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Francisco J. Martínez-López
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Advances in Digital Marketing and eCommerce

Second International Conference, 2021

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Editors

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Preface

The Digital Marketing & eCommerce Conference aims to bring together leading researchers and research scholars to exchange and share their experiences and research results on any aspects of ecommerce and digital marketing. It also offers a platform for academicians and practitioners to present and discuss the most recent breakthroughs, trends and concerns as well as practical challenges encountered and solutions adopted in the fields of ecommerce and digital marketing.

Each paper submitted to the 2021 DMeC Conference has gone through a stringent peer-review process by members of the programme committee, which comprises over 60 researchers from around 30 countries.

This edition has been dedicated to social media marketing. Firms have spent billions of dollars on social media marketing. In today's socially connected world, social media has moved beyond a marketing channel and can be a source of competitive advantage. In particular, fashion, beauty, travel and hospitality firms have witnessed the crucial role of social media marketing in growing their business.

Does social media marketing remain what it was when social media just started? The concept of social media marketing was coined almost a decade ago, but customer demands and technology advances have been evolving the essence and mechanism of social media marketing. On the one hand, customers want more convenience and better consumption experiences when using social media for commercial purposes such as discovering interesting products or services. On the other hand, mobile technology, cloud computing, 5G technology, ecommerce technology and artificial intelligence (AI) have evolved social media features and social media content. People can find that today's social media is fundamentally different from what it was. As a consequence, these two aspects have changed social media marketing. In terms of media formats, with the advent of 5G technology, social media marketing offers more smooth, interactive and immersive media formats such as social videos and live streaming. With respect to media content, social media has allowed recommending more personalized commercial content for customers. Precision marketing is becoming possible in today's social media marketing campaigns.

Today's social media also enables users to create high-quality content by offering digital options and other content-enhancing features. Social media marketing is not solely completed by marketers. Research has revealed that user-generated content (UGC) also plays a key role in social media marketing. The enhancement of UGC quality can facilitate social media marketing performance. Regarding social media features, social media has offered AI-powered chatbots, one-click-to-checkout, online live interactions, AR-based lenses and others. These new features can substantially improve social media marketing effectiveness.

A total of 34 papers have been accepted, and they address diverse areas of application and topics, not necessarily connected with the primary topic of this edition, such as influencer marketing, voice assistants, engagement on social networks and metrics, online shopping problems, pandemic-related issues from a digital marketing perspective, online atmospherics, social media monitoring, recommendations for fashion merchandising, social media advertising and TikTok-related issues, among others.

Hopefully, this second edition continues the aim set initially to encourage, promote and publish high-quality contributions on digital marketing and e-commerce that can aid academics and practitioners in dealing with a wide range of issues.

Finally, we wish to acknowledge the support of our sponsors and publishers. Last but not least, we would like to thank all the contributing authors, members of the programme committee and the rest of the organizing committee for their highly valuable work in enabling the success of the 2021 DMeC Conference, still under the effects of the COVID-19 pandemic.

Francisco J. Martínez-López
David López

Contents

Influencer Marketing in the Make-up Industry	1
Ioanna Yfantidou and Mile Grncarov	
Brand Semiotics as a Tool to Create Stronger Viewer Involvement with Brand Visuals on Social Media	16
C. du Plessis	
Talking to Voice Assistants: Exploring Negative and Positive Users' Perceptions	24
Michela Patrizi, Maria Vernuccio, and Alberto Pastore	
The Influence of Brands and Platform Mechanics on Creator' Content Sovereignty on TikTok	35
Markus Rach	
Interactivity in Social Media: A Comparison in the Movie Studios Sector	43
Joan-Francesc Fondevila-Gascón, Pedro Mir-Bernal, Marc Perelló-Sobrepere, and Marc Polo-López	
Digital Transformation Induced by the Covid-19 Pandemic	50
Sankhani Hemachandra and Nora Sharkasi	
Towards an Understanding of the Intention to Engage on Facebook . . .	62
Diep Ngoc Nguyen and Nora Sharkasi	
Metrics of Engagement on Social Networks and Their Relationship to the Customer's Decision-Making Process Under e-Commerce Conditions	74
L'udovít Nastišin and Richard Fedorko	
Online Shopping Problems in the Context of B2C E-commerce in the Visegrad Four Countries	83
Richard Fedorko and Štefan Král'	

The New Adult on the Block: Daily Active Users of TikTok Compared to Facebook, Twitter, and Instagram During the COVID-19 Crisis in Belgium	95
Johan Hellemans, Kim Willems, and Malaika Brengman	
Fight Against Corona: Exploring Consumer-Brand Relationship via Twitter Textual Analysis	104
Francesco Smaldone, Mario D’Arco, and Vittoria Marino	
How to Leverage Digital Marketing in B2B: A Study on Italian SMEs During the Covid-19 Outbreak	112
Lala Hu and Mirko Olivieri	
How Does the Number of Instagram Followers Influence Brand Attitude: The Role of Purchase Intention, Perceived Product Quality, Referrals, Brand Trust, and Gender	121
Ricardo Dias, Luis F. Martinez, and Luisa M. Martinez	
Online Atmospheric - An Evaluation of the Current State of the Art and Future Research Directions	129
Eva Maria González Hernández, Jan-Hinrich Meyer, and Andrea Trujillo	
How TikTok’s Algorithm Beats Facebook & Co. for Attention Under the Theory of Escapism: A Network Sample Analysis of Austrian, German and Swiss Users	137
Markus Rach and Marc K. Peter	
The Social Media Monitoring Process and its Role in Social Media Strategy Development	144
Cécile Zachlod and Marc K. Peter	
Organic Reach on YouTube: What Makes People Click on Videos from Social Media Influencers?	153
Jason Weismueller and Paul Harrigan	
Online E-Communication Channels: The Impact of CSR and Reviews on Purchase Intent	161
Leanne Johnstone and Cecilia Lindh	
Social Media in FMCG Marketing: Understanding How Supermarkets Use Facebook During the COVID-19 Pandemic	184
Surej P. John and Richard Walford	
The Role of Social Media to Re-design the Brand Image of Small Villages	192
Angela Caridà, Maria Colurcio, and Alberto Pastore	
Influencer Marketing: Current Knowledge and Research Agenda	201
Samira Farivar and Fang Wang	

What Digital Marketers Should Learn from the Struggles of an Ageing Society on Social Media 209
 Izzal Asnira Zolkepli, Pradeep Isawasan, Hasrina Mustafa, and Lalitha Shamugam

Who Is a Digital Agency? Delving into the Value Proposition 225
 Federica Ceccotti and Maria Vernuccio

Moments of Truth in Social Commerce Customer Journey: A Literature Review 236
 Leticia Terra and Beatriz Casais

Aspect-Based Recommendation Model for Fashion Merchandising 243
 Weiqing Li and Bugao Xu

Leveraging Malicious Joy to Influence Consumer Word-of-Mouth Transmittal in Social Networks 251
 Barney G. Pacheco and Joseph Paniculangara

Selling Global Luxury Brands in China: The Use of Social Media Advertising 255
 Federica Codignola

The Intention to Repurchase Apparel Online: A Case of South African Millennial Men 263
 Chris D. Pentz and Lieze Ryke

Understanding the Digital Communication Preference of Business-to-Business Purchasers and Sellers 277
 Bert Paesbrugge, Teidorlang Lyngdoh, Arun Sharma, and Deva Rangarajan

eCommerce Within the Tourism Industry in the Global South: The Case of the Sharing Economy in South Africa 280
 Unathi Sonwabile Henama

Influencers on Instagram: The Influence of Disclosure, Followers and Authority Heuristic on Source Credibility 291
 Debbie Human-Van Eck, Chris Pentz, and Tobias Beyers

The Effect of Covid-19 Pandemic on Client’s Equity: The Case of a Senegalese Telecommunication Company 305
 Nora Sharkasi and Thioro Ndiaye

Yes, You Make Me Confused and Skeptic: Exploring Green Confusion and Green Advertisements Skepticism on Social Media 313
 Kashif Farhat, Wajeeha Aslam, and Iviane Ramos de Luna

Package-Free Returns: A Trend in Green Ecommerce 330
Yangchun Li, Changyuan Feng, and Huaming Liu

Author Index 335



Influencer Marketing in the Make-up Industry

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Abstract. The growth of social media usage and its utilization in marketing campaigns has created a new class of community leaders online, called influencers. Influencers appeared on social media as relevant content creators on a certain niche topic such as sports, comedy, make-up etc. The make-up industry has completely adopted the trend of influencers which ended up disrupting the entire industry. The purpose of this study is to demonstrate the effects that influencer marketing has had on the make-up industry and how it has become essential for marketers with a focus on that industry. This includes a comparison of influencer marketing to other marketing options such as TV and Online Paid Ads, the cost of advertisement, effectiveness and ability to influence consumer behavior, primary data, data obtained from secondary sources as well as personal contact with influencer agencies.

Keywords: Influencer · Marketing · Make-up · Social media · Advertising

1 Introduction

The purpose of this research is to perform a comparative analysis of influencer marketing to other marketing alternatives and analyze its effectiveness and the successful usage of influencer marketing. Though the research is focused on investigating influencer marketing in the make-up industry, important insight is gained on influencer marketing overall as well as about other industries.

Social media is not only for users to connect with their friends but also with many celebrities, brands and as of recently, influencers. Social networks like Instagram, Facebook, YouTube and Snapchat are now an integrated space where you can not only connect to, but be introduced to brands, companies and influencers through a discovery-based option. This research is emphasizing on YouTube and Instagram only, as there is evidence that influencer marketing is thriving on those media compared to others (Ault 2014). Schiniotakis and Divini (2018) believe that influencer marketing is a subcategory of word-of-mouth marketing, along with buzz marketing, viral marketing, blog marketing and referral marketing. Influencer marketing is marketing products or services through individuals who have a sway over what people buy (Dada 2017). This ability to persuade people to purchase a certain product or service comes from the perception that the influencer has a certain market expertise and understand the product or service which

they are referring to (Dada 2017). Apart from the term ‘influencers’, the terms ‘bloggers’ or ‘Youtubers’ are also used to promote content across various social media and offer an influential basis for promoting brands and products especially to the younger generation (Kolo and Haumer 2018). When US teens were asked to rank influential figures, six out of the top ten were YouTubers or YouTube influencers (Ault 2014). The survey concluded that most of the participants found YouTubers more authentic than famous celebrities, ranking them as more trustworthy and believable (Ault 2014).

To better understand the objectives of this study, it is important to present a few introductory lines about the two social media of this study, Instagram and YouTube.

Instagram. With over 1 billion users of which 500 million are active daily, Instagram is 10 times more engaging than Facebook and 84 times more engaging than Twitter (Lyfe Magazine 2018). There are more than 50 billion photos on Instagram today and more than 4.2 billion likes per day (Omnicores 2020). Regarding businesses, there are 25 million business accounts on Instagram, more than 500,000 active Instagram influencers and 70% of shopping enthusiasts turn to Instagram for product discovery (Omnicores 2020). Regarding demographics, 59% of Instagram users are women, 59% of all users are 18–29 years old and 33% are 30–49 years old (Omnicores 2020). It is worth noting that businesses are seeing unprecedented success on the platform thanks to Instagram Stories that were launched in 2016 as a competitor to Snapchat Stories (Nardello 2017). Instagram has taken community connectivity to a whole new level by creating hashtag-based communities’ which people can follow, explore the content of, and publish their own content under these tags. When a user on the platform posts a photo with the hashtag #makeup, their photo on a public account will be featured under that tag along with everyone else that has used the #makeup in their photo captions. The 286 million content posts with the hashtag #makeup on Instagram demonstrate the popularity of this feature (Instagram, data obtained in June 2020). Users are further allowed to browse everyone’s make-up related posts by clicking the hyperlinked #makeup post where they can see the most popular and the newest posts by community members, celebrities and brands. There are hundreds of make-up related tags on Instagram that also contain contributions by the make-up community on Instagram such as #make-upartist with 84.5 million posts, #mua with 65.8 million posts, as well as tags for make-up products such as #highlighter with 4.6 million posts (Instagram, data obtained in June 2020). Make-up related Instagram tags will be referred to as community tags—ones that users which have an interest in make-up are likely to use when they create their own content related to make-up.

YouTube. YouTube is a visual platform which allows users to post videos on any topic that they are interested in. More than 300 h of video are uploaded on YouTube every minute with 30 million people visiting YouTube every day while the platform has more than 2.5 billion users (Hubspot 2019). YouTube is the second largest search engine in the world after Google (Social media advertising guide 2019). Visual platforms like Instagram and YouTube work well for make-up users since they can see and hear more detailed facts about the product or make-up look that they are interested in. Some examples of popular make-up artists on YouTube include James Charles with over 19 million subscribers, Jeffree Star with over 18 million and Nikkie Tutorials with more than 14

million (YouTube, data obtained in June 2020). Interestingly, when people search for beauty related content on the internet, most of them turn to make-up tutorials done by influencers in order to watch a review for the product, style inspiration or just for entertainment (Verb Brands Limited 2017).

Academic research on influencer marketing is limited thus this research paper is thought essential in order to understand the trend of utilizing this method of marketing and its impact consumers. There is a lack of research on the impact gender, market, and industry have on the effectiveness of influencer marketing, and this paper is exploring these different aspects with a quantitative and qualitative approach. Specifically, primary data are collected through surveys and interviews, whereas secondary data from the internet are used to reinforce or justify some of the findings.

1.1 The Growth of Internet Advertising

The growing popularity of social media has been reflected in a report by the Interactive Advertising Bureau (IAB) in their 2017 annual report where they reported that Internet Advertising continues to be the largest sources of advertising revenue for that year (IAB 2017). Advertising revenues for internet advertising in 2017 were around US \$88 billion (in the US alone) which represented a 21.4% spike from 2016, while TV advertising fell to 70.1 billion, a 2.6% decrease from 2016 (IAB). While this report is on all types of internet advertising and not specific to influencers, it is important to take note of this trend. The results of this \$17.9 billion lead of internet advertising ahead of TV advertising could be indicating that people are generally more engaged with online ads rather than TV ads. In fact, there is evidence from a recent study that individuals tend to opt for online sponsored advertisements and this fact is positively related to their visual attention (De Souza et al. 2020). The influencer marketing spend is harder to track since all information available comes from the US FTC organization to which influencers report their earnings to tax authorities (Bladow 2018). However, a study found that 93% of the largest influencers are not fully or not at all compliant with the FTC (Bladow 2018), which is why market size predictions go from 2.38 billion for the US in 2019 (Statista 2019) to 10 billion worldwide by 2020 (Mediakix 2019).

1.2 Influencer Marketing Costs Less

There is a great amount to be said about the different costs of advertising when comparing TV and Internet advertising. According to a research done by Fou (2014), in order to reach 1,000 impressions with an advertisement, social media has the lowest cost while TV and mail advertising have the highest (Fou 2014). In his study, Fou found that to reach 1,000 people it will cost advertisers a hefty \$30 (2014 report) while online search ads go as low as \$2, online display ads at \$7 and online video ads, the most comparable to TV ads go for \$15 (Fou 2014).

When it comes to influencer marketing, the data available for pricing is partially based on knowledge from contacting influencers, while some have attempted to set up metrics to calculate profits based on following, engagement and reach. However, reports of estimates from influencer agencies for 2019 round up the numbers to around \$1,000

per 100,000 followers, meaning \$10 per 1,000 people reach (Chen et al. 2017). This places influencer advertising in the middle between online pay-per-click ads and TV ads.

When comparing influencer marketing to online ads or TV ads there is a lot of differences such as the fact that working with an influencer usually means outsourcing all the overhead, production, content creation and other costs related to producing the actual advertisement.

For this next information, a popular Instagram influencer from the United States was contacted and she gave a quick oversight of what influencers have to do when promoting a brand. “In a way, influencers act as models, camera people, producers, editors, content creators, use their own overhead and save the company interactions which can take away from the ad spend budget that could be utilized for acquiring more reach. In most cases, influencers are sent products or given services which they then attempt to introduce to their audience” (Anonymous Influencer). In short, when companies choose influencers, they are not only reducing the necessary budget for all the above-mentioned factors, they are also receiving an excellent reach per dollar of ad spend.

According to influencer James Charles, later confirmed by agency PikeWood Creative, the production of a video advertisement can cost a company upwards of \$200,000 when you consider the crew, models, camera equipment, studio and post-production (Koon 2017). The famous make-up influencer spoke about this in a video when a recent controversy about the price of influencer marketing occurred in 2018, where he claimed that influencers asking for \$60,000 dollars for a paid promotion to their tens of millions of followers was not even comparable to the costs that companies and brands would incur trying to run a TV ad (Marlena Stell, YouTube). These \$200,000 is an estimated price before the ad is aired after which the price averages around \$30 per 1,000 impressions on prime time tv, as mentioned earlier in the paper. If marketers are working with a tighter budget, influencer campaigns seem to be the easiest way to control the budget.

1.3 Influencer Marketing has a Good ROI

ROI in influencer marketing is measured by the number of clicks to the company’s product or service that the promotion results in and hence the number of sales in that period. Companies have used a variety of methods to track this information such as link tracking, pages made with the influencers name as well as discount codes and tracking how many times they have been used. According to a report by digital marketing agency Bust Media, which ran 48 influencer marketing programs in 2014 through 15 industries and 662 influencers, the average return for \$1 of paid media was \$6.85 (Morrison 2015). The company reports that influencers bring in a great return for the money invested in campaigns, the highest in consumer-packaged goods and food at \$11.33 per \$1 spent, apparel at \$10.48, and tourist destinations at \$7.04 (Morrison 2015). Bust Media observed that if a company works with the right influencers whose fans and followers fit the company’s ideal customer profile, there is much to gain from the invested capital in influencer marketing campaigns. To compare, Nielsen Analytic Consulting showed that the average ROI for digital ads (pay-per-click) was \$2.18 per \$1 dollar spent, significantly lower than that of influencer advertising (Bateman 2017).

Perhaps one of the best ways to get insight on influencer marketing in different industries is to look at cases of brands collaborating with different social media influencers.

1.4 Make-up Industry - The Case of Morphe Cosmetics

One excellent example of a company fully integrated into the influencer sphere is Morphe - a make-up company with a social media presence on Instagram, Facebook, Twitter, Pinterest and Snapchat (Morphe Cosmetics 2020). Morphe has long used the benefits of social media for promoting their products by encouraging the customers of their products to tag them on their social accounts for a chance to have their look reposted in front of their millions of followers across platforms (Morphe Instagram @Morphebrushes). Morphe Cosmetics is not a product that customers buy to just use, but rather a product which makes them a part of the company community across social media using the social tags (#, @) mentioned earlier.

Morphe is also no stranger to influencer collaborations on products that they carry in their online store as well as their physical stores. The company frequently releases products which are custom designed by the influencer who gets to be involved in the entire process and carries the name of the influencer. One collaboration like this was the James Charles × Morphe eyeshadow collection, a great example of an influencer collaborating with a brand and bringing in a huge ROI (Morphe Cosmetics 2020).

Last, but not least, Morphe collaborates with lots of large and small influencers by giving them their custom discount code (Tea 2016). This affiliate style program gives influencers a code they can share with their followers which gives their fans a discount on Morphe products, while allowing the influencer to earn money for every sale for which their code was used (Tea 2016). The discount code which can be used for any of the Morphe products on their website as well as in store, motivates influencers to repeatedly promote it to their followers without being paid every single time they mention the brand, rather for the purchases that their code is used for – more mentions is more revenue for the influencer (Tea 2016).

2 Literature Review

Nowadays people not only communicate directly with companies and celebrities through social media, they expect a dialogue and engagement from the brand's side as well (Bennett 2014). Digital retailers can provide stimuli to their followers through their daily post on social media (Sihombing et al. 2020) and gain valuable insights about their customers' attitudes and behaviors (Schiniotakis and Divini 2018). Social media has also allowed for the creation of focused online communities where individuals passionate about the same thing can connect much easier than before (Schiniotakis and Divini 2018). A perfect example of this is the make-up community's ability to connect with each other, make-up creators (make-up artists), and brands that produce make-up.

The return on investment from using social media influencers over more traditional advertising strategies like TV is still debated. A study by Kadekova and Holiencinova (2018) concludes that the impact that TV and influencer marketing have is different

in various age groups and for this reason a survey has been conducted for additional information. However, within the rapidly changing landscape of advertising, and the increased availability of targeting software, the evaluation of a single variable such as age is no longer adequate for justifying how impactful different channels are. There is a lack of research on the impact gender, market, and industry have on the effectiveness of influencer marketing, including evaluation of it across multiple social media platforms. Research on influencer marketing is scarce thus this work is thought essential in order to understand the trend of utilizing this method of marketing and its contribution to the development of the digital marketing industry.

Influencer marketing has offered a new way for marketers to form strategic partnerships which have a long-term benefit for their company. In the make-up industry, it is more than clear that influencers have helped brands increase their profits, as previously explained. Aside from the numerous brand partnerships that we observe with influencers, it is still relevant to ask whether or how much influencers affect consumer preferences and buying behavior when it comes to make-up.

RQ1 Does Influencer Marketing in the make-up industry affect consumer preferences?

With RQ1 this paper attempts to see if there is a connection between influencer marketing and consumers preference towards the advertised product or service. According to a study, trustworthy influencers can affect consumers beliefs, attitudes and preferences (Wang et al. 2017). Similarly, influencers who are viewed as experts tend to be more persuasive (Aaker and Myers, 1987) and can drive consumer purchase intention (Ohanian 1991).

RQ2 Is Influencer Marketing cheaper for the results it gives to the make-up companies?

Data shows that at least in the US, influencer marketing is cheaper for the reach it gives companies. As mentioned earlier, TV advertisements have a cost of \$30 per 1,000 people reach (Fou 2014), while influencer marketing comes to an approximate \$10 per 1,000 impressions (Chen et al. 2017). What none of these studies considered as far as advertising for the make-up industry is that not every TV channel is watched by a niche audience. On the other hand, a make-up specific influencer is much more likely to have a following of people who enjoy seeing make-up related content and would perceive recommendations from that influencer much more legitimate.

RQ3 Does the industry the company operates in influence the effectiveness of Influencer Marketing?

While the purpose of this paper is to focus on influencer marketing in the make-up industry, it is important to be objective and consider whether the effectiveness of influencer marketing depends on the industry that it is being used in. Are sports and fitness related influencers equally 'influential' and desired by brands, or even perhaps more so? One great example is the already abundant gaming industry which is full of online influencers that frequently test and promote games online, some of which are paid to promote. There is also the question of different demographics and age groups that should be considered when looking at different industries. Although there are cases which show the effectiveness of influencer marketing in various industries, this is still a subject of research and

could vary from one to another, as well as other factors such as geographic location or local culture.

The three research questions can be answered from secondary data analysis, the interviews conducted for this study and the open-ended parts of the survey. Lastly, considering the popularity of influencer marketing it is hypothesized that respondents have purchased products that were promoted by influencers rather than TV ads (H1). It is believed that women are influenced more by traditional advertising compared to men (Sutton 2009). Similarly, we hypothesize that women are more likely to be influenced by influencer marketing and make a purchase after they have been exposed to an influencer's sponsored advert (H2).

Hypothesis 1 (H1): Respondents are more likely to have bought a product that is recommended by an influencer compared to a product that was advertised on TV.

Hypothesis 2 (H2): Females are more likely to purchase products that are advertised by influencers, compared to men.

3 Methodology

In order to gather further information and achieve those objectives, primary and secondary data were collected and analyzed. Secondary data regarding the effectiveness and ROI of TV and social media advertising was collected through the internet and other studies as mentioned in the literature review section. Other secondary data was obtained through the personal social media accounts of influencers and via contacting their agents. For primary data, a survey was conducted through the period of November 2019–June 2020. Primary data will help confirm or reject hypotheses as well as provide descriptive analyses.

The survey was created in Google Forms and the prospective respondents were sent the survey link through email or/and through social media. Hence, for this project the researchers' personal network was used as a potential respondents' pool and their contacts were asked to pass on the survey link to other contacts, thus creating a ripple effect. No personal data was stored during the collection of the respondent's answers, in alignment with GDPR policies. The online survey includes four variables related to demographics and eleven questions relevant to social media, influencer marketing and TV usage. In total, 870 responses were received within seven months and SPSS (v.22) was used for data analysis.

4 Findings

SPSS was used to analyse the data, however the authors relied mainly on descriptive statistics as the target is to describe and understand the features of the data set by giving short summaries. Table 1 presents the demographic characteristics of the sample in terms of gender, age group, economic activity and education.

As illustrated in Table 1, the majority of respondents are females (68%) compared to males. Simply for observation, information related to age was used to see if there

Table 1. Demographic characteristics of the sample

	Category	Absolute frequency	Relative frequency
Gender	Male	278	32%
	Female	592	68%
Age group	Gen Z	692	79.5%
	Gen Y	74	8.5%
	Before 1981	104	12%
Economic activity	Unemployed	57	6.5%
	Employed	270	31%
	Student	543	62.5%
Education	Primary	17	2%
	Secondary	352	40.5%
	Bachelor's	418	48%
	Master's	83	9.5%

is a difference between how diverse generational groups react to influencer marketing. Yet, the random survey ended up having almost 80% of respondents from the same age group (Gen Z), due to which our results testing generational differences were considered insignificant. Similarly, when it was decided to look into how different economic activity affected influencer marketing's success, we ended up seeing that most of the respondents were students (temporary employed for a few months of the year), thus this test was also unsuccessful.

In the introductory part of the survey, the respondents were asked if they knew what an influencer was and if they were familiar with the term. 87% of the respondents said that they were aware of the term 'influencer' and how influencer marketing works. Since 7.5% of the respondents were not aware of what the term influencer meant it was implied in the following questions what the terms means with useful examples from internationally known influencers so that the respondents may proceed in answering the following questions.

Also, 53% of the respondents said they follow influencers on social media platforms (Instagram, YouTube, Twitter, Facebook) and 22% said that they have seen content from influencers despite not following them. Regarding the category of influencers that the respondents are following, they said that 20.9% followed make-up influencers, 13% are following sports stars, 7.8% are following influencers related to gaming and 4.3% follow kids related influencers. 54% of the respondents said that they follow celebrities (general) on social media, meaning no specific niche to their content (Fig. 1). While celebrities are the most followed group, make-up influencers took up a large portion of the following among females. Yet, some respondents in an open-ended question state that they follow celebrities who often advertise make-up, such as Kim Kardashian West.

A One-sample t test was performed to examine how often respondents have bought a product that was seen at a TV ad (Table 2) or product that was recommended by

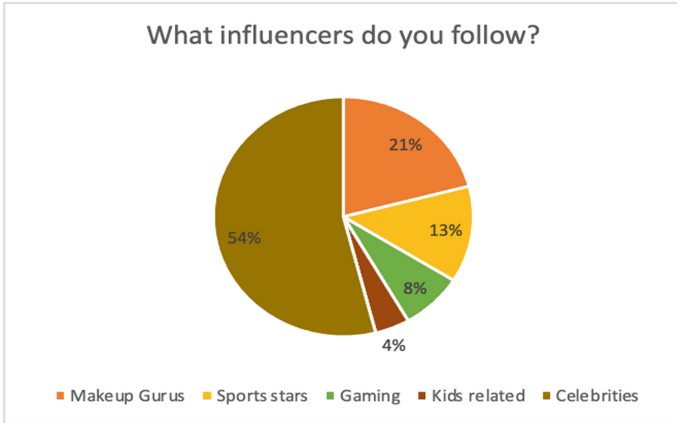


Fig. 1. Categories of influencers that are followed by the sample

an influencer (Table 3). A Mean of 1.87 indicates that respondents rarely bought a product that was advertised on TV. Although slightly higher, a Mean of 2.11 shows that respondents would rarely buy a product after they had seen a recommendation by an influencer (3-point scale from 1-never to 3-very often). The results indicate that there is statistical significance, and indeed respondents are more likely to have bought a product that is recommended by an influencer compared to a product that was advertised on TV. Hence, H1 is confirmed.

Table 2. One-sample t test for products purchased from TV ad

One-sample Statistics	N	Mean	Std. deviation	Std. Error Mean	
Purchased TV ad	870	1.87	0.78	0.34	
One-sample Test	Test value = 0				
	t	df	Sig. (2-tailed)	Mean difference	95% confidence interval of the difference
	Purchased TV ad	5.501	869	.000	1.87

When secondary data had reaffirmed that influencer marketing is in fact effective, perhaps even more so than TV advertising, it was decided to test whether there is a difference in gender preference to type of advertising. The survey conducted helped us look at how many men and women had purchased a product from influencer marketing (med to compare two groups of interest: males and females. As illustrated in Table 4) and TV ads (Table 5). An Independent Samples *t test* analysis of differences was performed to compare two groups of interest: males and females. As illustrated in Table 4, the Mean for purchases for males is 1.79 and for women it is 0.69, meaning that women are more likely to buy a product that is recommended by an influencer compared to men. Since the Levene’s test for equality of variances indicates that the significance associated

Table 3. One-sample t test for products purchased from influencer recommendation

<i>One-sample Statistics</i>	N	Mean	Std. deviation	Std. Error Mean		
Purchases influencer ad	870	2.11	0.65	0.41		
<i>One-sample Test</i>	Test value = 0					
	t	df	Sig. (2-tailed)	Mean difference	95% confidence interval of the difference	
	Purchased influencer ad	5.143	869	.000	2.11	Lower 1.99

with the *F* value is higher than 0.05, then we should be looking at the equal variance line of the output. The significance level shows little support for the hypothesis that the means are equal. In other words, there is statistical difference between the male’s preference mean and the female’s preference mean for products purchased from an influencer advertisement. Hence, H2 is confirmed as there is evidence to support that females are more likely to purchase products that are advertised by influencers, compared to men.

Table 4. Independent samples t-test for purchased products from influencer marketing ads

Purchased influencer ad	t-test for equality of means					95% Confidence	
	t	df	Sig (2-tailed)	Mean difference	Std. error difference	Lower	Upper
Equal variances assumed	-2.626	194	0.009	-0.298	0.113	-0.521	-0.074
Equal variances not assumed	-2.564	112.177	0.023	-0.298	0.116	-0.528	-0.068

Moving on to Table 5, the Mean for purchases for males is 1.24 and for women it is 1, which, surprisingly, means that men are more likely to buy a product that is advertised on TV compared to women. Like the previous results, the Levene’s test for equality of variances shows that the significance associated with the *F* value is higher than 0.05. The significance level shows little support for the hypothesis that the means are equal. In other words, there is statistical difference between the male’s preference mean and the female’s preference mean for products purchased from a TV advertisement.

Table 5. Independent samples t-test for purchased products from TV ads

Purchased TV ad	t-test for equality of means						
						95% Confidence	
	t	df	Sig.(2-tailed)	Mean difference	Std. error difference	Lower	Upper
Equal variances assumed	1.923	186	0.056	0.24	0.125	-0.006	0.487
Equal variances not assumed	1.933	113.969	0.056	0.24	0.124	-0.006	0.487

Considering the open-ended questions that are included in the survey, it is confirmed that the industry the company operates in influences the effectiveness of influencer marketing (RQ3). The survey provides the following categories of influencers: sports stars, make-up gurus, gaming, kids related, celebrities (general). Respondents can select more than one category. When we separate the data set into smaller data sets by filtering the influencer category, we can then look at the comments section and see that respondents who follow celebrities report being more influenced by their recommendations. For example, there is a comment about a respondent who admits to be influenced by Kim Kardashian's Instagram posts. Similarly, respondents who follow make-up influencers seem to be affected by their recommendations as mentioned in a comment about using James Charles' vouchers to buy make-products. However, there are very few comments from respondents who follow gaming influencers and zero for kids related influencers. Also, for the 'how often have you purchased a product recommended by an influencer' question, 89% of people who follow gamers said 'never', 91% of people who follow kids related influencers said 'never', and only 3% of people who follow sports stars said 'very often' (Fig. 2). As a result, the brand industry affects the effectiveness of influencer marketing. In a similar vein, RQ1 is confirmed as Fig. 2 shows that influencer marketing in the make-up industry affects consumer preferences. This is in accordance with other scholar's findings, for example influencers can affect consumers beliefs, attitudes and preferences (Wang et al. 2017), people who are considered experts in an area tend to be more persuasive (Aaker and Myers 1987) and drive consumer purchase intention (Ohanian 1991).

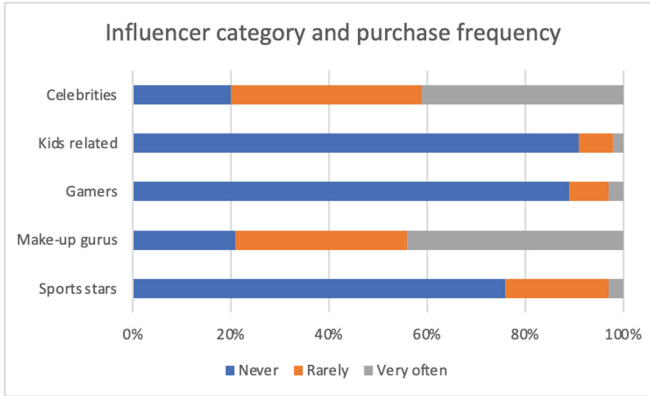


Fig. 2. Influencer category and purchase frequency

5 Conclusions

The current study aims to conduct a comparative analysis of influencer marketing to other marketing alternatives as well as analyze its effectiveness and the successful usage of influencer marketing. Although the research was focused on exploring influencer marketing in the make-up industry, valuable insight was gained on influencer marketing overall as well as in other industries.

There is limited research on influencer marketing, and none on influencer marketing in the make-up industry. Most of the information which is considered as a basis to this study was collected from marketing and psychological studies, as well as marketing agencies and directly from influencers. For this reason, some of the data has a wider range rather than a specific number – something especially relevant to pricing of influencer collaborations which tend to be determined case by case.

The survey conducted includes responses from international respondents and it is interesting to see the relationship between influencer marketing and gender, as we found evidence that women are more likely to buy a product that is promoted by an influencer. Interestingly though, it is also found that men are more likely to buy a product that is advertised on TV compared to men. Also, RQ1 and RQ3 are both confirmed through primary data analysis, as it is obvious that influencer marketing in the make-up industry does in fact affect consumer preferences and brand industry affects the effectiveness of influencer marketing. Secondary data from marketing as well as psychology related research articles has confirmed that the average price of traditional marketing is higher than influencer marketing when comparing effective reach (RQ2). Besides, when make-up brands advertise their products on TV, they target at a very wide audience, not just make-up users. Yet, a make-up specific influencer is much more likely to have a following of make-up users and would have a positive reaction towards the recommendations from that influencer.

All in all, this research paper proved that influencer marketing is more effective for make-up brands and it has become essential for marketers with a focus on that industry

as it looks to be better value for money with higher ROI compared to that from other marketing options such as TV and Online Paid Ads (pay-per-click).

A hybrid research approach is employed with both qualitative and quantitative research designs. Primary data were collected with the use of an online survey, whereas the authors briefly interviewed two popular make-up influencers who want to keep their anonymity.

6 Limitations and Future Research

One goal of this research is to explore an understudied area in academia. The lack of exploration on this topic meant that there were not many available academic sources to gather data from. More so, the data from primary research may differ if the sample is different, for example if only respondents with a full-time job take part in the research. Another limitation is the sources used, many of which had to be obtained via direct contact with influencers, agencies, and companies that have worked with influencers. Making this data publicly accessible is difficult since some of the matters concerned are financial, which are dealt with on a case-by-case basis. The same goes with finding industry averages, when the general assumption is that not everyone is compliant or reporting all gains from influencer marketing to the tax authorities.

The company most open to give out information was Morphe Cosmetics, thus a limitation was that the main cases of influencer marketing in the make-up industry are based on this company's collaborations. More information from similar size companies may be useful to see if there is an industry standard when it comes to influencer collaborations.

It would also be interesting to see country specific research since regional culture and media may have effect on the various results obtained in that state.

Finally, although influencer marketing is still in its developing stages, future researchers should collect more data and over longer periods of time to examine if the length of marketing campaigns influence the effectiveness.

References

- Ault, A., Ault, A.: Survey: YouTube stars more popular than mainstream celebs among U.S. Teens. *Variety*, 5 August 2014. <https://variety.com/2014/digital/news/survey-youtube-stars-more-popular-than-mainstream-celebs-among-u-s-teens-1201275245/>
- Bladow, L.: Worth the click: why greater FT enforcement is needed to curtail deceptive practices in influencer marketing. *William Mary Law Rev.* **59**(3), 1123–1164 (2018)
- Bateman, S.: Online Advertising ROI: 3 Useful Metrics to Know. *Promise Media*, 17 November 2017. <https://www.promisemedia.com/organic-marketing/online-advertising-roi>
- Bennett, S.: 88% Of companies are using social media for marketing [STUDY]. – *Adweek* 20 October 2014. <https://www.promisemedia.com/organic-marketing/online-advertising-roi>
- Chen, Y., et al.: What influencer marketing really costs. *Digiday*, 5 June 2017 <https://digiday.com/marketing/what-influencer-marketing-costs/>
- CodeJamesHoodie: Sisters Apparel. <https://sisters-apparel.com/products/code-james-hoodie?variant=13816816336959>
- Dada, G.A.: What is influencer marketing and how can marketers use it effectively? *Forbes Magazine*, 14 November 2017. <https://www.forbes.com/sites/forbescommunicationscouncil/2017/11/14/what-is-influencer-marketing-and-how-can-marketers-use-it-effectively/>

- De Souza, M.T., De Oliveira, J.H.C., De Moura Engracia Giralddi, J.: Organic and sponsored ads: study on online purchase intent and visual behavior. *Int. J. Internet Market. Advert.* **14**(3), 318–335 (2020)
- Fortnite Epic Games: Fortnite. <https://www.epicgames.com/fortnite/home>
- Fou, A.: Cross channel media costs comparison CPM basis by Augustine Fou. LinkedIn Slide Share, 4 February 2014. <https://www.slideshare.net/augustinefou/cross-channel-media-costs-comparison-cpm-basis-by-augustine-fou>
- Fuller, S.: Topic: Video Gaming Industry. <https://www.statista.com/topics/868/video-games/>
- Global Instagram Influencer Market Value Statistic: Statista (2019). <https://www.statista.com/statistics/748630/global-instagram-influencer-market-value/>
- IAB Annual Report (2017). [annualreport2017. www.iab.com/](http://annualreport2017.iab.com/)
- Influencer Marketing: Making The Case For Athlete Influence. Opendorse, 12 October 2017. <https://opendorse.com/blog/athlete-influence/>
- Jeffreestar: Jeffree Star × Morphe Reveal, YouTube, 1 February 2019. <https://www.youtube.com/watch?v=Cy90jt1HnLA>
- Kadekova, Z., Holiencinova, M.: Influencer marketing as a modern phenomenon creating a new frontier of virtual opportunities. *Commun. Today* **9**(2), 90–105 (2018)
- Kolo, C., Haumer, F.: Social media celebrities as influencers in brand communication: an empirical study on influencer content, its advertising relevance and audience expectations. *J. Digit. Soc. Media Market.* **6**(3), 273–282 (2018)
- Koon, S.: “How much does it cost to produce a Video or Television Commercial?” Pikewood Creative, Scott Koon. <https://Pikewoodcreative.com/Wordpress/WpContent/Uploads/2017/06/Header-Logo-TextSymbol-Dark-01.Png>, 16 June 2017. <https://pikewoodcreative.com/how-much-does-it-cost/>
- Morphe (@Morphebrushes): Instagram Photos and Videos, Instagram. <https://www.instagram.com/morphebrushes/?hl=en>
- Morphe Cosmetics Brushes: Brush Sets. Morphe US. <https://www.morphebrushes.com/?geo=1>
- Morrison, K., Morrison, K.: Report: Influencer Marketing Can Yield Big Returns.” – Adweek, 6 March 2015. <https://www.adweek.com/digital/report-influencer-marketing-can-yield-big-returns/>
- Nardello, E.: Best practices for producing stories on Instagram. *J. Digit. Soc. Media Market.* **5**(4), 332–340 (2017)
- Ohanian, R.: The impact of celebrity spokespersons’ perceived image on consumers’ intention to purchase. *J. Advert. Res.* **31**(1), 46–54 (1991)
- Omnicores, S.A.: Data obtained in February 2020. <https://www.omnicoreagency.com/instagram-statistics/>
- Represent.com: Use Code James Hoodie. Represent.com. <https://represent.com/james10off>
- Schiniotakis, N., Divini, K.: Guerrilla marketing in social media: the age of marketing outside the box. *J. Digit. Soc. Media Market.* **6**, 75–86 (2018)
- Sihombing, E.S., Budi, I., Munajat, Q.: Factors affecting the urge of impulsive buying on social commerce Instagram. *Int. J. Internet Advert.* **14**(3), 236–257 (2020)
- Size of the Global Make-up Market 2012–2024 Statistic. Statista. <https://www.statista.com/statistics/259217/global-make-up-market-size/>
- Stell, M.: My Truth Regarding the Beauty Community. YouTube, 27 August 2018. <https://www.youtube.com/watch?v=fBNZrvGLmYQ&t=1s>.
- Tea, Here For The: “WHEN MORPHE DISCOUNT CODES COLLIDE!” YouTube, 27 December 2016. <https://www.youtube.com/watch?v=wYgVOCL4pqw>
- The 2019 Influencer Marketing Industry Ad Spend [CHART]. Mediakix, 29 Jan 2019, mediakix.com/2018/03/influencer-marketing-industry-ad-spend-chart/
- The Ultimate Sports Influencer Marketing Guide, IZEA, 6 June 2018, <https://izea.com/influencer-marketing/>

- Top 5 Digital Marketing Trends in the Beauty Industry - Verb Brands Limited, 10 October 2017. <https://verbbrands.com/top-5-digital-marketing-trends-in-the-beauty-industry/>
- The Fastest Way to Share a Moment!, Snapchat. <https://www.snapchat.com/>
- Wang, S.W., Kao, G.H.Y., Ngamsiriudom, W.: Consumers' attitude of endorser credibility, brand and intention with respect to celebrity endorsement of the airline sector. *J. Air Transp. Manage.* **60**, 10–17 (2017)
- Weiss, G.: Influencer-Centric Beauty Brand Morphe Nabs Jeffree Star For Latest Collab., Tube-filter, 4 February 2019. <https://www.tubefilter.com/2019/02/04/morphe-jeffree-star-collaboration/>
- Why Your Brand Should Invest in Gaming Influencer Marketing in 2019, Forward Influence, 15 January 2019. <https://forwardinfluence.com/why-your-brand-should-invest-in-gaming-influencer-marketing-in-2019/>



Brand Semiotics as a Tool to Create Stronger Viewer Involvement with Brand Visuals on Social Media

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Abstract. This paper draws on a visual social semiotic analysis to illustrate how brand semiotics could be used as a social media marketing tool to select brand visuals that will attract attention and drive social conversations. Consumers nowadays access and interpret online brand messages differently due to social media and access to more technologies. While brands today have more visibility and can create and share brand messages on numerous social media platforms for a wider reach, the power has shifted to consumers. Because of more access to online information consumers can choose to either ignore or share and engage with a brand's messages. By analysing one brand visual that sparked many reactions on social media, it is demonstrated how stronger viewer involvement can be achieved with embedded signs and symbols with which the viewer can resonate. The findings demonstrate that it is important for social media marketers to develop the inner meaning of visuals by placing consumers in a specific visual relationship with the visual. In doing so, the paper addresses the paucity of research on the semiotics of brand visuals and also provides a heuristic for social media marketers how to consider signs and symbols embedded in visuals for more impact on social media.

Keywords: Brand message · Brand semiotics · Brand visual · Social media marketing · Visual semiotics

1 Introduction

In the digital age consumers have unprecedented access to online information and thus also have more knowledge about and access to brands (Campbell 2014). How a brand represents itself in digital spaces have thus become more important to connect emotionally with consumers (Vos 2019). As a result, social media marketers also use visual communication to convey brand information through brand imagery to have a greater visual impact (Kaulback 2018). While a brand cannot exist without product and services, a brand's signs and symbols (intangible aspects) have become increasingly important to connect with consumers in social media while having to compete with thousands of other brands. Tangible brand features such as product and services should thus not be the only considerations for a brand's social media strategy, but a brand should also signify

it's messaging using signs and/or symbols (Campbell 2014). Social media marketers cannot control how brand messaging is interpreted, but it is argued in this paper that a semiotics vocabulary could assist them to decode the meanings (cues) that resonate more with consumers (Olbertová 2018; Vos 2019). Many social media marketers nowadays use brand visuals to express the brand and to captivate consumers in social media as part of the brand's story (Ivanov 2017), but often neglect to consider the brand's signs and symbols to better connect with consumers. To address the paucity of research on the semiotics of resonating brand visuals, the study is driven by the following research question:

How can social media marketers create stronger viewer involvement with embedded signs and symbols in brand visuals?

The paper proceeds in several parts. The brand and visual brand messaging in social media are first discussed followed by a discussion of the semiotics of a brand as a tool for a brand's social media strategy. To answer the research question one brand visual that received much consumer engagement in social media is analysed by focusing on visual semiotics. The paper ends with a discussion and conclusions.

2 The Brand and Visual Brand Messaging on Social Media

Consumers nowadays are faced with an overload of brand messaging on social media and continually process visuals while forming opinions about a brand (Avery 2019). Consequently, the concept of a brand is dependent on interpretation by consumers and only exists when there are distinct ideas and meanings about the brand in their minds which are instilled with brand messaging (Campbell 2014). Numerous definitions of a brand are available in the academic literature covering different topics. In addition, brand experts define brands with different nuances (Kapferer 2012). A brand is thus not a predetermined concept but rather multidisciplinary with different perspectives across disciplines (Le Roux and Du Plessis 2014). For this paper, a definition of a brand is adopted as "a multidimensional construct that exists in a continuous process of cyclical communication between the actions of the firm and the interpretations and redefinitions of the consumers, through which the brand is imbued with certain values and expectations" (Yenicioglu and Christodoulides 2014, p. 269).

It is well-documented that successful brands connect with consumers on social media through brand stories that depict a powerful visual mental representation of the brand (Hong 2016; Perreira 2019). These brand stories are driven by social word of mouth (viral marketing on social media) to extend the reach of social conversations around a brand's story (Hajli et al. 2014). Brand messaging often uses brand imagery on social media which is the aesthetic appearance of a brand's core messaging which can include but are not limited to a brand's visual identity, advertisements and other brand visuals depicting the brand's story (Garret 2020; Keating 2016). Unlike an advertisement, a brand story is a cohesive narrative about why a brand exists and matters and usually inspires an emotional reaction with consumers. Within this context, effective brand visuals relate to and have a personal meaning to the consumer (Avery 2019). It has thus become imperative for brand visuals to resonate with consumers for them to participate in (co-create) the brand (Ind et al. 2020). A brand's visual messages with brand visuals

must thus also speak to the essence of a brand in a way that resonates with the viewer and with which semiotics of a brand can assist.

3 Semiotics of a Brand as a Tool for a Brand's Social Media Strategy

Since Manning's (2010) influential paper on semiotics of brand, scholars such as Oswald (2015), Conejo and Wooliscroft (2015) and Olbertová (2018) have contributed meaningfully to the body of knowledge of brand semiotics. However, the semiotic resources that underpin effective brand visuals to connect with consumers are still not fully understood. Semiotics is a multidisciplinary field of study involving many different theoretical positions and methodological applications of semiotic resources to understand the use or interpretation of signs and symbols and the way they work to convey meaning (Chandler 2007). Van Leeuwen (2005, p. 3) defines semiotic resources as 'the actions and artefacts we use to communicate' and are 'always material, social and cultural resources at the same time'. These semiotic resources, Jewitt and Oyama (2004) argue, are used to interpret the inner meaning of visuals.

Brands are essentially semiotic systems that function in a cultural environment, creating a connection with the consumer through visual language (Oswald 2015). Conejo and Wooliscroft (2015, p. 292) consequently describe a brand as a 'semiotic marketing system' that integrates the consumer's culture with the brand's 'meaning infrastructure.' This being the case, brand semiotics can be said to be the interaction of the product(s), organisation, customers and stakeholders which shape the brand (Lencastre and Côte-Real 2010), while addressing shifting consumer perceptions and attitudes and blending identity with a broader cultural meaning (Khattri and Prakash 2016). At the same time, humans constantly construct meaning and connotations through the process of signification and by using signs, brands essentially create a 'perceptual presence' and mental representation of the brand while connecting with consumers (Sudarsan 2015). However, brands must be clear in their social media strategy about what they want to represent and what value visuals should add before selecting semiotics resources (Ivanov 2017).

4 Visual Semiotics as Visual Vocabulary for Brand Visuals

For this study, the analysis of the brand visual was done from the perspective of visual semiotics anchored in a social constructionist worldview. From visual semiotics, the idea of intentional use of symbolic meanings was drawn. This method was adopted to better understand how a brand can enhance stronger viewer involvement with embedded signs and symbols in the brand visual. Visual semiotics studies the meanings of visual signs and symbols in different contexts (Danesi 2017). In this regard, Kress and van Leeuwen's (2006) grammar of visual design rooted in Halliday's (1978) work provides a useful vocabulary which can be used to plan, select, test and evaluate resonating brand visuals to convey visual cues on social media through visual composition. Specifically, the interactive metafunction of Kress and van Leeuwen's (2006) framework is useful to enable stronger viewer involvement with brand visuals since it shows how the participants in a visual interact with each other. Of importance are the interactions between

the producer, represented participant(s) (RP) and the viewer that can strengthen how the viewers may become more involved with the visual. The interactive metafunction uncovers layers of social relationships between producers and viewers/reproducers to determine how the visual engages the viewer. For this reason, this function is especially relevant for social media marketing since it reveals how the brand visually conveys inner meaning for the viewer to become captivated (see Harrison 2003).

The following levels of analysis of the interactive metafunction were considered (Harrison 2003: 53):

- Visual demand: Image act and gaze: eyeline of the RP in relation to the viewer.
- Social distance and intimacy: how close the RP(s) in the visual appears to the viewer resulting in feelings of intimacy.
- Point of view: horizontal angle and involvement, namely the relationship between the position of the RP(s) and the viewer and the vertical angle and power, namely the relationship of the RP and the viewers.

4.1 A Case of a Brand Visual That Sparked Strong Viewer Involvement on Social Media

Since the study focuses on how a brand can enhance stronger viewer involvement with embedded signs and symbols in visuals it was important to select a brand visual that generated many interactions on social media. The brand visual used for the analysis is also not an advertisement, but an appealing visual shared on social media to support the brands' story (see Hong 2016).

The visual as depicted in Fig. 1 labelled *First-Ever Selfie with Jesus*, was taken by Lee Thompson co-founder of The Flash Pack, a travel agency in London, United Kingdom (UK), which caters for a younger target audience. He took advantage of the 2014 FIFA World Cup in Brazil by sharing a highly spreadable visual in digital media two weeks before the World Cup commenced to tell the brand's story of adventurous single travellers. This visual generated more than 100 million views globally and directed two million views to the agency's website within four days after it was shared. In addition, the visual generated 50 million interactions on social networking sites such as Facebook, Twitter and Instagram, 909 000 hits on YouTube, 400 000 search results pages on Google, a 600% increase in newsletter subscriptions and a 1500% increase in customers. Several social media influencers also joined the millions of social media conversations (Vayas 2015). The visual is still coloured and without text depicting a young Caucasian male on top of the Christ Redeemer statue, looking into the camera while smiling and holding his camera (assumably a mobile phone) in his one hand. Skyscrapers, the earth and people are visible in the far distance. The producer and the representative participant (RP) is the same male, while the viewers of the visual on social media platforms are dispersed globally. The context of the visual is a prominent tourist landmark in Brazil, South America, the Christ Redeemer Statue in Rio de Janeiro.

5 Analysis of the Brand Visual

Turning to Kress and van Leeuwen's (2006) framework, the close camera angle of the smiling face and visible shoulders of the RP framed at a close personal distance is



Fig. 1. The visual labelled *First-Ever Selfie with Jesus* is in the public domain (credit: Lee Thompson).

reinforcing a demand through its visual direct address. The viewer is recognised because of the frontal angle, while the visual and the viewer create a direct connection as the image looks straight at the viewer, creating intensity, directness and a feeling of oneness. This forms an imaginary bond with the RP, as the viewer becomes an active participant in the relationship between the visual, the RP and the creator. The sociable arm gesture in the visual further draws the viewer into the visual, expecting the viewer to join the RP in his adventure as a friend. The creator of the visual chose to enhance feelings of closeness with the viewer while sharing this exciting moment. The viewer and the RP in the visual share an eyeline, so the viewer becomes part of the same, unexpected world while the viewer can identify with the RP. The viewer sees the RP directly, so the implication of boldness is strong and clear. It is also the RP's smiling face in the foreground that is most salient in the visual and first attracts the viewer's attention. The vertical angle of the image creates proximity with the RP at that high level, but still shares his level of experience. The creator of the visual wanted to include the background of the image to highlight the gravity of the moment. The horizontal angle focuses on the distance between the RP and earth, with the viewer standing in front. The high angle of the image with the RP looking up and the viewer looking down creates a feeling of less power for the RP and more power to the viewer. This angle encourages a sense of empowerment and even freedom for the viewer to share in this incredible moment and surroundings. The viewer is invited to become overwhelmed by the grandeur of the surroundings. The combination of the two angles reinforces involvement with the extreme experience of the RP and creator of the visual. The creator of the visual could have used other semiotic resources such as concentrating on an offer and not a demand, by perhaps using a different camera angle to focus more on the distance to the ground and visiting tourists and less on the "selfie" aspect. However, this would have diminished the feeling of oneness with the RP's experience and lessened viewer engagement with the intensity of the moment. The viewer would also have interacted less emotionally with the visual.

6 Discussion

The analysis of the brand visual by considering the interactive metafunction provides a heuristic for brands involved in social media marketing to visually depict the brand's inner meaning intrinsic to the brand's core values to connect with consumers (see [Perreira 2019](#)). The image of the *First Ever Selfie with Jesus* captures an adventurous moment and communicates the message as part of the brand's story that the travel agency will ensure a life-altering, exciting holiday that addresses the needs of the adventurous single traveller. In doing so, the visual sparked the imagination of the target market through the brand's association with lifestyles. The visual thus became a timeless brand narrative of a daring moment that drove social conversations intrinsic to the Flash Pack brand. In this regard, the visual expressed and evoked an emotion from the viewer which in terms of the interactive metafunction processes made the visual engaging (see [Harrison 2003](#); [Ovilgy 2018](#)). This is also evident in how the social relationships between the producer and viewers/reproducers are represented supported by the success metrics of this brand visual.

The image act and gaze, social distance and point of view created a direct connection between the creator and viewer and thus a feeling of oneness. The viewer was drawn into the visual and became an active participant in the relationship between the visual, the RP and the creator. The viewer could look at the visual from an inside perspective and became engaged in the same world as depicted in the visual. Hence it can be argued that the emotions surrounding the visuals as well as enhancing feelings of closeness with the viewer created stronger viewer involvement and a context to talk about the brand on social media. In addition, the visual spoke to a universal lifestyle trend of being adventurous as a single traveller and capturing an adventurous moment with a selfie. Although the travel agency is based in the UK, the image spoke to consumers globally because of being able to connect with like-minded travellers and those who admired the selfie (see [Olbertová](#)). In addition, when the viewer and the RP in the visual share an eyeline, the viewer becomes part of the same world, as a friend, and can identify more with the RP. The viewer was drawn into the visual with a strong affective response and not as an onlooker to the scene. The visual invited a response from the viewer and acknowledged the viewer's presence. The viewer entered the image frame and related to the visual. Also, by placing the viewer in a specific visual relationship with the visual, strong viewer involvement occurred ([Harrison 2003](#)).

7 Conclusion

The contribution of this study is twofold. The analysis firstly adds to the body of knowledge on the semiotics of resonating brand visuals and secondly provides some functional insight for social media marketers into how awareness of symbols and signs embedded in visuals could have a strong visual impact on consumers. Furthermore, knowledge about vocabulary for visual language must become important to social media marketers to better connect emotionally with consumers in chaotic online spaces. The main limitations of this study are that only one visual was analysed while focusing solely on the interactive metafunction of the visual grammar framework. In addition, consumer

responses to the visual were not tested but rather secondary data were considered as an indicator of the visual's engagement success. The findings nevertheless provide a potential mechanism which social media marketers could use to plan and select brand visuals for online brand messages. This study also opens important opportunities for future research about creativity in branding to engage social media users through visuals. Future research is needed to delimitate how to use visual grammar to enhance visual engagement on social media by also considering other vocabulary.

References

- Avery, J.: "Brand Storytelling"
- Campbell, N.: The signs and semiotics of advertising. In: Bell, E., Warren, S., Schroeder, J. (eds.) *The Routledge Companion to Visual Organization*, pp. 130–145. Routledge, New York (2014)
- Chandler, D.: *Semiotics: The Basics*, 2nd edn. Routledge Taylor & Francis Group, London (2007)
- Conejo, F., Wooliscroft, B.: Brands defined as semiotic marketing systems. *J. Macromarket.* **35**(3), 287–301 (2015)
- Danesi, M.: Visual Rhetoric and Semiotics. *Oxford Research Encyclopedia of Communication*, pp. 1–19 (2017s)
- Garret, C.: How to create brand messaging that resonates (2020). <https://www.pardot.com/blog/how-to-create-brand-messaging-that-resonates>. Accessed 19 July 2020
- Hajli, N., Lin, Z., Featherman, M., Wang, Y.: Social word of mouth. How trust develops in the market. *Int. J. Market Res.* **56**(5), 673–689 (2014)
- Halliday, M., Alexander, K.: *Language as Social Semiotic the Social Interpretation of Language and Meaning*. Edward Arnold, London (1978)
- Harrison, C.: Visual social semiotics: understanding how still images make meaning. *Tech. Commun.* **50**(1), 46–60 (2003)
- Hong, P.: Why emotional storytelling is the future of branding. *Linkdex* (2016). <https://www.linkdex.com/en-us/inked/future-of-branding-emotional-storytelling>. Accessed 19 July 2020
- Ivanov, I.: How brands can take advantage of the internet meme culture on social media (2017). <https://www.business2community.com/marketing/brands-can-take-advantage-internet-meme-culture-social-media-01956578>. Accessed 10 Feb 2020
- Ind, N., Coates, N., Lerman, K.: The gift of co-creation: what motivates customers to participate. *J. Brand Manage.* **27**, 181–194 (2020)
- Jewitt, C., Oyama, R.R.: Visual meaning: a social semiotic approach. In: van Leeuwen, T., Carey, C. (eds.) *The Handbook of Visual Analysis*, pp. 134–156. Sage Publications, London (2004)
- Kapferer, J.N.: *The New Strategic Brand Management: Advanced Insights and Strategic Thinking*, 5th edn. Kogan Page Publishers, London (2012)
- Kaulback, M.: Why visual communication is important for your brand. *Agility PR solutions* (2017). <https://www.agilitypr.com/pr-news/public-relations/visual-communication-important-brand>. Accessed 19 July 2020
- Keating, G.: Brand imagery versus brand image (2016). <https://www.hangar-12.com/blog/brand-imagery-versus-brand-image>. Accessed 19 July 2020
- Khattri, V., Prakash, O.: Role of semiotics in interpreting brand elements. *Amity Bus. Rev.* **17**(2), 66–79 (2016)
- Kress, G., van Leeuwen, L.: *Reading Images. The Grammar of Visual Design*, 2nd edn. Routledge, London (2006)
- Lencastre, P., Côte-Real, A.: One, two, three: a practical brand anatomy. *J. Brand Strateg.* **17**(6), 399–412 (2010)

- Le Roux, C., du Plessis, C.: An exploratory Q study of corporate brand identity elements governing corporate brand image formation. *South. Afr. Bus. Rev.* **18**(3), 119–141 (2014)
- Manning, P.: The semiotics of brand. *Ann. Rev. Anthropol.* **39**, 33–49 (2010)
- Olbertová, M.: How semiotics helps brands encapsulate value (2018). <https://www.brandingstrategyinsider.com/how-semiotics-helps-brands-encapsulate-value/#.XxR0oSgzZPZ>. Accessed 19 July 2020
- Oswald, L.R.: The structural semiotics paradigm for marketing research: theory, methodology, and case analysis. *Semiotica* **205**, 115–148 (2015)
- Perreira, G.: Brand storytelling: a three-dimensional perspective. *J. Brand Strate.* **8**(2), 146–159 (2019)
- Sudarsan, S.: The semiotics of brand building. *Brandingmag* (2015). <https://www.brandingmag.com/2015/02/04/the-semiotics-of-brand-building/> Accessed 10 Feb 2020
- van Leeuwen, T.: *Introducing Social Semiotics*. Routledge, London (2005)
- Vayas, R.: A Platinum Winning Case Study: The Flash Pack (2015). <https://sigs.cim.co.uk/travel-group/news/2015/october-2015/a-platinum-winning-case-study-the-flash-pack>. Accessed 19 July 2020
- Vos, L.: Semiotics in marketing: what it means for your brand and messaging. *CXL*(2019). <https://cxl.com/blog/semiotics-marketing>. Accessed 19 July 2020.
- Yenicioğlu, B., Christodoulides, G.: Branding in the age of digital connectivity. In: Moutinho, L., Bigné, E., Manrai, A.K. (eds.) *The Routledge Companion to the Future of Marketing*, pp. 268–281. Routledge, New York (2014)



Talking to Voice Assistants: Exploring Negative and Positive Users' Perceptions

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Abstract. The widespread use of voice assistants (VAs), which collect and process a huge volume of user data through user interactions, is beginning to attract the attention of marketing researchers. The early studies investigating consumers' negative (i.e., risk) and positive (i.e., benefits) perceptions related to users-VAs interactions appear partial and fragmented. Consequently, this paper aims at exploring the key perceptual factors of risk and benefits of interactions with VAs on smartphones. Then, we propose to profile Generation Y users according to their perceptions and analyse whether they are significantly different in terms of frequency of VA use, VA attitude, VA familiarity, innovativeness and age. By adopting a quantitative exploratory approach, 349 questionnaires are collected and validated. By running an exploratory factor analysis, a three-factor solution is outlined. Besides, the non-hierarchical k-means cluster analysis highlights three Generation Y user clusters. This research contributes to the nascent strand of studies on user perceptions related to interactions with VAs, by offering an overall view of perceived risk and benefits. Finally, we propose to marketers strategic guidelines in terms of targeting and marketing communication design.

Keywords: Voice assistant · Personal data collection risk · Personal data misuse risk · Benefits

1 Introduction

Voice assistants (e.g., Google Assistant) are artificial intelligence (AI) technologies that converse with users as if they were human beings (Vernuccio et al. 2020a, b) thanks to deep learning algorithms. VA usage data are becoming increasingly important, with 4.2 billion voice assistants being used worldwide, especially on smartphones and smart speakers (Statista 2021). Generation Y consumers are heavy users of VAs; they have twice the adoption rate of Baby Boomers and use VAs for both utilitarian (e.g., calling someone, checking schedules) and leisure (e.g., playing quizzes or games) purposes as well as for shopping and reading product reviews (Capgemini Research Institute 2018).

VAs are based on learning algorithms that collect and analyze a huge volume of users' personal and behavioral data. In a period where particular attention is being paid to privacy protection from a regulatory point of view (e.g., the GDPR in Europe), researchers have begun to investigate perceived risk related to interactions with VAs (Kaplan and

Haenlein 2020). In some studies, the perception of risk was analyzed with reference to the perceived risk of personal data collection, which is related to concerns that data may be collected without personal consent and illegally stolen by third parties (Rase et al. 2018; McLean and Osei-Frimpong 2019; Hong et al. 2020; Pitardi and Marriot, 2021). Other researchers have considered perceived personal data misuse risk, which refers to the fear that personal data are used and disclosed improperly (Saffarizadeh et al. 2017; Cho 2019). However, the literature on risk in the VA field seems disjointed since scholars have adopted specific theoretical perspectives (e.g., the theory of reasoned action, information privacy models, uses and gratification theory and resistance models). In addition, there is no consensus on the measurement scales used, and no study has analysed both perceived personal data collection and perceived personal data misuse risks. In addition, risk perception has mainly been analysed in the context of smart speakers, with little attention paid to smartphones, which are the most commonly used devices. Considering more optimistic perceptions, Rase et al. (2018) investigated the general usefulness of VAs by applying both the theory of reasoned action and the information privacy model, while Moriuchi (2019), analyzed the perceived usefulness of the Google Assistant on Google's website using the technology acceptance model. Moreover, Fernandes and Oliveira (2021) examined VA perceived usefulness by following the service robot acceptance model and Pitardi and Marriot (2021) investigated the perceived usefulness of Alexa by integrating human-computer interaction literature with para-social relationship theory. Finally, McLean and Osei-Frimpong (2019) considered utilitarian, hedonic and symbolic benefits as antecedents of Alexa usage following uses and gratification theory. Regardless, no study has analyzed benefit perceptions when users interact with VAs on smartphones. To date, to the best of our knowledge, only McLean and Osei-Frimpong (2019) investigated personal data collection risk and benefits jointly: the former moderates the positive impact of utilitarian, hedonic and symbolic benefits on in-home VA usage.

Despite the growing focus on risk and benefit perceptions, the specific and partial perspectives adopted do not allow us to grasp a holistic view of users' negative and positive perceptions arising from interactions with VAs. In addition, little attention has been given to the smartphone context. To fill this gap, our research simultaneously explores the main dimensions of risk and benefit perceptions related to user-VA interactions on smartphones. Moreover, to the best of our knowledge, no study has identified groups of users based on these perceptual differences. Thus, this work has a twofold aim: 1) to explore the main perceptual dimensions regarding the risk and benefits related to interactions with VAs and 2) to identify user clusters based on differences in perceptions.

To achieve these goals, we collected data through a web survey focused on Generation Y users, who are the segment most prone to VA use. Data were analysed through exploratory factor analysis (EFA) and k-means cluster analysis. In this way, our contribution fits into the nascent literature aimed at grasping users' perceptions related to interactions with VAs by offering the first holistic view of positive and negative user perceptions. In addition, our findings provide managers with interesting insights in terms of targeting, interaction experience design and marketing communication regarding value propositions on VAs. This paper is structured as follows. In the next section, we describe the literature on perceived risks and benefits in the VA context and formulate the research

questions. Then, the methodology and main results are presented. Finally, we propose the academic and managerial implications, limitations and suggestions for future research.

2 Theoretical Background and Research Questions

In the context of VA, scholars have investigated risk perceptions by referring to two different concepts: perceived privacy risk and privacy concerns. The former concept originated in the human-computer interaction field to indicate concerns related to the increased level of personal data collected by digital technologies without the consent of users (Collier 1995). Given the central role of voice-based AI technologies in everyday life, the perception of risk associated with improper data collection has become increasingly significant since VAs (e.g., Alexa on Amazon Echo) have security flaws that can be harnessed by hackers to illegally access data (Liao et al. 2020). The perception of risks related to data collection has been analyzed only in the context of smart speaker interactions by adopting specific perspectives. In particular, Rase et al. (2018), applying both the theory of reasoned action and the information privacy model, considered perceived privacy risk as an antecedent to VA attitude, while McLean and Osei-Frimpong (2019), adopting uses and gratification theory, reported that perceived privacy risk moderates the causal relationships between perceived benefits and the usage of in-home VAs. Moreover, Hong et al. (2020) emphasised the positive effect of perceived privacy risk on resistance to VA use by following the resistance model. They also noted how unfamiliarity with VAs on smart speakers should enhance perceptions of privacy risk. Finally, Pitardi and Marriot (2021) highlighted how perceived privacy risk negatively affects both attitude to use and VA trust by integrating human-technology interactions with para-social relationships theories. The concept of “privacy concerns” has been the object of considerable attention by researchers in different strands of study so that only in the literature on information systems have four different conceptualizations with their respective measurement scales been identified (Smith et al. 1996; Malhotra et al. 2004; Dinev and Hart 2005; Hong and Thong 2013) and used in the field of marketing (e.g., Saffarizadeh et al. 2017; Cho 2019). These scales include some common items relating to user perceptions of personal data misuse risk, which refers to concerns that personal data are used and disclosed improperly. In the VA field, Cho (2019) does not find privacy concern differences based on the device used (smartphone vs. smart speaker). Moreover, voice (vs. text) interactions led to a positive VA attitude only when individuals had low levels of privacy concerns. In conclusion, the literature on perceptions of risk related to interactions with VAs appears fragmented. As scholars have adopted partial perspectives, there is no agreement on the measurement scales that should be used, and no study has jointly investigated the two concepts of risk.

Utilitarian benefits refer to instrumental and functional benefits. VAs offer important utilitarian benefits not comparable to those offered by any other technology, such as the opportunity to interact with the device with little strain, hands-free, and without the effort of looking at or touching a physical interface (e.g., the smartphone screen) (Hoy 2018). Marketing scholars use the term “hedonic benefits” to indicate aesthetic and affective experience attributes, such as enjoyment and fun (Schuitema et al. 2013). According to McLean and Osei-Frimpong (2019), utilitarian benefits could be crucial in encouraging

consumers to use VAs, while hedonic benefits may be essential to the repeated use of these new technologies. Finally, symbolic benefits concern users' social images derived from interactions with technologies (Schuitema et al. 2013). To date, only McLean and Osei-Frimpong (2019) have analyzed perceptions of utilitarian, hedonic and symbolic benefits related to interactions with VAs in the smart speaker context. Moreover, this contribution is also the only one that has put benefits in relation to perceived privacy risk. In particular, risk moderates the positive effects of benefits on in-home VA usage.

Despite the growing attention of the marketing literature on perceptions of personal data collection and misuse risks, as well as benefits related to user-VA interactions, knowledge on this topic is still in its infancy and appears partial and fragmented. Therefore, it seems useful to adopt a holistic perspective to explore the key perceptual dimensions of risk and benefits. In addition, little attention has been given to VAs on smartphones. Consequently, the following research question is formulated:

RQ1 - What are the key perceptual dimensions of the risk and benefits related to interactions with VAs on smartphones?

Given the importance of Generation Y as the users most accustomed to interacting with VAs (Capgemini Research Institute 2018), we decided to focus on them. Since this segment is composed of users within a wide age range (25–40 years old) and because no study in this field has performed a cluster analysis based on the perceptual dimensions of the risk and benefits associated with VAs, we propose the following research question:

RQ2 - Which clusters of Generation Y users can be identified based on perceptual differences in risk and benefits related to interactions with VAs on smartphones?

3 Methodology

To answer the research questions, in 2020, we conducted a web survey focused on Generation Y users, i.e., those 25–40 years old (Monaco 2018). The survey was conducted in Italy and first involved postgraduate university students, and then other respondents were added through snowball sampling. Screening questions were inserted to select users born between 1980 and 1995 who have used VAs on smartphones at least once a month. As an initial step, to test the questionnaire, a pilot study was conducted with 20 respondents. Based on the results, we made some minor revisions. The final sample is composed of 349 target respondents (82.9% of the total respondents), of whom 52.7% are women (Table 1), and the average age is 29 years.

The questionnaire, composed of five sections, was administered through Survey-Monkey®. In the first section, we detected perceived personal data collection risk and perceived personal data misuse risk. The first was measured by adapting the four-item scale (e.g., *“I am worried that the voice assistant gathers too much data about me”*) developed by McLean and Osei-Frimpong (2019) to our context, while perceived personal data misuse risk was measured through the adapted four-item scale (e.g., *“I am concerned that the information I provide to the voice assistant could be misused”*) developed by Dinev and Hart (2005). In the second section, utilitarian (e.g., *“The use of the voice assistant is a cost-effective way to manage my time”*), hedonic (e.g., *“Completing tasks with the voice assistant is fun”*) and symbolic benefits (e.g., *“The use of the voice assistant improves my image among my friends”*) were measured using McLean and

Table 1. Profile of the respondents (N = 349)

Category	(%)
<i>Gender</i>	
Female	52.7
Male	47.3
<i>Education</i>	
Junior High School Graduate	0.6
High School Graduate	10.6
Bachelor's Degree	34.4
Master's Degree	38.1
Ph.D	15.2
Other	1.1

Osei-Frimpong's scales (2019). The third section focused on which VAs are mainly used on a smartphone (e.g., Google Assistant, Siri), VA attitudes and VA familiarity, which were measured by using Moriuchi's five-item scale (2019) and adapting the three-item scale by Griffin et al. (1996), respectively. In the fourth section, we measured innovativeness (Bruner and Kumar 2007). In the last section, structural data (gender, age and educational qualifications) were registered.

4 Findings

We conducted an EFA using SPSS 25 software to analyse the perceptual dimensions of risk and benefits associated with users-VAs interactions. We used PCA and the varimax rotation. To identify the factors to be extracted, we considered three criteria: 1) eigenvalues, 2) scree plot, and 3) parallel analysis. Then, we ran a k-means cluster analysis based on the factor scores to find clusters of Generation Y users based on perceptual differences. The EFA results showed a three-factor solution (19 items), with all factor loadings above 0.50 (minimum value 0.588; maximum value 0.907) and no cross-loading above 0.30. According to Costello and Osborne (2005), our findings are satisfactory. The three factors extracted accounted for 67.22% of the total variance. In addition, the Kaiser-Meyer-Olkin (KMO) index (0.878, $p < 0.001$) confirmed the sampling adequacy, and the variable appropriateness for the factor analysis was verified by Bartlett's test of sphericity ($\chi^2 = 6660.48$ (171), $p < 0.001$). Finally, the internal consistency of the items in each factor (Hair et al. 2015) was corroborated with Cronbach's alpha and composite reliability (CR) (factor 1: $\alpha = 0.924$, CR = 0.934; factor 2: $\alpha = 0.878$, CR = 0.90; factor 3: $\alpha = 0.925$, CR = 0.934). The extracted factors can be categorised as (Table 2): 1) data collection and misuse risk, 2) utilitarian and hedonic benefits, and 3) symbolic benefits.

Table 2. Exploratory factor analysis results

Factor	Item	Factor loading		
Factor 1 – data collection and misuse risk ($\alpha = 0.924$)	I am concerned that the information I provide to the voice assistant could be misused	0.890		
	I am concerned about providing information to voice assistant because of what others might do with it	0.882		
	I am concerned about providing information to voice assistant because it could be used in a way, I did not foresee	0.872		
	I am worried that the voice assistant gathers too much data about me	0.855		
	I am worried that my personal data saved with the voice assistant may be lifted	0.851		
	When I shop through the voice assistant, I am concerned that my credit card information may be stolen and misused during the transfer	0.752		
	I have my concerns about the confidential nature of my interactions with the voice assistant	0.694		
	I am worried about executing a financial transaction by voice assistant due to the data it gathers	0.659		
Factor 2 – utilitarian and hedonic benefits ($\alpha = 0.878$)	Performing tasks with the voice assistant allows me to manage my time efficiently		0.825	
	Performing tasks with the voice assistant facilitates my life		0.806	
	The use of the voice assistant is a cost-effective way to manage my time		0.805	
	I think using the voice assistant is pleasant		0.768	
	I think using the voice assistant is enjoyable		0.731	
	Performing tasks with the voice assistant fits my program		0.724	
	Completing tasks with the voice assistant is fun		0.588	
Factor 3 – symbolic benefits ($\alpha = 0.925$)	The use of the voice assistant is for me a status symbol			0.907
	The use of the voice assistant makes me seem more important among my friends			0.897
	The use of the voice assistant makes me seem more distinguished than those who do not			0.897
	The use of the voice assistant improves my image among my friends			0.831

Notes: Total variance extracted = 67.22%; KMO = 0.878; Bartlett's $\chi^2 = 6660.48$ (171), $p < 0.001$.

The non-hierarchical k-means cluster analysis (Ward’s method), based on the three factors identified by the EFA, was performed to explore the presence of similar VA perceptions among users. Four criteria allowed us to identify the final three-cluster solution: 1) within-cluster and between-cluster variance (F-test), 2) data interpretability, 3) the number of respondents in each cluster, and 4) the pseudo F-test (126.11) (Calinski and Harabasz, 1974). The generalisability of the cluster solution was verified by the Rand index (0.8009) (Rand 1971).

Table 3. K-means cluster analysis results

	F-statistic	Cluster		
		1. Iconic	2. Rational and emotional	3. Scared
Factor 1 – Data collection and misuse risk	16.568*	0.15	-0.31	0.35
Factor 2 – Utilitarian and hedonic benefits	160.167*	0.22	0.57	-1.02
Factor 3 – Symbolic benefits	397.143*	1.49	-0.53	-0.37
N	349	83	159	107
% of sample	100%	23.78%	45.56%	30.66%

Notes: * $p < 0.001$.

The first cluster, which we named “iconic”, is composed of 83 respondents and represents 23.78% of the sample (N = 349). This cluster has a high level of sensitivity to symbolic benefits (positive standardised score 1.49, thus the highest value among the three clusters). Moreover, members of this cluster are partially interested in utilitarian and hedonic benefits (0.22) and have a perception of risk slightly above average (0.15).

The second cluster, composed of 159 respondents (45.56% of the sample), is designated “rational and emotional” since its members are particularly sensitive to utilitarian and hedonic benefits (0.57, the highest value among the three clusters). These users are not interested in symbolic benefits (-0.53, the lowest value among the three clusters) and do not perceive the risk associated with the collection and misuse of data to be high (-0.31, the lowest value).

Finally, the third cluster, called “scared”, consists of 107 respondents (30.66% of the sample). This segment has the highest value among the three clusters in terms of perceived risks (0.35) and does not recognise neither the utilitarian and hedonic benefits (-1.02, the lowest value among the three clusters) nor the symbolic benefits (-0.37) (Table 3).

To reveal the differences among the three clusters, they were compared based on the variables measured in the third, fourth and fifth sections of the questionnaire. The relationships between cluster membership and the qualitative descriptive variables were studied through connection analysis and the chi-squared test. The findings highlight a significant association between cluster membership and the frequency of use ($\chi^2 =$

66.240 (6), $p = 0.000$), while associations with the VA used ($\chi^2 = 4.759$ (8), $p = 0.779$), gender ($\chi^2 = 1.489$ (2), $p = 0.475$) and educational qualifications ($\chi^2 = 7.835$ (10), $p = 0.645$) are all insignificant. In particular, “scared” cluster users have a low average usage frequency, while “rational and emotional” cluster users have a high average usage frequency. Moreover, to verify statistically significant differences among cluster means, we ran a series of one-way ANOVAs with the quantitative descriptive variables as the dependent variables and cluster membership as the independent variable. As shown in the Table 4, the results indicated significant differences in terms of VA attitudes, VA familiarity, innovativeness and age.

Table 4. One-way ANOVA cluster means and significance levels

Dependent variables	Cluster mean			F-statistic	P-value
	1. Iconic	2. Rational and emotional	3. Scared		
VA attitude	5.03	4.90	3.83	40.956	$p = 0.000$
VA familiarity	4.98	5.13	3.91	24.333	$p = 0.000$
Innovativeness	4.38	3.31	2.48	35.288	$p = 0.000$
Age	27.36	28.40	27.57	3.298	$p = 0.038$

Specifically, the “scared” cluster had the worst VA attitudes, the lowest average level of VA and the lowest average level of innovativeness compared to the other two clusters. Moreover, the users belonging to the “rational and emotional” cluster have above average ages compared only to the “iconic” cluster. Finally, users in the “iconic” cluster had low average ages compared to those in the “rational and emotional” cluster (Table 5).

Table 5. Multiple comparisons

Key dependent variables	Cluster		Mean difference	P-value
VA Attitude	3	1	-1.20	$p = 0.000$
		2	-1.07	$p = 0.000$
VA Familiarity	3	1	-1.06	$p = 0.000$
		2	-1.21	$p = 0.000$
Innovativeness	3	1	-1.89	$p = 0.000$
		2	-0.83	$p = 0.000$
Age	2	1	1.04	$p = 0.072$
		3	0.83	$p = 0.151^*$

Notes: * $p > 0.1$ NS

5 Conclusion

This study fits into the nascent strand of studies on VAs, holistically identifying and interpreting the key dimensions of perceived risk and benefits related to interactions between users and VAs. The EFA identified a satisfactory structure composed of three factors: “data collection and misuse risk”, “utilitarian and hedonic benefits” and “symbolic benefits”. The first factor is composed of eight items referring to both perceived personal data collection risk and perceived personal data misuse risk. The second factor, composed of seven items, is based on perceptions of both practical and hedonic benefits. Finally, the symbolic benefits factor is related to four items regarding users’ social status and image. The k-means cluster analysis reveals three Generation Y user clusters (“iconic”, “rational and emotional”, “scared”), which are described in terms of the frequency of VA use, VA attitude, VA familiarity, innovativeness and age. The users in the “iconic” cluster are particularly sensitive to symbolic benefits and are younger than those in the “rational and emotional” cluster. Moreover, they are the most interested in the purchase and use of new technologies (innovativeness). The “rational and emotional” cluster is composed of users attracted by both utilitarian and symbolic benefits, having a slightly higher average age than users of the first cluster and using VAs on smartphones more frequently. Finally, in the “scared” cluster, users are particularly sensitive to data collection and misuse risk, their usage frequency and VA familiarity are lower than in the other two clusters, and their VA attitudes are more negative. In addition, these users are the least inclined to use new technologies.

The contribution of this study to the academic literature is fourfold. First, it proposes an advancement in the fragmentary knowledge about the risk and benefits related to interactions with VAs by offering the first holistic view of these positive and negative perceptions. Moreover, concerning perceptions of the “dark side”, our findings show how users perceive, in an integrated way, the different dimensions of risk that are associated with data collection (e.g., Hong et al. 2020) and the misuse of data (e.g., Cho 2019). At the same time, considering the “bright side”, the analysis highlights users’ unified views of utilitarian and hedonistic benefits. The extant literature indirectly echoes this finding with the “utilitarianism” concept, related to both hedonic and utilitarian items (Babin et al. 1994). Moreover, these perceptions are reflected in the VA use for practical and leisure purposes by Generation Y users (Capgemini Research Institute 2018) (RQ1). Finally, this is the first study that has proposed using cluster analysis to highlight perceptual differences in terms of risk and benefits among groups of Generation Y users (RQ2).

In terms of managerial implications, the EFA and cluster analysis results offer important cues to practitioners regarding targeting, interaction experience design and marketing communication about the value proposition of VAs. For example, to reach the “iconic” users, communication activities should be focused on the prestigious and innovative image that VA users can acquire. To address the “rational and emotional” cluster, marketers should care about highlighting the variety of utilitarian and entertainment functionalities of VAs as well as emphasising both benefits in their communications to target users. Finally, to reach the “scared” users, the interaction experience should be designed to be as safe as possible. In addition, marketing communications should highlight security in data collection and use practices.

Our study is not exempt from limits. First, we use a non-probabilistic sample of Italian Generation Y users, who interact with VAs on smartphones. Consequently, this research design should be applied to other countries, other segments (e.g., Generation Z) and other devices (e.g., smart speakers) in specific VA usage contexts (e.g., in-home). Besides, future research lines could explore also the positive and negative perceptions of non-users. As our study has an exclusively exploratory focus, future works could deepen the possible causal links between perceptual variables and the intention to use VAs and/or resistance to the use of VAs on smartphones.

References

- Babin, B.J., Darden, W.R., Griffin, M.: Work and/or fun: measuring hedonic and utilitarian shopping value. *J. Consum. Res.* **20**(4), 644–656 (1994)
- Bruner, G.C., II, Kumar, A.: Gadget lovers. *J. Acad. Market. Sci.* **35**(3), 329–339 (2007)
- Caliński, T., Harabasz, J.: A dendrite method for cluster analysis. *Commun. Stat. Theor Methods* **3**(1), 1–27 (1974)
- Capgemini Research Institute “Voice Assistants – the new glass!” (2018). <https://www.capgemini.com/wp-content/uploads/2018/10/Voice-Assistants.pdf>
- Cho, E.: Hey Google, Can I Ask You Something in Private? In: Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems, pp. 1–9 (2019)
- Collier, G.: Information privacy. *Inf. Manage. Comput. Secur.* **3**(1), 41–45 (1995)
- Costello, A.B., Osborne, J.: Best practices in exploratory factor analysis: four recommendations for getting the most from your analysis. *Pract. Assess. Res. Eval.* **10**(1), 1–9 (2005)
- Dinev, T., Hart, P.: Internet privacy concerns and social awareness as determinants of intention to transact. *Int. J. Electron. Commer.* **10**(2), 7–29 (2005)
- Fernandes, T., Oliveira, E.: Understanding consumers’ acceptance of automated technologies in service encounters: drivers of digital voice assistants adoption. *J. Bus. Res.* **122**, 180–191 (2021)
- Griffin, M., Babin, B.J., Attaway, J.S.: Anticipation of injurious consumption outcomes and its impact on consumer attributions of blame. *J. Acad. Market. Sci.* **24**(4), 314–327 (1996)
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E., Tatham, R.: *Multivariate Data Analysis*, 7th edn. Pearson India Education Services, Noida (2015)
- Hoy, M.B.: Alexa, Siri, Cortana, and more: an introduction to voice assistants. *Med. Ref. Serv. Q.* **37**(1), 81–88 (2018)
- Hong, A., Nam, C., Kim, S.: What will be the possible barriers to consumers’ adoption of smart home services? *Telecomm. Policy* **44**(2), 101867 (2020)
- Hong, W., Thong, J.Y.: Internet privacy concerns: an integrated conceptualization and four empirical studies. *MIS. Q.* **37**, 275–298 (2013)
- Kaplan, A., Haenlein, M.: Rulers of the world, unite! The challenges and opportunities of artificial intelligence. *Bus. Horizons* **63**(1), 37–50 (2020)
- Liao, S., Wilson, C., Cheng, L., Hu, H., Deng, H. Measuring the effectiveness of privacy policies for voice assistant applications. In: Annual Computer Security Applications Conference (ACSAC), pp. 1–11 (2020)
- Malhotra, N.K., Kim, S.S., Agarwal, J.: Internet users’ information privacy concerns: the construct, the scale, and a causal model. *Inf. Syst. Res.* **15**(4), 336–355 (2004)
- McLean, G., Osei-Frimpong, K.: Hey Alexa... examine the variables influencing the use of artificial intelligent in-home voice assistants. *Comput. Hum. Behav.* **99**, 28–37 (2019)
- Monaco, S.: Tourism and the new generations: emerging trends and social implications in Italy. *J. Tourism Futures* **4**(1), 7–15 (2018)

- Moriuchi, E.: Okay, Google!: an empirical study on voice assistants on consumer engagement and loyalty. *Psychol. Market.* **36**(5), 489–501 (2019)
- Pitardi, V., Marriotti, H.R.: Alexa, she's not human but... Unveiling the drivers of consumers' trust in voice-based artificial intelligence. *Psychol. Market.* [Advance online publication] (2021)
- Rand, W.M.: Objective criteria for the evaluation of clustering methods. *J. Am. Stat. Assoc.* **66**(336), 846–850 (1971)
- Rase, Y., Ormaza Cuadra, A., de Moerloose, C.: The use of personal voice assistants in the context of retail digitalization: an empirical study of consumers' attitude and privacy concerns. Doctoral dissertation, Master's thesis. (2018)
- Saffarizadeh, K., Boodraj, M., Alashoor, T.: Conversational assistants: investigating privacy concerns, trust, and self-disclosure. In: *ICIS 2017 Proceedings*, pp. 1–12 (2017)
- Schuitema, G., Anable, J., Skippon, S., Kinnear, N.: The role of instrumental, hedonic and symbolic attributes in the intention to adopt electric vehicles. *Transp. Res. Part A Policy Pract.* **48**, 39–49 (2013)
- Smith, H.J., Milberg, S.J., Burke, S.J.: Information privacy: measuring individuals' concerns about organizational practices. *MIS Q.* **20**, 167–196 (1996)
- Statista: Number of digital voice assistants in use worldwide 2019–2024 (2021). <https://bit.ly/2Oumb4n>
- Vernuccio, M., Patrizi, M., Pastore, A.: Brand anthropomorphism and brand voice: the role of the name-brand voice assistant. In: *Advances in Digital Marketing and eCommerce*, pp. 31–39. Springer (2020a). https://doi.org/10.1007/978-3-030-47595-6_5
- Vernuccio, M., Patrizi, M., Pastore, A.: Developing voice-based branding: insights from the Mercedes case. *J. Prod. Brand Manage.* Advance online publication (2020b)



The Influence of Brands and Platform Mechanics on Creator' Content Sovereignty on TikTok

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Abstract. TikTok, the fastest growing app of 2020, has received much attention for its growth, creativity and marketing opportunities. Much accelerated through COVID19, TikTok has grown to over 800 million monthly active users and has catapulted itself in frontline media. However, the app has also shown to tightly control its infrastructure through its algorithm centric built, its approach to content censorship and active brand management. With that, TikTok has gone different routes than many predating platforms. Through TikTok's creator marketplace and indirectly monetizing content creators through its creator fund, TikTok has also shown to hold a tight grip on content creator. For this reason, this study examines the impact of TikTok and brands on content creator' content sovereignty. Through structured interviews, this study found evidence to suggest that TikTok's influence on the content behavior of its creator exceeds that of brands. It continues to propose a conceptual model to validate the findings through an empirical research track.

Keywords: TikTok · Content sovereignty · Influencer · Content creator

1 Introduction

TikTok has become the most talked about social media platform since its meteoritic rise during the COVID-19 pandemic in 2020 (Weimann and Masri 2020; Bhandari and Bimo 2020). Throughout 2020, TikTok has much capitalised upon users prolonged mobile online activity and thus grew its user base to over 800 million active users, coming from over 2 billion app downloads (Su et al. 2020). TikTok is frequently reported to be the most downloaded app in almost every app-store and achieved high media coverage (Su et al. 2002; Medina Serrano et al. 2020), not only for its stunning growth numbers, but also the platform's ongoing struggle with content censorship allegations (Anderson 2020), user data protection and of course the impact of China's ongoing tradewar with the US and other political issues (Janusch and Lorberg 2020). Academic interest in the platform has also started to increase with research focusing foremost on advertising and branding effects, the increasing usage of the app and potential political interferences through TikTok. However, very little research has yet focused on the platform's impact on content creator (Rach 2020). TikTok does not generate own content but acts as a matchmaking

platform, connecting users with user generated content (UGC) in order to monetize user engagement through advertising (Zeng et al. 2020). This reliance upon UGC is one of the few traits TikTok shares with competitors like Facebook, Instagram, YouTube and Twitter (Taprial and Kanwar 2012; Susarla et al. 2012). In contrast to other platforms, TikTok ignores users' peer network, but focuses solely on users' platform behaviour for its algorithmic driven content curation. For this reason, the importance of the content creator is elevated as a vital element to increase user engagement and render the platform interesting to brand sponsorships. Through various mechanics, such as the Community Guidelines, the algorithm and the Creator Fund, TikTok moderates and impacts content and user interaction to a greater extent than other platforms (Lin 2020). At the same time, brands excerpt their influence on content creator through sponsored engagements. This paper therefore seeks to tighten the current research gap with regards to platform and brand impacts on content creator on TikTok. It seeks to provide insights, if and to which extent the content sovereignty of TikTok content creator is impacted by either the platform or brands. Therefore, this paper focuses on economically driven content creator to compare the potential direct and indirect behavioural alteration effect on their content sovereignty. As such, this paper seeks to further stimulate discourse about creator' content sovereignty within the larger framework of matchmaking platforms and persuasive technology applications in social media.

2 Methodology

Based on the prior research conducted in this field, the following research question has been formed, which will be answered through a sequential research method, building upon qualitative interviews with TikTok content creator: to which extent, if at all, is the content sovereignty of TikTok creator impacted by either platform mechanics, or brand sponsorship demands? This research question has been materialised through an extensive literature review, followed by series of qualitative interviews with TikTok content creator. The work of (Thomas et al. 2019) has been used to construct supporting questionnaire items and scaling to measure the perceived level of influence and persuasion exerted on content creator.

3 Literature Review

Due to TikTok's young age within the social media landscape and thus the missing large scale research coverage, particularly in critical areas, a rigorous literature review has been conducted to account published academic works, but also practitioner reports. Table 1 provides an overview of applies search parameters. Each search was full-text, time-restricted from 2017 to 2020 and using the following keywords.

Google search results have been further restricted by including the "content creator" operand, resulting in 155 findings. The only research identified within the scope of this paper is a conference presentation (Rach 2020), which hypothesizes the impact of TikTok platform mechanics on economically driven content creator. All other streams of research focus primarily on influencer effects, marketing and branding, TikTok's growth, or privacy and censorship issues. Since these were irrelevant for this study, they

Table 1. Literature Review Search Criteria

Database	Search Criteria (2017–2020)		
	TikTok	TikTok + content	TikTok + creator
EBSCO Host	2'108	143	54
Google Scholar	7'430	5'040	1'170
ScienceDirect	116	84	16

are not further discussed. The paper of Rach (2020) provided first evidence of subtle behavior alteration impact through the platform's algorithm and abrupt behavior alteration impact through platform mechanics, such as the enforcement of TikTok's community guidelines (Bandy and Diakopoulos 2020). It assumed, that TikTok's monetization objectives determine the behavior alteration impact the platform exercises on its content creator. However, it ignored to weigh these impacts against the second potential alteration force, brand sponsorships. In summary, based on the conducted literature review, a research gap to understand the behavior and behavioral impacts on content creator has been confirmed.

4 Qualitative Interviews

To conduct qualitative interviews, content creators with active brand sponsorships were first recruited via a network sampling technique in dedicated creator groups on LinkedIn, Facebook and various online forums. Network sampling has been proven effective in studies relating to the recruitment of social media users (Heckathorn and Cameron 2017). To qualify for the study, at least 2 different brand sponsored posts had to be realised. Further, creator had to have at least 1 million followers on the platform. This number was set so to avoid opportunistic content creator and only focus on creator with a high level of platform involvement (Narassiguin and Sargent 2019). To restrict cultural influences, only content creator in Europe and North America were targeted. Since the above failed to provide the necessary sample based on the set filter criteria, a manual sampling was initiated. Content creator fitting the above criteria were identified using TikTok's Creator Marketplace feature and subsequently contacted via in-app messaging, E-Mail, or through their linked Instagram account. Through this, a total of 125 content creators were contacted. 36 agreed to participate in the study, a further 13 were eliminated through either self-selected no-show, or language barriers. All interviews were conducted via videoconferencing and kept at 20 min, following a pre-set interview structure. Table 2 provides an overview of interviewed content creator.

65% of interviewees were based in the US, 9% in Canada and the rest in Europe.

5 Results

Main results are summarized in Table 3. Based on the conducted interviews, 87% of content creator acknowledged to have been impacted by algorithmic changes, or other

Table 2. Interview list

#	Follower count in million	Gender	Age range	Content focus
1	8	F	15–19	Dance
2	5	F	20–29	Storytelling
3	4	F	15–19	Entertainment
4	4	F	15–19	Dance
5	4	M	30–39	Stories
6	4	F	15–19	Dance
7	3	F	15–19	Dance
8	3	F	20–29	Tutorials
9	3	F	20–29	Entertainment
10	2	M	20–29	Stories
11	2	M	30–39	Learning with TikTok
12	2	F	15–19	Dance
13	2	M	20–29	Dance
14	2	F	20–29	Entertainment
15	2	F	20–29	Singing
16	2	M	20–29	Car related
17	2	F	20–29	Entertainment
18	1	M	15–19	Storytelling
19	1	F	15–19	Dance
20	1	F	30–39	Cooking
21	1	F	15–29	Dancing
22	1	M	20–29	Car related
23	1	F	15–19	Dance

indirect platform impacts. About 22% reported to have been directly impacted by platform induced penalties due to community guideline violations. To contrast, the study of Rach (2020) found over 80% impacts by algorithmic changes and 40% impact by other platform mechanics. Thus, this study found a much higher creator focus on the algorithm, but lower dependency on other platform mechanics. Creator seemed aware of community guidelines and appeared very savvy in avoiding any potential violation or flagging of their content. With the increasing following of a creator, risk mitigation measures to avoid any platform interreference seemed to positively correlate. Thus, the larger the account's following and the higher the impact of the platform on the creator's income structure, the more sensitive and aware creator appeared of the potential harm a guideline

violation could have on their account's monetization potential. All interviewed content creator provided hints of adjusting their personal platform behaviour to maximize user views and engagement. This finding extends the previous study of Rach (2020), which demonstrated a behavioural algorithm driven impact on posting frequencies.

Table 3. Results summary

Impact dimension	TikTok	Brands
Perceived direct impact	22%	NA
Perceived indirect impact	87%	30%
Monetization impact (direct)	43%	73%
Monetization impact (indirect)	100%	40%
Reason to content adjust	100%	22%

To contrast, the impact of brands on creator' content sovereignty proved less significant. Over 60% of content creator did not adjust their content style or creative to the demands of brands. The rational voiced was that overall account reach and relevancy was more valuable for further monetization opportunities than singular sponsored posts. Furthermore, creator stated to know the platform and their audiences' taste better than sponsoring brands. As such brands often rely upon creator's advice and content suggestion for their sponsored engagements. However, almost 22% admitted having adjusted to the liking of sponsored brands. Particularly smaller accounts seemed more prone to any form of influence, both platform and brand related.

Further noteworthy is the perceived monetization impact of the platform and that of brands. Since TikTok creator can receive three streams of monetization, direct brand monetization, TikTok creator fund monetization and marketplace influencer deals, the indirect monetization impact of TikTok was rated much higher and much more influential by content creators. This included any adverse algorithmic effect on an account's reach. To contrast, the direct monetization impact of brands was rated higher to the current sponsorship potential, but much lower in overall impact on a creator's content sovereignty.

6 Discussion of Findings

Whilst this study provided some interesting findings, any further discussion has to be both contextualized and demand empirical verification. First, the direct monetization through brand sponsorships has a lesser effect on creators' content sovereignty than the platform itself. Considering that TikTok operates its own creators' marketplace (Collie and Wilson-Barnao 2020) and stricter content moderation, its influence is perceived higher than that of any brand relationships. A loose interpretation of findings might suggest a platform dependency by creator, but a sponsorship interdependency. Thus, the skewedness of perceived dependency leans towards TikTok.

Contrasting influencer behavior on other platforms, some similarities can be noted, particularly by studies done on influencers on Instagram and their exhibited behavior towards brands. Account reach is understood as a long-term value, which generally supersedes short-term monetization opportunities. This correlates also with increase of account size as measured by the number of followers. Creator seem to act more tactical with an increase in account followership. However, with an increasing dependency on brand deals as a source of personal income, this content sovereignty protecting behavior seemed to take a turn. Unfortunately, the sample of income dependent accounts was too small to contrast these findings to existing Instagram studies in order to understand if account growth stimulates a tipping point in content behavior (Breves et al. 2019; Lou and Yuan 2019). Personal observations of the top 50 creator accounts by followers seemed to provide confirming evidence, with sponsored posts appearing scripted and not blending into the overall content structure of observed accounts.

To stimulate further research and to summarize the findings of this qualitative study on the content sovereignty of TikTok creator, the following conceptual model, as seen in Fig. 1, has been proposed as a result of this study's findings.

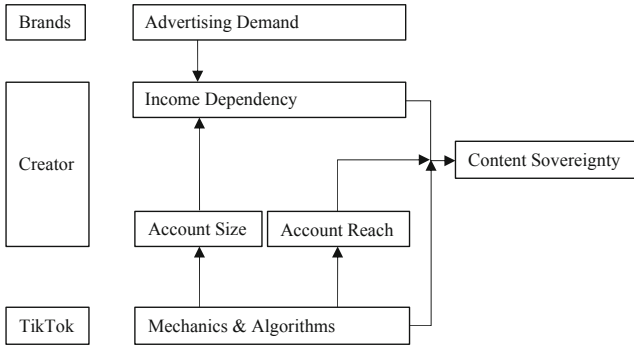


Fig. 1. Conceptual Model of Creator Content Sovereignty

7 Conclusion

This paper somewhat confirmed and validated the pre-dating study by Rach (2020) about the behavioral alteration impact of the TikTok platform on content creator. It further highlighted, that the influence of the TikTok platform on the content sovereignty of its content creator outweighs the impact monetization brand partners have. Whilst this might not seem harmful, it poses a tremendous change to the influencer-marketplace dynamic and highlights the potential level of behavioral impact of the TikTok platform. For brands seeking to invest in sponsored posts and for creator alike, it is vital to understand impacting forces on their relational construct and return expectations. It raises questions about the potential impact the platform could have creator brand posting vs. Platform native forms of advertising. Since a competitive platform already announced to guarantee views on its advertising products, the importance and relevance of creator to brands will be put to question.

8 Limitations and Further Research

Although all possible efforts have been undertaken to quality control the outcome of this study, some limitations have to be noted. First, this paper's research was built upon a qualitative research method to propose a conceptual model for further validation. Findings might thus not be representative and require substantial empirical validation. Further, the interview selection, although objectivized through selection criteria, did not follow a random selection method and thus holds the danger of a selection bias. At the time of research, no means was discovered to avoid a selection bias for the very specific scope of this paper. Lastly, since qualitative interviews were conducted, although following a preset structure, an operational interview bias cannot be excluded.

Nevertheless, the findings of this research are grounds for further quantitative research to validate the formed conceptual model empirically. Furthermore, the scope of this paper can be expanded to other social media platforms to understand the potential impact of platforms and brands on the behaviour and therefore content sovereignty of its creator. Particularly since younger generations strive to become content creator, it is vital to understand behavioural impacts to propose regulatory, educational, or platform monitoring processes, to neutralize behavioural alteration effects resulting from potentially manipulative influences. Finally, influencers are perceived as the current solution to the constant decrease of advertising effectiveness. Thus, if influencers adjust their content behaviour to the objective conformity of a platform and or the liking of brands, their level of influence might decrease due to the increasing advertising perception and gradual loss of authenticity. Measuring this effect could have a big impact on the marketing practitioners and their future budget planning towards native forms of advertising, the planning of organic platform interaction, or creator engagements.

References

- Anderson, K.E.: Getting acquainted with social networks and apps: it is time to talk about TikTok. *Library Hi Tech News* (2020).
- Bandy, J., Diakopoulos, N.: # TulsaFlop: A Case Study of Algorithmically-Influenced Collective Action on TikTok. *arXiv preprint [arXiv:2012.07716](https://arxiv.org/abs/2012.07716)* (2020)
- Bhandari, A., Bimo, S.: TikTok and the "algorithmized self": a new model of online interaction. *AoIR Selected Papers of Internet Research* (2020)
- Breves, P.L., Liebers, N., Abt, M., Kunze, A.: The perceived fit between instagram influencers and the endorsed brand: how influencer-brand fit affects source credibility and persuasive effectiveness. *J. Advert. Res.* **59**(4), 440–454 (2019)
- Collie, N., Wilson-Barnao, C.: Playing with TikTok: algorithmic culture and the future of creative work. In: *The Future of Creative Work*. Edward Elgar Publishing (2020)
- Heckathorn, D.D., Cameron, C.J.: Network sampling: from snowball and multiplicity to respondent-driven sampling. *Ann. Rev. Sociol.* **43**, 101–119 (2017)
- Thomas, R.J., Masthoff, J., Oren, N.: Can I influence you? Development of a scale to measure perceived persuasiveness and two studies showing the use of the scale. *Front. Artif. Intell.* **2** (2019).
- Janusch, H., Lorberg, D.: Maximum pressure, minimum deal: president trump's trade war with a rising China. *S&F Sicherheit und Frieden* **38**(2), 94–99 (2020)

- Lin, J.: One App, Two Versions: Tiktok and the Platformization from China. *AoIR Selected Papers of Internet Research* (2020)
- Lou, C., Yuan, S.: Influencer marketing: how message value and credibility affect consumer trust of branded content on social media. *J. Interact. Advert.* **19**(1), 58–73 (2019)
- Medina Serrano, J.C., Papakyriakopoulos, O., Hegelich, S.: Dancing to the Partisan beat: a first analysis of political communication on TikTok. In: *12th ACM Conference on Web Science*, pp. 257–266, July 2020
- Narassiguin, A., Sargent, S.: Data science for influencer marketing: feature processing and quantitative analysis. *arXiv preprint [arXiv:1906.05911](https://arxiv.org/abs/1906.05911)* (2019)
- Rach, M.: A qualitative study on the behavioral impact of Tiktok’s platform mechanics on economically driven content creators. In: *The 9th International Conference on Sociality and Humanities (ICOSH 2020)*, December 2020
- Su, Y., Baker, B.J., Doyle, J.P., Yan, M.: Fan engagement in 15 seconds: athletes’ relationship marketing during a pandemic via TikTok. *Int. J. Sport Commun.* **13**(3), 436–446 (2020)
- Susarla, A., Oh, J.H., Tan, Y.: Social networks and the diffusion of user-generated content: evidence from YouTube. *Inf. Syst. Res.* **23**(1), 23–41 (2012)
- Taprial, V., Kanwar, P.: *Understanding social media*. Bookboon (2012)
- Weimann, G., Masri, N.: Research note: spreading hate on TikTok. *Stud. Conflict Terrorism*, 1–14 (2020)
- Zeng, J., Schäfer, M.S., Allgaier, J.: Reposting “till Albert Einstein is TikTok famous”: The Memetic Construction of Science on TikTok (2020)



Interactivity in Social Media: A Comparison in the Movie Studios Sector

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Abstract. This research analyzes the social media activity of three movie studios (20th Century Fox, Warner Bros and Universal Studios), and how that is affecting in the numbers and relevance of each. We develop a database to keep a record of the decisions this companies have been doing and how they take advantage of the tools presented by the social media. Methodology is quantitative. We collect frequency of posts, special events, types of post, the number of likes and comments retrieved from the viewers and also the number of shared posts. We have focused in different parts of each social media since, each one is designed to fulfill one specific aspect. With that approach we expect to determine which of the companies has understood better the way they have to be used and if they had won any kind of advantage through the good use of this medias presented as more interaction between themselves and the viewers and a more effective way to present their products. We conclude a correlation between enterprises (movie studios) and social media.

Keywords: Cinema · Interactivity · Marketing · Social media · Digitization

1 Introduction

Social media and interactivity are conditioning the marketing activity of movie studios in the Broadband Society environment (Fondevila-Gascón 2013), in which competitiveness is high thanks to the new online video business models (Currah 2006; Clemons 2009; Artero 2010). There is no excess of scientific literature in the study object of this article. Some articles have analysed the progress of many movie studio industries (Lombardi 2013), that try to create a plot twists and redefine their storylines (Kleckner 2013). One of the principal topics is the migration to the online activity (Iordanova and Cunningham 2012). Movie has changed from a classic entertainment.

The three principal players in the movie industry arena are Universal Pictures, 20th Century Fox and Warner Brothers. About cinema and possible impacts of social media, the research is focused in the status of the promotion, distribution and exhibition in Spain (Deltell and García Fernández 2013), and in the activity in social media, especially in Twitter (Deltell et al. 2013) and Spanish producers (Deltell Escolar and Clemente Mediavilla 2016).

With the rapid growth in both the movie industries and the development of social media, the presence of both of these industries becomes inseparable due to the many types of social media (Fondevila-Gascón et al. 2012; Fondevila-Gascón et al. 2020a) and sources like crowdfunding (Fondevila-Gascón et al. 2015). In the interactive ecosystem, thanks to Hybrid broadband broadcast Television (HbbTV) standard (Fondevila-Gascón et al. 2017a, b, c), the social media presence is crucial. About brand longevity, it is progressively linked to social media activity (Preece et al. 2018). The enterprise can obtain benefits thanks to interactive options, like HbbTV (Fondevila-Gascón 2012; Fondevila-Gascón et al. 2017a, b, c). From the business perspective, the value propositions that are offered by these movie studios are immensely unique.

2 Methodology

The aim of this paper is to investigate the length that different movie studios undertake in efficiently using social media as a platform to promote their movies and to establish an atmosphere that will enhance the level of curiosity of their customers. The factors include the next: frequency of posts, special events, types of post, the number of likes and comments retrieved from the viewers and also the number of shared posts. It is based in a combination of methodological indicators about social media from Fondevila-Gascón et al. (2013: 161–163), Fondevila-Gascón (2014), Fondevila-Gascón and Perelló-Sobrepere (2014: 115–116), Fondevila-Gascón et al. (2017a, b, c), Fondevila-Gascón et al. (2020a, b).

The appropriate strategy to analyze the presence of different movie studios on social media is through explicitly observes their activities in the online world. The social media platforms that will be observed are Facebook, Twitter, Instagram, and YouTube. Facebook allow its regular users to ‘like’, ‘share’ ‘comment’ and use different emoticons to express a specific emotion (Fondevila-Gascón et al. 2020b) be longer videos and Instagram uses photos or shorter videos, that is something that these companies should take into account in order to gain more visibility. The film studio corporations must know how to appropriately make the most impact through their marketing attempts (Cavallo et al. 2012).

We contrast interaction between the different movie studios and the reactions that come from different customers. It also tries to reveal the level of engagement that customers have with the movies. We compared the performance of all the observed variables from the three different movie studio companies.

Another observation that is equally important is regarding the reactions that people are creating as the result of the hype that have been posted on these social media. People generally tend to comment, re-share the posts and leave a ‘like’ signs. This gives the freedom for the viewers to express their thoughts regarding those upcoming box office

movies. In a sense, these reactions can measure how popular are these movies perceived by the many customers both positive and negative.

3 Results and Findings

Since we are comparing 4 different types of social media, we will observe in which of them people use the ‘like’ button in the most frequent way. In Fig. 1, there is an account on the amount of likes from each of the social media.

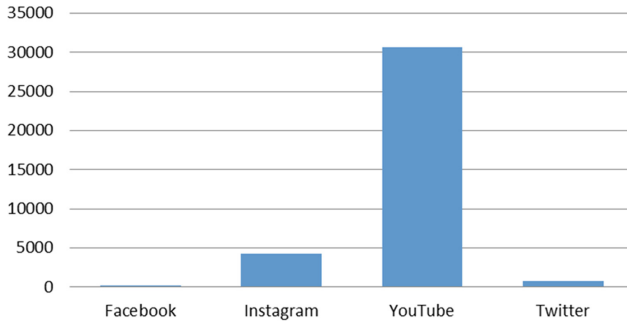


Fig. 1. The number of likes per social media

We observe that YouTube is the social media in which people leave the greatest number of likes. The fundamental purpose of YouTube is not for observing the amount of ‘likes’ a video has, instead it supposed to be the amount of ‘views’ it has. The value of a post on Instagram lies in the number of ‘likes’ it has (Parmelee and Bichard 2012). That is the reason we will choose Instagram to compare the number of likes between posts retrieved per social media (Fig. 2).

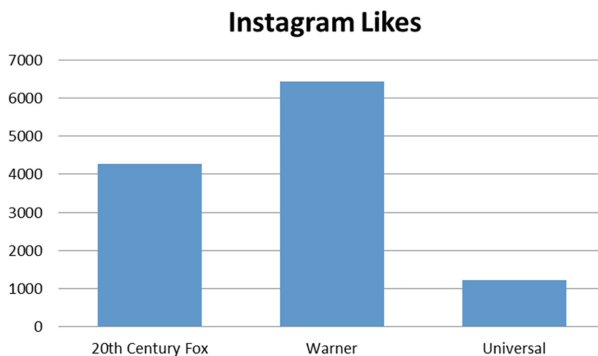


Fig. 2. The number of ‘likes’ retrieved by different movie studios on Instagram.

Warner Brothers has the most amounts of likes retrieved for the posts that they published on Instagram. One of the main reasons is that Warner Brothers has been very

successful in delivering their contents that intrigued more people to like more of their posts in comparison to the other movie studios. It is very important to note that this superior like does not have anything to do with the frequency of posts made by Warner Brothers. Publishing the most amounts of posts with a good content makes people keener in leaving their ‘likes’.

There is also a specific feature on YouTube that allows enterprises to promote their products through advertisement (ad) that every so often appeared before the desired video was about to play. Some of these ads can be skipped without the need of having a premium account, but some of those ads could not be skipped without acquiring the premium privilege. This type of ad is an example of ‘viral advertising’ that is available on social medias such as: YouTube. Viral advertising refers to an advertising technique in which video advertisements are distributed from one user to another via e-mail and online social networking (Golan and Zaidner 2008).

The rate of posts conducted by the 3 movie studios is different in social media platforms. Twitter and Instagram are the most used social media platforms for Warner Brothers. Figure 3 presents the number of comments made towards a specific post in different types of social media platform. The number of comments retrieved in different platforms distributed quite similarly. Even though, we did have an extreme minimum and also an extreme maximum number of comments. Universal Pictures received the least number of comments on Instagram. Warner Brothers received the most amounts of comments on YouTube.

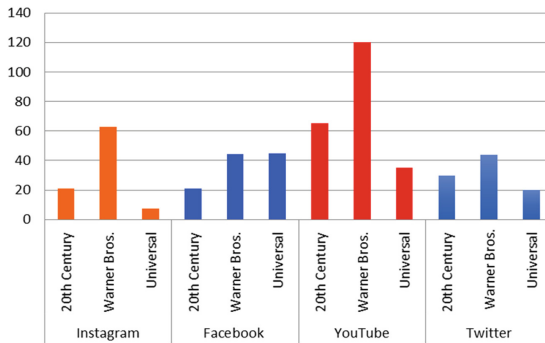


Fig. 3. Total comments per social media

The number of comments can help to indicate the level of engagement that the viewers have on a specific post. Since it does take more time to comment on something rather just leaving a ‘like’ or sharing a certain post. Based on observing the number of posts that Universal Pictures made on Instagram, it shows that they made the least number of posts in this social media platform. However, an interesting case can be seen from the unprecedented amount comments retrieved by Warner Brothers. It is indicated that the Warner Brothers posted the least videos on YouTube, however they managed to receive the greatest number of comments. This really does help us to better understand that the number of posts does not necessarily affect the number of comments they receive. In this sense, the content of the video is what truly important and not its amount. Therefore,

we can say that people are in favor to comment on the fewer video posts made by the Warner Brothers in comparison to the many video posts made by other movie studio companies.

4 Conclusions and Discussion

There is a correlation between enterprises and social media. In marketing, the advantage that social media platforms offer for businesses and enterprises are unquestionable. Within the film industry, the final and perhaps one of the most important stages is the selling process of that movie itself. In order for a movie to be recognized and known by the general public, a persistent and effective marketing effort is highly needed (Cavallo et al. 2012). The real challenge that these movie studios have is to efficiently promote their movies to all corners of the globe.

The purpose of advertising a movie is not limited to the creation of awareness alone. Movies are basically tangible products that have a certain sense of uniqueness in its nature. When a movie managed to achieve its most successful stage, for instance receiving an award (like in science) or some sort, the reminiscence of it will remain for more years to come. Due to this unique value proposition, endorsing a movie is also an activity of establishing a level of engagement and building that jubilant ambience.

Each social media has its own particular purpose of engagement. When Universal Studios published a video of a movie trailer on YouTube, it means that the company focuses on observing the number of views and the number of times that particular trailer has been played. Frequency of posts in any type of social media does not guarantee a great deal number of views, likes or comments. It was the case of Universal Studios that this film studio tends to post a lot of videos on their main channel on YouTube, however they too receive the less amount of likes in comparison its competitors. People tend to a post with more specific and valuable content. Interactivity (Fondevila-Gascón 2012; Fondevila-Gascón et al. 2017a, b, c) is decisive.

There is a good number of posts made by each movie studio regarding special events, interview with the casts of the movie and also behind the scenes of some of the making process of those movies. It turns out that these kinds of posts generate an even more engagement from the public than the regular movie trailers. This may be derived from the fact that people tend to connect more with the casts of the movie and also, they tend to seek for more information about the movie that trailer does not provide them.

Like Warner Brothers is the movie studio that stands out the most in terms of the public enthusiasms that they generated from their posts in all social media platforms. It is compelling to truly realize that Warner Brothers retrieved the most reactions even though they were not the most frequent one to publish variety number of posts. It is simply because they put a lot of thoughts to make their posts to have a diminishing level of content that intrigued many viewers. It can be concluded that social media really does enhances the level of engagement between the general public with the movie studios. It is also a valid statement to mention that movie studios need to adjust the best strategies from using each of the social media platforms.

Research included in the Project Challenges of the General Directorate of Scientific and Technical Research, General Sub directorate of Research Projects, Ministry of Economy, Industry and Competitiveness, Spain, “New forms of interactive advertising in television, Internet and digital media. Real applications on HbbTV” (CSO2017-88895-R). Blanquerna-Universitat Ramon Llull and CECABLE.

References

- Artero, J.P.: Online video business models: YouTube vs Hulu. *Palabra Clave* **13**(1), 111–123 (2010)
- Cavallo, M., Esposti, P.D., Konstantinou, K.: *Hand Book of Green Communication and Marketing*. Ecomark, Milano (2012)
- Clemons, E.K.: Business models for monetizing internet applications and web sites: experience, theory, and predictions. *J. Manage. Inf. Syst.* **26**(2), 15–41 (2009)
- Currah, A.: Hollywood versus the Internet: the media and entertainment industries in a digital and networked economy. *J. Econ. Geograph.* **6**, 439–468 (2006)
- Deltell, L., García Fernández, E.C.: Film promotion in the digital universe. The end of the cinema exhibition in Spain. *Hist. Comun. Soc.* **18**, 203–217 (2013)
- Deltell, L., Claes, F., Osteso, J.M.: Twitter en las campañas comunicativas de películas cinematográficas. *El Profesional de la Información* **22**(2), 128–134 (2013)
- Deltell Escolar, L., Clemente Mediavilla, J.: Productoras españolas en la red. Actividad en Twitter y Facebook. *Estudios sobre el Mensaje Periodístico* **22**(2), 969–980 (2016)
- Fondevila-Gascón, J.-F.: Connected television: advantages and disadvantages of the HbbTV standard. *Cuadernos de Información* **32**, 11–20 (2012)
- Fondevila-Gascón, J.F., Del Olmo-Arriaga, J.L., Bravo Nieto, V.: Digital presence and reputation in social media: comparative in the fashion industry. *Fonseca J. Commun.* **5**, 92–116 (2012)
- Fondevila-Gascón, J.-F.: Periodismo ciudadano y cloud journalism: un flujo necesario en la Sociedad de la Banda Ancha. *Comun. Hombre* **9**, 25–41 (2013)
- Fondevila-Gascón, J.F., Herrando-Soria, C., Beriain-Bañares, A., Del Olmo-Arriaga, J.L.: Social media y comercio electrónico. Pinterest como nueva herramienta comunicacional. *DOXA COMUNICACIÓN Revista Interdisciplinar de comunicación y ciencias sociales* **16**, 151–172 (2013)
- Fondevila-Gascón, J.F.: El uso de hipertexto, multimedia e interactividad en periodismo digital: Propuesta metodológica de ranking de calidad. *ZER, Revista de Estudios de Comunicación* **19**(36), 55–76 (2014)
- Fondevila-Gascón, J.F., Perelló-Sobrepere, M.: The rise of Twitter in the Latin American landscape: a study of the most followed accounts in Brazil, Mexico, Argentina, Colombia and Venezuela. *Revista Latinoamericana de Ciencias de la Comunicación* **10**(19) (2014)
- Fondevila-Gascón, J.-F., Botey-López, J., Rom-Rodríguez, J., Muñoz-González, M.: Posibilidades comunicativas del HbbTV: un nuevo escenario para la publicidad interactiva. In: Araceli Castelló-Martínez y Cristina del Pino-Romero (Coords.) *Publicidad y Convergencia Mediática. Nuevas estrategias de comunicación persuasiva*, pp. 11–28. Egrejus Ediciones, Sevilla (2017a)
- Fondevila-Gascón, J.F., Mir-Bernal, P., Rom-Rodríguez, J., Santana-López, E.: New digital metrics in marketing: a comparative study on social media use. In: Freire, F.C., Araújo, J.R., Fernández, V.A.M., García, X.L. (eds.) *Media and Metamedia Management, Colección Advances in Intelligent Systems and Computing*, 503, pp. 343–350. Springer, Heidelberg (2017b)
- Fondevila-Gascón, J.-F., Rom-Rodríguez, J., Mata-Monforte, J., Santana López, E., Masip Masip, P.: Crowdfunding as a formula for the financing of projects: an empirical analysis. *Rev. Científ. Hermes* **14**, 24–47 (2015)

- Fondevila-Gascón, J.F., Botey-López, J., Rom-Rodríguez, J.: Formats emergents en televisió: anàlisi comparativa d'aplicacions publicitàries interactives en HBBTV. *Comunicació: Revista de Recerca i d'Anàlisi [Societat Catalana de Comunicació]* **34**(1), 67–81 (2017c)
- Fondevila-Gascón, J.-F., Polo-López, M., Rom-Rodríguez, J., Mir-Bernal, P.: Social media influence on consumer behavior: the case of mobile telephony manufacturers. *Sustainability* **12**(4), 1506 (2020a)
- Fondevila-Gascón, J.-F., Gutiérrez-Aragón, Ó., Copeiro, M., Villalba-Palacín, V., Polo-López, M.: Influencia de las historias de Instagram en la atención y emoción según el género. *Comunicar. Revista Científica de Comunicación y Educación* **63**(2), 41–50 (2020b)
- Golan, G.J., Zaidner, L.: Creative strategies in viral advertising: an application of Taylor's six-segment message strategy wheel. *J. Comput. Mediat. Commun.* **13**, 959–972 (2008)
- Iordanova, D., Cunningham, S. (eds.): *Digital Disruption: Cinema Moves Online*. St Andrews Film Studies, St Andrews (2012)
- Klecker, C.: Mind-tricking narratives: between classical and art-cinema narration. *Poet. Today* **34**(1–2), 119–146 (2013)
- Lombardi, F.: *Allan Dwan and the rise and decline of the Hollywood studios*. McFarland, Jefferson (2013)
- Parmelee, J.H., Bichard, S.L.: *Politics and the Twitter Revolution: How Tweets Influence the Relationship Between Political Leaders and the Public*. Lexington Books, Lanham (2012)
- Preece, C., Kerrigan, F., O'reilly, D.: License to assemble: theorizing brand longevity. *J. Consum. Res.* **46**(2), 330–350 (2018)



Digital Transformation Induced by the Covid-19 Pandemic

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Abstract. The covid-19 pandemic has posed massive challenges to every actor of our social system. In Southeast Asia, businesses are no exception; well-established corporations moved toward digital transformation faster than others. With a pre-scriptive objective in mind, this study explores the acceleration of the digital transformation in the retail industry in Sri Lanka upon the Covid-19 pandemic. Taking a qualitative research approach, the paper describes different approaches for DT. Business leaders from banking, telecommunication, and fast moving consumer goods were interviewed. Some business leaders had a strategic vision towards digitalization, not because they anticipated the pandemic coming, but rather because of its advantages. Managers saw that digital transformation would bring two main advantages. One is through disintermediation, by reaching out to clients directly, and that customers can reach out to businesses anytime anywhere. Second, in terms of the cost factor, digital implementations were conceived comparatively cheaper in the long run. The ‘new normal’ of businesses keep changing its ways every day as the virus variants evolve, warning us, this could be a situation that we have to deal with for longer than anticipated. This makes investing in digitalization and further keep the impetus of agile implementation worth the effort.

Keywords: Digital transformation · Value creation and delivery · Marketing channels · Business networks · Covid-19 pandemic

1 Introduction

Digital transformation is not a new concept; business practices in developed nations had already experienced a wave of innovative business solutions and automation, and ever since reaped its benefits. With the number of successful business cases undergoing digital transformation is on the rise, especially in the rapidly growing economies like Singapore and Malaysia, neighbouring developing nations like Sri Lanka try to build traction toward digital transformation.

We argue that the digital transformation carried out by businesses during the pandemic was not a manifestation from below, not just an outcome of traditional top-down

system design authorized by the decision-makers in the organization; rather, it is triggered by the unexpected and sudden escalation of the limitations imposed on our systems due to the pandemic and fuelled by ongoing worldwide digital transformation activities. We thus see digital transformation as an inevitable endeavour and that it was just a matter of time for nation-wide practices to embrace the digital concept. We argue that the pandemic accelerated the impetus of such transformation.

The second section of this article articulates the definition of digital transformation based on a thorough review conducted by Vial (2019). In this section, we also elaborate on our adopted conceptual framework adjusted by filtering out relevant building blocks to fit our context. A historical brief on digital transformation in Sri Lanka is also included in this section. Section 3 lays out the methodology of this exploratory study, and Sect. 4 discusses results organized in subsections relevant to the building blocks of the conceptual framework; we also discuss organizational changes in value creation delivered by varying intermediation modes and channels. The paper is concluded in Sect. 5.

2 Conceptual Framework

Digital transformation happens when the company starts to solve problems or conduct daily routines on digital platforms. It combines changes associated with society, economy, legal and policy measures, business models, and organizational culture (Gunawardene 2017). Enterprises have understood the potential value of technology changes and the pivotal role of the data-driven innovation (Berghaus and Back 2017). The foremost benefit of the digital transformation is that it generates real-time information, connects customers and suppliers with other business entities more effectively (Ensaria and Karabay 2014).

Our study adopts Vial (2019) conceptual framework based on reviewing 282 papers winnowed from the information system literature to define digital transformation (DT). Some adjustments have been made to the framework illustrated in Fig. 1 below to fit our study's scope and context. Out of the 23 definitions examined in (Vial 2019, Table 1), the following definition by Haffke et al. (2017) could be the closest to our context, "Digital transformation encompasses the digitalization of sales and communication channels, which provide novel ways to interact and engage with customers, and the digitalization of a firm's offerings (products and services), which replace or augment physical offerings. Digital transformation also describes the triggering of tactical or strategic business moving by data-driven insights and the launch of digital business models that allow new ways to capture value."

Covid-19 as a Source of Disruption. Covid-19 has recently inducted and accelerated the implementation of DT worldwide and across different industries (Iivari et al. 2020). It accelerated the planned digitalization process for enterprises already undergoing transformation (e.g. the interviewed financial institution) and created a greater urgency for those organizations still early in the transformation process (e.g. the interviewed fast moving consumer goods enterprise). In this exploratory study, we consider the effect of Covid-19 on the acceleration of DT, taking cases from the retail industry in Sri Lanka for closer examination.

In Mar 12–14, schools, pre-schools, and universities were closed until further notice. The government declared a lockdown from 20th March 2020 to nearly 52 days across Sri Lanka, the island-wide curfew in low risk areas was relaxed in Apr 20th. However, in May 1-03 again, an island-wide curfew was imposed (IFPRI 2020). First, the state emergency law imposed, and under the emergency law island-wide curfew is declared. During the curfew, people were not allowed to go out except for essential service workers like those who are granted special permission and working in hospitals, army, navy, police...etc. Supermarkets and pharmacies started online ordering and delivery services, and those activities were also closely monitored by the Sri Lankan army. By the third week of May, the curfew was lifted. At the beginning of the lockdown, companies in the country were closed completely but slowly started to work remotely, many were reluctant to adopt the “Work from home” concept. Many companies were unprepared to meet the requirements by each passing day. At the early few weeks of lockdown, there were huge inefficiencies in distributing essential grocery and supplies by the government. On the other hand, large supermarket chains have their own home delivery systems up and running in place before Covid-19.

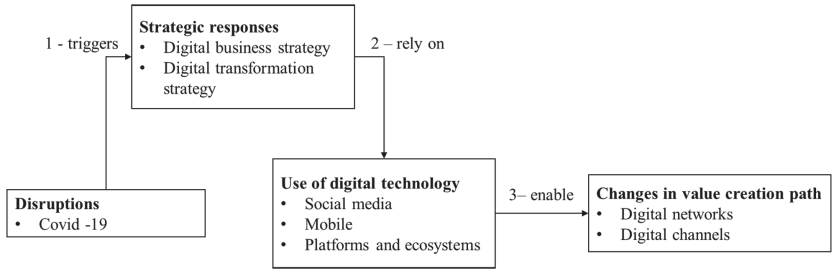


Fig. 1. Conceptual framework based on Vial (2019) with adjustments

Strategic Responses to Covid-19 Disruption. Due to the exogenous and endogenous tensions arising at the Covid-19 pandemic, to keep business up and running, an agile execution of digital transformation is crucial to achieve a quick response to bounce back (Gunther et al. 2017; Huang et al. 2017). However, such a rapid response could have had happened in the absence of a well-formed and approved digital business strategy that secures pre-determined allocated resources. Researchers debated the importance of the fusion of digital business strategy and digital transformation strategy (Bharadwaj et al. 2013). Discoveries are expected to surface when examining cases where digital transformation was not even aligned to a well-formed digital business strategy during Covid-19 pandemic.

New ways for value creation. Value creation is attained by deploying digital technologies within a context that unlocks new affordances and uncovers new paths to create value to different entities as in enterprise, consumer, or society (Kane 2014; Markus and Robey 1988).

Value Networks. Digital transformation could lead to three possible mediation strategies, as explained in (Vial 2019):

- (i) A disintermediation strategy uses digitalization to bypass intermediaries and enable direct transactional and information exchanges among members of the network (Hansen and Sia 2015).
- (ii) Through remediation strategy, enabling close collaboration and coordination among participants as in supply chain systems (Klotzer and Pflaum 2017).
- (iii) Network-based mediation, where despite the potentially conflicting interests of the network participants, they come together to form a system to generate value for customers (Tan et al. 2015).

Added to the above three different networks, content creation networks as in private or public online communities for value generation (Oestreicher-Singer and Zalmanson 2012) could also be sources of value creation for businesses.

Digital Channels. Social media platforms are now considered a crucial element in the marketing omnichannel strategy (Hansen and Sia 2015). The novel advanced algorithms deployed in decision-making business applications (Gunther et al. 2017) allow companies to effectively target prospects and draw consumer insights that help effectively serve and retain customers. Social media platforms were also crucial in effectively reaching out to customers (Chuang 2019) and forming co-creation of business ideas for products and services (Piller et al. 2012).

3 Methodology

Our approach to inquiry took the form of in-depth interviews (IDI) following the standards of convenience sampling (Blackstone 2012). An overview of the research process can be seen in Fig. 2. It is important to note here, at this stage of the study, the intention is to describe the acceleration process of digital transformation with a prescriptive objective in mind (Nolen and Talbert 2011) and not theoretical as of yet.

The data processing started by researchers listening to the recorded zoom interviews, then, they transcribed them in a MS Word document to form the “corpus”. The researchers then read the transcript again and performed line-by-line general coding, highlighting main terms and phrases. Afterwards, the researchers eliminated dross and organized the corpus into smaller segments of paragraphs. These segments were then transferred to a MS Excel datasheet for further processing. Each segment of text was placed in a single cell in the datasheet under the label “What is said by the informant”.

The interview number and industry were specified for each interview transcript in the Excel sheet. The following columns were also added and populated by the transcript’s segments:

In-vivo Codes. We highlighted the informant’s prominent keywords. Prominent keywords are those found to describe a state of mind or contextual emotional reaction. This way the segment was labeled with multiple in-vivo codes.

Memoing. The researchers documented their memos in this cell, indexed by researcher’s initials and dates.

Constructed Codes. “what is not said by informant”: researchers’ interpretations of the informant’s statement. This is peer-reviewed and cross-referenced by the researchers.

Temporal Context. Tagging the segment based on whether it is relevant to the situation before or after the pandemic, some segments’ temporal context was left blank.

Categories. The researchers grouped the codes into categories, in order to reduce the different pieces of data in the future analysis. For example: ‘changes in marketing operations’, covering those coded as: social media, customer service, website presence, digital advertising.

The corpus of the online IDI was saved in an MS. Word document, then after dross cleaning, the segments of text were stored in an MS. Excel data file saved in Google Drive. The raw data of the corpus amounts to approximately 48 pages (transcribed with 12-font Times, New Roman). The transcript encompasses a total of (101) segments of text, all with a word count \geq of 10. Three interviews were conducted with decision-making leaders in banking, telecommunication, and Fast Moving Consumer Goods FMCG.

We followed the procedure of grounded theory analysis by (Charmaz 2014) with a prescriptive objective in mind, as follows:

Scripting. The video recordings of the interviews were transformed into writing. Notes of rephrased wordings as in words referring to formally introduced concepts were included in square brackets [], while notes of vocal observations or rewritten words, as in “every month” to “monthly”, were enclosed in curly brackets {}.

Document Repository. Before embarking on the actual analysis of the corpus of the data collected, a spreadsheet was created to contain the following: (1) original quotes of informants (in vivo/inductive codes), (2) researchers’ interpretations of the inductive codes (constructed codes), (3) the context was indicating any important body language as well as flagging events before and after the pandemic, and (4) abstractions; these are extractions from the original quotes, and finally (5) any notes taken by the researcher during the data collection, and data analysis processes.

Coding. After reading interview transcripts, we proceeded with an initial cycle of (open) coding of the data. The initial coding encompassed the process of breaking down the qualitative data into discrete parts of original quotes of the informant (a segment of text) and dropping the dross. Then, the researcher specified inductive and constructed codes. Multiple iterative steps were taken until the researchers exhausted possibilities.

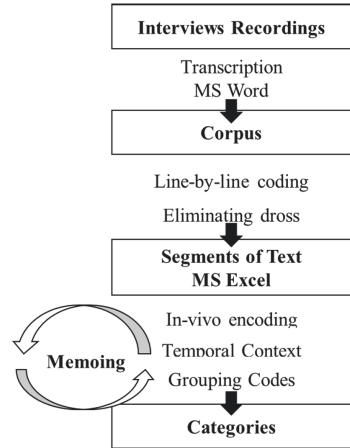


Fig. 2. Encoding process based on inductive grounded theory approach

Abstraction of Categories. The second cycle of analysis involved the more in-depth reading of text and extraction of main topics per original quotes, examining them and comparing them for similarities and differences, remaining open to all possible theoretical directions.

Construction of Themes. A recursive process whereby the themes are reviewed in relation to the coded data categories and the entire corpus of collected data. Making sure the highlighted themes satisfied the criteria specified in (Braun and Clarke 2012).

Following these steps, and after the initial first cycle of open coding of the data (Charmaz 2014), we proceeded to the second cycle of analytical coding (Braun and Clarke 2012). Three interviews were conducted with leaders and decision-makers of varying managerial levels across different industries in Sri Lanka. More details about the Informants could be seen in Table 1. Table 2 shows a brief on the company profiles of the informants.

Table 1. Characteristics of the data sources

#	Content originator	Industry	Number of words	Transcribed pages	Duration approximate
1	Regional manager	Banking	3459	12	40 min
2	Brand manager	Telecom.	2864	10	30 min
3	Senior brand manager	FMCG	2989	10	30 min

Table 2. Company profiles

Industry	Nature	Market share	Employees	Customer base
Banking	All type of commercial banking products and services	\$0.1124bn market capitalization	2230	Personal customers, SME and corporate
Telecom.	Advanced mobile telephony and high speed mobile broadband services, Satellite TV connections	\$0.4974bn market capitalization	4535	Mass audience in Sri Lanka
FMCG	Manufacturers and distributes of food items and personal care products	Not available	450	Sri Lankans mostly women

Telecom.: Telecommunication; FMCG: Fast Moving Consumer Goods

4 Analysis

Strategic Response to Covid – 19 in the Retail Industry in Sri Lanka. The three enterprises examined in this study could be ranked at different levels of progressions with their digital business strategy (Mithas et al. 2013, p. 472). In our banking case, a strategic plan was put in place before the pandemic. The banking industry has had already introduced digital products even before the pandemic started. For example, cash Automated Teller Machines (ATM) and cash deposit machines, called CDM. A ‘virtual wallet’ mobile application was launched before the pandemic; to transfer money, pay bills, and then use it for purchase ... e-banking service where you can log in from anywhere and do banking transactions without going to a branch; those services were available even before the lockdown. “Then we introduced pay apps; we called them plastic less payment gateway. [regional manager of a financial institution].” In contrast, the FMCG firm had no such a plan and neither a future vision toward DT before the pandemic. The telecom vendor had some digitization, but digitalization was thin on the forefront with customers’ payment processing.

Table 3. Company profiles

	FMCG	Banking	Telecom.
Presence of strategic plan	Non-existent “Previously, we were into the manual process of distribution. Most of our handling process was done manually in terms of sales handling. Through our distributors and business partners, we placed our products in retail outlets.”	In place before Covid “we have introduced this e-banking service where you can log in from anywhere and do banking transactions without going to a branch. So, those things were available even before lockdown. Those are pre-COVID initiatives.”	In place before Covid “It is part of our annual plan and five-year vision plan [...] many customers used to go to an outlet or used to go to the service center to pay their bill or buy a reload card to pop up their mobile,” “This has been shifted in the past 3 months;”
Agility of execution	Front & Back-end “We have moved our entire sales process into to digital platform where we have launched a e-commerce tools which we did not have previously. We launched our website during the lockdown and through fan pages in social media we communicated our delivery services and all the other information and guidance required. We took all our marketing and promoting related activities to digital platforms.”	Front-end & Back-end “During the pandemic, the bank had to shift its customer acquisition practices to digital, “during the lockdown period, we provided customers who are willing to register with such facilities through our website.” We requested them to send their applications, soft copies by email, and acknowledge it and provide service.”	Front-end “Finance point of view I would say, we even went to fully digitalized payment acceptance, purchase order acceptance, approval systems in full digital format.”

(continued)

Table 3. (continued)

	FMCG	Banking	Telecom.
Perception	Hybrid-term	Long-term	Long-term
	<p>“We framed the idea of making all processes into digital as crisis management”</p> <p>“but we have gone for ERP systems to a certain level which is tracking our data.”</p> <p>“Currently, {monthly} we are saving all our data [in the system]. It generates some automated projections also which is helpful in our decision making. It is still in developing stage. So even before corona outbreak, we were practicing some digital methods.”</p>	<p>“We have two separate segments, government sector and private sectors like government institutions and private institutions. Private institutions are fast to react to these technological changes and digitalization.”</p> <p>“In 2019, the fiscal year 2018/19, we came up with the initiative to change into the digital concept. Because we understood that going forward, digitalization is something we cannot avoid.”</p>	<p>“Because we saw digital transformation will bring two main advantages for us. One is, we can reach to the customers and customers can reach to us without any intermediary boundaries ... in the long term that is very plus point for the cost factor to the company. Because of those two reasons we anyway planned and during this COVID period we accelerate it.”</p>

On the agility of execution (Gunther et al. 2017; Huang et al. 2017), we examine DT’s acceleration on the front-end compared to the back-end. Despite that the FMCG had no DT plan before the pandemic, the FMCG interviewee stated, “we have been assigned to sustainability reporting portal where employees link all transactions in one portal. This was established before the pandemic.” However, with the lockdown constraints, DT’s acceleration was focused on the forefront with customer communication and sales. Even with the DT plan in place, as in the banking institution, DT’s impetus was intense on the forefront, particularly for customer acquisition. Both firms focused on DT of marketing and sales operations. The focus of the telecommunication company was placed on financial and service operations. The telecommunication company could be ranked in terms of digital transformation progression as in-between. It already had a plan, but it is still young, and not much was achieved on the ground yet before the pandemic. The telecommunication company also had to respond to the upward surge in data consumption during the pandemic and the lockdown. Most people started working and studying from home because there was an upward trend in data usage. Third, device sales comparatively plumped; this is maybe due to the restriction of movement and willingness to avoid going to outlets to stay safe. Refer to Table 3 for details from the transcript of the interviews.

Value Creation During Covid-19 Pandemic. Due to the lockdown, business leaders had to come up with innovative solutions to keep their business up and running within the ‘new normal.’ In this study, we focus on sales and marketing changes for value creation.

Banking. “There is a shift from print media to online sources because the bank was used to post lots of advertisements in newspapers, magazines,... etc., before the virus outbreak. But during the lockdown period, magazines and newspapers were not available; therefore, what we did was we shifted our focus and attention to social media and our

website. We have our website and our own Facebook page and Twitter. We heavily used those platforms to market our products as well as educate our customers on what we are doing these days, how they can join with these services, how they can get benefit out of these facilities, how the bank is going to help them during this lockdown and after that how the bank is going to help them rebuild their businesses, all these communications conducted through social media. It was very effective. [...] “During the lockdown period, we provided customers who are willing to register with such facilities and use during the lockdown period because of this immobility, through our website. We requested them to send their applications, soft copies by email and acknowledge it and provide service; then, after the lockdown period, customers can come physically to the branch and complete the documents. So, without completing all documents, we allowed customers to use facilities. [regional manager of a financial institution]”.

FMCG. As per the FMCG, “challenging to run our business with a manual system there were so many limitations with the people, with the regulations, security issues . . . we have moved our entire sales process into to digital platform . . . launched our website during the lockdown . . . shifted from place to space . . . first time in the history of the company . . . For each brand, we have our own social media accounts . . . used some other pages like retail chains to promote items . . . we used distribution channels that are digitally strong . . . We launched our website during the lockdown which contains all our products, and through fan pages, in social media, we communicated our delivery services and all the other information and guidance required. And we took all our marketing and promotional related activities to digital platforms . . . Through these digital platforms; we were able to deliver our products to customers to their doorsteps. During this period and during the lockdown, we listed and made available our products in other e-commerce sites and delivery sites by namely Uber, pick me, kapruka.lk, etc. Before we were kind of distant from our customers . . . to communicate with our clients, it was through intermediaries; it took two, three stages to reach out . . . digital platforms give us a chance to get directly connected with our clients, good opportunity to get their direct response . . . we are developing a kind of platform where we can do direct marketing and sales. [senior brand manager of an FMCG company]”.

Telecommunication Company. There is a tendency that marketing function shifts more toward digital platforms compared to other functions. “marketing-wise . . . we used to have lots of ground presence, . . ., we had shops, we had outdoor events, but after coronavirus, around 80%–90% of ground operations had to shift in to digital. In terms of the business revenue, as I said before, there was a hit from payment collection, but meantime data usage has gone up, which is again a revenue increment, on the other hand, and device sales went down . . . we saw digital transformation would bring two main advantages for us. One is, we can reach to the customers, and customers can reach to us without any intermediary boundaries, and number two is it is in terms of the cost factor. Those implementations are comparatively cheap for us. For example – opening 25 physical outlets vs. maintaining a mobile app for the same operation. [brand manager of telecommunication industry].”

5 Conclusion and Marketing Implications

Digital transformation is not only about establishing a presence online, use social media for advertising, or conduct meetings on zoom. Digital transformation happens when the company starts to solve problems or conduct daily routines on digital platforms to survive. This paper contributes to understanding the strategic response of DT during the Covid-19 pandemic in the retail industry. Companies at a different level of progression of DT accelerated their DT impetus differently at the front and back-end.

In the case of the banking industry, before the pandemic, it had a strategic plan in place; however, with the pandemic's coming, most efforts focused on the revenue generation streams at the forefront of sales and marketing. The pandemic opened windows to advance the impetus of DT. The bank considered alternative identity authentication methods to transform operations traditionally done in-person to online, as in customer acquisition.

Similarly, in the telecom vendor with a prepaid B2C business model in Sri Lanka, the telecom industry also focused on customers' forefronts through the financial and payment system, sales, and customer service. The lockdown had forced the firm to automate and digitize its payment receivable operations. It also demanded attention to enhance the reliability of internet services and device sales. The firm had also extended its customer service hours around the clock.

Despite the absence of a well-formed DT plan, the FMCG was forced to accelerate DT on both front and back ends. The personnel of the marketing department of the FMCG used to travel long hours to meet clients before the pandemic. Moving their B2B communications online through a secure portal had eliminated intermediaries during the pandemic. With digitalized communications, goods were moving faster and more conveniently. An e-commerce site was launched to maintain a revenue stream from customers.

With the lockdown limiting face-to-face interaction with customers onsite, most businesses opted to create new touchpoints with customers in the social media and digital sphere. Some firms invested heavily in social media for customer acquisition through opening channels for online registration for services or customer retention through providing services online and extending customer support service hours. Communication through owned media, as in the business's owned website and earned media through high engagement with customers on social media, further helped businesses survive during the pandemic. Many companies have accelerated or even introduced digital means to their companies with the pandemic.

Some of the telecom industry's implications are to focus on the B2C business model, especially if its B2B revenue model was hurt during the pandemic. Diversifying revenue streams through device sales could also be another option for start-up telecom companies during the pandemic. As for FMCG, disintermediation on the back end had proven to aid the fast movement of goods in a developing country like Sri Lanka.

The Covid-19 pandemic is expected to accelerate technology adoption in a developing country like Sri Lanka. It is also likely to positively affect building trust with financial institutions; the future of the B2C model could be digital, which may relax constraints on the size of bank branches onsite or even the number of branches within a region.

The study is not free of limitations; we examined three different cases in the retail industry. The scope of the study is limited to three denominations. The interview did not cover detailed dynamics of task forces created to combat the pandemic, neither the line-of-command nor the approach of decision-making during the pandemic.

References

- Blackstone, A.: Principles of Sociological Inquiry – Qualitative and Quantitative Methods. Saylor Foundation, University of Maine (2012). <https://open.umn.edu/opentextbooks/textbooks/139>
- Berghaus, S., Back, A.: Disentangling the fuzzy front end of digital transformation: activities and approaches. In: Thirty Eighth International Conference on Information Systems, South Korea. ICIS 2017 Proceedings. 4 (2017). <https://www.alexandria.unisg.ch/254097/>
- Bharadwaj, A., El Sawy, O., Pavlou, P., Venkatraman, N.: Digital business strategy: toward a next generation of insights. *MIS Q.* **37**(2), 471–482 (2013). <https://www.jstor.org/stable/43825919?seq=1>
- Braun, V., Clarke, V.: Thematic analysis (2012). <https://psycnet.apa.org/record/2011-23864-004>
- Charmaz, K.: Constructing Grounded Theory. Sage. (2014). https://books.google.co.jp/books?hl=en&lr=&id=v_GGAwAAQBAJ&oi=fnd&pg=PP1&dq=charmaz+2014+grounded+theory&ots=YXSuK7yFm5&sig=3t7i79Ai-NVWRcL9xg4YesZCRPs&redir_esc=y#v=onepage&q=charmaz%202014%20grounded%20theory&f=false
- Chuang, S.-H.: Co-creating social media agility to build strong customer-firm relationships. *Ind. Market. Manage.* **84**, 202–2011 (2019)
- Ensaria, M.Ş, Karabay, M.E.: What helps to make SMEs successful in global markets? *Proc. Soc. Behav. Sci.* **150**, 192–201 (2014)
- Gunawardene, N.: Digital transformation in Sri Lanka: opportunities and challenges in pursuit of liberal policies. Friedrich Naumann Foundation Sri Lanka (2017). <https://www.rticommission.lk/web/images/pdf/DigitalTransformationinSriLankareport-FINAL-30Nov2017.pdf>
- Gunther, W.A., Mehrizi, M.H.R., Huyasman, M., Feldberg, F.: Debating big data: a literature review on realizing value from big data. *J. Strat. Inf. Syst.* **26**(3), pp. 191–209 (2017). <https://www.sciencedirect.com/science/article/pii/S0963868717302615>
- Haffke, I., Kalgovas, B., Benlian, A.: The transformative role of bimodal IT in an era of digital business. In: Hawaii International Conference on System Sciences, Waikoloa Beach, HI, pp. 5460–5469 (2017). <https://128.171.57.22/handle/10125/41822>
- Hansen, R., Sia, S.K.: Hummel’s digital transformation toward omnichannel retailing: key lessons learned. *MIS Q. Execut.* **14**(2), 51–66 (2015)
- Huang, J., Henfridsson, O., Liu, M.J., Newell, S.: Growing on steroids: rapidly scaling the user base of digital ventures through digital innovation. *MIS Q.* **41**(1), 301–314 (2017)
- IFPRI: Timeline of Covid-19 of Sri Lanka – key measures for Covid-19 containment and management of food supply chains (2020). <https://southasia.ifpri.info/files/2020/05/Table-2.pdf>
- Iivari, N., Sharma, S., Ventä-Olkkonen, L.: Digital transformation of everyday life – how COVID-19 pandemic transformed the basic education of the young generation and why information management research should care? *Int. J. Inf. Manage.* 102183 (2020). <https://www.sciencedirect.com/science/article/pii/S0268401220310264>
- Kane, G.C.: The American Red Cross: adding digital volunteers to its ranks. *MIT Sloan Manag. Reven.* **55**(4), 1–6 (2014). <https://search.proquest.com/openview/6199cff475a182573c5ec51b35888e0/1?pq-origsite=gscholar&cbl=26142>

- Klötzer, C., Pflaum, A.: Toward the development of a maturity model for digitalization within the manufacturing industry's supply chain. In: Hawaii International Conference on System Sciences, Waikoloa Beach, HI, pp. 4210–4219 (2017). https://aisel.aisnet.org/hicss-50/in/digital_supply_chain/5/
- Markus, M.L., Robey, D.: Information technology and organizational change: causal structure in theory and research. *Manage. Sci.* **34**(5), 583–598 (1988)
- Mithas, S., Tafti, A., Michell, W.: How a firm's competitive environment and digital strategic posture influence digital business strategy. *MIS Q.* **37**(2), 511–536 (2013)
- Nolen, A., Talbert, T.: Qualitative assertions as prescriptive statements. *Educ. Psychol. Rev.* **23**(2), 263–271 (2011). <https://link.springer.com/article/10.1007%2Fs10648-011-9159-6>
- Oestreicher-Singer, G., Zalmanson, L.: Content or community? A digital business strategy for content providers in the social age. *MIS Q.* **37**(2), 591–616 (2012). <https://www.jstor.org/stable/43825924?seq=1>
- Piller, F.T., Vossen, A., Ihl, C.: From social media to social product development: the impact of social media on co-creation of innovation. *Swiss J. Bus. Res.* **65**(1), 7–27 (2012). <https://ssrn.com/abstract=1975523>
- Tan, B., Pan, S.L., Lu, X., Huang, L.: The role of IS capabilities in the development of multi-sided platforms: the digital ecosystem strategy of Alibaba.com. *J. Assoc. Inf. Syst.* **16**(4), 2 (2015). <https://aisel.aisnet.org/jais/vol16/iss4/2/>
- Vial, G.: Understanding digital transformation: “A review and a research agenda”. *J. Strat. Inf. Syst.* **28**, 118–144 (2019). <https://www.sciencedirect.com/science/article/abs/pii/S0963868717302196>



Towards an Understanding of the Intention to Engage on Facebook

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Abstract. Facebook is attracting marketers' attention as a productive tool for generating successful marketing campaigns. Understanding the aspects influencing customers' intention to purchase was thoroughly examined in the literature. Nevertheless, the relationship between the intention to purchase and the intention to engage is still largely understudied. The objective of this study is to explore possible relationships between the components of the latent dependent variable, individual intention to engage on Facebook (FB), and the components of the latent independent variables; crowd's engagement, cognitive and affective trust components, and order-related risk factors, by using a five-point anchored scale of the intention to purchase for measurement. The results showed that the crowd's engagement behavior is positively associated to the intention to follow a brand's FB page, while financial risk found to be negatively associated to the intention to share or like a brand's FB content. Results also suggested it could be a good practice to avoid symbols and emoji's in the advert's primary text, and that trusted FB friends' engagement behavior is positively related to the intention to comment, making it a suitable candidate for harboring e-WoM. This study helps practitioners identify important factors for the success of digital marketing campaigns.

Keywords: Facebook consumer engagement · Crowd engagement behavior · Affective trust · Cognition trust · Order-related risk factors

1 Introduction

Most of the youth nowadays spend long hours on social media platforms engaging with various consumption activities. In Asia/Oceania region, it is estimated that users stay on social media for an average of 2 h and 30 min a day (Metev 2020). Businesses had quickly integrated social media into their digital marketing strategy considering an additional effective touchpoint to reach out to prospects at the grassroots level for its power to enable a business to directly engage with customers and prospects (Shailashree 2019). Marketers are striving to come up with various effective ways to engage the consumer with their brands on social media (Schivinski et al. 2016; Yang et al. 2016). Based on the foundation of crowd capital theory, the aggregate of individuals engaging behavior

forms a crowd's engaging behavior that could, in turn, influence other individuals to act (Prpic et al. 2013). On Facebook (FB), the crowd engagement concept could capture customers' total set of behavioral activities toward a brand (Gummerus et al. 2012). In this study, we define the following manifestations of a crowd's engaging behavior: the total number of likes, positive and negative comments, the total number of followers on a brand's page.

Trust is necessary to complete a transaction (Torkzadeh and Dhillon 2002). It is defined as the belief of an individual (trustor) expecting the (trustee) will meet expectations (Zhang et al. 2008). This study embraces the model proposed by McAllister (1995) to define trust. In this model, trust is studied as a combination of cognitive-based and affective-based components. Affective trust emerges from the social bonds among individuals (Chen et al. 1998). In the context of this study, affective-based components are identified as the effect of the engaging actions of tightly known FB friends and the non-tightly known FB friends, as well as the effect of featuring influential figures like celebrities or known social media starlets in a FB advert.

In an e-commerce context, cognitive trust could be the action of an in-depth examination of an online store's properties. This examination could result in either encouraging or discouraging the intention to purchase. In digital marketing, consumers' intention to take action is triggered by advertising (Hyun et al. 2011). Research studies in digital advertising show that a poor design of the advertisement leads to failing in competing for customer's attention (Simola et al. 2011), thus failing to engage with them. The attributes of a website such as images, videos, emotional symbols, textual content could enhance customer attitudes (Hsieh et al. 2011; Loiacono et al. 2002). Nantel and Glaser (2008) advocated that the mother-tongued language associates with perceived usability. Intrinsic properties of the advert, examined in this study under the cognitive-based trust, are the quality of media, emoji, and symbols in the primary text of the FB advert, the advert's language, and whether or not the brand's FB property displays a standalone website outside FB.

Despite the rapid adoption and varied marketing material used to engage prospects, researchers and practitioners lack evidence of how consumers engaging behavior may unfold in the presence of different drivers of consumer's intention of purchasing. For example, in the context of a brand awareness campaign with a focus on electronic Word of Mouth e-WoM (Tsimonis and Dimitriadis 2014), if one identifies that risk-averse consumers are less likely to comment on a brand's FB marketing material, in response, practitioners could incorporate assuring call-outs into the ad copy served to this cohort of consumers on social media.

Regarding the manifestations of the risk factors subject of the study, they are temporal risk identified as a prolonged delivery or possible delay (Vijayarathy and Jones 2000), product financial risk defined in the threat of product loss with no insurance of delivery and no return policy (Kanuk and Schiffman 1994), as well as information risk as in the invasion of personal privacy (Bhatnagar 2000).

This is a confirmatory study attempting to explore possible relationships between the components of the latent dependent variable, individual intention to engage on Facebook (FB), and the components of the latent independent variables; crowd's engagement,

cognitive and affective trust components, and order-related risk factors, by using a five-point anchored scale of the intention to purchase. The results showed that the crowd's engagement behavior is positively associated to the intention to follow a brand's FB page, while financial risk found to be negatively associated to the intention to share or like a brand's FB content. Results also suggested it could be a good practice to avoid symbols and emoji's in the advert's primary text, and that trusted FB friends' engagement behavior is positively related to the intention to comment, making it a suitable candidate for harboring e-WoM. This study helps practitioners identify important factors for the success of digital marketing campaigns.

The remainder of this paper is structured as follows: the second section explores the importance of consumer engagement behavior and layouts the theoretical threads leading to the manifestations of main drivers of consumer intention to purchase on social media platforms. In order to answer the main question of the research, on what drivers of the intention to purchase could relate to an engaging behavior on FB, we describe the research methodology and measurement instrument used in the third section of the study. The fourth section of the study illustrates the output of the statistical tests, and the study is concluded in section five.

2 Literature Review

Engaging behavior online could also be defined depending on the affordances enabled by the user interface through its different features. It could be described through the action taken to engage with a brand, for example, liking or sharing a Facebook (FB) advert or following the brand's FB page (Moran et al. 2019). Engagement with a brand on social media may be manifested through making a purchase, electronic word-of-mouth (e-WoM) activities like commenting, recommendations to friends by sharing a brand's advert or post, helping other customers in an active participation mode, blogging, and even writing reviews (Van Doorn et al. 2010). Engagement with the brand's advert or posts takes the form of (a) liking, (b) commenting, and (c) sharing, while that with the brand's FB page is limited to liking or following the page. According to Ananda et al. (2019), these forms of actions could be classified into (1) Endorsement engagement as in "liking" or "commenting" on the FB advert of a brand or a business, or when "following" the brand's FB page. (2) Recommendation engagement when "sharing" the brand's promotional or non-promotional content either on the individual's FB wall, or "sharing" it with a FB group community, or "sharing" a brand's story. In general, any pass-on behavior of a brand's related content is considered recommendation engagement.

Crowd Engagement Behavior. A key factor affecting the individual's engaging behavior online is the crowd's engaging behavior; for example, the total number of likes or comments on the advert. Crowd Behavior refers to engaging behavior generated by individuals within a group of people connected by the same purpose regardless of the strength of the tie or connection. Crowd engagement concept could capture customers' total set of behavioral activities toward a brand (Gummerus et al. 2012). The theory of crowd capital (Prpic et al. 2013), concerned with the study of crowd capability to influence individual behavior, has been utilized in various research areas related to engagement. Customer engagement with a company has been found to have positive association to a

brand's awareness and purchase intention (Hutter et al. 2013) and subsequent purchasing behavior (Malthouse et al. 2016). Hazari et al. (2017) emphasized the effect of online crowd engagement on gender; the study found that the intention to purchase and the trust of females is highly influenced by crowd engaging behavior than that of males. Chen (2017) studied customer engagement on the mobile platform to predict the intention to purchase by perceived values.

H₁: The underlying variables of the latent independent variable, crowd engagement behavior (number of likes, number of comments, positive comments, and negative comments) are positively associated to the individual's intention to endorse (like, comment, follow) the brand on FB.

H₂: The underlying variables of the latent independent variable, crowd engagement behavior (number of likes, number of comments, positive comments, and negative comments) are positively associated to the individual's intention to pass-on or recommend (share, create story) the brand on FB.

Trust Components. Trust is necessary to complete a transaction (Torkzadeh and Dhillon 2002). The effect of trust is positively significant to the willingness to purchase (Alfina et al. 2014). This study adopts the model proposed by McAllister (McAllister 1995) to define trust. In this model, trust is studied as a combination of cognitive-based as well as affective-based trust components. This study adopts the model proposed by McAllister (1995) to define trust. In this model, trust is studied as a combination of cognitive-based and affective-based trust components.

Affective Trust. Affective trust has been studied from different perspectives; in an online game-based community, findings showed that the community's identity would strengthen long-term relationships within it and is tied to interpersonal trust (Tsai 2019). The formation of online purchase intention and trust was investigated by recent studies as in (Sharma 2020; Chang et al. 2019), whereby trust is characterized as the readiness of one party (trustor) to be helpless against the activities of another party (trustee) dependent on the promise that the other party (trustee) will deliver a specific activity critical to the trustor, irrespective to the capacity to screen or control the other party (Zhang et al. 2008). Thus, trust could be defined as the belief of an individual (trustor), expecting the trustee will meet expectations. Trust could also be realized as assessing the reliability of a trustee (Sabel 1993). In the context of digital advertising, the FB user with her pre-set expectations accumulated through historical experiences interacting with FB friends forms some level of trust.

Affective trust has been studied from different perspectives; in an online game-based community, findings showed that the community's identity would strengthen long-term relationships within it and is tied to interpersonal trust (Tsai 2019). Affective trust emerges from the social bonds among individuals. Trust could be studied by investigating whether the engagement actions of closely known and trusted or distant FB friends influence the individual's intention to engage. The effect of influential figures like celebrities or known social media starlets could also be investigated as an affective component of trust due to the bond the followers form with the influential figure or the attitude toward their endorsements (Singh et al. 2020).

H₃: The underlying variables of affective trust (engagement behavior of trusted FB friends, and engagement behavior of social media influencer) are positively associated to the individual's intention to engage with a brand on FB (endorse or pass-on).

H₄: The engagement behavior of distant FB friend is negatively associated to the the individual's intention to engage with a brand on FB (endorse or pass-on).

Cognitive Trust. Cognitive-based trust is the process of using evidence and analysis to form the trust components. This represents an individual's judgment and assessment process to reach the stage of placing a high likelihood that the trustee will meet expectations. In an e-commerce context, cognitive trust could manifest in the action of in-depth examination around online stores' properties. The attributes of a website such as images, videos, emotional symbols, textual content could enhance customers' attitudes (Hsieh et al. 2011, Loiacono et al. 2002). Another property is the language that the site used to convey the messages. Nantel and Glaser (2008) advocated that the mother-tonged language associates with perceived usability. Those factors are the first impression when customers come to examine digital stores like a FB-based brand's store. A FB advert has the same attribution as in eCommerce websites, such as images, videos, copies, and a collection of emoji. We study the following Ad intrinsic properties: media quality, presence of emoji's and symbols in primary text, language, and presence of outside business website URL on FB property.

H₅: Cognitive trust is positively associated to the individual's intention to engage with a brand online.

Risk Factors. Assessing quality, fit, and desirability are difficult to ascertain in online purchasing decisions. The distance between the customer and the product and the time gap between purchase and receiving the product creates purchase uncertainty. The lack of personal contact with the brand in a virtual environment where transactions automated via mediated platforms adds to the uncertainty and doubt in the authenticity of the products (Gerber et al. 2014; Cunningham et al. 2005). According to Kanuk and Schiffman (1994), Perceived risk can be grouped into six categories: functional, physical, financial, time, psychological, and social risk. Research by Bhatnagar (2000) concluded that there are three major components of risk; they are financial, product, and information risk (Security and privacy). Miyazaki and Fernandez (2001) expanded their investigation to include the relationship between perceived risks and purchase intentions. They showed that when it comes to online shopping, privacy and security risks are of utmost concern. Furthermore, Doolin (2005) pinned downed that privacy risk factors are negatively associated with online shopping. Vijayasathy and Jones (2000) also showed that delivery and return of items bought on the Web raise serious concerns to customers. We performed multiple statistical tests on the manifestations of the risk factors subject of the study, and they are temporal risk identified as a prolonged delivery or possible delay, product financial risk defined in the threat of product loss with no insurance of delivery and no return policy, as well as information risk as in the invasion of personal privacy.

H₆: Order risk factors is negatively associated to the individual's intention to engage with the brand on FB.

A summary of the theoretical framework of the study is illustrated in Fig. 1.

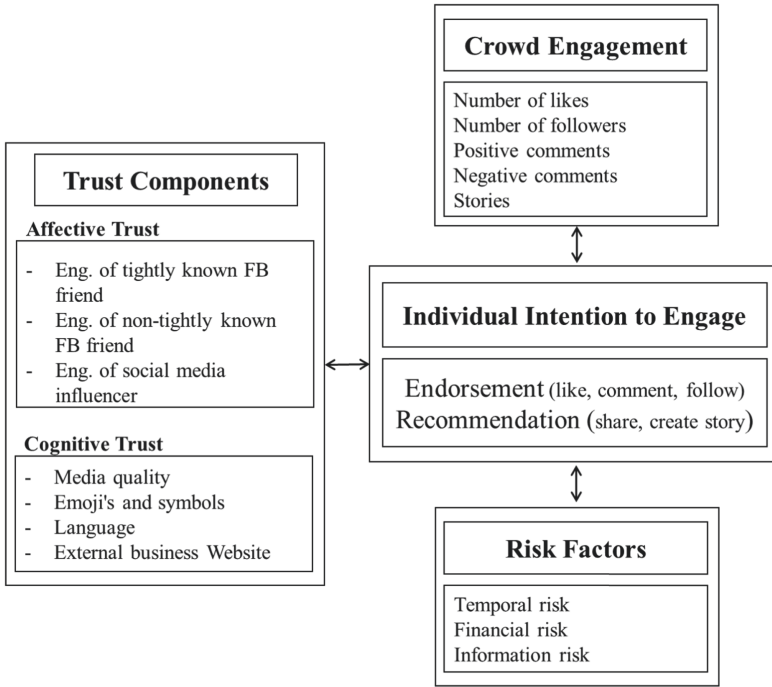


Fig. 1. Theoretical framework of the study

3 Method and Data Collection

This study employed a five-point anchored measurement scale following a quantitative approach. The anchors of the scale are set to gauge the perceived intention to purchase for all underlying variables of the independent latent variables of the study; 1: Not complete purchase – 5: Complete purchase.

Designing the measurement scale around the “engagement” construct would have yielded a vague instrument design due to the fact that engagement is not measured directly, unlike in the “intention to purchase.” The five-point anchored scale ranges from 1–5, whereby polarized anchors were labeled as “not complete a purchase” and “complete a purchase,” respectively. Grounded on empirical bases (Malthouse et al. 2016; Hutter et al. 2013; Berger et al. 2012; Zhou et al. 2012), the design is thought to best suit this study. The mechanical sum of the underlying variables is used to compute the value of the latent constructs (Angeles et al. 2014). For example, the intention to engage, denoted here as ‘EngI,’ is computed: $EngI = like + share + follow + comment$.

A self-administered questionnaire was published online via Google Forms targeting international students residing in Japan. To date, the random sample includes a total of 69 valid responses in the 17–30 years old bracket. About 70% of females with over 60% of the sample fairly spending over 5 h on FB daily. With the present sample size of 69, testing the null hypothesis of the form: $H_0 : \rho_s = 0$ vs. $\rho_s \neq 0$, we could detect an

alternative value of ρ_s as small as (0.3–0.4) with 80% power using the two-tailed test with a significance level of 0.05 (Fig. 1a).

4 Results

In order to study the drivers of an individual's engaging behavior with brands on FB, we first examine the association between the crowd's engagement behavior and the individual's intention to engage. This is done through testing the correlational relationships between each underlying variable of the crowd's engagement behavior and the individual's intention to proactively engage at the purchase consideration stage. Table 1 below summarizes the significant relationships detected with the data collected up-to-date by Spearman coefficients, denoted as r_s and their p-values.

Table 1. Spearman coefficients and P-values between crowd's engagement behavior and individual's intention to engage on FB

Crowd engagement behavior and individual's intention to endorse		r_s	p-value
Crowd's num. of likes on FB advert	Follow	0.313	0.008***
Number of followers on brand's FB page	Follow	0.271	0.024**
Crowd's positive comments on FB advert	Follow	0.263	0.028**
	Comment	0.276	0.021**
Crowd engagement behavior and individual's intention to recommend/pass-on			
Crowd's negative comments on FB advert	Intention to share	0.254	0.034**
Exposure to brand's FB stories		0.254	0.034**

The statistically significance level ($\alpha = 0.01$ ***, 0.05**, 0.1*).

Examining the individual's intention to endorse, one can observe that individual's whose intention to purchase is positively affected by (a) the number of likes on an advert or the brand's page, (b) the number of followers on the brand's FB page, (c) and also affected positively by the positive comments on diverse brand's digital property on FB; have high tendency to also follow the brand's FB page in the consideration stage of the purchase decision making experience. It is also found that the positive impact of positive comments on the intention to purchase could also induce the commenting engaging behavior of the individual. Up-to this stage of the study, no significant correlations were found between the crowd's engagement behavior and its impact on stimulating the individual's intention to hit the like button. In regards to the individual's intention to pass-on the brand's marketing content through sharing, results showed that individual's intention to sharing the brand's marketing material is correlated when the intention to purchase is discouraged by the negative comments on the advert and when affected by the brand's FB stories. The nature of the positive relationship involves a lack of interest to share when the intention to purchase is discouraged by negative comments. It is surprising that the respondent's intention to purchase was not sparked by brand

stories. To examine the correlation of affective trust components and an individual's intention to engage, we also performed Spearman rank correlation tests. Table 2 lists the Spearman coefficients and their p-values.

Table 2. Spearman test for individual intention to engage and trust components

Affective trust components	Individual's engagement	r_s	p-value
Engagement behavior of a tightly known FB friend	Comment	0.223	0.064*
Engagement behavior of non-tightly known FB friend	Share	0.243	0.043**
	Comment	0.372	0.001***
Cognitive trust components			
Quality of media used in FB advert	Share	-0.243	0.043**
	Comment	-0.372	0.001***
The primary text of advert contains emoji, characters, or symbols	Comment	0.208	0.08 *

The statistically significance level is ($\alpha = 0.01$ ***; 0.05 **; 0.1 *).

The results of investigating affective-based trust components indicated that an individual's intention to purchase affected positively by the engagement behavior of closely known FB friends had a positive relationship with the individual's intention to comment. This is in conformation with the reciprocal nature of the personal exchange of communication on social media platforms (Tandoc et al. 2020). However, the positive correlation between the engagement behavior of loosely known FB friends and the intention to share or comment takes another direction. As the intention to purchase is not positively affected by the engagement behavior of FB friends distant to us, similarly, our intention to share and comment is discouraged at the consideration stage of the purchasing process.

As per cognitive trust, despite the expected negative relationship of low media on the intention to purchase, we found that consumer's intention to engage was not negatively affected by the low media quality of the advert; however, their intention to engage, through sharing or commenting, was very low. One reasonable explanation for this could be the advertising policies of FB itself. The regulations state that the resolution of pictures or videos must be 1200×628 pixels in order to get the approval for showing up on FB newsfeed. This means consumers on FB are never exposed to low media quality. For FB adverts with primary text, including symbols and emojis, the results indicated a negative relationship between the intention to purchase in the presence of emojis and symbols in the primary text, which was found related to a low intention to comment. Pertaining order risk factors and the individual's intention to engage, the Spearman rank correlation test is used to generate the coefficients and their corresponding p-values, as in Table 3. A positive correlation is detected between risk-averse individuals whose intention to purchase is affected negatively by the threat of no return policy and the speculation of invasion of privacy, and the discouraged intention to share.

Table 3. Spearman test for individual’s intention to engage and FB advert risk factor

Risk factors	Individual’s engagement	r_s	P-value
No return policy	Like	0.300	0.011**
	Share	0.301	0.011**
Risk of personal privacy	Share	0.247	0.040**

The statistically significance level is ($\alpha = 0.01***; 0.05**; 0.1*$).

5 Conclusion

Crowd engagement behaviors (e.g., the number of likes, followers, and positive comments) were found to relate to the individual’s intention to follow the brand’s page on FB. Writing a comment is positively associated to the crowd’s positive comments. Results also indicated a positive correlation between the low influence of less trusted or distant FB friends and the intention to purchase and share and comment. Tightly known and trusted FB friends’ engagement behavior influences the individual’s intention to comment. This could be implicitly understood through the reciprocal power in marketing in general and viral marketing in particular (Tandoc 2020). Risk-averse individuals identified in this study by their low intention to purchase in the case of no return policy, and suspicion of invasion of privacy are found to also be deterred from sharing or liking brand’s marketing content on FB. In general, the significant relationships detected with risk factors and trust components were found to relate to the individual’s intention to share or comment. At the same time, the crowd’s engagement behavior was found to relate to the intention to follow the brand’s FB page.

The results could help practitioners in predicting engagement metrics of digital marketing campaigns, for example, harboring crowd’s likes and comments in a digital marketing campaigns could help in growing the number of followers on the brand’s FB page. Whereas, when marketing campaigns aim at rising brand awareness through e-WoM (Tsimonis and Dimitriadis 2014) or enhance the number of comments, it could be a good practice to avoid including symbols, and emoji’s in the primary text of the FB advert – as results indicated.

Results suggest that, enhancing the campaign’s ad copies by incorporating callouts that mitigate risks could probably enhance the individuals’ intention to share. It is important to note that this research tested correlational relationships and not causal ones. Drawing from possible related theories in social psychology, we could possibly enhance our understanding of the characteristics that could describe risk-averse consumer cohorts in relation to their attitude to share. Some of the research limitation is the small sample size, a larger sample will help test the theoretical model rather than exploring associations between underlying variables of latent constructs. For future work, more data will be collected to employ confirmatory factor analysis (CFA) for model validity confirming that latent variables likely measures what we want them to measure. Bayesian hypothesis testing could also be investigated as well as Structural Equation Modeling SEM to analyze the structural relationship between measured variables and latent constructs.

References

- Alfina, I., Ero, J., Hidayanto, A.N., Shihab, M.R.: The impact of cognitive trust and e-WoM on purchase intention in C2C e-commerce site. *J. Comput. Sci.* **10**(12), 2518–2524 (2014). <https://doi.org/10.3844/jcssp.2014.2518.2524>
- Ananda, A.S., Hernández-García, Á., Acquila-Natale, E., Lamberti, L.: What makes fashion consumers “click”? Generation of eWoM engagement in social media. *Asia Pac. J. Mark. Logist.* **31**(2), 398–418 (2019). <https://doi.org/10.1108/APJML-03-2018-0115>
- Berger Paul, D., Mathur, P., Black Jennifer, E., Cao, J., Weinberg Bruce, D.: The impact of social media usage on consumer buying behavior. *Adv. Manag.* **5**(1) (2012)
- Bhatnagar, A., Misra, S., Rao, H.R.: On risk, convenience and internet shopping behaviour. *Commun. ACM* **43**(11), 98–105 (2000)
- Chen, Y.R.: Perceived values of branded mobile media, consumer engagement, business-consumer relationship quality and purchase intention: a study of WeChat in China. *Public Relat. Rev.* **43**, 945–954 (2017)
- Chen, C.C., Chen, X.-P., Meindl, J.R.: How can cooperation be fostered? The cultural effects of individualism-collectivism. *Acad. Manag. J.* **23**(2), 285–304 (1998)
- Cunningham, L., Gerlach, J., Harper, M.: Perceived risk and e-banking services: an analysis from the perspective of the consumer. *J. Financ. Serv. Mark.* **10**, 165–178 (2005)
- Doolin, B., Doolin, S., Thompson, F., Corner, J.L.: Perceived risk, the internet shopping experience and online purchasing behavior: a New Zealand perspective. *JGIM* **13**, 66–88 (2005). <https://doi.org/10.4018/jgim.2005040104>
- Malthouse, E.C., Calder, B.J., Kim, S.J., Vandenbosch, M.: Evidence that user-generated content that produces engagement increases purchase behaviors. *J. Mark. Manag.* **32**(5–6), 427–444 (2016). <https://doi.org/10.1080/0267257X.2016.1148066>
- Gerber, C., Ward, S., Goedhals-Gerber, L.: The impact of perceived risk on on-line purchase behaviour. *Risk Gov. Control Financ. Markets Inst.* **4**, 99–106 (2014). <https://doi.org/10.22495/rgev4i4c1art4>
- Gummerus, J., Liljander, V., Weman, E., Pihlström, M.: Customer engagement in a Facebook brand community. *Manag. Res. Rev.* **35**(9), 857–877 (2012)
- Hsieh, Y.C., Chen, K.H.: How different information types affect viewer’s attention on internet advertising. *Comput. Hum. Behav.* **27**(2), 935–945 (2011). <https://doi.org/10.1016/j.chb.2010.11.019>
- Hutter, K., Hautz, J., Dennhardt, S., Füller, J.: The impact of user interactions in social media on brand awareness and purchase intention: the case of MINI on Facebook. *J. Prod. Brand Manag.* **22**(5/6), 342–351 (2013)
- Hyun, S.S., Kim, W., Lee, M.J.: The impact of advertising on patrons’ emotional responses, perceived value, and behavioral intentions in the chain restaurant industry: the moderating role of advertising-induced arousal. *Int. J. Hosp. Manag.* **30**(3), 689–700 (2011). <https://doi.org/10.1016/j.ijhm.2010.10.008>
- Tsai, J.C., Hung, S.Y.: Examination of community identification and interpersonal trust on continuous use intention: evidence from experienced online community members. *Inf. Manag.* **56**(4), 552–569 (2019). <https://doi.org/10.1016/j.im.2018.09.014>. ISSN 0378-7206
- Prpic, J., Shukla, P.: The theory of crowd capital. In: 46th Hawaii International Conference on System Sciences, Wailea, Maui, HI, pp. 3505–3514 (2013). <https://doi.org/10.1109/HICSS.2013.545>
- Loiacono, E.T., Watson, R.T., Goodhue, D.L.: WEBQUAL: a measure of website quality. In: Evans, K., Scheer, L. (eds.) 2002 Marketing Educators’ Conference: Marketing Theory and Applications, pp. 432–437 (2002)

- Metev, D.: How Much Time Do People Spend on Social Media? [63+ Facts to Like, Share and Comment]. Review 42, 21 November 2020. <https://review42.com/how-much-time-do-people-spend-on-social-media/#:~:text=16%2D24%2Dyear%2Dolds,on%20social%20networking%20in%202019>
- McAllister, D.: Affect-and Cognition-based trust formations for interpersonal cooperation in organizations. *Acad. Manag. J.* **38**, 24–59 (1995). <https://doi.org/10.2307/256727>
- Miyazaki, A., Fernandez, A.: Consumer perceptions of privacy and security risks for online shopping. *J. Consum. Aff.* **35**(1), 27–44 (2001). <https://www.jstor.org/stable/23860070>. Accessed 6 Oct 2020
- Moran, G., Muzellec, L., Johnson, D.: Message content features and social media engagement: evidence from the media industry. *J. Prod. Brand Manag.* **29**(5), 533–545 (2019). <https://doi.org/10.1108/JPBM-09-2018-2014>
- Nantel, J., Glaser, E.: The impact of language and culture on perceived website usability. *J. Eng. Technol. Manag.* **25**(1/2), 112–122 (2008)
- Sabel, C.F.: Studies trust: building new forms of cooperation in a volatile economy. *Hum. Relat.* **46**(9), 1133–1170 (1993)
- Schiffman, L.G., Kanuk, L.L.: *Consumer Behavior*. Prentice-Hall, Englewood Cliffs (1994)
- Schivinski, B., Christodoulides, G., Dabrowski, D.: Measuring consumers' engagement with brand-related social-media content: development and validation of a scale that identifies levels of social-media engagement with brands. *J. Advert. Res.* **56**(1), 64–80 (2016). <https://doi.org/10.2501/JAR-2016-004>
- Shailashree, B.: Social media for grassroots development. *Int. J. Humanit. Soc. Sci. Invention (IJHSSI)* **8**(2), 27–33 (2019)
- Simola, J., Kuisma, J., Oorni, A., Uusitalo, L., Hyona, J.: The impact of salient advertisements on reading and attention on web pages. *J. Exp. Psychol. Appl.* **17**(2), 174–190 (2011). <https://doi.org/10.1037/a0024042>
- Singh, J., Crisafulli, B., Quamina, L.T., Xue, M.T.: 'To trust or not to trust': the impact of social media influencers on the reputation of corporate brands in crisis. *J. Bus. Res.* **119**, 464–480 (2020)
- Hazari, S., Bergiel, B.J., Sethna, B.N.: Hedonic and utilitarian use of user-generated content on online shopping websites. *J. Mark. Commun.* **23**(6), 572–591 (2017). <https://doi.org/10.1080/13527266.2016.1143383>
- Tandoc, E.C., Huang, A., Duffy, A., Ling, R., Kim, N.: To share is to receive: news as social currency for social media reciprocity. *J. Appl. Journal. Media Stud.* **9**(1), 3–20 (2020). https://doi.org/10.1386/ajms_00008_1
- Torkzadeh, G., Dhillon, G.: Measuring factors that influence the success of Internet commerce. *Inf. Syst. Res.* **13**(2), 187–204 (2002)
- Tsimonis, G., Dimitriadis, S.: Brands strategies in social media. *Mark. Intell. Plann.* **32**(3), 328–344 (2014)
- Van Doorn, J., Lemon, K.E., Mittal, V., Nass, S., Pick, D., Pirner, P., Verhoef, P.C.: Customer engagement behavior: theoretical foundations and research directions. *J. Serv. Res.* **13**(3), 253–266 (2010)
- Vijayarath, L.R., Jones, J.M.: Print and internet catalog shopping: assessing attitudes and intentions. *Internet Res.* **10**(3), 191–202 (2000)
- Yang, S., Lin, S., Carlson, J.R., Ross, W.T.: Brand engagement on social media: will firms' social media efforts influence search engine advertising effectiveness? *J. Mark. Manag.* **32**(5–6), 526–557 (2016). <https://doi.org/10.1080/0267257X.2016.1143863>
- Zhang, A.Y., Tsui, A.S., Song, L.J., Li, C., Jia, L.: How do I trust thee? The employee-organization relationship, supervisory support, and middle manager trust in the organization. *Hum. Resour. Manag.* **47**, 111–132 (2008). <https://doi.org/10.1002/hrm.20200>

Zhou, Z., Zhang, Q., Su, C., Zhou, N.: How do brand communities generate brand relationships? Intermediate mechanisms. *J. Bus. Res.* **65**, 890–895 (2012). <https://doi.org/10.1016/j.jbusres.2011.06.034>



Metrics of Engagement on Social Networks and Their Relationship to the Customer's Decision-Making Process Under e-Commerce Conditions

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Abstract. In today's world, social media is already a full-fledged part of the marketing mix. Their growth has been huge in recent years. Our paper seeks to analyze the metrics that make up social media engagement and their relationship with consumer's purchase intentions. The variables examined in our study were the number of likes, comments, shares, followers, and respondents' purchase intentions. Data for this study were collected via the CAWI - computer assisted web interviewing method. The dataset consisted of 372 respondents. In the study, we analyzed the degree of correlation for the four established hypotheses. The results indicate the statistical significance of the examined relationships for all selected social media exposure metrics. These findings were presented in the context of existing research with an aim to expand current knowledge in this area. The results support the perceived importance of these variables in the purchasing process while proving important for e-commerce and s-commerce.

Keywords: Social Media · Engagement · Purchase Intention · e-Commerce

1 Introduction

E-commerce is currently one of the most effective business area. Social media is no exception. From a business point of view, social media are very attractive due to their ability to communicate directly with the consumer (two-way communication). The importance of social media combined with consumer shopping behavior in recent years has been a much sought-after topic and many researchers are trying to analyze it from different points of view. Ecommerce sales are forecasted to have increased 32.4% over the previous year with brick-and-mortar forecasted to fall 3.2% (eMarketer 2020). This issue is very broad and, therefore, there are still many areas that will need to be addressed in this respect. There are many ways to communicate on social media with new ones constantly evolving or emerging. Both theory and practice call for a deeper understanding of the impact of social media on shopping behavior, with engagement playing a key role. The aim of this paper is to examine the factors that create this engagement on social media. In particular, the paper focuses on likes, shares, comments and the number of

followers and their relationship with purchase intentions. Such a research setting has not been explored in great detail so far. The concept of involvement in the digital environment of social media is still a question open for in-depth research, and we believe that our analysis will contribute to a deepening of the knowledge of this issue. Therefore, the aim of our research is to identify the statistical significance of the relationships between the main social media engagement metrics and the intention to subsequently purchase a product from a brand which publishes the content on social media platforms.

2 Theoretical Background and Current State of Research

Social networks have a large number of metrics, so it is practically impossible to monitor every single metric in detail. On the other hand, it seems to be sufficient to focus only on certain types of indicators that indicate the success of marketing activities in this area. Social media can increase traffic to a company's website. Google Analytics has a built-in report for tracking website traffic from social media networks, so we can directly measure their impact on e-commerce. In this case it's about s-commerce. It is a subset of e-commerce that involves social media and online media that supports social interaction, and user contributions to assist online buying and selling of products and services (Lam et al. 2019). Social media sites can be powerful tools for distributing content and promoting engagement but, like much of marketing, long-term success on social media requires continuous efforts.

Bamini et al. (2014) argue that marketing managers must perceive marketing on social media as an important marketing tool capable of making an effective contact with the younger generation. A good indicator of success in this environment is the social media presence. Research by Lee et al. (2020) also confirms that brand engagement in the online space has a positive impact on consumers' purchase intentions. This means that the users of these platforms are active participants in mutual communication with the brand and not just passive followers. Engagement on social media can be understood in relation to consumer shopping behavior at two levels. The first is the proactive level, which is mainly about creating and publishing relevant content of a brand. It is also about sharing this content through other communication channels. The second level is reactive. It is about communicating with users of these platforms, for example, commenting on posts or writing direct messages (Schaffer 2013). The most important role of brands on social media is to engage their followers (Loureiro et al. 2019). These followers interact not only with content published by brands, but also with content shared by their network of acquaintances on social media, thus sharing information and social values.

According to a study by Poyra et al. (2013), followers are divided into two groups: consumers of published content and those actively engaging with the published content, i.e. posts. The most basic engagement metrics in this environment are likes, shares, comments, and the size of the fan base that enters the engagement calculation. Under the notion of the purchase intention, we mean the consumer's perceived intention to buy a particular product (Balakrishnan et al. 2014). Interactions with the brand on social media are very important for this factor because active users of social media strengthen the brand, brand awareness, involvement in mutual communication and thus subsequently stimulate shopping indicators (Loureiro et al. 2019). Studies by Rahman et al. (2017)

and Agnihotri et al. (2016) have even shown that these metrics have a strong positive impact on online shopping. An earlier study by Quester and Lim (2003) showed a certain relationship between the purchase of products and interaction with the brand as such. If we move into online environment, this relationship persists. Increasingly, brand engagement in the digital space, such as social media, has a significant impact on consumers' purchasing decisions. Poyry et al. (2013) argues that all basic social media engagement metrics are inconspicuous forms of consumer purchasing recommendations. In the field of social media, the phenomenon of FOMO (fear of missing out) is becoming increasingly important as, according to the research Good and Hyman (2020), it is able to influence people's purchase intentions. In this regard, Shareef et al. (2019) combine purchase intentions with the factor of trust in the brand in the e-commerce environment. If we look at the current state of knowledge in this area, we will find several interesting related studies that analyze related issues. Ferran's research (2014) aimed at finding out which factors play a key role in the success of published content. Furthermore, Pereira et al. (2014) discussed the importance of the fan base for the brand.

The study by Linjuan (2013) or Zoha (2016) addressed independent involvement on social media. Luarn et al. (2015), Rahman et al. (2016) and Traphagen (2015) addressed the relationship between content and engagement in the online space. Shao and Ross (2015) and De Olivier et al. (2015) examined the motivation of social media users to engage with the brand. The use of social media in the context of consumer behavior was analyzed by Sosic (2019). Xue (2019) examined the theory of social impact through a news feed on Facebook. Alotaibi et al. (2019) investigated the issue of what influences confidence and purchasing decisions of consumer on Instagram. However, the number of studies which analyze specific components of social media engagement in this regard, is limited. Kudeshia (2016) and Damianos et al. (2015) examined loyalty and brand awareness on social networks.

3 Methodology

The subject of our research were the main engagement metrics relevant to social media and purchase intention in terms of s-commerce, i.e. a subset of e-commerce taking place in the social media space. The survey was attended by 372 respondents who were engaged through an electronic questionnaire. The sample consisted of 48% men and 52% women. Their age composition largely referred to the demographic composition of the population in Slovakia (eacea.ec 2019), where this research itself was conducted. The age distribution of the research sample was as follows: 22% of respondents were under 20, 34% of respondents were aged 21–30 years, 23% of respondents were aged 31–40 years and 21% of respondents were over 41 years. This demographic distribution ensured the relevance of the sample for the declared purpose. The only condition was that the respondents have to be active users of at least 2 social media. The aim of the research was to identify the statistical significance of the relationships between the main social media engagement metrics and the perceived intention to purchase a product from a brand which publishes the content on social media platforms using an analysis. Based on this goal, we postulated the following research hypotheses:

Hypothesis 1: The number of likes as a social media engagement metric is statistically significantly related to the intention of users to buy a product from a given brand.

Hypothesis 2: The number of shares as a social media engagement metric is statistically significantly related to the intention of users to purchase a product from a given brand.

Hypothesis 3: The number of comments as a social media engagement metric is statistically significantly related to the intention of users to buy a product from a given brand.

Hypothesis 4: The number of followers as a social media engagement metric is statistically significantly related to the intention of users to buy a product from a given brand.

Researched Variables: Number of likes, Number of shares, Number of comments, Number of followers: these are behavioral metrics of social media which represent the personal attitude of the user of these platforms to the content published on them (Cheonsoo and Sung-Un 2017).

Purchase intention: the Sum total of cognitive, affective and behavioural towards adoption, purchase, and use of the product, services, ideas or certain behaviours (Dadwal et al. 2020). Or as defined by Drossos and Giaglis (2010), it is an individual's conscious plan to make an effort to purchase a brand.

Based on the analysis of the normal distribution of the sample, we chose to verify the hypotheses using inductive statistics, namely the Pearson correlation coefficient in order to measure the linear association between the selected variables. To present the effect size of the relationship, we used the definition according to Cohen (1988), which states a value below 0.1 is considered a trivial effect, the value up to 0.3 is a small effect, up to 0.5 is a medium effect and a value above 0.5 is a large effect. Our research plan is visually represented in the following conceptual framework of the selected issue, which is built on the basis of studies Lee et al. (2020) and Loureiro et al. (2019) (Fig. 1).

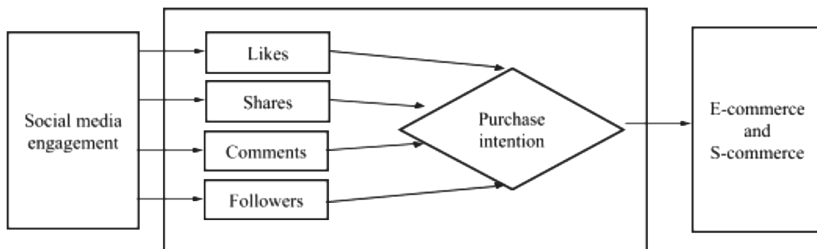


Fig. 1. Conceptual research model

4 Research Findings

Before examining the selected contexts, we also analyzed the attitudes of the respondents to the issue. It turned out that of all the engagement metrics that we address in our

research, the number of comments is considered to be the strongest indicator of the success of a brand's marketing communication on social media. This metric was found in more than half of the respondents. The same result, but only at the level of two thirds of the respondents was shown in comments and their impact on the purchase intention process. Although these attitudes to the given facts show only a subjective perception of the issue by the respondents, we also analyzed the correlation relations of the selected variables in order to better grasp the given context. The first metric to be analyzed is likes. The table below shows the relationship in question is statistically significant at the significance $p = 0.000$ and the correlation coefficient $r = 0.378$, which can be interpreted as a moderately strong dependence. We therefore accept hypothesis H1. It could be said that the number of likes as a metric of social media engagement is statistically significantly related to the intention of users to buy a product from a given brand (Fig. 2).

Purchase intention	Correlation (r)	Sig.
Like	0.378	0.000

Fig. 2. Correlation metrics likes and purchase intention

We then analyzed the content sharing as a metric of social media engagement. Even in this case, statistical significance was confirmed at the level of $p = 0.000$. Here, however, the correlation coefficient was even higher, but still in the interval of a moderately strong relationship with the value $r = 0.448$. Thus, the hypothesis is accepted. It can be argued that the number of shares as a metric of involvement on social media is statistically significantly related to the intention of users to buy a product from a given brand (Fig. 3).

Purchase intention	Correlation (r)	Sig.
Shares	0.448	0.000

Fig. 3. Correlation metrics shares and purchase intention

The attention was paid to the comment metric. As already stated above, this metric was subjectively evaluated as the most effective of all. This trend was confirmed by the statistical testing, where the significance at $p = 0.000$ brought about a very strong relationship at the level of the correlation coefficient $r = 0.512$. Although it is only just beyond the limit of a moderately strong relationship, this also shows the dominance of this metric. Based on this, we accept the hypothesis with the statement that the number of comments as a metric of involvement on social media is statistically significantly related to the intention of users to purchase a product from a given brand (Fig. 4).

Purchase intention	Correlation (r)	Sig.
Comments	0.512	0.000

Fig. 4. Correlation metrics comments and purchase intention

The size of the fan base was analyzed as the last. The relationship turned out to be statistically significant with a value of $p = 0.000$ and with a degree of relationship at the level of the coefficient $r = 0.285$, which is defined in this case as a small dependence. However, we still accept the hypothesis that the number of followers as a metric for social media engagement is statistically significantly related to the intention of users to purchase a product from a given brand (Fig. 5).

Purchase intention	Correlation (r)	Sig.
Followers	0.285	0.013

Fig. 5. Correlation metrics followers and purchase intention

5 Discussion

After a statistical analysis of the selected relationships, we can state that the results generally support the study of Lee et al. (2020) on a positive relationship between engagement and shopping behavior. The importance of this finding is also supported by the statement of Loureiro et al. (2019) on the importance of engagement for the success of e-commerce activities as such. In our case, the relationship turned out to be statistically significant in all exposure metrics. There is a parallel with the studies of Rahman et al. (2017) and Agnihotri et al. (2016), whose studies also declared the positive impact of these metrics on consumers' purchase intentions. In the presented paper, comments proved to be the strongest metric. This could be explained by the degree to which comments contribute to brand engagement in the online space is greater than, for example, in case of likes. Likes are also a form of engagement, but require less effort than comments and so do not burden the consumer so much. On the other hand, comments require much more input from the people who write them as ideas need to be formulated in a precise way. At first glance, writing a comment does not seem to be difficult, but in the case of micro-communication, difference is noticeable. This phenomenon was also confirmed by Cvijikj and Michahelles (2013). On the other hand, the size of the fan base was not such a strong factor in the given case, although it was statistically significant. The size of the fan base plays a role in the whole process, but as proven in the study by Pereira et al. (2014), it is not enough to significantly influence the purchasing intention. The analysis of the current state of knowledge in this field pointed out the fact that the process of proving the significance of these relationships at the level of specific engagement metrics has its gaps and there is a need for further research. These results will contribute to the understanding of the established relationships at the theoretical level and also provide implications for practice. The mere fact that all analyzed engagement metrics have a statistically significant impact on the purchasing intention will force social media managers to pay more attention to monitoring these metrics and handling them properly. The study by Khan et al. (2020) confirmed that activities related to the communication conveyed through social media significantly supports engagement. According to Poyra et al. (2013), social media managers shall make effort in this regard to support shopping intentions.

6 Conclusion

In our study, we analyzed the relationship between social media engagement metrics and shopping intentions. The aim was to identify, with the help of the analysis, the statistical significance of the relationships between the main social media engagement metrics and the intention to purchase a product from a brand which publishes the content on social media platforms. Based on the presented research, these relationships were confirmed and compared with existing research in this field. The results can help social media managers to better understand the broader impact of these metrics on e-commerce. However, the field of social media is still relatively young in terms of knowledge, and thus the study also has certain limitations. These include the size of the sample (one country), and thus the results cannot be generalized and the fact that the shopping intentions were taken into account as the only variable, while it is generally known that shopping intentions consist of a larger number of variables. At the same time, however, these limitations open up space for future research, which is crucial for a deeper understanding of the processes in question.

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References

- Agnihotri, R., et al.: Social media: Influencing customer satisfaction in B2B sales. *Ind. Market. Manage.* **53**, 172–180 (2016). ISSN: 0019-8501
- Alotaibi, T.S. et al.: Instagram shopping in Saudi Arabia: what influences consumer trust and purchase decisions? *Int. J. Adv. Comput. Sci. Appl.* **10**(11) (2019). ISSN: 2158-107X
- Balakrishnan, B.K.P.D., Dahnil, M.I., Yi, W.J.: The impact of social media marketing medium toward purchase intention and brand loyalty among generation Y. *Procedia – Soc. Behav. Sci.* **148**, 177-185 (2014). ISSN: 1877-0428
- Bamini, K.P.D., et al.: The impact of social media marketing medium toward purchase intention and brand loyalty among generation Y. *Procedia – Soc. Behav. Sci.* **148**(25), 177-185 (2014). ISSN: 1877-0428
- Cheonsoo, K., Sung-Un, Y.: Like, comment, and share on Facebook: how each behavior differs from the other. *Public Relat. Rev.* **43**, 441–449 (2017). ISSN: 0363-8111
- Cvijikj, I.P., Michahelles, F.: Online engagement factors on Facebook brand pages. *Soc. Netw. Anal. Mining* **3**(4), 843–861 (2013). ISSN: 1869–5450
- Cohen, J.: *Statistical Power Analysis for the Behavioral Sciences*. Routledge, London (1988). ISBN: 978-1-134-74270-7
- Dadwal, S.S., et al.: Technology and Sharing Economy-Based Business Models for Marketing to Connected Consumers. *Handbook of Research on Innovations in Technology and Marketing for the Connected Consumer* (2020). ISBN: 978-1-799-80131-3
- Damianos, P.S. et al.: The development of Facebook's competitive advantage for brand awareness. In: *Economics and Finance Conference Proceedings*, pp. 589–597 (2015)

- De Oliviera, M.J., et al.: Factors driving young users' engagement with Facebook: evidence from Brazil. *Comput. Human Behav.* **54**(C), 54-61 (2015). ISSN: 0747-5632
- Drossos, D., Giaglis, G.M.: Reviewing Mobile Marketing Research to Date: Towards Ubiquitous Marketing. *Handbook of Research on Mobile Marketing Management* (2010). ISBN: 978-1-605-66074-5
- Eacea.ec: Populácia: demografická situácia, jazyky a náboženstvá (2019). https://eacea.ec.europa.eu/national-policies/eurydice/content/population-demographic-situation-languages-and-religions-72_sk. Accessed 02 Dec 2020
- Ferran, S.J.M.: Factors influencing popularity of branded content in Facebook fan pages. *Euro. Manage. J.* **32**, 1001-1011 (2014). ISSN: 0263-2373
- eMarketer: US ecommerce will rise 18% in 2020 amid the Pandemic (2020). <https://www.emarketer.com/content/us-ecommerce-will-rise-18-2020-amid-pandemic?ecid=NL1001>. Accessed 02 Dec 2020
- Good, M.C., Hyman, M.R.: Direct and indirect effects of fear-of-missing-out appeals on purchase likelihood. *J. Consum. Behav.* (2020). ISSN: 1472-0817. Accessed Oct 2020
- Khan, I., Fatma, M., Islam, J., Rahman, Z.: Brand engagement and experience in online services. *J. Serv. Mark.* **34**(2), 163-175 (2020)
- Kudeshia, C., et al.: Spreading love through fan page liking: a perspective on small scale entrepreneurs. *Comput. Human Behav.* **54**, 257-270 (2016). ISSN: 0747-5632
- Lam, H.K.S., et al.: Should firms invest in social commerce? An integrative perspective. *Inf. Manage.* **56**(8), 103164 (2019). ISSN: 0378-7206.
- Lee, J.K., et al.: The effect of brand personality self-congruity on brand engagement and purchase intention: the moderating role of self-esteem in Facebook. *Curr. Psychol.* **39**(6), 1-13 (2020). ISSN: 1046-1310
- Linjuan, R.M.H.: Beyond liking or following: understanding public engagement on social networking sites in China. *Public Relat. Rev.* **39**, 13-22 (2013). ISSN: 0363-8111
- Luarn, P., et al.: Influence of Facebook brand-page posts on online engagement. *Online Inf. Rev.* **39**(4) (2015). ISSN: 1468-4527
- Loureiro, S.M., et al.: How fashion brands engage on social media: a netnography approach. *J. Promot. Manage.* **25**(3), 367-378 (2019). ISSN: 1049-6491
- Pereira, H.G., et al.: Say yes to Facebook and get your customers involved! Relationships in a world of social networks. *Business Horizons* **57**(6), 695-702. ISSN: 0007-6813
- Poyry, E.P., et al.: The power of 'like interpreting usage behaviors in company-hosted Facebook pages. In: 46th Hawaii International Conference on System Sciences (2013). ISBN: 978-1-4673-5933-7
- Quester, P., Lim, A.L.: Product involvement/brand loyalty: is there a link. *J. Prod. Brand Manage.* **12**(1) (2003). ISSN: 1061-0421
- Rahman, Z., et al.: Fanpage metrics analysis. "Study on content engagement". In: Proceedings of the International Conference on Applied Science and Technology 2016 - AIP Conference Proceedings (2016)
- Rahman, Z. et al.: SM analytics: impact of SM engagement metrics on online purchase intention. *J. Eng. Appl. Sci.* **12**(2), 283-289 (2017). ISSN: 1816-949X
- Schaffer, N.: *Maximize Your Social: A One-Stop Guide to Building a Social Media Strategy for Marketing and Business Success*. Wiley, New York (2013)
- Shao, S.W., Ross, M.: Testing a conceptual model of Facebook brand page communities. *J. Res. Interact. Marketing* **9**(3) (2015). ISSN: 2040-7122
- Shareef, M.A. et al.: Purchase intention in an electronic commerce environment a trade-off between controlling measures and operational performance. *Inf. Technol. People* **32**(6). ISSN: 0959-3845
- Sosic, M.M.: Examining social media usage in the context of consumer behaviour. *Ekonomiska misao i praksa-economic thought and practice* **28**(2) (2019). ISSN: 1330-1039

- Traphagen, M.: Why Engagement DOES Matter as a Social Media Metric (2015). <https://marketingland.com/engagement-matter-social-media-metric-114497>. Accessed 15 Sep 2020
- Xue, F.: Facebook news feed ads: a social impact theory perspective. *J. Res. Interact. Marketing* **13**(4) (2019). ISSN: 2040-7122
- Zoha, R.K.: Social media engagement metrics analysis: study on fan-page contents. *J. Telecommun. Electron. Comput. Eng.* **8**(8), 71-76 (2016). ISSN: 2180-1843



Online Shopping Problems in the Context of B2C E-commerce in the Visegrad Four Countries

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Abstract. As online shopping grows, problems with online shopping grow, too. The main aim of the paper is to evaluate and compare problems customer face when online shopping in the Visegrad Four countries (Slovakia, Czechia, Hungary, Poland). The paper outlines the theoretical basis of online shopping and describes the main problems related to shopping via Internet. Based on data from the Eurostat database, the paper compares specific online shopping problems in the years 2015, 2017 and 2019. We found that the highest incidence of problems with online shopping in 2015 was reported in Hungary (40%), in 2017 in Poland (18%) and in 2019 in Czech Republic (28%). The most frequent problem in all V4 countries was that the delivery time of goods or services was longer than it was stated by the seller on the store's website.

Keywords: Online shopping · Internet · Visegrad four · B2C · E-commerce · Customers · Problems

1 Introduction

With the development of digital technologies and the increased use of the Internet, online shopping is becoming increasingly popular and the number of consumers shopping online is growing steadily, too. Of the total population of almost 7.7 billion people, about 4.4 billion use the Internet. In 2019, 2.8 billion customers (We are social 2019) shopped online. Currently, the world is facing a COVID-19 pandemic, so it can be assumed that the number of online shoppers will rise as a result.

Customers opt for online shopping because they find it more convenient and faster than shopping in a brick-and-mortar stores (Muthumani et al. 2017). Despite this, online shopping comes with a number of problems that often discourage customers from shopping online. Thus, shopping behavior can be affected by various difficulties that can occur when shopping online.

The aim of the paper is to evaluate and analyze problematic areas of the online shopping process faced by consumers in the online environment in the Visegrad Four countries in 2015, 2017 and 2019.

2 Theoretical Background of the Issue

Online shopping is a form of e-commerce that allows consumers to directly purchase goods or services from a retailer over the Internet using a web browser. Online stores have gained popularity over the years, especially because online shopping is a convenient and easy way to shop from the comfort of home (Prabha and Karunanidhi 2017). As the use of the Internet increases, e-commerce is now becoming available to a large number of customers (Holdorf and Haasis 2014).

Ganapathi (2015) states that online shopping offers several benefits to customers. Above all, the customer does not have to physically visit the brick-and-mortar shop, which saves time. The customer can choose from a wide range of products and also compare products or prices. Online stores also offer customers discounts that cannot be obtained in a brick-and-mortar stores. The big advantage is unlimited time for decision making and place from which an order can be placed - the online order can be placed anytime and anywhere.

Online shopping comes with certain risks, too. Problems include, for example, late delivery of the product, the risk of incorrect product size or color, or the risk of product damage (Prabha and Karunanidhi 2017). Kavitha (2017) adds a problem with returning a product and additional fees. Arffin et al. (2018) also outline the risks associated with online purchases, namely financial risks, product risks and security risks. E-commerce faces several issues related to security, trust, reputation, legal framework, payment mechanisms, advertising or online catalogs (Haleema and Iyengar 2016). Diaz (2016) states that difficulties with online purchases may include lack of trustworthiness, inability to test the product, technical problems or limited Internet access. In their research, Karim (2013) and Savarimuthu and Devi (2016) found that major problems with online shopping include difficulties with online payment security, privacy, distrust, unclear warranty rules and lacking customer service. It is important that online traders prevent problems from happening. However, if problems do occur, they need to be resolved immediately, as customers may become sceptical about online shopping if they are unsure whether their issues will be resolved quickly (Del Duca et al. 2011).

Although the Internet has enabled retailers to reach new markets and new consumers, maintaining them and gaining long-term trust and loyalty has become a challenge (Bandara et al. 2020). For successful online sales, the seller should ensure a clear technical design of the website, ease of use, a seamless communication platform and payment gateway, flawless products and services, and last but not least, perfect communication and security (Rajib 2016). Abdullah et al. (2019) state that the most important factor influencing the success of e-commerce are detailed product or service information and the reputation of the website. The ease of use and the security and protection of personal data are considered to be no less important factors.

Over time, it is expected people will completely stop visiting brick-and-mortar stores and switch to online shopping. Therefore, e-commerce businesses need to follow current trends and adapt to a rapidly evolving online environment. Businesses need to be able to respond promptly to changes and problems in the online environment in order to stay competitive (Artene 2014). An unsatisfactory solution of a customer's problem can have negative consequences for the seller (Kawaf and Tagg 2017). The inability of an online retailer to meet customer expectations or solve customer problems encourages

the customer to opt for other online retailers. In addition, a dissatisfied customer has access to many online channels through which he can disseminate information about negative experiences with the online seller (Singh and Crisafulli 2016).

The importance of online shopping is growing in the Visegrad Four countries (V4), too. The Visegrad Four represents an informal grouping, which consists of 4 Central European countries, namely the Slovak Republic, Poland, the Czech Republic and Hungary. This group was founded on February 15, 1991. The V4 countries are countries that share the same values, have a common history, culture and geographical status (Ministry of Foreign and European Affairs of the Slovak Republic 2019). The aim of this group is to encourage cooperation among the members, especially with their neighbors. Its crucial concern is the democratic development of all parts of Europe. The intention of the V4 countries is to contribute to the building of a European security architecture based on effective, complementary and mutually reinforcing cooperation and coordination within the existing European and transatlantic institutions. All activities of the Visegrad Group are aimed at strengthening stability in the Central European region (Visegrad Group 2021). The cooperation of the V4 countries is strong even nowadays, in particular in economy, infrastructure, energy, digitization and innovation. Equally important is the cross-border cooperation and cultural aspects, coordination of foreign policy and the promotion of common interests at the European level as well as in relation to third countries (Ministry of Foreign and European Affairs of the Slovak Republic 2019).

With the growth of e-commerce, the Slovak Republic competes with many large European states. More than 12,600 e-shops are registered in Slovakia and revenues from e-commerce exceed 1.3 billion euros (Heureka 2020). Out of 79% of internet users in Slovakia, 60% shop online. The best-selling category of products Slovaks buy online is clothing and household goods (Eurostat 2020a). For online purchases, cash on delivery has long been the preferred method of payment. However, recent trends show payment cards and bank transfer payments are becoming increasingly popular (Marková 2020). The Czech Republic is the fastest growing e-commerce market in Europe (Morgan 2019). There are currently more than 40,700 e-shops in the Czech Republic. 78.5% of Czechs over the age of 16 use the Internet, of which 64% make online purchases. Revenues from e-commerce in the Czech Republic reached more than 7.61 billion euros in 2020. The popularity of online payments (by payment card) is growing while the popularity of cash on delivery is weakening (Czech e-commerce 2021). The best-selling category of online products in the Czech Republic is clothing, followed by trips, accommodation and household items (Eurostat 2020a). E-commerce in Poland consists mainly of small and medium-sized enterprises. In 2020, 11,000 new e-shops were launched in Poland. Of the total population of 38 million, 77% use the Internet. In 2020, almost 80% of Polish Internet users shopped online. Revenues from e-commerce in Poland in 2020 reached almost 22 billion euros (Czech e-commerce 2021). Poles most often buy clothes and household goods (Eurostat 2020a). The preferred method of payment for online purchases in Poland is bank transfer, followed by cash on delivery (Payvision 2020). In Hungary, online shopping is also advancing, but at the slowest pace of the V4 countries. The main reason is the distrust that Hungarians still feel towards this type of shopping. The preferred method of payment is still cash on delivery (Jurčo 2020). The most frequently purchased products in Hungary in 2019 were clothing and

electronics (Eurostat 2020a). In 2020, 65.7% of Hungarians shopped online, almost 4.86 million consumers. Revenues from e-commerce in Hungary in 2020 amounted to 1.46 billion euros (Statista 2021).

3 Methodology

The aim of the paper is to evaluate and analyze problematic areas of the online shopping process faced by consumers in the online environment in the Visegrad Group countries in 2015, 2017 and 2019. V4 is an important tool for cooperation and promotion of the interests of these states in the EU. This grouping is the result of 4 countries' efforts in the field of democratic development and security in the Central European region. V4 members strive for joint promotion of topics which connect them and are also important for the population, e.g. digitization, transport infrastructure and energy policy (Novak 2021). There has been an extensive research into the issue of e-commerce in the Visegrad Four countries in recent years, e.g.: Analysis of the potential for the development of the digital economy in V4 countries (Balejová 2014); The problematics of using mobile devices for e-commerce in the V4 countries (Bacik et al. 2018); Impact of the e-commerce on distribution channels of insurance services; E-commerce from the perspective of Visegrad Four countries (Corejova et al. 2020). For this reason, we consider the Visegrad Four countries as a suitable research sample for our research. In relation to the available data, we formulated the following research questions: How did the incidence of online shopping problems change in the V4 countries during the period under review? What differences in online shopping problems can be observed in the V4 countries? What were the most common problems with online shopping in the V4 countries during the period under review? The data used in the analysis were obtained from the database of the Statistical Office of the European Communities (Eurostat). The data analyzed cover the general population - individuals aged 16 to 74 who made at least one online purchase in 12 months. The unit of measurement is the Percentage of individuals. Due to missing data, the years 2015, 2017 and 2019 were selected for analysis. Based on the available data, we focused on the following issues: the overall problems that consumers faced when shopping online; delivery time issues; problems with wrong or damaged goods; technical problems with online shopping; difficulties in finding warranty information; problems with delivery costs or final price; frauds. The obtained data were graphically processed in the RStudio program.

4 Results

The proportion of consumers shopping online varies across the EU. Consumers in different countries face various problems when shopping online. Based on the available data, it is possible to evaluate and compare changes and differences in the problems faced by customers based in Visegrad Group countries when shopping online.

Figure 1 shows the share of online shopping consumers in the V4 countries and the overall average in the EU countries, who made at least one online purchase in 12 months in 2015, 2017 and 2019. It can be stated that in all countries there was a gradual increase in online shopping in the monitored years. While in 2015 and 2017 Slovakia had the

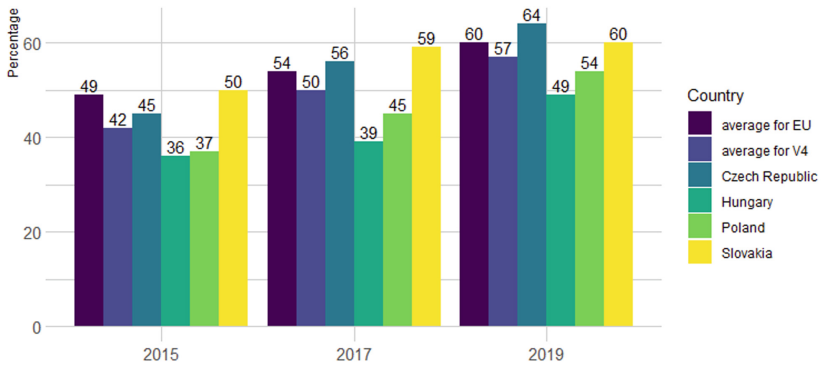


Fig. 1. Share of online shopping consumers in V4 countries and the EU (Eurostat 2020b)

largest share of online purchases (50% and 59%), in 2019 it was overtaken by the Czech Republic (64%). In all V4 countries except Hungary, the share of online purchases in the monitored years was at a level comparable to the overall average of EU countries. Also, the average found for the V4 countries was at a similar level in all years as that found for the EU.

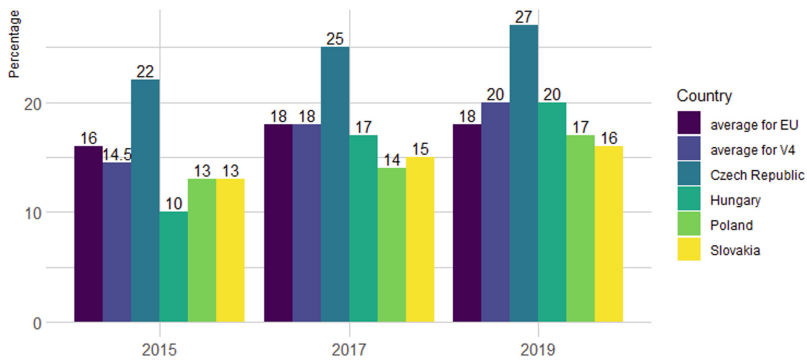


Fig. 2. Share of e-commerce turnover in total wholesale and retail turnover (Eurostat 2020b)

Figure 2 shows the percentage share of e-commerce turnover in the total turnover from wholesale and retail in the V4 countries in the monitored years. With regard to the average of EU countries, the average of V4 countries and individual V4 countries, a growing share of e-commerce in total turnover could be observed. The Czech Republic had the largest share of e-commerce turnover on total turnover in the monitored years. Hungary had only a 10% share in 2015, but doubled it by 2019. Slovakia recorded a share in all years at a level comparable to Poland.

Figure 3 shows the overall share of problems which customers faced when shopping online in the monitored years. Within all EU countries, the average share of problems was 25% in 2015, 24% in 2017 and 28% in 2019. The average share of problems within the V4 countries was comparable to the EU average, except for 2017, when the average

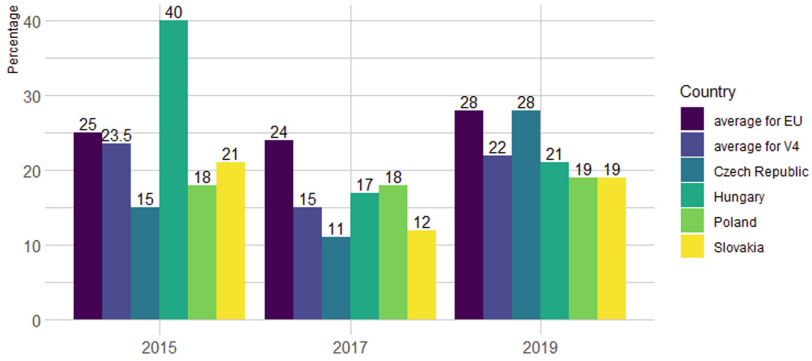


Fig. 3. Customer problems when shopping online in V4 and EU countries (Eurostat 2020b).

of V4 reached only 15%. It is only natural that the incidence of problems with online shopping grows with the increasing popularity of online shopping. This is also confirmed by the data recorded in the monitored countries. In each of the V4 countries, a decrease in the incidence of problems was recorded in 2017 compared to 2015, with the exception of Poland, which recorded the same level of problems. In 2019, there was a slight increase in these problems in all countries, except for the Czech Republic, where the increase was very significant, up to 17% compared to 2017. Slovakia recorded an increase of 7% in 2019, Poland by 1% and Hungary by 4% compared to 2017.

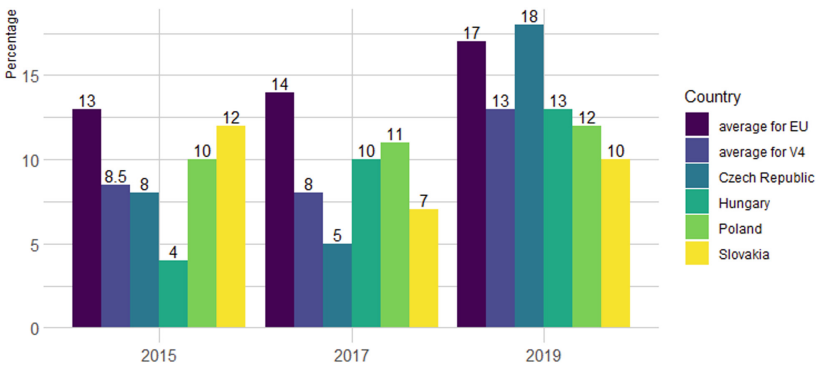


Fig. 4. The time of delivery of goods or services was longer than stated by the seller (Eurostat 2020b)

The most common problem with online shopping in the V4 countries was the longer delivery time of goods or services than stated by the seller on the store’s website (Fig. 4). As for the EU average, there was a 1% and 3% increase for the years under review. In Slovakia, a 5% decrease was recorded in 2017 compared to 2015, but in 2019 the incidence of this problem increased again by 3%, from 7% to 10%. Hungary recorded an increase of 9% in 2019, from 4% to 13%. In Poland, there was only 1%, increase from

10% to 11% and then to 12%. The Czech Republic recorded a decrease of 3% between 2015 and 2017, but in 2019 it had the highest increase of 13%.

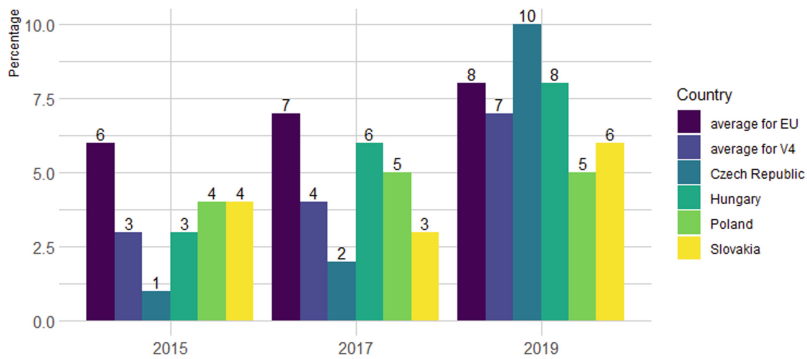


Fig. 5. Wrong or damaged goods (Eurostat 2020b)

Another problem with online shopping was the delivery of wrong or damaged goods (Fig. 5). The EU average reached 6% in 2015 with a subsequent increase by 1% in 2017 and 2019. The average of the V4 countries was at the level of 3% in 2015 and at the level of 7% in 2019. In the V4 countries, Slovakia and Poland recorded the most problems of this kind in 2015 (4%), Hungary in 2017, specifically 6%, and in 2019 the Czech Republic, specifically 10%. Values in Slovakia reached 3% in 2017 and 6% in 2019.

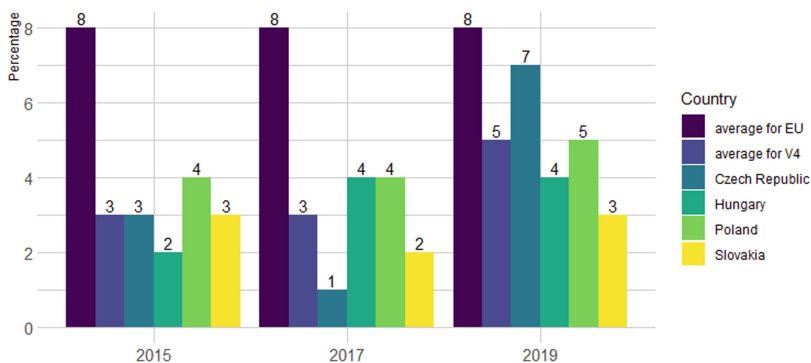


Fig. 6. Technical problems when ordering/shopping (Eurostat 2020b)

Technical problems when ordering or shopping online were recorded on average by 8% of online shoppers in EU countries in the years under review (see Fig. 6). The average of the V4 countries was 3% in 2015 and 2017 and 5% in 2019. Hungary recorded a level of 2% in 2015 and 4% in 2017 and 2019, much like Poland in 2015 and 2017. In 2019, the share of technical problems in online shopping in Poland increased to 5%. In 2015, 3% of online shoppers in the Czech Republic and Slovakia recorded technical problems with

online shopping. In 2017, only 1% of online shoppers in the Czech Republic experienced technical problems, while in 2019 the number was up to 7%. As for Slovakia, there was only a slight increase from 2% to 3% in 2019.

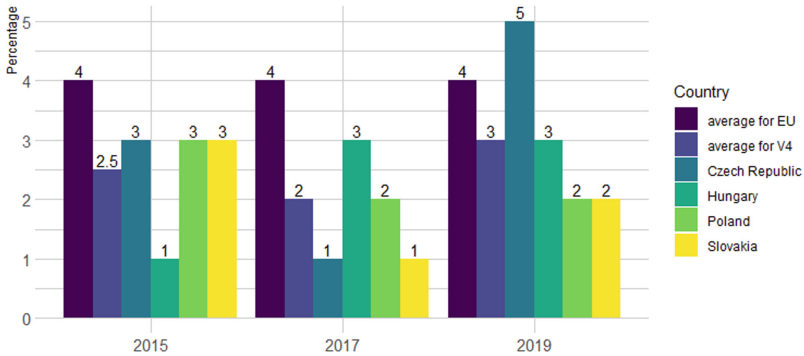


Fig. 7. Difficulty finding warranty information (Eurostat 2020b)

Difficulties in finding warranty information on the seller’s website were stated by 4% of online shoppers on average in EU countries over the years under review (see Fig. 7). The average for the V4 countries ranged from 2 to 3%. 3% of online shoppers in Poland, Slovakia and the Czech Republic also recorded these problems in 2015, 3% of online shoppers in Hungary recorded this value in 2017 and 2019. In Slovakia, the share of online shoppers who had difficulty finding warranty information increased from 1% in 2017 to 2% in 2019. The Czech Republic recorded an increase of 4% in 2019 compared to 2017.

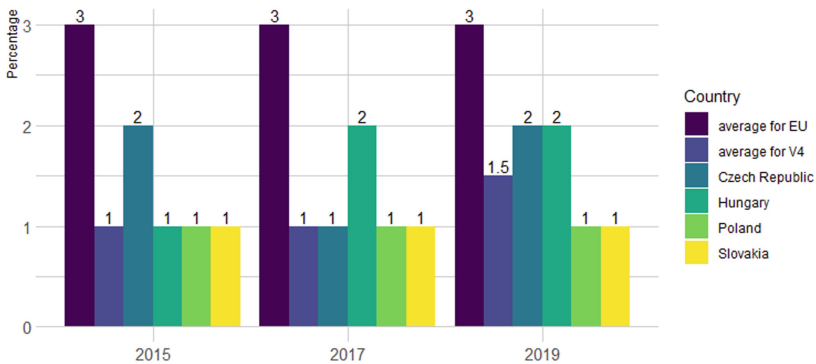


Fig. 8. Delivery costs or final price were higher than stated by the seller (Eurostat 2020b)

One of the problems that customers encountered when shopping online was that the cost of delivery or the final price was ultimately higher than stated by the seller on its website (see Fig. 8). In EU countries, on average, 3% of customers encountered this

problem in the years under review. The average of the V4 countries was at the level of 1% in 2015 and 2017 and 1.5% in 2019. In the V4 countries, the values in 2015 were at the level of 1% in Slovakia, Poland, Hungary and at the level of 2% in the Czech Republic. In 2017, 1% of online shoppers in Slovakia, Poland and the Czech Republic encountered this problem while in Hungary it was 2%. In 2019, 1% of customers in Slovakia and Poland and 2% in the Czech Republic and Hungary encountered this problem.

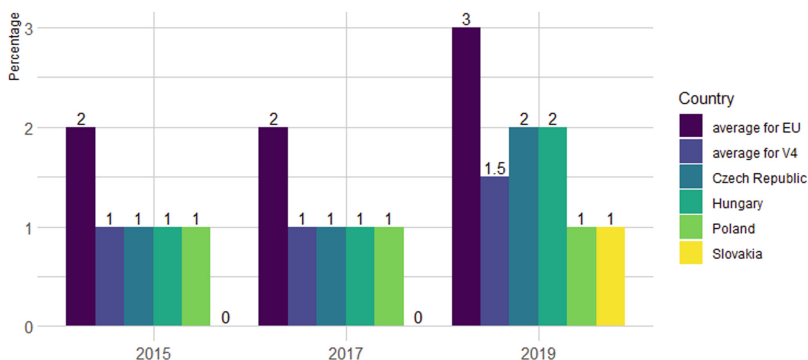


Fig. 9. Problems with fraud (Eurostat 2020b)

Figure 9 shows the proportion of shoppers who faced a fraud problem when shopping online. The EU average was 2% in 2015 and 2017 and 3% in 2019. The V4 average was 1% in 2015 and 2017 and 1.5% in 2019. In 2015 and 2017 1% of online shoppers encountered this problem in the Czech Republic, Poland and Hungary. In 2015 and 2017, less than 1% of online shoppers in Slovakia recorded problems with fraud when shopping online. In 2019, the share of experience with fraudulent online shops increased by 1% in each of the countries, with the exception of Poland, which recorded the same value as in 2017.

5 Conclusion

As the Internet use grows rapidly, e-shopping is becoming more widespread in the EU. The importance of online shopping is also growing due to the benefits that customers appreciate, in particular the ability to shop anytime and anywhere, access to a wide range of products and the ability to easily compare prices (European Commission 2018). In addition to the benefits that online shopping offers, it also brings about certain problems and risks that online consumers face.

Based on the above analyzes, it can be concluded that not only online shopping, but also the problems associated with it are growing every year. Regarding the overall problems, the highest incidence of problems was recorded in 2015 in Hungary (40%), in 2017 in Poland (18%) and in 2019 in the Czech Republic (28%). The most common problem in all V4 countries was the longer delivery time of goods or services than that stated by the seller on the store's website. Another relatively common problem was

the delivery of wrong or damaged goods. In 2015, most such goods were delivered to customers in Slovakia and Poland (4%), in 2017 in Hungary (6%), in 2019 in the Czech Republic (10%). On average, 8% of online shoppers in the EU underwent technical problems with online shopping in the monitored years, while, for example, in Slovakia only 3% of online shoppers experienced technical problems in 2015, 2% in 2017 and 3% in 2019. Difficulties in finding warranty information on the seller's website ranged from 1% to 5% across the V4 countries under review. The incidence of the problem with the delivery costs or the final price being higher than what was stated by the seller on its website was lower in the V4 countries than the EU average - below 2%. Slovakia recorded only 1% incidence of this problem in the monitored years. Customers also faced fraud problems when shopping online. Specifically, in 2015 and 2017, 1% of online shoppers reported such problems in the monitored countries, with the exception of Slovakia, where the value was below 1%. In 2019, the incidence of this problem increased by 1% in all countries except Poland, which reported the same values as before - at level of 1%.

The reason for the increasing number of problems with online shopping may be the increasing number of consumers who shop online. The share of e-commerce turnover in total sales turnover also increases year on year. For companies, this means, on the one hand, an increased turnover and an increased number of customers, but on the other hand, with the growth in sales volume, it is also possible to expect a growing incidence of problems. As the number of online orders increases, so does the likelihood that businesses will be under more pressure and order processing time will increase. Online retailers will have problems coping because they are not able to adapt to the growth of the market in timely manner, and will therefore make more mistakes. Error rates will increase. Errors may also be made by delivery companies, not only sellers themselves.

Lack of relevant data caused problem to the research, as complete data have not been available for several years. Future research may compare data collected with data collected from countries of Western and Eastern Europe. COVID-19 and its effect on online shopping and the problems associated with it may be researched too.

Online shopping is becoming increasingly popular, also given the need to minimize personal contact during the COVID-19 pandemic. It is more than certain that the consequences of this pandemic will be significant, especially in the field of online shopping. More and more consumers prefer online shopping to shopping in brick-and-mortar stores for reasons brought along by the pandemic - restrictions on movement, lack of products in shops and health concerns (Reddy 2020; Sharma and Jhamb 2020; Shashidhar 2020). It is possible to assume that with the increase in online shopping, problems with online shopping will also grow. On the other hand, despite the growing number of problems with online shopping, people do not seem to be put off by shopping online. On the contrary, the number of people shopping online is growing (Sabou et al. 2017; Karthikeyan 2016). Despite the growing number of purchases made online, it is necessary for merchants to know and identify the problems that their customers face when shopping online and to solve them to the maximum satisfaction of customer. As competition between e-merchants increases, customers can easily choose another online retailer if problems recur.

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References

- Abdullah, L., Ramli, R., Bakodah, H.O., Othman, M.: Developing a causal relationship among factors of e-commerce: a decision making approach. *J. King Saud Univ. Comput. Inf. Sci.* **32**(10), 1194–1201 (2019)
- Ariffin, S.K., Mohan, T., Goh, Y.N.: Influence of consumers' perceived risk on consumers' online purchase intention. *J. Res. Interact. Market.* **12**(3), 309–327 (2018)
- Artene, A.S.: E-business and informational society and their impact on sustainable development. *SEA Pract. Appl. Sci.* **2**(2), 439–446 (2014)
- Bacik, R., Fedorko, R., Olearova, M.: The problematics of using mobile devices for e-commerce in the V4 countries. In: *Economic and Social Development: Book of Proceedings*, pp. 109–118 (2020)
- Balejová, M.: Analysis of the potential for the development of the digital economy in V4 countries. *Almanach Act. Iss. World Econ. Polit.* **9**(4), 45–64 (2014)
- Bandara, R., Fernando, M., Akter, S.: Explicating the privacy paradox: a qualitative inquiry of online shopping consumers. *J. Retail. Consum. Serv.* **52**, 101947 (2020)
- Czech e-commerce: Size of Czech e-commerce market (2021)
- Corejova, T., Garbier, M., Chinoracky, M., Valicova, A.: E-commerce from the perspective of Visegrad countries. In: *Economic and Social Development: Book of Proceedings*, pp. 641–648 (2020)
- Del Duca, L.F., Rule, C., Loebel, Z.: Facilitating expansion of cross-border e-commerce-developing a global online dispute resolution system (Lessons derived from existing ODR systems: work of the United Nations Commission on International Trade Law). *J. Law Int. Affair.* **1**(1), 59–85 (2012)
- Diaz, C.: What is E-Commerce? Definition, differences with other terms and first steps to follow if you want to launch your e-commerce (2016)
- European Commission: *Digital Economy & Society in the EU* (2018)
- Eurostat: *Internet purchases* (2020a)
- Eurostat: *Problems encountered by individuals when buying/ordering over the internet* (2020b)
- Ganapathi, R.: A study on factors affecting online shopping behavior of consumers in Chennai. *J. Manage. Res. Anal.* **2**(2), 123–126 (2015)
- Haleema, P.K., Iyengar, N.C.: A mathematical model with flexible negotiation strategies for agent based negotiations in dynamic e-commerce environments. *J. King Saud Univ. Comput. Inf. Sci.* **30**(4), 1–14 (2016)
- Heureka.: Slovaks reached a new record on e-shops in 2019 (2020)
- Holdorf, S., Haasis, H.D.: Last mile delivery concepts in E-commerce an empirical approach. In: *The 8th International Conference on Software, Knowledge, Information Management and Applications (SKIMA)*, pp. 1–6 (2014)
- Jurčo, G.: *Online marketing in Hungary* (2020)
- Karim, R.A.: Customer satisfaction in online shopping: a study into the reasons for motivations and inhibitions. *IOSR J. Bus. Manage.* **11**(6), 13–20 (2013)
- Karthikeyan, G.: Problems faced by online consumers. *Int. J. Curr. Res. Modern Educ.* **1**(1), 166–169 (2016)
- Kavitha, T.: Consumer buying behavior of online shopping - a study. *Int. J. Res. Manage. Bus. Stud.* **4**(3), 38–41 (2017)

- Kawaf, F., Tagg, S.: The construction of online shopping experience: a repertory grid approach. *Comput. Hum. Behav.* **72**, 222–232 (2017)
- Marková, P.: The overview of Slovak e-commerce in 2020 (2020)
- Ministry of Foreign and European Affairs of the Slovak Republic: Slovakia and V4 (2019)
- Morgan, J.P.: E-commerce Payments Trends: European Overview (2019)
- Muthumani, A., Lavanya, V., Mahalakshmi, R.: Problems faced by customers on online shopping in Virudhunagar district. *Int. J. Sci. Technol. Manage.* **6**, 152–159 (2017)
- Novak, J.: MEPs from the Visegrad four recalled the importance of this association (2021)
- Payvision: Online payment methods in Poland (2020)
- Prabha, R.J., Karunanidhi, M.: A study on consumers problems towards online shopping. In: *International Journal of Business and Management Invention. National Conference on Emerging Trends and Innovations in Digital Marketing*, pp. 26–28 (2017)
- Rajib, R.: *Learning More - Ecommerce and Online Business*. Lulu Press, Raleigh (2016)
- Reddy, A.: Covid-19 impact: consumers move more towards digital (2020)
- Sabou, S., Avram-Pop, B., Zima, L.A.: The impact of the problems faced by online customers on ecommerce. *Studia Universitatis Babe-Bolyai Oeconomica* **62**(2), 77–88 (2017)
- Savarimuthu, I., Devi, S.K.: Customer satisfaction towards online shopping in Cuddalore town. *Int. J. Market. Technol.* **6**(9), 14–20 (2016)
- Sharma, A., Jhamb, D.: Changing consumer behaviours towards online shopping - an impact of Covid 19. *Acad. Market. Stud. J.* **24**(3) (2020)
- Shashidar, A.: Coronavirus crisis: Snapdeal goes ‘Local’ to ensure faster deliveries amid lockdown. *Bus. Today* (4) (2020).
- Singh, J., Crisafulli, B.: Managing online service recovery: procedures, justice and customer satisfaction. *J. Serv. Theor. Pract.* **26**(6), 764–787 (2016)
- Statista: E-Commerce Hungary (2021)
- Visegrad Group: About Visegrad Group (2021)
- We are social. *Digital 2019* (2019)



The New Adult on the Block: Daily Active Users of TikTok Compared to Facebook, Twitter, and Instagram During the COVID-19 Crisis in Belgium

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Abstract. It is believed that due to quarantine regulations during the covid-19 crisis, more people are attracted to social media. Especially TikTok seems to be linked to this crisis, given its rise to fame during the same period. However, to date, very little is known about TikTok regarding the number of users or usage characteristics. While considered a Social Network Site (SNS) oriented toward a younger audience of kids and teens, we hypothesized that TikTok would find its way to mainstream adult audiences, given the increasing attention devoted to this particular SNS in popular media. Cross-sectional data from 2500 Belgians (age between 18–64 years old) during the covid-19 crisis in 2020 show an expanding adoption of TikTok in daily active users (DAU). Further logistic regression analyses on the number of DAU show individual differences in sociodemographic background comparing SNS Facebook, Twitter, Instagram, and TikTok. The adult's resulting profile on TikTok is younger, less graduated, with a lower income, living in urban areas, and having kids. Contrary to expectations, we did not find a gender effect nor a student effect. While not yet at the level of Facebook and Instagram, TikTok succeeded to quickly gain momentum in the adult space, to a level that is reaching that of a longer-standing platform like Twitter.

Keywords: Social Network Sites · Facebook · Twitter · Instagram · TikTok · COVID-19

1 Introduction

Today, social media seems omnipresent, and it has changed almost any aspect of society, facilitating and transforming information and communication between people, groups, businesses, and governments (Shiau et al. 2018; Xu et al. 2012). People are spending less time interacting physically with each other and are spending an excessive amount of time socializing over the web (Colabelli et al. 2010). Due to quarantine regulations during the covid-19 crisis, it can be expected that even more people are attracted to social media to stay in contact, be informed, or find distraction or enjoyment.

Our primary research question was to investigate whether widespread SNS usage had increased during 2020 among an active adult population aged 18 to 64 and whether

this supposed trend applies to all SNS or only for some and not for others. Over the years, some Social Network Sites (SNS) like Facebook, Instagram, and Twitter have risen to dominance in user base, revenue, or cultural and media phenomenon. Nonetheless, the short history of SNS shows that new SNS can emerge quickly, just like existing SNS change their modalities, while other SNS lose popularity or get suspended (Boyd and Ellison 2007; Rains and Brunner 2015). How fast it can go, is demonstrated by the recent story of TikTok. One of the most recent SNS to rise to fame during the covid-19 crisis and considered the fastest-growing SNS application (Weimann and Masri 2020). To date, very little is known about TikTok in terms of user- or usage characteristics. So far, the SNS went somewhat unnoticed in academic circles. Overall, it is considered an SNS that was mainly adopted by children and adolescents, representing the largest demographic group on TikTok (Bossen and Kottasz 2020). It became quickly apparent that TikTok became very big in Belgium, seemingly overnight, and not only amongst kids and teens. As a result, in this paper, we opted to focus mainly on this new SNS, comparing it to other SNS, given that so little academic research on TikTok is available.

The number of users worldwide and in Belgium can vary depending on the source and internet site that report on it. Official figures provided by Bytedance, the Chinese owner of TikTok, are scarce and infrequent. Citing internal TikTok usage figures, the media and entertainment site Emence referred to 2.2 million Belgian users (Boogert and Libbenga 2020). De Tijd, a prominent economic and financial newspaper in Belgium, reported 3 million Belgian users in 2020, which is almost threefold the number of registered users of 2019 (Samain 2020). The difference in these numbers is, however (in part), likely due to a difference in definition. By any definition, the increase in adoption seems phenomenal though, given that TikTok was only launched internationally by the end of 2017 and only became available worldwide mid-2018 when merging with musical.ly, a lip-syncing and dance app targeted to younger audiences. The news site CNBC citing an internal TikTok source, reported almost 700 million monthly active users worldwide in 2020, where at the beginning of 2018, it counted only 55 million global users (Sherman 2020). This phenomenal growth gives rise to the question of whether this expansion came at the expense of other SNS or not.

In March 2019, the New York Times (Herrman 2019) already heralded TikTok as “a new extraordinarily popular video app,” “a refreshing outlier in the social media universe,” and one that is “genuinely fun to use.” Bossen and Kottasz (2020) explored the uses and gratifications of TikTok sought by adolescents in Denmark and identified that indeed entertainment motives were the primary driver. Haenlein et al. (2020) indicate the focus on entertainment as one reason why both Instagram and TikTok attract more influencers, given it is relatively easier to obtain a follower base and gain social capital in the form of views and likes as these SNS rely less on existing offline connections. Furthermore, the available content presented to a user is not follower-based as in other SNS but rather organized on a “For You” recommendation page selected by an algorithm. While this feature also exists on Instagram, it is considered the primary landing page on TikTok. This unique feature also makes that users driven by fame-seeking motives have the impression that TikTok can gratify this need best because they can present their content to non-followers, and their content can go viral (Leight 2019). The success of the SNS reaching cultural relevance and growing media attention goes hand in hand with

the overnight success story of young TikTok users like the 16-year-old Charli D'Amelio, with 100 million followers, the most followed person on the app, far beyond well-known stars after being only one year on the platform, and brands that offer these influencers life-changing deals to get their products and messages across. Searching in Go Press Academic, an archive of articles and notes in Belgium's popular media sources, resulted for 2018 in 22 features of TikTok in Belgian published newspaper and magazines. In 2019 this increased to 191 references and exploded to 1844 references in 2020. In Belgium, the success of TikTok can be explained by the increasing attention of popular media due to the success of local teenage TikTok stars and the brand-deals they secure. Headline stories were about older established celebrities in the entertainment industry that adopted the SNS and tried to mimic this success in a time where they have less spotlight on them; government and virologists that adopted the SNS to get their covid-19 measures across to a younger audience; the ban of the SNS in India; the potential ban in the US; and the unsuccessful takeover attempt by Microsoft. With this increasing attention in traditional media, adults and parents met the latest social media phenomenon initially adopted by their kids and teens.

This shift from teens and students, as early adopters of SNSs, that adults later follow is not new to TikTok. Younger people have been more comfortable with online communication than adults (Thayer and Ray 2006). Moreover, visual-based applications created specifically for mobile use like Instagram and Snapchat have been known to incite and perpetuate teen cultures (Charteris et al. 2014) in a similar vein as TikTok today. Also, Facebook was initially launched as a student-only SNS. Younger adults used Facebook more frequently and were significantly more emotionally impacted by the site than older adults (Hayes et al. 2015). Earlier research also showed that young people preferred not to share their Facebook profiles with older people and their parents (West et al. 2009). However, today, the increasing adoption of some SNSs by older users has led to a more intergenerational landscape. It can be regarded as a specific so-called collapsed context, in which boundaries between separate online communities start to blur, creating potential conflict amongst its users (Marwick and Boyd 2011), that younger age groups might try to resolve in different ways, and which could result in shifting SNS usage (Gil-Lopez et al. 2018). In contrast with the earlier findings, Yang (2018) shows that students accepted parents and family on their Facebook profile similar to peers in such a context. However, it seems that it makes them more cautious about what they share online (Yang 2018), limiting themselves to merely disclosing what is universally appropriate (Gil-Lopez et al. 2018). On Instagram, younger Instagram users responded by creating so-called Finsta-accounts (fake or secret Instagram) that portray more genuine, less filtered behavior (Dewar et al. 2019), and that is shared only with intimate friends who are presumed to keep the shared content private (McGregor and Li 2019). Finally, younger users might be retreating to other sites (Wiederhold 2012), abandoning certain SNS or segmenting their content shared per SNS.

SNSs have altered how business in general and marketing is conducted (Xu et al. 2012). Also, the advent of new successful SNSs with new modalities can profoundly change the way companies and brands evaluate their marketing efforts. Indeed, in times of pandemic quarantines, the growth in the user base of TikTok did not go unnoticed amongst marketers aiming to tap into this user base by collaborating with influencers on

the popular SNS (Haenlein et al. 2020). While TikTok still trails Facebook in the number of users, revenue, and advertising, Haenlein et al. (2020) see a shift towards Instagram and TikTok compared to Facebook for influencer marketing, given they are more on-trend, serve younger populations with different consumption patterns, and are seen as more appropriate than Facebook for this type of marketing. According to the authors, marketing managers still have a less than adequate understanding of those platforms than their knowledge of more traditional media channels (Haenlein et al. 2020) and might not be aware of the challenges a new collapsed context poses.

The proliferation of SNS poses a challenge to marketing and advertising managers in selecting the right social network platform(s) for their marketing purposes based on who they want to reach and with what purpose. While the number of active users might be readily available for some SNS in industry reports, press releases, and annual account statements, such information is not publicly available for all SNSs like TikTok. Furthermore, if some user information is available, it is far from certain that the measure is captured in the same way across these platforms. Even far less is known about how many users there are across different SNSs. Such information is not available from a single company, and the industry and academics are to rely on survey information. Understanding the difference in audience characteristics of different SNSs and the potential overlap between platforms is crucial in determining the right SNS and budget allocation based on the audience group's size and characteristics that can be reached and targeted (Bolotaeva and Cata 2010).

2 Research Questions

The current research extends our previous study (Hellemans et al. 2020) into the underlying individual differences in specific socio-demographics of Facebook, Instagram, and Twitter by also including TikTok. While the SNS indeed has been noted in popular media given its remarkable success, research into the sociodemographic factors for TikTok is - to the best of our knowledge - not yet available. Furthermore, we investigate to which degree certain SNSs were adopted over 2020 during the covid-19 crisis.

This paper contributes to the recent stream of research that takes a cross-SNS approach by (1) comparing Facebook, Twitter, Instagram, and TikTok use in terms of daily active usage (DAU) and (2) in terms of individual differences and specific socio-demographics: age, gender, student, education, relationship status, kids, working, income and urbanization, (3) while particularly examining this in the extraordinary pandemic period of 2020.

Due to quarantine regulations during the covid-19 crisis, it can be expected that even more people are attracted to social media to stay in contact, be informed, or find distraction or enjoyment. Therefore, we hypothesize a positive time-effect where the DAU-scores of each SNS increase during the crisis. Furthermore, given the popular press messages, we assume this effect to be larger for TikTok.

Based on our previous research (Hellemans et al. 2020), we hypothesize about underlying individual differences per SNS. Notably, we expect more female users on Instagram and Facebook and more males on Twitter; more students, and younger ages on all three SNSs. We assume the age, student, and gender effect to apply to TikTok as well. Previously we also observed fewer users with a graduate degree on Facebook and more users

with a higher income on Twitter, and more working population on Instagram. We assume users with kids to be more on Facebook and TikTok. With regards to the socio-economic status, on TikTok, we do not have an assumption. We expect those living in urban areas to be more associated with Instagram and TikTok to reflect their trendiness.

3 Methodology

3.1 Sampling

Cross-sectional data were obtained from a Belgian online panel on regular frequency probes for SNS usage by a self-completed survey. Data from 2020 was selected over five periods, resulting in a sample of $N = 2500$ respondents, of which 49% being female. The data includes one-period pre-covid (period 1). The average age reported is 42.4 years ($SD = 13.4$). Besides age, other sociodemographic variables included as binary dummy variables are: (1) female, (2) graduate degree, (3) student, (4) single, (5) working, (6) higher income, (7) kids, (8) urban area.

3.2 Usage Measure

In this survey, participants rated how frequently they consulted different SNS on a 7-point frequency scale designed to obtain the number of DAU users per SNS platform, going from “not at all” (i.e., score 1) to “daily-to several times a day” (i.e., score 7). DAU users are defined as users that log into the SNS at least once a day (Score 7). This scoring was obtained for Facebook, Twitter, Instagram, and TikTok. This measure is a standard metric used by SNS companies and industry press reports. Also, other academic research on SNS adoption (Haight et al. 2014; Yu et al. Yu et al., 2016) has made use of a dichotomized measure or dichotomize their measure during the analytical stage given the non-normal distribution of the user frequencies. The results will, as such, also be further analyzed with non-parametric statistical testing.

4 Results

4.1 DAU-Scores 2020

Table 1 shows the obtained DAU users for each specific SNS over 2020 on the total sample. Facebook remains by far still the most frequently used site, with DAU reaching 64.6% in 2020. Instagram further attains up to 26.0% DAU users. Twitter is used daily by 11.1% overall. Finally, TikTok is used on average across 2020 by 5.5% daily. It is the only SNS showing a steady, significant increase across the periods in 2020 from 1.2% in period 1 to 9% in period 5 (Chi-square, $\chi^2 = 43.0$, $df = 4$, $p < 0.01$), supporting our hypothesis and the general notion that TikTok was the leading platform to grow in 2020 while not penalizing the usage of other SNS in terms of DAU. For the other SNSs, no significant periodic effects were observed in 2020. If we compare the number of DAU users with our reported 2019 data (Hellemans et al. 2020), the adoption of TikTok so far did not result in a lower DAU user base for Facebook (64.6% versus 61.4% in 2019),

Twitter (11.1% versus 9.5% in 2019), and Instagram (26.0% versus 24.3% in 2019). The R Hecor package available in SPSS was run to estimate the polychoric correlation between our DAU-measures presented in Table 2. The strongest correlation observed is the one between Instagram and TikTok and Instagram and Twitter.

Table 1. DAU frequency during 2020

Period 2020	P1	P2	P3	P4	P5	Total
Total n	500	500	500	500	500	2500
Facebook	63.0%	65.2%	63.2%	63.6%	67.8%	64.6%
Twitter	9.6%	13.0%	10.8%	10.4%	11.8%	11.1%
Instagram	26.4%	27.2%	25.0%	26.0%	25.2%	26.0%
TikTok	1.2%	2.8%	6.6%	7.8%	9.0%	5.5%

Table 2. Polychoric correlations DAU frequency scores

	Facebook	Twitter	Instagram
Twitter	0.34		
Instagram	0.49	0.60	
Tiktok	0.30	0.49	0.60

4.2 Individual Differences in SNS Usage

To contribute to understanding individual differences, logistic regressions were run on each DAU measure of Facebook (FB), Twitter (TWT), Instagram (INSTA), and TikTok (TT), and the available sociodemographic variables as well as the period indicator in 2020 as determinants.

The results in Table 3 show that the negative effect of age seems to be the only demographics effect being consistent across each DAU-measure (FB, $b = -0.01$, $p < 0.05$), (TWT, $b = -0.04$, $p < 0.05$), (INSTA, $b = -0.07$, $p < 0.05$), and (TT, $b = -0.07$, $p < 0.05$) which is in line with previous findings (Hellemans et al. 2020). A significant student effect can be noted for TWT ($b = 0.76$, $p < 0.05$) and INSTA ($b = 0.56$, $p < 0.05$) and not for FB or TT. TWT shows significantly more male DAU-users ($b = -0.79$, $p < 0.05$) while Instagram ($b = 0.23$, $p < 0.05$) and FB ($b = 0.38$, $p < 0.05$) show more female DAU-users. Contrary to our expectation no gender effect was noted for TT. A significant positive effect was observed for having kids for FB ($b = 0.15$, $p < 0.1$), TWT ($b = 0.38$, $p < 0.05$), and TT ($b = 0.35$, $p < 0.1$). Further, we observed a significant positive effect of urban regions for TWT ($b = 0.43$, $p < 0.05$) and TT ($b = -0.61$, $p < 0.05$) while not for INSTA. A negative effect of a graduate degree can be observed both for FB ($b = -0.29$, $p < 0.05$) and TT ($b = -0.44$, $p < 0.05$), while a positive effect

Table 3. B-coefficients logistic regressions on DAU per specific/general SNS

	FB	TWT	INSTA	TT
Female	0.38*	-0.79*	0.23*	0.21
Age	-0.01*	-0.04*	-0.07*	-0.07*
Single	-0.06	-0.21	0.11	-0.24
Graduate degree	-0.29*	0.4*	0.18	-0.44*
Working	0.24*	0.27	-0.01	-0.27
Student	0.13	0.76*	0.56*	0.44
Higher income	-0.04	0.23	0.17	-0.41**
Kids	0.15**	0.38*	0.08	0.35**
Urban	-0.01	0.43*	0.11	0.61*
Period	0.04	0.04	0.00	0.48*
Constant	0.8*	-1.4*	1.07*	-2.02*
χ^2	65*	151*	459*	209*
Nagelkerke R^2	0.04	0.12	0.25	0.23

* $p < 0.05$.** $p < 0.10$.

applies to TWT ($b = 0.40$, $p < 0.05$). The effect of working is only observable for FB ($b = 0.24$, $p < 0.05$). A lower-income effect only is applicable for TT ($b = -0.41$, $p < 0.1$). Finally, a periodic positive effect over 2020 was found for TT only ($b = 0.48$, $p < 0.05$).

5 Discussion, Implications, and Limitations

The landscape of SNS is continuously changing. In Belgium, this is demonstrated by TikTok, which was adopted massively by adult users. This increase does not seem to have penalized other SNS in their DAU-base. We should note that while the other SNS also keep their position that a potential loss to TikTok might have been compensated by an increasing number of new users, given our cross-sectional approach. Future research with a longitudinal approach following the same users can establish whether this is the case or not. Furthermore, while it might not have eroded their DAU-base, it could well be that the intensity of use and engagement might have experienced an impact. Further research can look into intensity parameters like session duration or specific activities on SNS. It remains to be seen whether the overall increase of SNS usage is sustained once the country's quarantine measures are lifted or whether a specific number and type of user being more time-constrained again will choose one over the other. Comparing current results with our previous findings (Hellemans et al. 2020) shows that sociodemographic differences between different SNS exist and that the underlying profile of DAU can change over time and in atypical periods. Our findings suggest that the potential overlap of TikTok with Instagram is the highest. As expected, the DAU-profile of TikTok is younger, less graduated, having a lower-income, living in urban areas, and having kids. Contrary to expectations, we did not find a gender effect nor a student effect. While not yet at the level of Facebook and Instagram, TikTok succeeded to quickly gain momentum

in the adult space as well, to a level that is reaching that of a longer-standing platform like Twitter.

With users on more platforms and shifting user attention, marketing managers' choice of selecting the best combination in reach and frequency becomes more complicated. They should be more cautious when they estimate their target group, the size, and the engagement of each SNS. As it is recommended to adopt the style of a campaign to the culture and features of a particular SNS (Haenlein et al. 2020), the next challenge of marketing managers choosing a popular upcoming platform like TikTok will exist in finding the suitable trade-off between the style of the initial younger age group and the older target groups that followed them. The SNS itself will need to see how it can keep its image of being the new cool kid on the block while it grows into adulthood, as a new collapsed context starts to emerge, in which boundaries between different age groups blur.

References

- Bolotaeva, V., Cata, T.: Marketing opportunities with social networks. *J. Internet Soc. Netw. Virtual Commun.* **2010**, 1–8 (2010)
- Boogert, E., Libbenga, J.: TikTok groeit in Nederland tot 3,5 miljoen gebruikers, Emerce (2020). <https://www.emerce.nl/nieuws/tiktok-groeit-nederland-tot-35-miljoen-gebruikers>
- Boyd, D.M., Ellison, N.B.: Social network sites: definition, history, and scholarship. *J. Comput. Mediat. Commun.* **13**(1), 210–230 (2007)
- Bossen, C.B., Kottasz, R.: Uses and gratifications sought by pre-adolescent and adolescent TikTok consumers. *Young Consumers* (2020)
- Charteris, J., Gregory, S., Masters, Y.: Snapchat 'selfies': the case of disappearing data. Rhetoric and reality: critical perspectives on educational technology. In: *Proceedings of Ascilite Dunedin* (2014)
- Colabelli, D., Morales, A., Dumont, J., Fagan, J.M.: Facebook addiction-it's a click away (2010)
- Dewar, S., Islam, S., Resor, E., Salehi, N.: Finsta: creating "fake" spaces for authentic performance. In: *Extended Abstracts of the 2019 CHI Conference on Human Factors in Computing Systems*, pp. 1–6, May 2019
- Gil-Lopez, T., Shen, C., Benefield, G., Palomares, N., Kosinski, M., Stillwell, D.: One size fits all: context collapse, self-presentation strategies and language styles on Facebook. *J. Comput. Mediat. Commun.* **23**(3), 127–145 (2018)
- Haenlein, M., Anadol, E., Farnsworth, T., Hugo, H., Hunichen, J., Welte, D.: Navigating the new era of influencer marketing: how to be successful on Instagram, TikTok, & Co. *Calif. Manage. Rev.* **63**(1), 5–25 (2020)
- Haight, M., Quan-Haase, A., Corbett, B.A.: Revisiting the digital divide in Canada: the impact of demographic factors on access to the internet, level of online activity, and social networking site usage. *Inf. Commun. Soc.* **17**(4), 503–519 (2014)
- Hayes, M., van Stolk-Cooke, K., Muench, F.: Understanding Facebook use and the psychological affects of use across generations. *Comput. Hum. Behav.* **49**, 507–511 (2015)
- Hellemans, J., Willems, K., Brengman, M.: Daily sactive users of social network site: Facebook, Twitter, and Instagram-use compared to general social network site use. In: *Advances in Digital Marketing and eCommerce*, pp. 194–202. Springer, Cham (2020)
- Herman, J.: How TikTok is rewriting the world. *New York Times* (2019). <https://www.nytimes.com/2019/03/10/style/what-is-tik-tok.html>

- Leight, E.: Surprising no one: TikTok is driving a lot of new-artist growth, *rolling Stone* (2019). <https://www.rollingstone.com/pro/news/chartmetric-breakthroughartists-report-958401/>
- Marwick, A.E., Boyd, D.: I tweet honestly, I tweet passionately: Twitter users, context collapse, and the imagined audience. *New Media Soc.* **13**(1), 114–133 (2011)
- McGregor, K.A., Li, J.: 73 fake instagrams for real conversation: a thematic analysis of the hidden social media life of teenagers. *J. Adolesc. Health* **64**(2), S39–S40 (2019)
- Rains, S.A., Brunner, S.R.: What can we learn about social network sites by studying Facebook? A call and recommendations for research on social network sites. *New Media Soc.* **17**(1), 114–131 (2015)
- Samain, M.: Bijna 3 miljoen Belgen op TikTok. *De tijd* (2020). <https://www.tijd.be/tech-media/technologie/bijna-3-miljoen-belgen-op-tiktok/10251530.html>
- Sherman, A.: TikTok reveals detailed user numbers for the first time. *CNB* (2020). <https://www.cnb.com/2020/08/24/tiktok-reveals-us-global-user-growth-numbers-for-first-time.html>
- Shiau, W.L., Dwivedi, Y.K., Lai, H.H.: Examining the core knowledge on facebook. *Int. J. Inf. Manage.* **43**, 52–63 (2018)
- Thayer, S.E., Ray, S.: Online communication preferences across age, gender, and duration of Internet use. *Cyber Psychol. Behav.* **9**(4), 432–440 (2006)
- Weimann, G., Masri, N.: The Virus of Hate: Far-Right Terrorism in Cyberspace. *International Institute for Counter-Terrorism*, 33–34 (March 2020). <https://www.ict.org.il/images/Dark%20Hate.pdf>
- Wiederhold, B.K.: As parents invade Facebook, teens tweet more. *Cyberpsychol. Behav. Soc. Netw.* **15**, 385 (2012). <https://doi.org/10.1089/cyber.2012.1554>
- West, A., Lewis, J., Currie, P.: Students' Facebook' friends': public and private spheres. *J. Youth Stud.* **12**(6), 615–627 (2009)
- Xu, C., Ryan, S., Prybutok, V., Wen, C.: It is not for fun: an examination of social network site usage. *Inf. Manage.* **49**(5), 210–217 (2012)
- Yang, Chia-chen: Social media as more than a peer space: college freshmen encountering parents on Facebook. *J. Adolescent Res.* **33**(4), 442–469 (2018)
- Yu, R.P., Ellison, N.B., McCammon, R.J., Langa, K.M.: Mapping the two levels of digital divide: Internet access and social network site adoption among older adults in the USA. *Inf. Commun. Soc.* **19**(10), 1445–1464 (2016)



Fight Against Corona: Exploring Consumer-Brand Relationship via Twitter Textual Analysis

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Abstract. This study investigates how social media (SM) can affect the consumer-brand relationship phenomena. Basing on the literature concerning the so-called “dark side” of social media (e.g., fake news and memes), the authors analyze the case of Corona beer. Web-users attacked this Mexican brand due to the link between its brand name and the Coronavirus. The case was analyzed via Twitter textual analysis. Results offer insights for both scholars and practitioners.

Keywords: COVID-19 pandemic · Corona extra · Instant marketing · Sentiment analysis · Twitter analysis · Text mining

1 Introduction

In current times, the COVID-19 pandemic represents a critical challenge for the financial markets and organizations and final customers. The different lockdown restrictions adopted by governments worldwide to reduce the spread of the virus have strongly modified consumption patterns and firms' revenues. Specifically, people started to use online interfaces for working, conducting business, studying, and engaging in a widening range of recreational activities on SM.

According to the extant literature, SM has both a ‘bright side’ and a ‘dark side’ (Kietzmann et al. 2011; Baccarella et al. 2018; Smaldone et al. 2020). It means that SM brings both advantages and disadvantages to individuals and firms. Specifically, as highlighted by Baccarella et al. (2018), the bright side of SM is represented by the fact that firms can use online channels to engage with consumers, sell their products/services, and create customer services initiatives as well as numerous communication and marketing strategies. At the same time, SM should cause several incidents and troubles, such as hate speech (Mondal et al. 2017; Pohjonen 2019), cyberbullying (Del Vigna et al. 2017), and brand attack episodes (Rauschnabel et al. 2016).

During the pandemic outbreak, SM revealed both a ‘bright side’ and a ‘dark side’. ‘Focusing on the dark side’, online users contributed to the development of fake news

(Merchant and Asch 2018), disinformation campaigns (Sfichi and Lavric 2020), and online hate speech towards the Chinese and Asian population (Schild et al. 2020). Another surprising phenomenon concerns the number of ironical and parodic social media contents linking due to the name similarity of the beer ‘Corona’, a Mexican corporation owned by Constellation Brands (STZ), and the Coronavirus. Because of such negative buzz around Corona, the intention to buy this famous beer brand in the United States among adults has fallen to its lowest level in the past two years, while the brand’s perception has also collapsed (Corbet et al. 2020).

The results of a phone survey conducted in February 2020 by the public-relations agency 5WPR revealed that 38% of 737 American beer drinkers “would not buy Corona under any circumstances”. A total of 16% said they were “confused about whether Corona beer is related to the coronavirus”. However, the picture depicted by Maggie Bowman, senior director of communications for the beer division of Constellation Brands, is different. Specifically, she said: “Despite the misinformation circulating, consumer sentiment and sales remain strong. Consumers understand there is no linkage between the virus and our business” (Bradley 2020).

Against this backdrop, the paper presents a Twitter analysis to explore people’s sentiment towards Corona Extra. To reach this objective, we first illustrate a brief theoretical background about the role of fake news, internet memes, and consumer-brand relationship. Thereafter, methods and research design are outlined as well as discussion, implications, and concluding remarks.

2 Marketing Problem-Solving Modes

The COVID-19 has infected millions of people, but also the mass media and the Internet. Particularly, fake news, namely, deliberate disinformation or hoaxes spread via traditional and new media, can harm the population more than the virus (Sfichi and Lavric 2020). The World Health Organization is trying to fight the Coronavirus and the trolls and conspiracy theorists. According to Shu et al. (2017), online fake news is intrusive and diverse in topics, styles, and platforms. Generally, fake news is published and distributed on the Internet, to purposely mislead, befool or lure readers for financial, political, or other gains” (Shu et al. 2017, p. 4). Sometimes fake news is targeted at brands. Such information can affect the consumer decision-making process and cause damages to a brand’s reputation and consumers (Chen and Cheng 2019).

In concomitance with dramatic events such as the COVID-19 outbreak, fake news can result from psychological suffering such as anxiety and fear. Specifically, as highlighted by Presti et al. (2020), things that have consonance with COVID-19 might acquire functions of ‘bad’, ‘diseased’, or ‘dangerous’, such as the case of the Corona Extra. Together with fake news, another phenomenon that characterizes the Internet is the proliferation of viral challenge memes. This form of participatory digital culture exploded during the summer of 2014 with the Ice-Bucket Challenge videos of people tipping water over themselves (Burgess et al. 2018).

The word “meme” was neologized by the biologist Richard Dawkins in *The Selfish Gene* (1976). According to Dawkins, a meme is a cultural unit transmitted from person to person via imitation (Pauliks 2020). From a semiotic perspective, viral challenge

meme is an example of multimodal texts, that is, units of signification resulting from the combination of different semiotic resources, such as videos, sounds, and written texts (Baldry and Thibault 2006).

The mass media have accused viral challenge memes of being both narcissistic and mindlessly conformist (Burgess et al. 2018). Researchers (Benaïm 2018) also underline the high symbolic value of internet memes. As in the case of the Ice Bucket Challenge, memes are used for charity. Therefore, such symbols represent a critical resource for marketing, advertising, and branding (Holt and Cameron 2010). Specifically, some brands and companies can benefit from internet users who create and disseminate (without payment) memes (Benaïm 2018). Similarly, online communities can use memes to denigrate companies or boycott their products (Fournier and Avery 2011).

Based on these theoretical considerations, the present research investigates the case of Corona Extra. This brand was at the center of a false narrative because of the homonymy involving the Coronavirus and its brand name. During the initial phase of the pandemic outbreak, Corona Extra became the target of several hilarious memes. The most emblematic example is the Corona beer challenge with a sword published by Mr Uekusa and emulated by other internet users.

This study aims at investigating the impact that a diseases name can have on a product or brand. Specifically, the attention is focused on the following research question: how can consumer-generated contents, such as memes, help or hurt a brand and thus strengthen or diminish consumers-brand relationship and brand image?

3 Methods and Research Design

This study adopts an explorative approach to detect customers' perceptions via Twitter textual analysis in the Anglosphere. Data Mining has been applied to the extracted *tweets* employing Text Mining (TM) techniques. Geocoded scraping via R software (<https://r-project.org/>) was performed to derive the prominent tweets in the target market. Nevertheless, "corona beer virus" was selected as a keyword about Corona Extra and the semantic linkage to Coronavirus.

Data mining was performed via *the twitter R* package, developed by Gentry (2015). Tweets' text was analyzed via *tm* package, developed by Feinerer et al. (2018). Tweets were recollected from the official website (<https://twitter.com>), stored, and analyzed via Text Analysis, Sentiment Analysis (SA), and Topic Modelling. After the data were stored and cleaned, TM was performed via R software to examine the retrieved tweets to proceed with the data visualization. The collection of 222,549 tweets is an exhaustive amount of data to explore phenomena linked to Corona Extra and Coronavirus via TM techniques.

Co-occurrences-based terminological combinations were obtained via the *stylo* package. Topic Modeling was conducted via the *topic models* R package. Topic Modeling was employed to derive the main thematic areas linked to the case study computing the probability of each word to be included in a topic. The last step of the methodology is SA; that is, the automatic (or semi-automatic) analysis of texts, pictures, or videos to extract and categorize the content's opinions. SA helps predict social, political, and economic events and understand public opinion on a specific theme of discussion, profile

opinions on products and brands, and collect customers’ emotions. SA is used to analyze the writer’s state of mind on a specific subject and classify it as positive, negative, or neutral (Feldman 2013). In this research, it was employed a supervised SA algorithm. The algorithm employs the NRC lexicon to explore customers’ emotions in Twitter data.

4 Results

After the methodological introduction, the results of the BDA are reported in this section. Bigrams, weighted word clouds, and sentiment outputs were computed via R software to perform text mining. Sentiment analysis with NRC lexicon is shown in Fig. 1. Throughout, a comparative weighted word cloud with topic modeling is depicted in Fig. 2. Focusing on the bigrams analysis, the ten terms with the highest occurrences are “corona beer” (81126), “beer challenge” (30654), “sword challenge” (17121), “sword corona” (13671), “beer friend” (10677), “right home” (10669), “everything right” (19664), “friends’ home” (10657), “hour outside” (10652), and “outside pub” (10648).

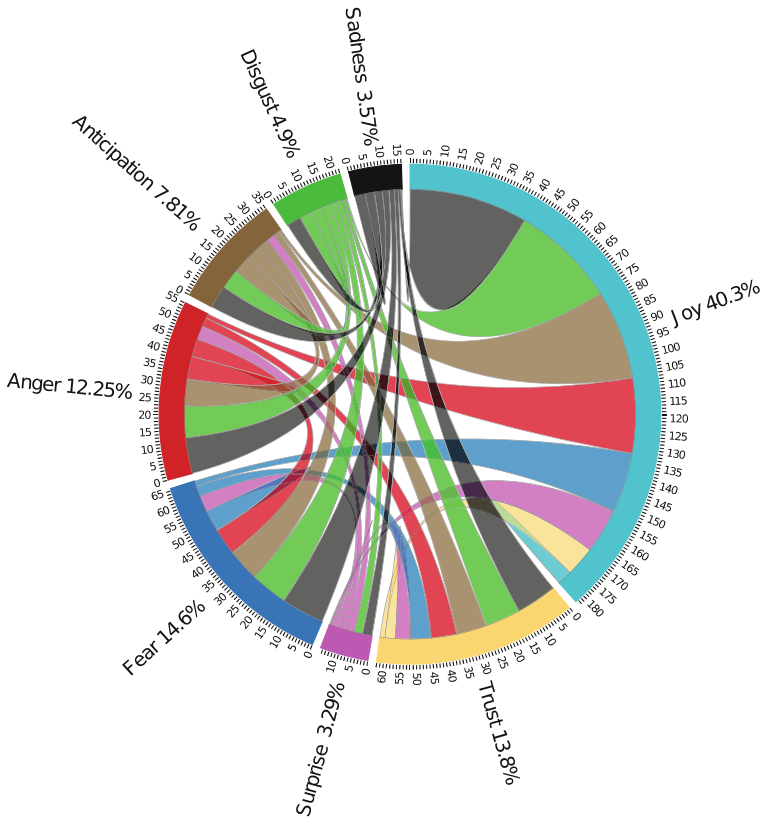


Fig. 1. Chord diagram representing emotions’ scores distribution obtained via NRC lexicon-based sentiment analysis.

Figure 1 shows the emotions derived from the extracted tweets and sentiment scores. Tweets regarding Corona Extra were almost positive (62%). The most common emotion was joy (40.3%), trust (13.8%), and surprise (3.29%), respectively. Among the negative emotions (38%) was found a consistent amount of fear (14.6%), followed by anger (12.25%), anticipation (7.81%), disgust (4.9%), and sadness (3.57%).

The comparative word cloud reported in Fig. 2 shows the set of words weighted on the base of their occurrences. Each color indicates one of the following topics: 1) meme challenge, 2) lifestyle, 3) brand perception, 4) COVID-19 pandemic. The first topic comprises words such as “beer”, “challenge”, “corona, sword”, “coronavirus”, “Mexican”, “body”, “Jenga”, “taco”, and “tablecloth”. The second topic includes words such as “beer”, “corona”, “virus”, “weather”, “garden”, “everyone”, “holidays”, “marketing”, “drink”, and “smart”. The third topic related to brand perception contains terms such as “beer”, “right”, “home”, “friend”, “outside”, “everything”, “pub”, “hour”, “feel”, “depth”, and “contempt”. The fourth topic embraces words such as “corona”, “beer”, “Mexico”, “drinking”, “people”, “Covid”, “shut”, “million”, “today”, and “since”.

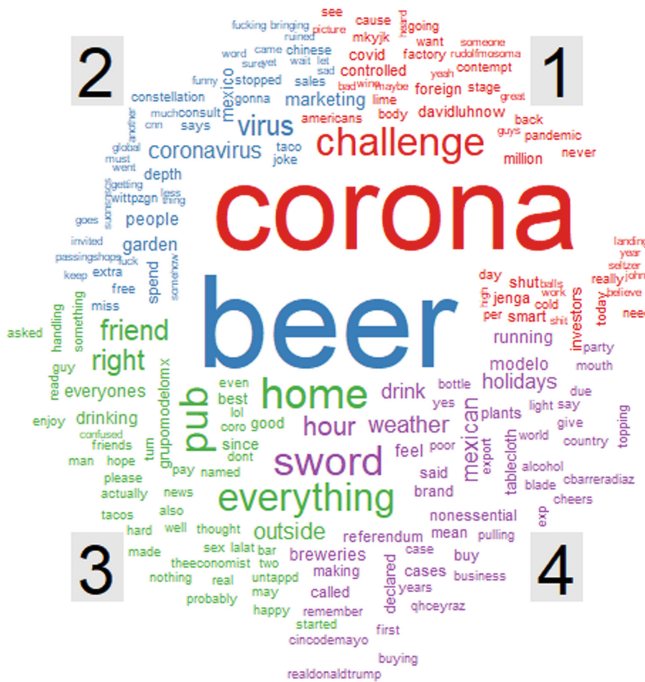


Fig. 2. Comparative weighted word cloud with topic modeling.

5 Discussion

The link between Corona Beer and the Coronavirus is coincidental. However, this association had a negative influence on the consumer-brand relationship. Several individuals

in their minds connected the disease to the beer and thus started to post on Twitter texts which contained negative sentiments, such as fear and disgust.

Focusing on Corona's presence on SM, it is worth to notice that the beer brand did not make any public comments or acknowledgment of the name similarities. The decision to remain silent in the cultural conversation was the right choice. As revealed by the topic modelling analysis, the negative buzz about Corona Beer has trespassed thanks to several viral internet meme challenges realized by Mr Uekusa (e.g., *Corona Sword Challenge* and *Corona Beer Challenge with Jenga*) and imitated by other individuals. The videos proposed by the International Variety performer positively impacted the brand because the internet users started to tweet positive emotions such as joy. Paradoxically, Corona obtained free media coverage and brand promotion via earned media in the worst of times.

The phenomenon of the association between diseases and brand products is not new. For example, in the 1980s, the sales of candy Aysds were negatively affected by the AIDS pandemic. The company attempted to save the product reputation by changing Diet Aysds, but the situation gets worse.

From the practitioners' point of view, this type of situation creates a dilemma due to the unpredictability of the public's response. This case teaches us that sometimes silence seems the most logical approach. Therefore, in this type of scenario, a brand can wait that the coincidence between the brand name and the disease will die down over time. During this time-lapse, brand managers should monitor the target audience's sentiment via Twitter analysis to explore the mood of the online conversation and collect data for better decision-making.

6 Conclusion

This study investigated Twitter users' reaction, considering the linkage between the brand Corona and the Coronavirus. In total, 222,549 tweets have been collected. Among them, around 62% of the tweets contain a positive sentiment. It means that despite several individuals in their minds connected the disease to the beer, a substantial segment of consumers did not detach themselves from the brand Corona.

This study has some limitations; data were collected in the initial stage of the pandemic. Future research should investigate the actual sentiment to understand consumers' feeling towards Corona Extra.

References

- Baccarella, C.V., Wagner, T.F., Kietzmann, J.H., McCarthy, I.P.: Social media? It's serious! Understanding the dark side of social media. *Eur Manage. J.* **36**(4), 431–438 (2018)
- Baldry, P., Thibault, J.: *Multimodal Transcription and Text Analysis*. London/Oakville: Equinox (2006)
- Benaim, M.: From symbolic values to symbolic innovation: Internet-memes and innovation. *Res. Policy* **47**(5), 901–910 (2018)
- Bradley, D.: Corona hits back at 'misinformation' about brand damage from Coronavirus. Campaign (2020). <https://www.campaignlive.co.uk/article/corona-hits-back-misinformation-brand-damage-coronavirus/1675570>

- Burgess, A., Miller, V., Moore, S.: Prestige, performance and social pressure in viral challenge memes: Neknomination, the Ice-Bucket Challenge and SmearForSmear as imitative encounters. *Sociology* **52**(5), 1035–1051 (2018)
- Chen, Z.F., Cheng, Y.: Consumer response to fake news about brands on social media: the effects of self-efficacy, media trust, and persuasion knowledge on brand trust. *J. Prod. Brand Manage.* **29**(2), 188–198 (2019)
- Corbet, S., Hou, Y., Hu, Y., Lucey, B., Oxley, L.: Aye Corona! The contagion effects of being named Corona during the COVID-19 pandemic. *Finan. Res. Lett.* **38**, 101591 (2020)
- Del Vigna, F., Cimino, A., Dell’Orletta, F., Petrocchi, M., Tesconi, M.: Hate me, hate me not: hate speech detection on Facebook. In: *Proceedings of the First Italian Conference on Cybersecurity (ITASEC17)*, pp. 86–95 (2017)
- Feinerer, I.: Introduction to the tm Package Text Mining in R. Retrieved March, 1, 2019 (2018)
- Feldman, R.: Techniques and applications for sentiment analysis. *Commun. ACM* **56**(4), 82–89 (2013)
- Fournier, S., Avery, J.: The uninvited brand. *Bus. Horizon.* **54**(3), 193–207 (2011)
- Gentry, J.: Twitter: R based Twitter Client. R package version 1.1. 9 (2015)
- Hansen, L.K., Arvidsson, A., Nielsen, F.Å., Colleoni, E., Etter, M.: Good friends, bad news-affect and virality in Twitter. In: Park, J.J., Yang, L.T., Lee, C. (eds). *Future Information Technology. Communications in Computer and Information Science*, vol. 185. pp. 34–43, Springer, Heidelberg (2011)
- Holt, D., Cameron, D.: *Cultural Strategy: Using Innovative Ideologies to Build Breakthrough Brands*. Oxford University Press, Oxford (2010)
- Kietzmann, J.H., Hermkens, K., McCarthy, I.P., Silvestre, B.S.: Social media? Get serious! Understanding the functional building blocks of social media. *Bus Horiz.* **54**(3), 241–251 (2011)
- Merchant, R.M., Asch, D.A.: Protecting the value of medical science in the age of social media and “fake news.” *Jama* **320**(23), 2415–2416 (2018)
- Mondal, M., Silva, L.A., Benevenuto, F.: A measurement study of hate speech in social media. In: *Proceedings of the 28th ACM Conference on Hypertext and Social Media*, pp. 85–94, July 2017
- Pauliks, K.: Memes of the virus: social criticism of the corona pandemic on the Internet. *TelevIZ* **33**(E), 46–49 (2020)
- Pohjonen, M.: A comparative approach to social media extreme speech: online hate speech as media commentary. *Int. J. Commun.* **13**, 3088–3103 (2019)
- Presti, G., Mchugh, L., Gloster, A., Karekla, M., Hayes, S.C.: The dynamics of fear at the time of covid-19: a contextual behavioral science perspective. *Clin. Neuropsychiatr.* **17**(2), 65–71 (2020)
- Rauschnabel, P.A., Kammerlander, N., Ivens, B.S.: Collaborative brand attacks in social media: exploring the antecedents, characteristics, and consequences of a new form of brand crises. *J. Market. Theor. Pract.* **24**(4), 381–410 (2016)
- Dawkins, R.: *The Selfish Gene*. Oxford University Press, New York (1976)
- Schild, L., Ling, C., Blackburn, J., Stringhini, G., Zhang, Y., Zannettou, S.: “Go eat a bat, Chang!”: an early look at the emergence of sinophobic behavior on web communities in the face of covid-19. *arXiv preprint arXiv:2004.04046* (2020)
- Sfichi, S., Lavric, A.: Covid-19 fake news analysis from a social media perspective. *LUMEN Proc.* **13**, 237–251 (2020)

- Shu, K., Sliva, A., Wang, S., Tang, J., Liu, H.: Fake news detection on social media: a data mining perspective. *ACM SIGKDD Explor. Newslett.* **19**(1), 22–36 (2017)
- Smaldone, F., Ippolito, A., Ruberto, M.: The shadows know me: exploring the dark side of social media in the healthcare field. *Eur. Manage. J.* **38**(1), 19–32 (2020)



How to Leverage Digital Marketing in B2B: A Study on Italian SMEs During the Covid-19 Outbreak

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Abstract. In this study, we analyze the digital marketing tools activated by SMEs operating in B2B during the Covid-19 outbreak in the first half of 2020. Before the health emergency, SMEs used social and digital media in a limited way as compared to traditional tools, such as printed material and client visits. In order to understand how the pandemic changed the digital marketing strategies adopted in B2B, we conducted a study on nine Italian SMEs. We collected semi-structured interviews with key informants belonging to companies operating in different sectors. Findings suggest new relational approaches and opportunities based on digital marketing and they discuss the main objectives of the main digital tools adopted during the initial phase of the Covid-19 pandemic.

Keywords: B2B · Covid-19 · Digital marketing · SMEs · Social media

1 Introduction

The Covid-19 pandemic has had dramatic effects on companies' and people's everyday lives due to the restrictions aimed at containing the virus that were implemented in most countries in the world. For example, the use of social media, which was already growing in recent years, has increased exponentially. According to an Ipsos research (2020), the time spent on social media by Italians surged by 70% during the first lockdown in March-May 2020 as compared to the previous year. Social media platforms are now considered a strategic asset of companies for various business purposes (Felix et al. 2017; Tafesse and Wien 2018). In the case of small and medium enterprises (SMEs), previous studies have shown that only a small portion of these companies adopt social media, mainly due to the lack of staff familiarity and technical skills to use such technologies (Michaelidou et al. 2011). However, it has been highlighted that social media can provide several benefits to SMEs, for instance they have a positive impact on financial performance, cost reduction on marketing and customer service, and they can improve customer relations and information accessibility (Ainin et al. 2015). So far, a few studies have analyzed social media adoption among SMEs (Odoom et al. 2017). Therefore, some scholars such as Wang et al. (2016) have highlighted the need to examine the developments of social

media marketing activities in SMEs operating in B2B. Moreover, as the pandemic is still ongoing, there is a lack of studies in marketing literature regarding the effects of Covid-19 on SMEs' adoption of social media in the B2B context. Hence, we conducted a qualitative research to analyze the role of social media in B2B marketing strategies of Italian SMEs during the first Covid-19 lockdown in 2020.

The remaining of this paper is structured as follows. In the next section, a literature review of the academic studies focused on the topic of digital marketing strategies of B2B companies provides the theoretical basis of this research. In Sect. 3, the research question and the method adopted for this study are presented. The findings of the research follow in Sect. 4. Finally, the discussion of the results and conclusions of the study conclude.

2 Literature Review

2.1 Digital Marketing in B2B

Traditionally, the B2B marketing approach considers the role of personal relationships and interactions to be key, especially between sales representatives, where contact between sales and customers is in fact the heart of an effective customer relationship management strategy (Bocconcelli et al. 2017). However, over time digital marketing strategies have also emerged in B2B, increasingly shifting the attention of professionals to online brand communities born with the purpose of sharing content (Huotari et al. 2015). The research conducted by Järvinen et al. (2012) highlights that B2B companies are aware of the potential of digital marketing to improve business results, but the lack of resources limits their ability to fully exploit them. Previously, researchers have mostly explored the identification of web-based applications, which can be traced back to multiple categories: wikis, blogs, social networks, public or private communities, content sharing websites, social tools, and virtual social networks (Ammirato et al. 2019; Lacka et al. 2020). Indeed, according to a recent research (Diba et al. 2019), B2B marketing professionals currently use popular digital platforms like Facebook and Instagram to launch a content network, then they switch to more B2B-oriented social media such as LinkedIn to share more specific content. Hence, social media and blogs are subject to a growing interest in B2B marketing, as they offer more personalized interactions between customers and suppliers, strengthening the relationship and allowing interaction between markets (Andersson and Wikstrom 2017).

The rapid growth of digital technologies has had a great impact on how, where and when B2B stakeholders interact for business purposes, offering the opportunity to contact and establish relationships between companies and stakeholders (Huotari et al. 2015). As Keinänen and Kuivalainen (2015) point out, there are many factors that influence the buyer behaviour in the B2B context, such as the marketing mix, the product, the price and distribution. In other words, according to Diba et al. (2019), the buying and selling processes for B2B firms have become less linear as customers seek and evaluate information and experiences on digital channels such as social media. At the same time, the number of stakeholders involved in these processes has also increased and, consequently, closing sales has become more complicated (Lingqvist et al. 2015). In this scenario, in order to develop a two-way and contextual communication, social media offer great opportunities to B2B companies.

2.2 Social Media Use Among SMEs

Traditionally, social media are more popular tools in B2C contexts where online communities are formed around a brand for the promotion of products or services (Katona and Sarvary 2014). However, as social media platforms have become increasingly important and widespread, also B2B online communities have started to grow. Among the benefits of social media for B2B companies, social media can contribute to reach sales purposes, improve the relationship with their customers, increase customer engagement or increase brand awareness among stakeholders (Agnihotri et al. 2016; Bocconcelli et al. 2017; Odoom et al. 2017; Karjaluoto et al. 2015). Some scholars (Iankova et al. 2019; Järvinen et al. 2012) have also highlighted that social media offer the possibility of communicating in real time with the target using different types of content, such as videos or images.

In the context of SMEs, social media can be advantageous as they can be adopted as tools for both external and internal communication (Meske and Stieglitz 2013). The low cost of social media and their ease of use without specific IT skills allows SMEs to integrate digital tools into their businesses (Alam 2009). For example, Wikstrom (2017) demonstrated the benefits of the LinkedIn adoption for B2B SMEs, as this social network allows to reach a large audience by taking part in specific forums to illustrate how products can solve certain needs.

Nowadays, we face the end of traditional B2B marketing due to the opening of further avenues to access product information and the critical role of content in the new digital environment (Gagnon 2014). An important change in B2B concerns the shift towards digital communication channels in customer decision making (Järvinen and Taiminen 2016). In this scenario, SMEs, which are traditionally slower in adopting technologies (Abou-Shouk et al. 2015), should take new paths by strengthening the adoption of social media in their marketing strategies. Furthermore, researchers such as Karimi and Naghibi (2015) focused on the fact that marketing strategies in SMEs are informal and unstructured as SMEs direct their attention to sales with the aim to survive.

3 Research Question and Method

The Covid-19 pandemic represents a disrupting event that has had major consequences at economic level, limiting business operations all over the world. The purpose of this paper is to investigate how the Covid-19 outbreak influenced the digital marketing strategies and social media use of SMEs operating in B2B. Consequently, we pose the following research question:

RQ: how did smes operating in b2b leverage their digital marketing strategies during the Covid-19 outbreak?

We tried to answer our research question by carrying out a qualitative analysis. Indeed, some studies on this topic (Wang et al. 2016) have adopted a qualitative approach because it allows researchers to go deeper into the topic to gather information about companies' motivations and strategies.

Specifically, we conducted nine semi-structured interviews with key-informants from firms belonging to diversified sectors in order to increase study generalizability, as

cross-sectional studies allow researchers to obtain a richer picture of the considered phenomenon (Corsaro 2020; Jarvi et al. 2018). The requirement for the key-informants' involvement in our analysis (see Table 1) is to have an extensive professional experience in the marketing and communication areas of SMEs operating in B2B.

Table 1. Interviewed key-informants

Company	Sector	Business role of key-informants
Company A	Electronics	Social media manager
Company B	Luxury cutlery	Marketing manager
Company C	Electronics	Marketing and business development manager
Company D	Computer technology	Marketing and communication manager
Company E	Bottle caps	Partner and commercial director
Company F	Home installations	CEO
Company G	Luxury furniture	CEO
Company H	Personal protective equipment	Country Manager
Company I	Personal protective equipment	General Manager

We opted for semi-structured interviews as the advantages of this method lie in the ability to extrapolate deeper insights and the possibility for key-informants to narrate their concrete experiences in a spontaneous way, contextualized to the initial period of the Covid-19 pandemic.

With the aim of collecting data, the key-informants were contacted individually both via online platforms and by telephone. The semi-structured interviews were conducted between the months of April and October 2020, with an average duration of one hour each. After receiving the key-informants' permissions, the interviews were recorded and transcribed. The purpose of the interviews is twofold: (1) to identify the evolution of SMEs' digital marketing strategies during the Covid-19 outbreak, and (2) to investigate the use of social media by SMEs to counter physical restrictions.

4 Findings

4.1 Digital Marketing Strategies During Covid-19 Era

Interviews focused on the influence of the pandemic on the digital marketing strategies of B2B SMEs, and their online and offline activities in general. Key informants declared that before the pandemic their companies used to rely on traditional tools such as printed materials (i.e. brochures, leaflets), client visits, and trade fairs to showcase their products and meet potential clients. Most companies had implemented digital channels and social media, but in a limited way as there was not a specific role in the company specialized in such tools, or because of lack of time. Another barrier that was reported concerned age, since most roles in SMEs might not be as young as most social media users.

A common theme emerged concerns the fact that, while on the one hand the lockdown limited many activities including shutdown of factories and points of sale, on the other hand it gave the opportunity to assess the company's internal value. The push towards the recovery of previous projects, the reinforcement of digital skills and new relational skills led firms to update their marketing strategy and tactics. Indeed, digital channels became essential to maintain contact with stakeholders in various ways. For some interviewed companies, the Covid-19 emergency represented an opportunity to implement specific digital content for the first time. Previous communication material like product brochures which used to be printed were adapted to digital formats or new versions were created.

In B2B, the relational dimension is considered central for SMEs as these companies are traditionally slower in the adoption of technologies (Abou-Shouk et al. 2015), both for a reputational objective and sales purposes. Since the restrictions imposed by the lockdown slowed down the physical contact, and above all the possibility of physical meetings, a shift was necessary. Starting from March 2020 lockdown, Italian SMEs replaced physical meetings mainly with videocalls and webinars. Videocalls were used to contact existing and potential clients to provide information and support. Then periodical webinars were organized aiming at reinforcing relationships, increasing loyalty, and pursuing engagement objectives. Furthermore, webinars were useful for product training purposes.

Among other digital tools implemented, some of the interviewed companies decided to create newsletters both for maintaining relationships and to provide news about the company. Other SMEs developed a corporate blog on their website to publish updates regarding their company and the sector in which they operate.

4.2 SMEs' Adoption of Social Media During Covid-19

Our research highlights that before the health crisis social media platforms were used to share content which were developed for other digital channels, especially the above mentioned websites and blogs. However, the Covid-19 pandemic pushed firms to create specific content to post on social media. Due to physical movement restrictions, SMEs increased their use of social media to provide information to their clients and show their presence and availability. Webinars shared on social media received a positive feedback from clients and increased brand awareness.

Another advantage of social media concerns personalization. For instance, Company A was able to test additional LinkedIn functions to better target content and generate awareness among partners and customers. Company H stressed the opportunity to personalize content thanks to social media analytics, however the key informant stressed that this should be integrated with sponsored content on social media and search engines in order to increase reach.

The sector in which companies operate affects their choice of the platform, the tone of voice of the contents and the objectives to be achieved. In particular, our research reported four main social media platforms managed by SMEs, i.e. LinkedIn, Facebook, Instagram and YouTube, as they represent the key channels to convey B2B online content. Among our sample, companies are present equally on LinkedIn and Facebook, followed by Instagram and YouTube. LinkedIn is recognized as the main channel for SMEs' B2B activities, in which companies take advantage of the opportunities to build and expand

the target of contents through extra features such as LinkedIn Sales Navigator. Hashtags and groups allow to monitor industry trends and competitors' activities, and to share it both internally and as an input for new content.

Regarding the role played by Facebook, the majority of key informants expressed different opinions, especially since the company sector strongly determines the target audience. For example, the platform turns out to be a simple "showcase" especially for companies that present highly technical content and for this reason it followed a similar content strategy to LinkedIn.

As for Instagram, also in this case the benefits of the social media use and its actual role are perceived to be different. Instagram seems to be more effective for those companies whose products' aesthetic and design dimensions can be conveyed through images and video, e.g. luxury sector. For most interviewed companies, Instagram use in B2B is quite limited, although key informants recognized the potential of the platform. In Table 2 we summarize the main digital tools activated during the Covid-19 outbreak and their objectives.

Table 2. Main digital tools and respective objectives used by SMEs during the Covid-19 outbreak

Digital tools	Objectives
Brochures/leaflets	<ul style="list-style-type: none"> • To provide product information • To increase sales
Webinars	<ul style="list-style-type: none"> • To reinforce business relationships • To increase loyalty • To increase engagement • To deliver product training
Videocalls	<ul style="list-style-type: none"> • To provide information and assistance • To maintain business relationships
Blogs	<ul style="list-style-type: none"> • To publish news and updates regarding the company and sector
Newsletter	<ul style="list-style-type: none"> • To provide news and updates regarding the company • To maintain business relationships
Social media	<ul style="list-style-type: none"> • To increase brand awareness • To provide information and assistance • To increase sales • To share content from other digital tools • To create more personalized content

5 Discussion and Conclusion

The study confirms previous research regarding the slow adoption of digital tools among B2B companies (Järvinen et al. 2012). However, the Covid-19 pandemic led firms to a substantial increase of social and digital media adoption, whose effects are perceived as not reversible. As in Michaelidou et al.'s (2011) study, most interviewed managers

expected the budget dedicated to online tools to overtake offline tools in the next few years.

The Covid-19 has offered SMEs with the opportunity to strengthen digital skills, which previously were not central in their marketing activities. Thanks to digital technologies, SMEs operating in B2B can activate faster and more direct communications, which are less dependent on face to face interactions (Obal and Lancioni 2013) and allow higher levels of personalization (Itani et al. 2017). As compared to larger firms, SMEs usually lack resources to invest in costlier tools such TV or print advertising. On the one hand, digital tools and social media usually require lower investments, therefore they could meet SMEs' budget constraints. On the other hand, as our study suggests, more investments—also in terms of time—should be devolved to train professionals and develop a specific B2B digital marketing strategy.

Findings of this research show that B2B SMEs should increase the use of digital tools and social media, as they represent an opportunity to achieve different marketing objectives from sales to brand awareness and customer engagement (Agnihotri et al. 2016; Bocconcelli et al. 2017; Karjaluoto et al. 2015). Furthermore, the Covid-19 outbreak gave a strong boost to the evolution of marketing strategies, making digital channels more central for companies operating in B2B to maintain and reinforce business relationships. Nevertheless, even in the post-Covid-19 era traditional marketing and communication tools will not be completely replaced by digital media, therefore an effective integration should be implemented.

In conclusion, this study provides evidence on the benefits of digital and social media adoption among SMEs. However, it suffers from some limitations. As the interviews were conducted in the same geographical area, i.e. Italy, research findings might not be generalizable. Furthermore, this qualitative research did not consider the perspective of B2B SMEs' buyers. Future research could deepen their point of view also by adopting quantitative methodologies in order to investigate the perception of buyers as well as effects in sales and engagement generated by the contents shared on social media by SMEs.

References

- Abou-Shouk, M., Eraqi, M.I.: Perceived barriers to e-commerce adoption in SMEs in developing countries: the case of travel agents in Egypt. *Int. J. Serv. Oper. Manage.* **21**(3), 332–353 (2015)
- Agnihotri, R., Dingus, R., Hu, M.Y., Krush, M.T.: Social media: influencing customer satisfaction in B2B sales. *Ind. Market. Manage.* **53**, 172–180 (2016)
- Ainin, S., Parveen, F., Moghavvemi, S., Jaafar, N.I., Shuib, N.L.M.: Factors influencing the use of social media by SMEs and its performance outcomes. *Ind. Manage. Data Syst.* **115**(3), 570–588 (2015)
- Alam, S.S.: Adoption of internet in Malaysian SMEs. *J. Small Bus. Enterpr. Dev.* **16**(2), 240–255 (2009)
- Ammirato, S., Felicetti, A.M., Della Gala, M., Aramo-Immonen, H., Jussila, J.J., Kärkkäinen, H.: The use of social media for knowledge acquisition and dissemination in B2B companies: an empirical study of Finnish technology industries. *Knowl. Manage. Res. Pract.* **17**(1), 52–69 (2019)
- Andersson, S., Wikström, N.: Why and how are social media used in a B2B context, and which stakeholders are involved? *J. Bus. Ind. Market.* **32**(8), 1098–1108 (2017)

- Bocconcelli, R., Cioppi, M., Pagano, A.: Social media as a resource in SMEs' sales process. *J. Bus. Ind. Market.* **32**(5), 693–709 (2017)
- Corsaro, D.: Value co-destruction and its effects on value appropriation. *J. Market. Manage.* **36**(1–2), 100–127 (2020)
- Diba, H., Vella, J.M., Abratt, R.: Social media influence on the B2B buying process. *J. Bus. Ind. Mark.* **34**(7), 1482–1496 (2019)
- Felix, R., Rauschnabel, P.A., Hinsch, C.: Elements of strategic social media marketing: a holistic framework. *J. Bus. Res.* **70**, 118–126 (2017)
- Gagnon, E.: Goodbye, B2B brand marketing: developing content-based marketing programs for the post-marketing era. *Int. Manage. Rev.* **10**(2), 68–71 (2014)
- Huotari, L., Ulkuniemi, P., Saraniemi, S., Mäläskä, M.: Analysis of content creation in social media by B2B companies. *J. Bus. Ind. Market.* **30**(6), 761–770 (2015)
- Iankova, S., Davies, I., Archer-Brown, C., Marder, B., Yau, A.: A comparison of social media marketing between B2B, B2C and mixed business models. *Ind. Market. Manage.* **81**, 169–179 (2019)
- Itani, O.S., Agnihotri, R., Dingus, R.: Social media use in B2b sales and its impact on competitive intelligence collection and adaptive selling: examining the role of learning orientation as an enabler. *Ind. Market. Manage.* **66**, 64–79 (2017)
- Ipsos: Italy during Coronavirus, Media & Digital, What is happening, contradictions, implications (2020). https://www.ipsos.com/sites/default/files/ct/news/documents/2020-05/italia_ai_tempi_del_coronavirus_media.pdf. Accessed 28 Dec 2020
- Järvinen, J., Taiminen, H.: Harnessing marketing automation for B2B content marketing. *Ind. Market. Manage.* **54**, 164–175 (2016)
- Järvinen, J., Tollinen, A., Karjaluoto, H., Jayawardhena, C.: Digital and social media marketing usage in B2B industrial section. *Market. Manage. J.* **22**(2), 102–117 (2012)
- Järvi, H., Kähkönen, A.K., Torvinen, H.: When value co-creation fails: reasons that lead to value co-destruction. *Scand. J. Manage.* **34**(1), 63–77 (2018)
- Karjaluoto, H., Ulkuniemi, P., Huotari, L., Saraniemi, S., Mäläskä, M.: Analysis of content creation in social media by B2B companies. *J. Bus. Ind. Market.* **30**(6), 761–770 (2015)
- Karimi, S., Naghibi, H.S.: Social media marketing (SMM) strategies for small to medium enterprises (SMEs). *Int. J. Inf. Bus. Manage.* **7**(4), 86–98 (2015)
- Katona, Z., Sarvary, M.: Maersk line: B2B social media—“It’s communication, not marketing.” *Calif. Manage. Rev.* **56**(3), 142–156 (2014)
- Keinänen, H., Kuivalainen, O.: Antecedents of social media B2B use in industrial marketing context: customers’ view. *J. Bus. Ind. Market.* **30**(6), 711–722 (2015)
- Lacka, E., Chan, H.K., Wang, X.: Editorial on Technological innovation in B2B international trade. *Ind. Market. Manage.* **91**, 174 (2020)
- Lingqvist, O., Plotkin, C.L., Stanley, J.: Do you really understand how your business customers buy? *McKinsey Q.* **1**, 74–85 (2015)
- Meske, C., Stieglitz, S.: Adoption and use of social media in small and medium-sized enterprises. In: Harmsen, F., Proper, H.A. (eds.) *Practice-Driven Research on Enterprise Transformation. PRET 2013*, pp. 61–75. Springer, Heidelberg (2013). https://doi.org/10.1007/978-3-642-38774-6_5
- Michaelidou, N., Siamagka, N.T., Christodoulides, G.: Usage, barriers and measurement of social media marketing: an exploratory investigation of small and medium B2B brands. *Ind. Market. Manage.* **40**(7), 1153–1159 (2011)
- Obal, M., Lancioni, R.A.: Maximizing buyer–supplier relationships in the Digital Era: concept and research agenda. *Ind. Market. Manage.* **42**(6), 851–854 (2013)
- Odoom, R., Anning-Dorson, T., Acheampong, G.: Antecedents of social media usage and performance benefits in small-and medium-sized enterprises (SMEs). *J. Enterp. Inf. Manage.* **30**(3), 383–399 (2017)

Tafesse, W., Wien, A.: Implementing social media marketing strategically: an empirical assessment. *J. Market. Manage.* **34**(9–10), 732–749 (2018)

Wang, W.Y., Pauleen, D.J., Zhang, T.: How social media applications affect B2B communication and improve business performance in SMEs. *Ind. Market. Manage.* **54**, 4–14 (2016)



How Does the Number of Instagram Followers Influence Brand Attitude: The Role of Purchase Intention, Perceived Product Quality, Referrals, Brand Trust, and Gender

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Abstract. The presence of brands online has intensified over the past decade. Previous research has found that following online updates from a brand's Facebook page enhances brand evaluations. As Instagram is emerging as one of the most popular social media platforms, we extended previous research by simulating the experience of navigating online on a smartphone while focusing on this platform. Our main goal was to understand if brands with a large number of followers versus brands with a small number of followers are perceived differently by consumers. Findings from two studies ($N_{total} = 313$) suggest that purchase intention and brand trust are higher for Instagram brand pages with a large number of followers. However, the perceived quality and likeliness to refer the brand to a friend are not affected by the number of followers. Also, we found no significant gender differences across variables.

Keywords: Instagram · Followers · Attitude · Purchase intention · Perceived product quality · Referrals · Brand trust

1 Introduction

A plethora of research has been conducted on how social media metrics (e.g., likes, tweets and shares) affect consumers' opinion about products. Facebook and Twitter, as the platforms that accompanied the social media boom since it started, have naturally captured greater attention on this topic. Fewer studies have addressed the influence of the number of followers on Instagram's brand pages on consumers' purchase intention, perceptions of quality, likeliness to refer, and brand trust. However, previous research clearly shows that a larger number of followers is related to a larger number of likes and shares of a post, and vice-versa (Lipsman et al. 2012; Xie and Lee 2015). Additionally, Sherman et al. (2016) conducted a study using a functional Magnetic Resonance Imaging (fMRI) that simulated Instagram. The results showed that, when participants viewed neutral, risky or even their own images with many likes (when compared with fewer

likes), greater activity in different parts of the brain was exhibited. The authors concluded that “(...) adolescents were more likely to like a photo if that picture had received more likes from peers” (p. 1031). Moreover, Spetz and Angelsted (2017) found that there is a positive relation between the number of followers on Instagram fashion brands and purchase intention. Still, more research is needed to better understand how having a small vs. a large number of followers could impact brand attitude. Accordingly, the importance of promoting Instagram profiles has resulted in the emergence of specialized paid services allowing marketers to find influencers according to established criteria.

2 Hypotheses Development

Given the easily perceived brand pages on social media, cues such as the number of followers might help people to make a quick assessment about the brand and its products as well as influence their purchase intention (Dehghani and Tumer 2015). The ‘need to touch’ a product is negatively correlated with a product perceived quality, especially for online purchases (San-Martín et al. 2017). These findings highlight the importance for brands to have a large number of followers, who could eventually contribute to increasing the perceived product quality. Moreover, Beukeboom et al. (2015) analyzed brand evaluation from current followers, new followers and non-followers, and concluded that new followers had a significative positive increase on all brand evaluation measures, whereas non-followers showed no significant changes. Kim and Ko (2012) tested the presence of luxury brands on social media and concluded it increased likeliness to recommend a product and purchase intention. Additionally, the net promoter score’s (NPS) benefits for brands have been demonstrated in the context of Facebook social media (e.g., Dholakia and Durham 2010), thus it is now vital to comprehend if the number of followers on Instagram is able to influence customers’ recommendation to peers. Also, consumers’ intentions to transact online are positively related to trust in e-commerce (Pavlou 2003). This author also stated that “trust reduces behavioral uncertainty related to the actions of the Web retailer, giving the consumer a perception of some control over a potentially uncertain transaction” (p. 106). We suggest that building trust will probably unchain positive buying behaviors and ease the decision-making process in an online environment. Lastly, considering gender differences, Eagly (1983) found females to be more susceptible to social influence than males. Ilie et al. (2005) concluded there are gender differences in perceptions and use of communication technologies. These findings would lead us to ask if they remain valid when transposed to an online environment, specifically on Instagram. Hence, we formulate the following five hypotheses:

H1: Purchase intention is higher for a brand page with a large number of followers, when compared to one with a small number of followers on Instagram.

H2: Consumers’ perceived product quality is higher for a brand page with a large number of followers, when compared to one with a small number of followers on Instagram.

H3: A brand present on an Instagram page with a large number of followers has a higher probability of being referred to a friend or acquaintance, when compared to one with a small number of followers on Instagram.

H4: Consumers will trust more a brand with a large number of followers, when compared to one with a small number of followers on Instagram.

H5: There are gender differences for the variables tested.

3 Study 1

This study focused on analyzing how consumers' attitudes vary in relation to a brand when it presents a profile page with a large vs. a small number of followers on Instagram. Participants engaged in using a platform emulating the social media (Instagram).

3.1 Method

One hundred and ten participants (47.3% women; $M_{\text{age}} = 20.81$ years, $SD = 2.57$ years) aged between seventeen and twenty-eight years old. All participants were required to be familiar with Instagram. We programmed a native Android application that fuses a fictitious version of Instagram with different questions related to this study and manipulated the number of followers (small vs. large). We used a between-subjects design, so the participants were randomly assigned to one of the two conditions. To control for demand effects and removing an affective component from our study, we used brands that are likely unfamiliar between the people who were asked to participate in the study: three real small Portuguese brands that show scarce sales in the market (Mojo Swimwear, Skinii Skateboards, CordiCastro); two fictitious brands (Bolo d'Hoje, MovIdeia) and a Chinese brand that is not present in the Portuguese market (Loz Blocks). There were two questionnaires (A and B): the number of followers in the brand page was changed – for example, in questionnaire A, the brand Loz had 35 k followers, whereas in questionnaire B it had only 4237; the next Instagram profile of Mojo Swimsuits had 1200 followers in questionnaire A and 421 k in questionnaire B and so on. The rationale was to adopt brands that would on average appeal equally to both genders or, alternatively, more to men or women but in the same proportion. Although each questionnaire in the study (A and B) contains the same pictures and hence this matter might not change the results, it was decided to not use photos with faces, given the findings of Bakhshi et al. (2014). In the study they conducted, it was found that independently from participants' gender and age, “photos with faces are 38% more likely to receive likes and 32% more likely to receive comments, even after controlling for social network reach and activity” (p. 965).

First, participants could navigate through the platform in the same way as a real Instagram experience – they were able to view the profile page and open each of the brand's posts in order to see the full-size pictures. Next, four questions about the brand were presented, assessing purchase intention and likeliness of referral (Beukeboom et al. 2015) as well as perceived quality and brand trustworthiness (Chu and Choi 2011). In the end, all participants experienced six different Instagram brand pages and answered to four questions on each one, produced a total of six hundred and sixty answers ($110 * 6$) for each of the first four constraints ($110 * 6 * 4 = 2640$ answers in total).

Followers are the main driver of engagement for both likes and comments on Instagram pages (Bakshi et al. 2014). People with more than 30000 followers are seen as celebrities, regardless of what they do for a living (Djafarova and Rushworth 2017). Using this number as a benchmark, we decided to represent brands with a large number of followers with numbers varying from 35000 to 500000, and brands with a small number of followers with values ranging from 500 to 9500. As likes are proportional to the quantity of followers, calculations were made to render the Instagram emulation look legitimate. An engagement rate between 0%–1.64% is considered low; 1.65%–3.48%

is medium; 3.49%–6.67% is high and, above that, very high (Georgia 2017). For both unpopular and popular brands, we used a percentage between 1.5% to 9%, thus varying the percentage among posts, as in the real social media photography posted at different times have different engagement rates. We sought to emulate these relevant aspects.

3.2 Results

Purchase Intention (H1). An independent samples t-test was used to test the hypothesized relationship between the number of followers and the purchase intention. Significant differences were found in the consumers' purchase intention when presented with a small number of followers brand page ($M = 4.55$, $SD = 1.46$) or a large number of followers brand page ($M = 4.82$, $SD = 1.51$) conditions; $t(658) = -2.31$, $p = .021$. These results suggest that a large number of followers on Instagram does positively impact consumers' purchase intention. Specifically, H1 was confirmed.

Perceived Product Quality (H2). The results of an independent samples t-test have shown that there are no significant differences in the consumers' perceived product quality when presented with a small number of followers brand page ($M = 5.06$, $SD = 1.24$) or a large number of followers brand page ($M = 5.22$, $SD = 1.24$) conditions; $t(658) = -1.57$, $p = .117$. Contrarily to what was hypothesized, these results suggest that the number of followers does not influence consumers' perceived product quality. Hence, H2 was rejected.

Likeliness of Referral (H3). A t-test for independent samples concluded that there are no significant differences in the likeliness of referring a brand to a friend or acquaintance when presented with a small number of followers brand page ($M = 4.75$, $SD = 1.47$) or a large number of followers brand page ($M = 4.84$, $SD = 1.51$) conditions; $t(658) = -0.76$, $p = .449$. These results advocate that the number of followers does not impact the likeliness of consumers' referring a brand to a friend or acquaintance. Consequently, H3 was rejected.

Brand Trustworthiness (H4). An independent samples t-test was used to test the hypothesized relationship between the number of followers and the consumers' brand trust. Significant differences for brand trust were found between consumers presented with a small amount of followers brand page ($M = 4.70$, $SD = 1.29$) or with a large amount of followers brand page ($M = 4.93$, $SD = 1.34$) conditions; $t(658) = -2.26$, $p = .024$. Our results suggest that, when consumers are presented with products on an Instagram page with a large number of followers, they are more inclined to trust the brand than in the case of a small number of followers on its page. Accordingly, H4 was confirmed.

Gender Differences (H5). For all the variables tested, no significant gender differences were found. Thus, H5 was rejected.

4 Study 2

The first study focused on providing participants an experience as similar as possible to the real Instagram social media platform. This implied not making them explicitly aware of the purpose of the study (i.e., comparing small vs. large number of followers). We concluded that Instagram pages with a large number of followers can induce bigger trust in their potential customers' minds and also increase the purchase intention for their products, when compared to pages with a small number of followers. To evaluate if people's reaction to the number of followers changes according to their awareness on the subject, a second and shorter follow-up study was conducted. We aimed to assess participants' willingness to purchase a product and brand trust when explicitly making participants aware of the small vs. large number of followers conditions for a specific Instagram page, thus this second study also serves as a manipulation check.

4.1 Method

Two hundred and three participants (50.2% females) who were not part of the first study responded to an online questionnaire. The previously disposed brand Mojo Swimwear was used with similar attributes as before (pictures, number of followers and number of followees). We made clear that we were evaluating the participants' reaction to the number of followers the Instagram brand page had. Participants read: "*The following brand pages have the same characteristics and represent the same brand as you can see. Only the number of followers changes between both. Bearing these in mind, please answer the following questions*". The questions were: "*Which one of the two brand pages gives you a higher willingness to purchase a product from this brand (for you or as a gift)?*" and "*Which one of the two brand pages conveys a higher level of trust in the brand you are seeing?*". For both questions, participants had to choose one out of three possible answers: (1) "*The brand page with the largest number of followers*"; (2) "*The brand page with the smallest number of followers*"; or (3) "*Both brand pages give me the same willingness to purchase/convey me the same level of trust*".

4.2 Results

Concerning purchase intention, 56.7% of respondents chose the page with the large number of followers as giving them the higher willingness to purchase a product; 39.9% answered both pages give them the same willingness to purchase; and, lastly, 3.4% felt that the page with the smallest number of followers gave them a higher purchase intention. For brand trust, 82.8% of the respondents declared that the page with the largest number of followers provided them more trust than the others; 3.0% claimed to feel the same trust in both pages; and 14.2% affirmed the smallest number of followers to provide them the biggest trust in the brand. Finally, and similarly to the first study, we did not find any gender differences across variables.

5 Discussion and Conclusion

The results achieved have indicated that having an Instagram brand page with a large number of followers when compared to one with a small number of follower's influences

consumers' purchase intention and brand trust. In contrast, a large number of followers is not able to influence the likeliness of referring brand's products to a friend nor to increase the brand's perceived quality on Instagram. Our studies also revealed that men and women are not differently affected by the number of followers in the Instagram brand profile. This is not only surprising for the ways different genders are socially influenced, but also important for expenditures contention, as these results highlight that implementing a gender targeting strategy for several variables might not be required by firms on Instagram. Additionally, we contradict Veirman et al. (2017) study, who found that a person with a high number of followers (influencer) who advertises a product might negatively influence the consumer attitudes towards the brand when compared to one with a small number of followers. However, Veirman et al. (2017) focused on influencers whereas our study focused on Instagram brand pages.

Practical Implications. We conclude that it is possible to positively influence the consumers' perception and attitude by increasing the number of followers of an Instagram brand's page, and benefit from a higher purchase intention and brand trust. Our results provide new empirical insights in the way marketers should pursue their brand's online positioning and strategy while giving suggestions on how to tackle the factors that the number of followers fails to influence.

Limitations and Suggestions for Future Research. First, this study was conducted with Portuguese and young participants only. Given that Instagram is a global platform where users come from every region in the world, our conclusions cannot by nature be representative of consumers' behavior on a worldwide scale. Nevertheless, Millennials and Gen Z have grown up socializing and making purchases online, using social networks and digital media on a daily basis, making them the most demanding and tech-savvy generation cohorts (Mangold and Smith 2012). Thus, they provide useful information on how the biggest technology consumers act and how similar cultures might behave when facing the same situations online. Second, in order to avoid pre-made judgments, we have used only brands that are unlikely to be known by the respondents. There is, nonetheless, a small probability that some of the participants were already familiar with one or more brands which might have influenced a small portion of the results. Third, there is an ongoing debate among opinion makers – namely bloggers and journalists – if a company should engage in the activity of actually buying both followers and likes. Both factions provide different arguments. The skeptical ones argue that these followers will not engage with posted content, hence they will be merely a number, providing a bad reputation to the brand. On the contrary, the supportive part believes in the fact that it provides a good starting point for beginners and help to boost the value of already established online profiles. Future studies could experiment to build two similar Instagram brands from inception, one where both followers and likes would be bought and one which would grow organically. The final analysis of the results would provide us with a solid conclusion on whether small brands or startups could benefit from a faster growth by influencing consumers' purchase intention and brand trust. Another interesting study could focus on how having an Instagram brand page with a large number of followers could impact the company's actual sales. The use of familiar brands – instead of unknown brands, which were used in this study – could also be examined closely to find out if the number of followers impacts them as much as unfamiliar ones.

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References

- Bakhshi, S., Shamma, D.A., Gilbert, E.: Faces engage us: photos with faces attract more likes and comments on Instagram. In: Proceedings of the SIGCHI Conference on Human Factors in Computing Systems, pp. 965–974. ACM (2014)
- Beukeboom, C.J., Kerkhof, P., Vries, M.D.: Does a virtual like cause actual liking? How following a brand's Facebook updates enhances brand evaluations and purchase intention. *J. Interact. Mark.* **32**, 26–36 (2015)
- Chu, S.-C., Choi, S.M.: Electronic word-of-mouth in social networking sites: a cross-cultural study of the United States and China. *J. Glob. Mark.* **24**(3), 263–281 (2011)
- Dehghani, M., Tumer, M.: A research on effectiveness of Facebook advertising on enhancing purchase intention of consumers. *Comput. Hum. Behav.* **49**, 597–600 (2015)
- Dholakia, U.M., Durham, E.: One café chain's Facebook experiment. *Harvard Bus. Rev.* **88**(3), 26 (2010)
- Djafarova, E., Rushworth, C.: Exploring the credibility of online celebrities' Instagram profiles in influencing the purchase decisions of young female users. *Comput. Hum. Behav.* **68**, 1–7 (2017)
- Eagly, H.A.: Gender and social influence: a social psychological analysis. *Am. Psychol.* **38**(9), 971–981 (1983)
- Ilie, V., Van Slyke, C., Green, G., Lou, H.: Gender differences in perceptions and use of communication technologies: a diffusion of innovation approach. *Inf. Resour. Manag. J.* **18**(3), 13–31 (2005)
- Kim, A.J., Ko, E.: Do social media marketing activities enhance customer equity? An empirical study of luxury fashion brand. *J. Bus. Res.* **65**(10), 1480–1486 (2012)
- Lipsman, A., Mudd, G., Rich, M., Bruich, S.: The power of “like”: how brands reach (and influence) fans through social-media marketing. *J. Advertising Res.* **52**, 40–52 (2012)
- Mangold, W.G., Smith, K.T.: Selling to Millennials with online reviews. *Bus. Horiz.* **55**(2), 141–153 (2012)
- Pavlou, P.A.: Consumer acceptance of electronic commerce: integrating trust and risk with the technology acceptance model. *Int. J. Electron. Commer.* **7**(3), 69–103 (2003)
- San-Martín, S., González-Benito, O., Martos-Partal, M.: To what extent does need for touch affect online perceived quality? *Int. J. Retail Distrib. Manag.* **45**(9), 950–968 (2017)
- Sherman, L.E., Payton, A.A., Hernandez, L.M., Greenfield, P.M., Dapretto, M.: The power of the like in adolescence: effects of peer influence on neural and behavioral responses to social media. *Psychol. Sci.* **27**(7), 1027–1035 (2016)

- Spetz, J.F., Angelstedt, A.N.: The more the merrier? A study of fashion followers on Instagram and their influence on purchase intention. (Unpublished Bachelor Thesis), Halmstad University, Halmstad, Sweden (2017)
- Veirman, M.D., Cauberghe, V., Hudders, V.: Marketing through Instagram influencers: The impact of number of followers and product divergence on brand attitude. *Int. J. Advert.* **36**(5), 798–828 (2017)
- Xie, K., Lee, Y.-J.: Social media and brand purchase: quantifying the effects of exposures to earned and owned social media activities in a two-stage decision making model. *J. Manag. Inf. Syst.* **32**(2), 204–238 (2015)



Online Atmospheric - An Evaluation of the Current State of the Art and Future Research Directions

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Abstract. Previous research has demonstrated that atmospheric (lighting, scent, music, temperature, store layout, product display, etc.) impact consumers' emotional and behavioral responses, and marketers have applied them to in-store strategies to stimulate purchases. However, in the last decades retailers are confronting a significant technological transformation and face the challenges to attract a digital consumer in an online setting. This work focuses on new insights provided by marketing researchers about the role of atmospheric in the context of online stores. We contribute to this debate by providing a systematic literature review of articles published in the last decade on atmospheric in the main journals of marketing. The present study has two main objectives: first, identify theoretical keys about the role of atmospheric in online stores. And second, recognize areas for future research.

Keywords: Atmospheric · Online stores · E-commerce

1 Introduction

Over decades, the retailing industry has followed similar strategies for growth and profitability mainly focusing on opening additional outlets. Yet, the digitalization has put an end to this development, and demands companies to choose and integrate a wide array of innovations to remain competitive in today's hyperconnected world (Grewal 2017). The integration of digital technology in all aspects of consumer's daily lives has shaped and increased consumer expectations with regards to product and service quality, as well as the customer experience. The enhanced connectivity of customers has led to strong changes in purchase behavior. The current Covid 19 pandemic has further accelerated this development by speeding up the adoption of digital technologies on the consumer side at an unprecedented rate, and opening up the digital world to previously reluctant segments (Van Belleghem 2020). In order to keep up with these developments, retailers need to allow their business models to evolve and create experiences that allow for seamless purchases in an omnichannel environment.

Especially virtual stores still face the challenge of incorporating tangibility, realism, immediacy, closeness and enjoyment. The lack of touch and feel has been a major drawback for online retailers since the early days (Weathers and Makienko 2006) and keeps being a major impediment to purchase until today (González et al. 2021). Yet, the digitalization is a reality, as demonstrated by solid double-digit growth rates around the world over the last decade and further advanced by the pandemic which accelerated the online shift by nearly two years to an estimated 30% of total retailing in the US (Van Belleghem 2020). Generating superior online experiences has therefore been a major goal for online retailers, in order to overcome the previously described barriers and facilitate a better online experience (González et al. 2021). Research has facilitated several insights, regarding product displays, design elements, technological implementation and social interaction. Yet, the integration of the different elements, and the creation of a generalizable framework towards better online experiences still remains a challenge for researchers and practitioners (Roggeveen et al. 2020).

A major research gap is the identification of the relevant factors for the Customer Experience design of online retailing experiences and the subsequent classification in how far the different elements add value for the customer. We posit that this requires a rethinking of the traditional framework for purchase experiences (e.g. Bitner 1992), by including new dimensions and variables for the digital environment. In this study, we aim to revise the academic advances from the last decade in order to identify innovative and relevant factors. Finally, our study proposes an adapted framework for the design of online retailing experiences and lines out fruitful areas of future research. Our study is based on a systematic literature review of academic publications from the last decade and a descriptive analysis the relevance of different factors and variables, to conclude with our proposed framework.

2 Understanding the (Online) Customer Experience

According to Holbrook and Hirschman (1982), customer experience is constructed from symbolic, esthetic and hedonic consumption elements. Verhoef et al. (2009) define the experience as a holistic construct which evokes cognitive, affective, social and physical consumer responses to a store. Both definitions coincide in the complex nature of experience based on the interaction between the environment set by the retailer and the customer. Our study focuses on those design elements that are most likely to evoke positive customer responses (Verhoef et al. 2009). Traditional research in retailing and marketing has highlighted repeatedly the importance of physical design elements such as lighting, store design or product display, which can evoke positive emotions and in turn increase the likelihood of purchase (e.g. Bitner 1992). The strategic importance of the physical environment has been long recognized in academic literature in order to influence consumer perceptions, evaluations and behavior (Grewal et al. 2009).

Among the pioneering frameworks to explain the impact of the retail environment on consumer purchase behavior are the models from Baker (1986) and Bitner (1992). Baker proposes three core dimensions which are atmospherics (e.g. lighting, music, temperature), design (architecture, layout, distribution) and social factors. Bitner (1992) on the other hand proposes a combination of environmental factors, which impact consumers

in a cognitive, affective and in a physical way. The three key dimensions are ambient conditions, the spatial layout and symbols. In a later revision, Turley and Milliman (2000) propose a combined version of the prior models by enhancing Bitner's work by the additional dimensions of exterior design and a social factor.

In recent years, academics have devoted and increased amount of attention to the design of online experiences, which has brought along a richness of different theoretical frameworks. These frameworks can be classified into three groups. The first group focuses on the transfer and adaptation of existing offline-based knowledge on atmospheric to the new digital reality (e.g. Roggeveen 2020). The second group of studies has a more technological orientation and take predominantly a human-technology interaction focus (e.g. Wolfinger and Gilly 2003). Finally, the third group of studies aims on a holistic digital point of view by purely focusing on the online customer experience (e.g. Trevinal and Stenger 2014).

Considering these recent theoretical advances, our work tries to thoroughly revise the existing research in order to 1) deliver an overview of the current state of academic research with regard to online atmospheric in online retailing, 2) identify those variables and dimensions that matter most in consumer decision making and proposing an updated theoretical framework based on recent research advances, and 3) to reflect on areas and opportunities for future research in the field of online retailing, customer experience design and omnichannel.

3 Methodology

The first decision was to define the databases and journals which would enter our study, and we did so by applying the following criteria: a) the international scientific prestige of the database and b) the scientific rigor of the incorporated journals (Schibrowsky et al. 2007). Therefore, Scopus was chosen as the primary database for our study, and the search was complemented with results from Business Source Premier, ABI/INFORM, Emerald and ultimately Google Scholar. In total, we revised around 20 different academic Journals from the areas of Marketing, Retailing, E-commerce and Management and considered the years from 2000 until 2019 as the timeframe for the sample collection.

After identifying a list of relevant keywords (e.g. online environment, web atmospheric, e-commerce), we searched the titles, abstracts and article-adjunct keywords of the previously mentioned databases. The keywords were driven by the three theoretical dimensions defined in the last section. In total, we found 154 scientific publications in the searched databases over the relevant timeframe. In a second stage, we evaluated the suitability of each of the encountered publications for further analysis by thoroughly revising the abstract. This review allowed us to identify if the encountered studies really focused on online atmospheric, or if the search result was incidental. During this second stage, the overall sample was reduced to a final sample of 96 documents which were deemed suitable for further analysis (The full list of references is available upon request).

Following Schibrowsky et al. (2007), two expert reviewers conducted the content analysis of each document. First, reviewers identified the descriptive data for each article (e.g. Journal name, year of publication, keywords, citations). Then, they classified the theoretical framework for each article and recorded the methodological design, as well

as the key variables. Finally, experts cataloged the main results for each of the articles with special attention to significant effects.

4 Descriptive Results

Our results show, that out of the 96 studies under investigation, 30.2% were published in the first five years of our observation frame (2000–2004), 42.7% in the second 5-year period (2005–2009), and 27% were published in the remaining years (2010–2019). Furthermore, we were able to identify the research fields of our sample: 27% of the studies were published in the field of Business, Management and marketing, 40% pertain to the area of Technology, Internet & E-commerce, while 28% were published in the area of Retailing, and the remaining 5% belong to the field of Consumer Psychology.

From a theoretical perspective, our analysis of the sample shows two dominant schools of thought underlying most studies. On the one hand, there is a cohort of studies applying a consumer psychology perspective, while on the other hand the next largest set of studies adopts a human-technology interaction perspective. For the former group, the most frequently applied background is the classic Stimulus-Organism-Response (SOR) model (Mehrabian and Russel 1974) which is strongly rooted in the field of physical retailing, and is used in 30% of the studies in the sample. For the latter group of studies, the Technology Acceptance Model (TAM), as well as the Human Computer Interaction (HCI) model make up a combined 10% of the studies in the sample. The remaining articles do not propose a clear reference to the underlying theoretical background, while most of them clearly apply variables pertaining either to the background of consumer psychology, communication or technology.

With regards to the methodology applied by the studies under investigation, our results show that a vast majority rely on quantitative approaches. While experimental designs make up 40% of the studies, survey methods represent 39% of the cases. Qualitative designs only make up for 4% of the studies under revision.

In order to revise and classify the variables under investigation, we follow the more recent advances from Turley and Milliman (2000) and Trevinal and Stenger (2014) as a frame of reference. The results show that 46% of the studies apply variables relating to physical aspects of the online store (site design). In more detail, 36% of the studies apply variables originating from research on physical stores (aesthetics), while another 10% of the studies use variables, which are unique to the digital environment, as grouped in the dimension of vividness. Secondly, there is a cohort of studies which centers on the functional aspects of online stores (usability), which can be grouped in two major dimensions, ease of use and transaction capability. In particular, results show that 24% of the studies apply variables facilitating the online experience, which are summarized in the ease-of-use dimension; while 14% of them focus rather on the process of facilitating the purchase, which are grouped in the transaction capability dimension. Finally, we identified a third group of variables, which can be recapped under the concept of social interaction. While 9% of the studies are centered around social presence variables, the remaining 8% of the studies focus on variables related to entertainment. These results show the scarcity of academic work on new concepts, including the online-exclusive vividness dimension in the site-design, as well as in the social interaction dimensions mentioned last.

For the dependent variables, we are able to see a much more homogeneous pattern. In line with attitudinal theory, most papers investigate the cognitive, affective and behavioral responses of the consumers with regards to the independent variables (Eroglu et al. 2001). Specifically, our results show that 43% of the studies measure behavioral variables, 38% include cognitive variables and 19% focus on the affective aspects. Finally, a large set of studies also relies on holistic assessments such as satisfaction or loyalty (8%).

4.1 Vividness, Transaction Capability and Social Interaction

We limit our analysis to those independent variables with the highest degree of novelty, being vividness, transaction capability, social presence and entertainment.

When looking at vividness, we observe that the results have been obtained by manipulating interactive elements, such 3D product representations or videos. In general, we observe significant results of vividness elements on different levels of consumer responses. For the cognitive dimension, we can see that vividness positively affects the attitude towards the store (e.g. Fiore and Jin 2003) and the product (Klein 2003), as well as for product selection and evaluation (Roggeveen et al. 2015). Similarly, for the affective responses, there are positive effects with regard to the emotional state of the consumer during the online shopping experience (e.g. Shen and Khalifa 2012) and an increase in enjoyment and entertainment, both on an individual as well as on a social level (e.g. Kim et al. 2007; Shen and Khalifa 2012). When turning to the behavioral responses the studies show positive effects of increased vividness on purchase intentions, time spent in the store, and the intention to come back to the store in the future (e.g. Fiore and Jin 2003; Kim et al. 2007)

Transactional capacity is often assessed via security and privacy concerns (e.g. Jaiswal et al. 2010; Wolfenbarger and Gilly 2003), trust (e.g. Goode and Harris 2007), payment processes or return policies (Dholakia and Zhao 2010). Positive effects are mainly shown over holistic assessments like store satisfaction (Park and Kim 2003) or loyalty towards the retailer (Wolfenbarger and Gilly, 2003), as well as for attitudinal measures such as brand attitude (e.g. Kim et al. 2015) such as purchase or store usage intention.

Finally, when turning to the effects of social interactivity, the most studied variables include user-generated comments and recommendations (online reviews), which are shown to impact affective responses via emotional reactions (Ning Shen and Khalifa 2012) and behavioral responses by impacting product choice (Senecal and Nantel 2004). Entertainment is measured by enjoyment and fun, and yields affective responses measured by positive emotions such as pleasure (Fiore et al. 2005) as well as holistic variables such as loyalty or satisfaction (Gao and Bai 2014).

4.2 Towards a Theoretical Framework for Online Atmospheric

Considering the analysis results, we propose a conceptual model for the evaluation of online atmospheric, that in the line of thinking of Turley and Miliman (2000), or the revised framework by Roggeveen et al. (2020). As can be seen in Fig. 1, we propose three major dimensions for a holistic evaluation of online atmospheric. On the one hand, there is a strong need to provide a consumer experience that underscores the

realness and the closeness of both the online store, as well as the products. This physical dimension is based on design factors, which include the visual presentation and the vividness of the experience. Especially the latter, the creation of a vivid environment is crucial for such an experience, as virtual stores still lack means to create the realism of a physical experience. Secondly, we focus on the functional aspects of the store which are linked to the usability. Stores need to facilitate the life of the consumers as much as possible via seamless and easy-to-use interfaces, and by evoking trust and security via the transactional capacity. Last but not least, our model includes a social and interactive dimension focusing on social presence, as well as entertainment. Virtual entertainment and virtual social interactions have been on the rise for more than a decade, yet the current Covid-19 crises has increased consumer knowledge and expectations even more, and should make these elements even more useful for a good customer experience.

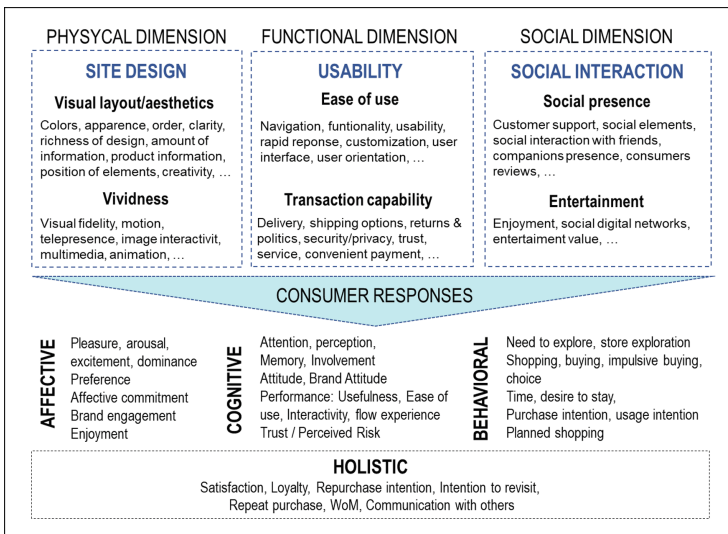


Fig. 1. Conceptual framework for online atmospherics

5 Discussion, Limitations and Ideas for Future Research

In this study, we have tried to obtain a state-of-the-art overview of the theoretical and the empirical work on online atmospherics. Our analysis yields three major dimensions, which allow the construction of a holistic proposal for a theoretical framework, focusing on the physical, functional and social aspects of the online store. Our conclusions highlight the importance of both, traditional retailing factors, such as design and layout, but also bring along unique online specific parts, such as vividness or social presence. Our model highlights the need for online retailers to build their stores in such a way that they are easy to use and secure for the customers while creating experiences, which are vivid, entertaining and social.

Our current study is subject to a several limitations, that could be addressed in future research. On the one hand, there is always the risk to have overlooked some relevant work due to different keywords or different areas of publication. On the other hand, our analysis for now could be enhanced with potential moderators for the different factors. For instance, the social and entertaining functions might have a stronger relevance for hedonic products, than for utilitarian products, while several studies hint that the design factors might be gender contingent (González et al. 2021). Furthermore, the overall importance of the three dimensions for now remains incomparable. A quantitative, meta-analytic approach might help to compare effect sizes and shed light on the relative importance. Finally, this study could be enhanced by the development of a holistic assessment tool for online store by developing a measurement instrument, based on the three major dimensions in this study.

References

- Baker, J.: The role of the environment in marketing services: the consumer perspective. In: *The services challenge: Integrating for competitive advantage*. Chicago: AmericanMarketing Association, vol. 1, pp. 79–89 (1986)
- Bitner, M.J.: Servicescapes: the impact of physical surroundings on customers and employees. *J. Mark.* **56**(2), 57 (1992)
- Eroglu, S.A., Machleit, K.A., Davis, L.M.: Atmospheric qualities of online retailing: a conceptual model and implications. *J. Bus. Res.* **54**(2), 177–184 (2001)
- Fiore, A.M., Jin, H.J.: Influence of image interactivity on approach responses towards an online retailer. *Internet Res.* **13**(1), 38–48 (2003)
- Fiore, A.M., Jin, H.J., Kim, J.: For fun and profit: hedonic value from image interactivity and responses toward an online store. *Psychol. Mark.* **22**(8), 669–694 (2005)
- Gao, L., Bai, X.: A unified perspective on the factors influencing consumer acceptance of internet of things technology. *Asia Pac. J. Mark. Logistics* **26** (2), 211–231 (2014)
- González, E.M., Meyer, J.H., Paz Toldos, M.: What women want? How contextual product displays influence women’s online shopping behavior. *J. Bus. Res.* **123**, 625–641 (2021)
- Goode, M.M.H., Harris, L.C.: Online behavioural intentions: an empirical investigation of antecedents and moderators. *Eur. J. Mark.* **41**(5–6), 512–536 (2007)
- Grewal, D., Levy, M., Kumar, V.: Customer experience management in retailing: an organizing framework. *J. Retail.* **85**(1), 1–14 (2009)
- Grewal, D., Roggeveen, A.L., Nordfält, J.: The future of retailing. *J. Retail.* **93**(1), 1–6 (2017)
- Holbrook, M.B., Hirschman, E.C.: Experiential aspects of consumption: consumer fantasies, feelings, and fun. *J. Consum. Res.* **9**(2), 132–140 (1982)
- Jaiswal, A.K., Niraj, R., Venugopal, P.: Context-general and context-specific determinants of online satisfaction and loyalty for commerce and content sites. *J. Interactive Mark.* **24**(3), 222–238 (2010). <https://doi.org/10.1016/j.intmar.2010.04.003>
- Kim, H., Choi, Y.J., Lee, Y.: Web atmospheric qualities in luxury fashion brand web sites. *J. Fashion Mark. Manag.* **19**(4), 384–401 (2015)
- Kim, J., Fiore, A.M., Lee, H.H.: Influences of online store perception, shopping enjoyment, and shopping involvement on consumer patronage behavior towards an online retailer. *J. Retail. Consum. Serv.* **14**(2), 95–107 (2007)
- Klein, L.R.: Creating virtual product experiences: the role of telepresence. *J. Interactive Mark.* **17**(1), 41–55 (2003)
- Li, H., Daugherty, T., Biocca, F.: Characteristics of virtual experience in electronic commerce: a protocol analysis. *J. Interactive Mark.* **15**(3), 13–30 (2001)

- Mehrabian, A., Russell, J.A.: *An Approach to Environmental Psychology*. The MIT Press, Cambridge (1974)
- Park, C.H., Kim, Y.G.: Identifying key factors affecting consumer purchase behavior in an online shopping context. *Int. J. Retail Distrib. Manag.* **31**(1), 16–29 (2003)
- Roggeveen, A.L., Grewal, D., Schweiger, E.B.: The DAST framework for retail atmospherics: the impact of in- and out-of-store retail journey touchpoints on the customer experience. *J. Retail.* **96**(1), 128–137 (2020)
- Roggeveen, A.L., Grewal, D., Townsend, C., Krishnan, R.: The impact of dynamic presentation format on consumer preferences for hedonic products and services. *J. Mark.* **79**(6), 34–49 (2015)
- Roy Dholakia, R., Zhao, M.: Effects of online store attributes on customer satisfaction and repurchase intentions. *Int. J. Retail Distrib. Manag.* **38**(7), 482–496 (2010)
- Schibrowsky, J.A., Peltier, J.W., Nill, A.: The state of internet marketing research: a review of the literature and future research directions. *Eur. J. Mark.* **41**(7–8), 722–733 (2007)
- Senecal, S., Nantel, J.: The Influence of Online Product Recommendations on Consumers' Online Choices. *J. Retail.* **80**, 159–169 (2004)
- Shen, K.N., Khalifa, M.: System design effects on online impulse buying. *Internet Res.* **22**(4), 396–425 (2012)
- Trevinal, A.M., Stenger, T.: Toward a conceptualization of the online shopping experience. *J. Retail. Consum. Serv.* **21**(3), 314–326 (2014). <https://doi.org/10.1016/j.jretconser.2014.02.009>
- Turley, L.W., Milliman, R.E.: Atmospheric effects on shopping behavior: a review of the experimental evidence. *J. Bus. Res.* **49**(2), 193–211 (2000)
- Van Belleghem, S.: *The Offer You Can't Refuse: What if Customers ask for More than an Excellent Service?*. Lannoo Meulenhoff, Belgium (2020)
- Verhoef, P.C., Lemon, K.N., Parasuraman, A., Roggeveen, A., Tsiros, M., Schlesinger, L.A.: Customer experience creation: determinants, dynamics and management strategies. *J. Retail.* **85**(1), 31–41 (2009)
- Weathers, D., Makienko, I.: Assessing the relationships between e-tail success and product and Web site factors. *J. Interactive Mark.* **20**(2), 41–54 (2006)
- Wolfinger, M., Gilly, M.C.: eTailQ: dimensionalizing, measuring and predictingetail quality. *J. Retail.* **79**(3), 183–198 (2003)



How TikTok's Algorithm Beats Facebook & Co. for Attention Under the Theory of Escapism: A Network Sample Analysis of Austrian, German and Swiss Users

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Abstract. TikTok was the undisputed rising star of Social Media in 2020. Although the app has started to rival Facebook for attention and the entire social media landscape regarding monthly active user growth, academic research on TikTok's secret to success is still scarce. This paper seeks to contribute to research by trying to identify how TikTok outperforms its rival with an advanced algorithm and inspire more academics to investigate the subject. A literature review will provide context, followed by a study amongst TikTok users in Austria, Germany and Switzerland. Results show that TikTok has overtaken Facebook by an average of 30 min amongst teenagers' daily app usage. TikTok's matchmaking algorithm plays a major role in this battle for attention by not only focusing on a user's friendship network, but on the user's explicit behaviour. Evaluating the theory of escapism as a motivator to use the app seems to suggest that TikTok outperforms Facebook based on content related criteria. Since both applications apply matchmaking on the basis of user generated content, it is suggested that TikTok's user focused algorithm outranks that of Facebook. TikTok thus marks a trend change in social media by putting user centric algorithmic content curation before peer-network driven considerations.

Keywords: TikTok · Facebook · Social media · User centricity

1 Introduction

Social media is an important tool of digital marketing strategies (Peter and Dalla Vecchia 2021). Among the social media landscape, TikTok was the fastest growing application (app) of 2020, both by number of downloads and user growth (Weimann and Masri 2020). Since its acquisition and integration of musica.ly in 2018 (Stokel-Walker 2000), TikTok has been unstoppable. TikTok, a matchmaking platform based on user generated content (UGC), has exceeded 2 billion downloads. Based on official reports, TikTok had over 700 million monthly active users (MAU) by mid-2020. It is expected that the app will have over 1 billion MAU by early 2021, thus ranking it among the top 10 largest social media platforms (Bellan 2020). If one would add the number of Douyin

users, the Chinese version of TikTok, its position would increase to be the fourth largest social media platform, trailing behind Facebook, YouTube and WhatsApp. Although both TikTok and Douyin belong to the Chinese company ByteDance, an AI (artificial intelligence) technology company, due to their strict separation of both users' content and legal entities (as per the requirement of the Chinese government), the MAU count is equally separate. Despite the impact of COVID-19 to the average utilisation of the Internet and social media, the question of how TikTok has catapulted itself in only three years to a social media superpower remains largely unanswered. Even more impressive than the growth in MAU is TikTok's ability to engage users for a long time. In fact, practitioners' studies have shown that on average, users spend only eight minutes less on TikTok (52 min according to Davis 2019) than on Facebook (58 min according to Famemass 2019). For younger generations, TikTok's main user base, the daily app usage exceeds that of Facebook by a long distance (80 min according to Newton 2020). TikTok's amazing leap against incumbent competitor Facebook raises the question of how TikTok manages to engage its users so successfully and for such a long time in terms of daily usage. Following a literature review on social media and TikTok, a network sample analysis among social media users in Austria, Germany and Switzerland will try to shed light to the investigation.

2 Social Media and Escapism

In order to assess the state of research on TikTok, an extensive literature review has been conducted via Google Scholar and ScienceDirect for articles relating to TikTok and its algorithm. ScienceDirect revealed 49 results and Google Scholar 12 results, all of which were reviewed. Whilst more research around the topic of TikTok can be found, the majority of research concentrates on the impact of TikTok on marketing and advertising in general and privacy issues. A total of only five articles were identified discussing the TikTok algorithm and its impact on user engagement. Across all articles, the identified commonality is the notion that algorithm based personal recommendations have started to become the dominating growth driver of matchmaking platforms (Tao et al. 2020), including TikTok and Facebook, but also on e-commerce sites such as Amazon. Particularly platforms built on UGC place a much higher priority on the algorithmic curation of content, as its users are driven to use the app through the motivation of escapism, besides other drivers. Much research on the motivational drivers for the use of social media has found escapism to be the most prominent driver (Whiting and Williams 2013). Escapism can be interpreted as the seeking of joy, fun, diversion and entertainment from our buzz-filled life (Korgaonkar and Wolin 1999) in combination with the key motivators of archiving, self-expression, communication and voyeurism (Omar and Dequan 2020). Studies already confirmed the connection of escapism with regards to social media usage (Kırcaburun and Griffiths 2019; Mülleret et al. 2017). Therefore, it is important to understand how escapism is formed on TikTok and which factors contribute to the assumed escapism superiority of TikTok compared to other social media apps. This research thus seeks to answer the question how, if at all, the algorithmic content curation on TikTok's ForYouPage (FYP) exploits escapism notions more effectively than other social media sites.

3 Research Methodology

Based on the literature review, a questionnaire was created that covered the concept of escapism and the five motivators as per Omar and Dequan (2020). Impacting factors on the construct of escapism and the questionnaire have been discussed in five qualitative validation interviews with open questions. The data for this research was drawn in December 2020 via an online survey based on the network sampling technique from Blagus et al. (2017). Also referred to as network sampling, this technique has emerged as both cost effective and representative to model a sample from a real network (Jalali et al. 2016). The sampling has been created through private messages on Facebook and TikTok. Facebook has been incorporated due to the fact that 85% of TikTok users also are on Facebook (Hootsuite 2020). Through this method, a total of 341 survey responses were received. 217 were completed and/or fulfilled the minimum age criteria of 13 years, which is the minimum age to use TikTok as defined in the app's terms of service and community guidelines (TikTok 2021). In addition, users had to be residents of Austria, Germany or Switzerland to account for a high cultural similarity, i.e. a shared application of the escapism motive. Based on the Index of Cultural Similarity (Roose, 2020), Austria, Germany and Switzerland showcase a high notion of similarity, justifying the scope limitation for replication and further research stimuli. Language was thus used as a natural selection criterion during the network sampling process. The questionnaire was setup in German, which is the only officially spoken language present in all three countries.

4 Findings

The evaluated responses revealed a user gender split of 55% male to 45% female. This is closely aligned to the generic online user demographics (ITU 2020). The sample covers all three German speaking countries: 76% of respondents were from Germany, 14% from Austria and roughly 10% from Switzerland. This mix slightly overemphasises the population of Germany with 85 million, Austria with 8.8 million and Switzerland with 8.4 million. The majority of respondents (79%) were between 13 and 34 years old. Assessing the primary motivator to be on TikTok largely validated the study of Omar and Dequan (2020). Escapism was shown as the most prominent factor. However, in contrast to the study of Omar and Dequan (2020), self-expression ranked as the second most important factor, followed by communication. Archiving and voyeurism did not show a strong correlation. An overview of correlation results is shown in Table 1 for TikTok. In comparison, the same results are shown in Table 2 for Facebook. Computed p-values proved <0.05 , thus suggesting significant findings.

Table 1. Correlation of motivators for the use of TikTok (r) (n = 217)

	Sample (n)	Escapism	Archiving	Self-expression	Communication	Voyeurism
Germany	165	0.561	0.681	0.648	0.701	0.658
Austria	31	0.582	0.647	0.614	0.648	0.678
Switzerland	21	0.527	0.683	0.598	0.694	0.681

Table 2. Correlation of motivators for the use of Facebook (r) (n = 217)

	Sample (n)	Escapism	Archiving	Self-expression	Communication	Voyeurism
Germany	165	0.731	0.467	0.692	0.652	0.399
Austria	31	0.649	0.482	0.638	0.619	0.426
Switzerland	21	0.663	0.501	0.546	0.605	0.417

Escapism and self-expression dominate over the other factors, particularly when compared to motivators for the use of Facebook. The analysis of the influencing drivers on escapism revealed two specific factors, namely a content related factor (to take users away from their daily life, to provide a distraction of sorts) and an app related factor (relating to the usability of the app to achieve a state of distraction with relative ease). Table 3 provides a comparison between TikTok and Facebook of factors forming the concept of escapism.

Table 3. Correlation of factors forming the concept of escapism (r) (n = 217)

Factors	TikTok	Facebook
Content related		
Interesting	0.782	0.663
Relevant	0.856	0.682
Surprising	0.738	0.527
Entertaining	0.904	0.631
App related		
Ease of use	0.831	0.572
Peer-network	0.739	0.859

TikTok outperforms Facebook in most criteria. In addition, TikTok’s entertainment value and content relevancy to the user hint towards a major difference as compared to Facebook. In the app related factors, TikTok outperforms Facebook mainly through

the app's usability. This suggests a lower user effort to escape reality on TikTok, as compared to Facebook. Contrary however, the network or peer effect to use either app shows a slight advantage of Facebook.

5 Discussion and Conclusion

5.1 Discussion

Based on the findings, the view emerges that user-centric algorithmic content curation outperforms other forms of algorithmic content creation under the escapism motivator for the use of social media. Since both TikTok and Facebook can be classified as algorithm-based matchmaking platforms, using a form of automated UGC curation to serve their users, this study suggests relevant findings for both practitioners and scholars alike. Findings have shown that under the same motivator, TikTok outperforms Facebook on capturing user engagement, as evidenced by prior studies through the increasing time spent on the platform. Whilst the motive of escapism was higher for TikTok than for Facebook, one could suggest that TikTok and Facebook serve different purposes. TikTok is the go-to app for escapism, while Facebook is the go-to app for communication or archiving. This however dilutes each app's ability to form the notion of escapism. Looking into the identified impacting factors (Table 3), a much clearer picture emerges. TikTok manages to serve its users more individually relevant content. It manages to capture attention by ignoring the peer-circle, but by focusing on the engagement of each user with the curated content for this specific user. However, the algorithmic curation of content introduces the risk of decreasing content variance. This would assume the entertainment value to decrease. To give an example, if a user values cat-related content, after a certain number of cat-related content servings, it is likely the gained utility of another cat-related content piece would diminish. Although this study did not account for the utility of perceived content servings over time, the impact of surprising content on escapism on TikTok suggests that their algorithm better mitigates the risk of a filter bubble than Facebook. Since the major difference between both platforms is to be found in the importance which the algorithm places on a user's peer-network, the hypothesis to seek the difference in perception in the algorithm further manifests. This leads to an interesting discussion on the importance of networking and user connection in newly emerging social networks versus the ability to capture, interpret and utilise users' behavioural traits to optimise platform objectives.

5.2 Limitations and Further Research

Although all efforts have been undertaken to deliver construct and content validity, some limitations with regard to reliability and generalisability have to be stated. First, the applied network sampling technique contains a self-selection bias on both network usage and study participation. In addition, since this study is based on the findings of prior research, it most likely also includes a scope and design bias.

The research project suggests further studies to empirically verify results with a larger sample and across different cultural spheres. Further, analysing the influence of

demographic user attributes on factors contributing to escapism could provide more granular results and reveal much of the inherent motivators to use a social media app. Lastly, to avoid a content and content format bias, it is highly suggested to conduct similar studies, contrasting TikTok to other social media platforms such as Instagram Reels, Snapchat Spotlight, YouTube Shorts and Triller. Finally, it would be of value to understand if users perceive a difference in content quality or relevancy as an impacting dimension on their escapism motive, if compared by the same content format.

5.3 Conclusion

This research project provided evidence that TikTok is impacted to a higher degree by the theory of escapism than Facebook. With both platforms sharing the notion of UGC matchmaking, this study suggested to seek the difference in influence not in the utility users gain from using the platform, but the ability of the platform to stimulate the motivator of escapism. In this regard, TikTok outperformed Facebook, which suggests that user generated content curation impacts the motivation of escapism in a superior way, as compared to network-based content curation. Suggestions for further research have been provided. The benefit of further research could help to understand how user behaviour on social media is changing and what the likely impacts are on brands, platforms, content, algorithms, and users.

References

- Bellan, R.: The Top Social Media Apps of 2020, According To Apptopia. *Forbes* **3** (2020). <https://www.forbes.com/sites/rebeccabellan/2020/12/03/the-top-social-media-apps-of-2020>
- Blagus, N., Šubelj, L., Bajec, M.: Empirical comparison of network sampling: how to choose the most appropriate method? *Phys. A* **477**, 136–148 (2017)
- Comp, G., Dyer, S., Gottlieb, M.: Is TikTok The Next Social Media Frontier for Medicine? *AEM Educ. Training* (2020). <https://doi.org/10.1002/aet2.10532>
- Davis, J.: The TikTok strategy: using AI platforms to take over the world. INSEAD (2019). <https://knowledge.insead.edu/entrepreneurship/the-tiktok-strategy-using-ai-platforms-to-take-over-the-world-11776>
- Famemass: How Much Time do People Spend on Social Media in 2019? *FameMass.com* (2019). <https://famemass.com/time-spent-on-social-media>
- Hootsuite Digital 2021. Global Overview Report. Hootsuite Inc. (2020). https://hootsuite.widen.net/s/zcdrtxwczn/digital2021_globalreport_en
- ITU: Internet Use by Sex & Age 2019. ITU World Telecommunication/ICT Indicators Database. Updated (2020)
- Jalali, Z.S., Rezvanian, A., Meybodi, M.R.: Social network sampling using spanning trees. *Int. J. Modern Phys. C* **27**(5) (2016). <https://doi.org/10.1142/S0129183116500522>
- Kircaburun, K., Griffiths, M.D.: Problematic Instagram use: the role of perceived feeling of presence and escapism. *Int. J. Mental Health Addict.* **17**(4), 909–921 (2019)
- Korgaonkar, P.K., Wolin, L.D.: A multivariate analysis of web usage. *J. Advertising Res.* **39**(2), 53–153 (1999)
- Müller, S., Stanoevska-Slabeva, K., Meckel, M.: The bright side of social media escapism. In: 67th Annual Conference of the International Communication Association (ICA), San Diego (2017)

- Newton, C.: TikTok is having a Monster 2020. The Verge (2020). <https://www.theverge.com/interface/2020/6/10/21285309/tiktok-2020-user-numbers-revenue-smash-hit-mea-culpa>
- Omar, B., Dequan, W.: Watch, share or create: the influence of personality traits and user motivation on tiktok mobile video usage. *Int. J. Interactive Mobile Technol.* **14** (4) (2020). <https://doi.org/10.3991/ijim.v14i04.12429>
- Peter, M.K., Dalla Vecchia, M.: The Digital marketing toolkit: a literature review for the identification of digital marketing channels and platforms. In: Dornberger, R. (ed.) *New Trends in Business Information Systems and Technology*, pp. 251–265. Springer, Berlin (2021)
- Roose, J.: Cultural Similarity in Europe according to the Index on Cultural Similarity. Free University Berlin, Institute for Sociology (2020). http://userpage.fu-berlin.de/~jroose/index_en/main_indexvaluesaz.htm
- Stokel-Walker, C.: TikTok's global surge. *New Scientist* **245**(3273), 31 (2020)
- Tao, Z., Wei, Y., Wang, X., He, X., Huang, X., Chua, T.S.: MGAT: multimodal graph attention network for recommendation. *Inf. Process. Manag.* **57**(5) (2020). <https://doi.org/10.1016/j.ipm.2020.102277>
- TikTok: Safety Center: For Parents: Safety Center. TikTok Inc. (2021). <https://www.tiktok.com/safety/resources/for-parents?lang=en>
- Weimann, G., Masri, N.: Research note: spreading hate on TikTok. *Stud. Conflict Terrorism* (2020). <https://doi.org/10.1080/1057610x.2020.1780027>
- Whiting, A., Williams, D.: Why people use social media: a uses and gratifications approach. *Qual. Market Res.* **16** (4) (2013). <https://doi.org/10.1108/qmr-06-2013-0041>



The Social Media Monitoring Process and its Role in Social Media Strategy Development

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Abstract. Social media marketing is an integral part of digital marketing. It requires a strategy, user generated content and technology applications. A review of the identified German literature unveiled eighteen social media strategy frameworks, of which only three included the component of social media monitoring. This is in contrast to the English literature, where social media monitoring is evidenced in a large literature review. The research analyses and describes the eighteen identified frameworks in the German literature, validates them against a generic social media strategy framework consisting of seven components/steps; and describes the underrepresented component of social media monitoring by suggesting a four-step process.

Keywords: Social media · Social media strategy · Social media monitoring · Social media listening

1 Introduction

Social media marketing is seen as an integral part of digital marketing, with many organisations taking advantage of this digital channel (Peter et al. 2017). It is regarded as a cost-effective digital marketing tool used by organisations in order to drive brand building, customer communication, customer loyalty, lead generation, search engine optimisation, social selling, and word-of-mouth marketing (Jensen 2006; Leeflang et al. 2014; Peter and Dalla Vecchia 2021). In order to benefit from social media, a strategy, valuable content (including a process to enable and foster the creation of user generated content) and technology applications are required (Effing and Spil 2016). Such applications may include marketing automation and social media monitoring, both providing analytical capabilities around markets, themes, products, users, and competitors (Dalla Vecchia et al. 2020). This research project aims to identify the components of social media strategies in order to understand the role and process of social media monitoring.

2 Research Methodology

A literature review was conducted with the goal to identify and analyse all relevant literature about social media strategy frameworks and the social media monitoring process based on pre-defined keywords (social media strategy, social listening, social media monitoring¹) in the German literature (referring to works in the German language from Austria, Germany and Switzerland) in the EBSCO (2020) and ProQuest (2020) databases. The search revealed that there has been only a limited focus on academic social media strategy frameworks in the past, but research is available on the topic of social media monitoring. As a result, a second literature review was conducted on the keyword “social media strategy” in the Google Scholar and Swisscovery databases. It turned out that a larger number of practice-oriented books, book chapters and articles can be found there. The focus therefore shifted to the identification and analysis of practitioner publications for social media strategy frameworks; while the academic body of knowledge (in English and German) was utilised in order to understand the role and process of social media monitoring. For the topic of social media strategy frameworks, the first thirty results were selected in each of the two databases following relevance sorting. After duplicates (eighteen) were removed, forty-two articles remained. Twelve social media strategy frameworks were eventually selected for further analysis based on their assumed completeness, i.e., the existence of strategic planning, management and operational components following Gorry and Morton (1971). Furthermore, four complementary frameworks referenced in the selected twelve papers were also considered and analysed, resulting in a total of eighteen analysed frameworks. Finally, a comparative analysis was conducted that identified all component/steps in the identified frameworks. The analysis followed the seven identified elements of social media strategy frameworks by Effing and Spil (2016).

3 Social Media Strategy Frameworks

The eighteen identified and analysed social media strategy frameworks in the German literature were summarised in Table 1. They were placed (numbered as steps 1 to 7) according to the overall process identified by Effing and Spil (2016). Target audience refers to the definition of target segments/groups in order to tailor activities to the market (identified in all eighteen sources); channel management includes the definition and orchestration of the various channels and social media platforms (seventeen sources); objectives/goals include the goal setting process for the social media strategy (all sources); resources includes the definition and description of the required infrastructure, applications, human resources and budgets (twelve sources); policies includes the set of rules including the legal framework, e.g. privacy policies (nine sources); con-

¹ The German keywords to conduct the literature review were “Social Media Strategie”, “Social Media Monitoring”, and “Social Media Listening”.

tent management refers to the development and implementation of a content roadmap (sixteen sources); and finally, monitoring refers to the process and tasks to capture and analyse social media data. It is surprising to see that only three sources (Beilharz 2014; Decker 2019; Rankl 2016) have referenced this component/step of a social media strategy. It shall be highlighted that these three frameworks were developed in later years, potentially allowing to conclude that the monitoring component was not considered as equally important as other components in the earlier literature. In addition, many frameworks include some type of analysis, for instance as a one-off measurement in the strategy development process (e.g. Bauer and Bensmann 2019; Hilker 2010; 2012; Li and Bernoff 2009; Pahrman and Kupka 2020; Stuber 2012) or performance marketing and controlling (e.g. Mack and Vilberger 2016), but not as an ongoing social media monitoring activity.

It is worthwhile to mention the framework from Li and Bernoff (2009) as one of the first social media strategy frameworks in the German literature. It offers a good basic structure. The framework consists of the four steps people (target group/audience), objectives, strategy and technology (Ruisinger (2011) also draws on the model from Li and Bernoff (2009)). Lembke (2011) combines classic company-related marketing methods with social media. With the detailed ten-step strategy process from Hilker (2010, 2012), the author describes that not all steps have to be worked out completely in strategy development and execution. The framework serves primarily as a guideline and should be adapted from case to case by selecting individual steps in a targeted manner. This is aligned to the framework from Stuber (2012), who designed the framework as an iterative process, consisting of four steps: define goals, discover, participate and manage. The process is complemented by three central aspects (people, content, tools), which must be taken into account in all dimensions of the four recommended process steps. Ceyp and Scupin (2013) focus on defining objectives and make a distinction between communication channels and forms of media alignment. Based on their consulting experience, Mack and Vilberger (2016) established a process model with eight guiding questions in three phases (based on the models from Li and Bernoff (2009) and Hilker (2010, 2012)). The authors highlight the need for a maturity analysis as part of the analysis phase. Decker (2019) provides a social media cycle with ten steps. It was developed from previously observed frameworks and is understood as a more advanced social media management approach. A focus on “brand-compliant” social media marketing is provided by Bauer and Bensmann (2019), and the established framework from Pahrman and Kupka (2020) includes six components/steps. Overall, the lack of monitoring as a strategy component in the German literature is even more evident when considering the comprehensive literature review by Effing and Spil (2016), who analysed sixty-six articles and drew their conclusion that monitoring is an essential component of social media strategy.

Table 1. Components/Steps of Social Media Strategy Frameworks in the German Literature following the framework from Effing and Spil (2016)

	Total	18	17	18	12	9	16	3
	Vey (2020)	X	X	X	X		X	
	Stuber (2012, n.d.)	X	X	X	X	X	X	
	Schütz (2017)	X	X	X			X	
	Ruisinger (2011)	X	X	X		X	X	
	Rankl (2016)	X		X	X	X	X	X
	Pahmann and Kupka (2020)	X	X	X	X	X	X	
	Oswald (2016)	X	X	X	X		X	
	Mack and Vilberger (2016)	X	X	X	X			
	Li and Bernoff (2009)	X	(X)	X	X			
	Lembke (2011)	X	X	X		X	X	
	Holmes (2020)	X	X	X	X	X	X	
	Hoffmann (2017)	X	X	X			X	
	Hilker (2010; 2012)	X	X	X	X	X	X	
	Decker (2019)	X	X	X	X	X	X	X
	Ceyn and Scupin (2013)	X	X	X	X		X	
	Beilharz (2014)	X	X	X	X		X	X
	Bauer and Bensmann (2019)	X	X	X		X	X	
	Assmann and Röbbeln (2013)	X	X	X			X	
Component / Step		1: Target Audience	2: Channel Management	3: Objectives / Goals	4: Resources	5: Policies	6: Content Management	7: Monitoring

4 Social Media Monitoring

Monitoring, even though only covered in three frameworks as per the literature review, is an essential component of social media strategy development and execution, grounded in the omnipresence of social media in our daily life. A recent study from Switzerland has shown that 71% of Swiss Internet users are active on social media and nearly all teenagers (99%) (Lutzer et al. 2020). The most mentioned reasons for participating on social media are (1) social interaction and (2) information seeking. While social interaction focusses on communication and interaction with each other over a social media platform, information seeking highlights the goal of seeking information using social media (Whiting and Williams 2013). Apart from individuals, organisations have also increasingly explored the advantages of social media and have an increased focus on social media monitoring. Social media monitoring can be defined as the systematic search for content on the social web relevant to an organisation through an ongoing process (Hadi and Fleshler 2016). Subsequently, the collected data is presented through standardised analysis in order to make business decisions based on the findings (Manzira and Bankole 2018; Orlandi et al. 2020). An organisation can utilise social media monitoring for various purposes, including what is being said about the organisation, about its products and services, and up-to-the-minute relevant information including audience target groups and competitor insights. It can also be used for quality assurance, e.g., customer service, product optimisation, reputation management and/or crisis prevention (Dalla Vecchia et al. 2020). It is important to distinguish social media monitoring from performance measurement and controlling, where the organisation reviews its own social media activities. The literature provides the terms social media monitoring, social media listening, social media analytics and social media mining. While social media monitoring (Hadi and Fleshler 2016; Manzira and Bankole 2018; Orlandi et al. 2020) and social media listening (Chumwatana and Chuaychoo 2017; Pomputius 2019) conclude on the same meaning (i.e., the collection, analysis and presentation of relevant social media data), social media analytics, on the other hand, is regarded in the context of an interdisciplinary research field as a set of tools, frameworks and methods to collect and analyse social media data in order to extract hidden patterns and information in a single task (Fan and Gordon 2014; Stieglitz et al. 2014; Zeng et al. 2011). Finally, social media mining is regarded as a component within social media analytics with the purpose to extract valuable patterns from social media data by identifying various entities such as customers, tags, keywords, and topics (Choi et al. 2020).

Social media monitoring requires a continuous and systematic process. Depending on the strategic goals of the organisation, the monitoring process must be designed differently. Even with a passive social media strategy (where the organisation does not maintain its own social media profiles), it is important to install a simple monitoring process, as users still might discuss issues relevant to that organisation (Pahrmann and Kupka 2020). Social media monitoring systems are based on keywords such as the organisation's brand, products, suppliers or competitors, and the social media profiles of individuals such as the company management or internal and external influencers (Rappaport 2010). In order to provide a basic structure for social media monitoring, the review of the literature enabled the definition of a four-step process (Fig. 1), consisting of 1) data collection (preparing search queries aligned to the social media strategy as

defined earlier), 2) data preparation (to clean and filter the data set, e.g. to remove irrelevant results), 3) data analysis (utilising tools and approaches, such as sentiment analysis, and to structure and summarise data), and 4) data presentation (to provide recommendations in a format which suits the social media strategic objectives and the recipients of the presentation) (Beilharz 2014; Decker 2019; Evertz 2017).

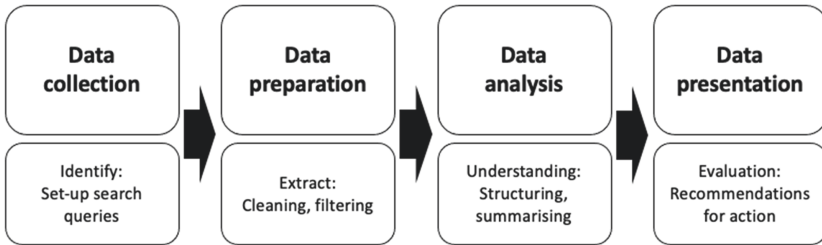


Fig. 1. The social media monitoring process following Beilharz (2014), Decker (2019) and Evertz (2017)

5 Discussion and Conclusion

5.1 Discussion

The review of German literature on social media strategy frameworks revealed that the monitoring component has not often been included, despite of its presence in the English literature. Social media monitoring (or social media listening) provides an important feedback loop and enables an organisation to review and optimise its activities; and at the same time, to identify relevant social media engagements and activities impacting its own organisation, even under a passive social media strategy.

The literature highlights some challenges with social media monitoring, including the high investment cost to setup a social media monitoring solution and process, with many organisations struggling to justify the investment (e.g., Henry 2011). At the same time, social media monitoring has some limitations, including the lack of access to users' private messages (for obvious reasons) on platforms such as Facebook Messenger or WhatsApp (Moreno et al. 2017). Research findings suggest that organisations referencing social media strategy frameworks from the German literature might have a disadvantage over those which reference English literature, as social media monitoring seems to be more prevalent there. This gap should be closed by those organisations who purely referenced strategy frameworks which emerged in the German literature.

5.2 Limitations and Further Research

The limited availability of social media strategy frameworks in the German literature is perceived to be a limitation in terms of a large data set for analysis, especially when comparing the eighteen identified frameworks against the large number of articles and

presented frameworks in the English language. In addition, the limitation to the German literature might further reduce the scope of the investigation as other frameworks originating in the German speaking region might have been published in the English literature. It is suggested that empirical research shall be conducted to investigate the phenomena of the lack of social media monitoring in many frameworks in the German literature, in order to either validate this perceived gap in business practice, or to provide evidence that best practice does indeed include monitoring as part of a generalisable social media strategy framework.

5.3 Conclusion

Social media strategy, as identified in the German literature and as supported by a large study in the English literature, should be built around seven key components or process steps, including 1) the definition of the target audience, 2) the definition of the relevant channels and platforms, 3) the definition and articulation of the organisation's objectives and goals, 4) the identification and definition of the required resources, 5) the establishment of policies for all relevant parties, 6) the creation of a content management framework, and 7) social media monitoring. While the seventh step, social media monitoring, is not widely recognized in the Germany literature, it can be found in the English literature. Its four process-steps of data collection, data preparation, data analysis and data presentation provide important analytics, both in an active and passive social media engagement, to monitor the social media landscape in terms of company, product, audience, and competitor insights.

References

- Assmann, S., Röbbeln, S.: *Social Media für Unternehmen. Das Praxisbuch für KMU*. Rheinwerk, Bonn, Germany (2013)
- Bauer, C., Bensmann, P.: *Markenkonforme Social-Media-Strategie für kleine und mittelgrosse Organisationen*. In: Robra-Bissantz, S., Lattemann, C. (eds.) *Digital Customer Experience*, Edition HMD. Springer Vieweg, Wiesbaden, Germany (2019)
- Beilharz, F.: *Social Media Marketing im B2B*. O'Reilly, Köln, Germany (2014)
- Ceyp, M., Scupin, J.P.: *Erfolgreiches Social Media Marketing. Konzepte, Massnahmen und Praxisbeispiele*. Springer Gabler, Wiesbaden, Germany (2013)
- Choi, J., Yoon, J., Chung, J., Coh, B.Y., Lee, J.M.: *Social media analytics and business intelligence research: a systematic review*. *Inf. Process. Manag.* **57**(6) (2020)
- Chumwatana, T., Chuaychoo, I.: *Using social media listening technique for monitoring people's mentions from social media: a case study of Thai airline industry*. In: *2nd International Conference on Knowledge Engineering and Applications (ICKEA)* (2017)
- Dalla Vecchia, M., Vogel, T., Zachlod, C.: *Social Media: Schritt für Schritt zum Erfolg*. In: Peter, M.K., Niedermann, A. (eds.) *Das digitale Marketing-Toolkit. Wie Unternehmen sich digital vermarkten und kommunizieren*. Ringier, Zürich, pp. 76–93 (2020)
- Decker, A.: *Der Social-Media-Zyklus. Schritt für Schritt zum systematischen Social-Media-Management im Unternehmen*. Springer Gabler, Wiesbaden (2019)
- EBSCO 2020. EBSCO Information Services. <https://www.ebsco.com>
- Effing, R., Spil, T.: *The social strategy cone: towards a framework for evaluating social media strategies*. *Int. J. Inf. Manag.* **36**(1), 1–8 (2016)

- Evertz, S.: *Analysiere das Web!: Wie Sie Marketing und Kommunikation mit Social Media Monitoring verbessern*. Haufe, Freiburg (2017)
- Fan, W., Gordon, M.D.: The power of social media analytics. *Commun. ACM* **57**, 74–81 (2014) Google Scholar (2020). <https://scholar.google.com>
- Gorry, G.A., Morton, M.S.S.: A Framework for management information systems. In: Alfred P. Sloan School of Management, Working Paper, pp. 510–571 (1971)
- Hadi, T.A., Flesher, K.: Integrating social media monitoring into public health emergency response operations. *Disaster Med. Public Health Preparedness* **10**(5), 775–780 (2016)
- Henry, S.E.: Social networking for the equipment finance industry: divine or a distraction? *J. Equipment Lease Financ.* **29**(1), 1–7 (2011)
- Hilker, C.: *Social Media für Unternehmen: Wie man Xing, Twitter, Youtube und Co. erfolgreich im Business einsetzt*. Linde, Vienna (2010)
- Hilker, C.: *Erfolgreiche Social-Media-Strategien für die Zukunft: Mehr Profit durch Facebook, Twitter, Xing und Co.* Linde, Vienna (2012)
- Hoffmann, D.: *5 Stufen zur erfolgreichen Social Media-Strategie*. Dajana Hoffmann Social Media & Marketing (2017). <https://socialmedia-hoffmann.de/5-stufen-zur-erfolgreichen-social-media-strategie/>
- Holmes, S.: *Social Media Marketing. Steigern Sie Ihren Unternehmenserfolg mit Facebook, Instagram, XING & Co.* Webmasters Press, Nürnberg (2020)
- Jensen, M.B.: Characteristics of B2B adoption and planning of online marketing communications. *J. Targeting Meas. Anal. Mark.* **14**(4), 357–368 (2006)
- Latzer, M., Büchi, M., Festic, N.: *Internet Use in Switzerland 2011–2019: Trends, Attitudes and Effects*. University of Zurich, Department of Communication and Media Research, Research Report Media Change & Innovation Vision, January, Zurich (2019)
- Leefflang, P., Verhoef, P.C., Dahlström, P., Freundt, T.: Challenges and solutions for marketing in a digital era. *Eur. Manag. J.* **32**, 1–12 (2014)
- Lembke, G.: *Social Media Marketing: Analyse, Strategie, Konzeption, Umsetzung*. Cornelsen, Berlin (2011)
- Li, C., Bernoff, J.: *Facebook, YouTube, Xing & Co: Gewinnen mit Social Technologies*. Hanser, München (2009)
- Mack, D., Vilberger, D.: *Social Media für KMU: Der Leitfaden mit allen Grundlagen, Strategien und Instrumenten*. Springer Gabler, Wiesbaden (2015)
- Manzira, F.M., Bankole, F.: Application of social media analytics in the banking sector to drive growth and sustainability: a proposed integrated framework. *Open Innov. Conf. (OI)* **2018**, 223–233 (2018)
- Moreno, A., Garrison, P., Bhat, K.: WhatsApp for monitoring and response during critical events: aggie in the Ghana 2016 election. In: *14th International Conference on Information Systems for Crisis Response and Management*, vol. 14, pp. 645–655 (2017)
- Orlandi, L.B., Zardini, A., Rossignoli, C.: Organizational technological opportunism and social media: the deployment of social media analytics to sense and respond to technological discontinuities. *J. Bus. Res.* **112**, 385–395 (2020)
- Oswald, M.: *60-Minuten-Social-Media-Strategie mit Hand und Fuss*. Digital Pioneers (2016). <http://t3n.de/news/60-minuten-social-media-strategie-746947/>
- Pahrmann, C., Kupka, K.: *Social Media Marketing. Praxishandbuch für Twitter, Facebook, Instagram & Co.* O'Reilly, Heidelberg (2020)
- Peter, M.K., Dalla Vecchia, M.: The digital marketing toolkit: a literature review for the identification of digital marketing channels and platforms. In: Dornberger, R. (ed.) *New Trends in Business Information Systems and Technology*, pp. 251–265. Springer, Berlin (2021)
- Peter, M.K., Kraft C., Streitenberger, M.: Forschungsresultate zum Stand der Digitalen Transformation. In: Peter, M.K. (ed.) *KMU-Transformation: Als KMU die Digitale Transformation erfolgreich umsetzen*. Forschungsresultate und Praxisleitfaden. FHNW Hochschule für Wirtschaft, Olten, pp. 29–55 (2017)

- Pomputius, A.: Can you hear me now? social listening as a strategy for understanding user needs. *Med. Reference Serv. Q.* **38**(2), 181–186 (2019)
- ProQuest (2020). <https://www.proquest.com>
- Rankl, J.: Social Media Strategie erstellen. Emarcon (2016). <http://emarcon.de/social-media-strategie-erstellen/>
- Rappaport, S.D.: Listening solutions. *J. Advertising Res.* **50**(2), 197–213 (2010)
- Ruisinger, D.: Social-Media-Strategie. Zuesrt das Ziel, dann die Tools. *Zeitschrift Führung + Organisation* **80**(5), 326–328 (2011)
- Schütz, S.: Mit den richtigen Fragen zur Social-Media-Strategie. *Zielbar* (2017). <https://www.zielbar.de/magazin/social-media-strategie-checkliste-16197/>
- Stieglitz, S., Dang-Xuan, L., Bruns, A., Neuberger, C.: Social media analytics: an interdisciplinary approach and its implications for information systems. *Bus. Inf. Syst. Eng.* **6**(2), 89–96 (2014)
- Stuber, R.: Erfolgreiches Social Media Marketing mit Facebook, Twitter, Google + , XING, LinkedIn, YouTube. Data Becker, Düsseldorf (2012)
- Stuber, R.: So gelingt Ihr Social Media Start – die ZEMM-MIT-Methode als Schritt-für-Schritt Anleitung (Teil 1). *Absatzwirtschaft* (2017). <http://www.absatzwirtschaft.de/so-gelingt-ihr-social-media-start-diezemm-mit-methode-als-schritt-fuer-schritt-anleitung-teil-1-11513/>
- Swisscovery 2020. <https://swisscovery.sls.ch>
- Vey, D.: Social-media-strategie – ressourcenplanung, budget und die richtige kommunikation. In: Kocks, K., Knorre, S., Kocks, J.J. (eds.) *Öffentliche Verwaltung – Verwaltung in der Öffentlichkeit*. Springer VS, Wiesbaden (2020)
- Whiting, A., Williams, D.: Why people use social media: a uses and gratifications approach. *Qual. Market Res. Int. J.* **16**(4), 362–369 (2013)
- Zeng, D., Chen, H., Lusch, R., Li, S.-H.: Social media analytics and intelligence. *Intell. Syst.* **25**(6), 13–16 (2011)



Organic Reach on YouTube: What Makes People Click on Videos from Social Media Influencers?

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Abstract. Our research investigates what increases click-through rates on YouTube videos, specifically the role of the thumbnail, the video title, and the verification badge. In the thumbnail, we look at the role of color characteristics and the inclusion of people, drawing on color psychology and the parasocial interaction phenomenon. In the video title, we look at the role of capital letters and emotional words, drawing on the elaboration likelihood model and negativity bias. Finally, we look at the role of the verification badge, drawing on source credibility theory. To test our hypotheses, we gather data from YouTube, by using YouTube's Application Programming Interface (API) to collect 50,000 thumbnails, video titles and other relevant data from a total of 1000 influencers in 10 different categories. Our findings will have implications across the marketing and information systems domains and, practically, will provide guidance for the many influencers who rely on the optimal reach of their videos as their source of income.

Keywords: Influencer marketing · Social media marketing · Clicks · YouTube · Thumbnails · Organic reach

1 Introduction

Social media has become an integral part of consumers' daily lives. On average, global internet users spend 144 min per day browsing through social networks (Clement 2020). In particular social networks that offer online videos and streaming services have gained popularity. YouTube is the most successful social media platform in this realm. For instance, it was found that 90% of internet users in the United States accessed YouTube to watch online video, thus, ranking as the number one online video platform (Tankosvka 2021). Perhaps not surprisingly, this prompts worldwide brands and their marketers to use YouTube to disseminate their brands messages. The delivery of brand messages is often carried out by so-called social media influencers. Influencers are usually social media users who are at the center of a sufficiently large, engaged and trusting community of mostly young consumers and attract the interest of relevant brand marketers, who need to engage with these communities (Lou and Yuan 2019; Yuan and Lou 2020). There is a growing stream of research that investigates the effectivity of paid influencer marketing campaigns (for a review: Hudders et al. 2020). However, not much is known about how

influencers and brands can reach their audience more organically. With people spending much of their screen time on YouTube, often just randomly browsing through content, there is a high potential to organically reach new customers, viewers, or subscribers. In fact, it is the only way to reach people on YouTube who are not already subscribers to one's YouTube channel, thus, being of high importance to influencers and marketers. But what makes social media users click a video when they seemingly have an unlimited number of videos to pick from? YouTube offers a range of features that may influence people's likelihood to click a video. Video thumbnails, which are snapshots of videos that people see as they're browsing YouTube, are one of the most powerful tools to make people click a video. Similar important is the video title, which aims to get people's attention through buzz words or capital letters. Once a video is clicked and consumed, research has shown that advertising messages on YouTube, in particular when they come from influencers, can increase brand awareness, brand attitudes and purchase intentions (Dehghani et al. 2016; Lee and Watkins 2016; Sokolova and Kefi 2020).

Against this backdrop, we aim to address two research questions: (1) Which thumbnail characteristics lead to increased views of videos from social media influencers? (2) Which other visual cues (e.g., video title, verification badge, display of video duration) lead to increased views of videos from social media influencers? Upon answering these research questions, we propose six hypotheses. First, drawing on color psychology, we hypothesize that a thumbnail with higher colorfulness increases video clicks. Second, drawing on the phenomenon of parasocial interaction, we expect the presence of the influencer in the thumbnail to increase video clicks. Third, underpinned by empirical work on consumer responses to emotions, we propose that emotional face expressions (i.e., surprise) will more likely gain people's attention, thus leading to increased video clicks. Fourth, drawing on the elaboration likelihood model and negativity bias, we propose that textual cues that increase people's attention such as capital letters or negative emotions will lead to increased video clicks. Fifth, drawing on expectancy theory, we expect an inverted U-shape between the displayed video duration and video clicks. Finally, using source credibility theory, we hypothesize that a verification badge leads to increased video clicks.

To test our hypotheses, we collect data from the most successful YouTube accounts and analyze the data with a range of different tools including image processing and language processing. First, we compile a list of 1,000 influencers with the most successful YouTube accounts (in terms of number of followers) in 10 different categories. These categories include gaming, comedy, beauty, film and others. The social media analytics website Socialblade is used to collect relevant data (i.e., name and channel ID) of the Top 100 accounts in each category. Second, we use YouTube's Application Programming Interface (API) to collect information (e.g., thumbnail, number of views, and video title) on the latest 50 videos of each account. Third, we use the Image Colour Summarizer API to analyze the colorfulness, dominant colors and lightness of each of the thumbnails. Fourth, we utilize the Microsoft Face API to check whether a person is present in the thumbnail and analyze facial expressions (i.e., emotions) in each of the thumbnails. Finally, we use textual analysis program Language Inquiry Word Count to analyze language characteristics (i.e., emotions, capital letters, negations or pronouns) of each of the video titles.

Our study aims to make three main contributions. First, we use big data with a total of 50,000 video thumbnails and video titles from the most 1000 most popular YouTube accounts. Prior research on YouTube influencers is dominated by surveys (Lee and Watkins 2016; Sokolova and Kefi 2020; Xiao et al. 2018). Here, we study real-world thumbnails, video titles and most importantly, engagement metrics such as video views (as opposed to intentions to click a video). Second, rather than focusing on how the video content may influence consumer attitudes and behaviors, we focus on what makes consumers click the video in the first place. Thus, being able to investigate how brands and social media influencers can increase their reach beyond their usual following. In so doing, we provide specific advice on how changes in the thumbnail and the video title for a specific video can increase reach. Third, we draw on source credibility theory, elaboration likelihood model, color psychology, parasocial interaction, negativity bias and expectancy theory to provide an overview with multiple theoretical perspectives of the mechanisms involved when people browse through YouTube and make the decision to click a video or not.

2 Influencer Marketing

Influencer marketing involves the identification and use of social media influencers. In line with Lou and Yuan (2019, p. 2), we define a social media influencer as “first and foremost a content generator: one who has a status of expertise in a specific area, who has cultivated a sizable number of captive followers—who are of marketing value to brands—by regularly producing valuable content via social media”. An influencer creates and shares content related to niche areas of interest or expertise (e.g., politics, sports, gaming) on social media platforms such as YouTube, Twitter and Instagram. Individuals or consumers with an interest in the particular area can follow and interact with influencers to keep up with the latest news and trends.

Research has investigated influencer marketing’s impact in various contexts (e.g., De Veirman et al. 2017; Djafarova and Trofimenko 2019; Lou and Yuan 2019; Weismueller et al. 2020). For example, Lou and Yuan (2019) investigated how message value and credibility affect consumer trust, which ultimately influences brand awareness and purchase intention. Research into which content and influencer characteristics leads to increased value for brands - in form of brand awareness and purchase intention - is important, because it can showcase the effectivity of influencer campaigns. However, to the best of our knowledge, no research has investigated how influencer campaigns can increase their reach. This includes the reach within an influencer’s following (as not every follower necessarily clicks the video) and the reach beyond the influencer’s following. Investigating on how social media influencers can increase their reach is important as it can boost the performance of an influencer campaign.

3 YouTube’s Browsing Environment

This study focuses on YouTube, an online video-sharing platform, that allows users to create and upload videos that are viewed and shared by hundreds of millions of viewers. More specifically, over 2 billion logged-in users visit YouTube each month,

people watch over a billion hours of video a day and those videos receive billions of views (YouTube 2021). YouTube's browsing environment consist of a range of features, including a thumbnail, a video title, a verified badge and a label that displays the duration of the video. Figure 1 displays an overview of how the YouTube browsing environment is designed. YouTube has algorithms that usually detect user watching patterns and recommend content that consumers like based on their previous watch history. Thus, the YouTube browsing environment is heavily personalized. However, even when a video is suggested by the YouTube algorithm, it is not guaranteed that the user clicks on the video. Whether a user clicks on the video or not may depend on various features that were previously discussed. In the following, we examine those features in more detail.

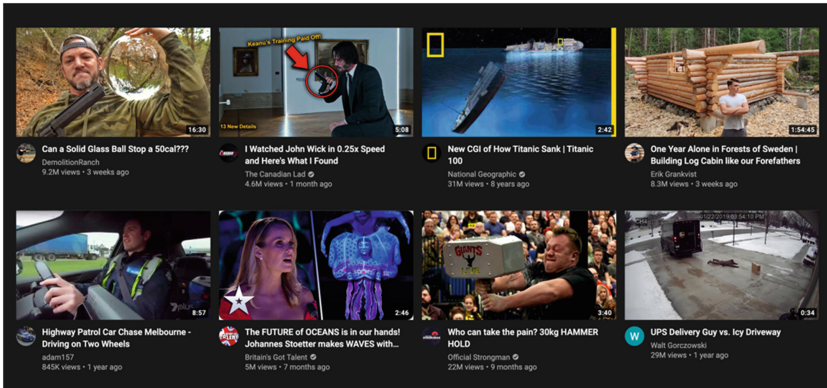


Fig. 1. YouTube browsing environment

4 The Impact of Thumbnails and Other Visual Cues on Video Clicks

4.1 Thumbnails

The most prominent feature in the YouTube browsing environment is the thumbnail. A thumbnail is either a randomly chosen frame of the video or a custom-made image from the video owner. Thumbnails act like billboards to help viewers decide to watch a video and often consist of a combination of photo, text and icons (see Fig. 2).

One of the most dominant characteristics in a thumbnail is color. Color theory has been widely applied in the marketing literature, including the context of brand recognition (Amsteus et al. 2015), product packaging (Garaus and Halkias 2020) and social media marketing (Yu et al. 2020). For instance, Yu et al. (2020) found that generally, individuals appeared more likely to respond to brighter and more saturated pictures on Instagram. Further, research on ad impressions found that more saturated images lead to an increase in click-through rates (Sokolik et al. 2014). More saturation in images appear to evoke greater levels of attention and arousal in people, which in turn increases their engagement with content that contain images with high saturation. Based on the above, we propose that increased colorfulness (saturation) leads to increased video clicks.



Fig. 2. YouTube thumbnail

Another dominant characteristic is whether a person is present in the thumbnail, or not. Research has found that one of the main drivers of why people engage with influencer content is the para-social interaction (PSI) the audience creates with the influencer (Lou and Kim 2019; Sokolava and Kefi 2020). PSI creates a feeling of personally knowing the influencer. While PSI is usually related to how openly the influencer engages with the audience, we argue that the presence of the influencer in the thumbnail may increase the feeling of closeness to an influencer, therefore, leading people to click the video. Hence, we hypothesize that the presence of an influencer in the video increases video clicks.

If the influencer is present, it is of interest which emotions are expressed through the influencer's face. The importance of emotions in affecting people's attitudes and behaviors have been widely discussed in a marketing context (for a review: Gaur et al. 2014). Research on the use of emotions on YouTube found that emotional videos ads positively impact sharing of the ad. Moreover, it was found that an element of surprise can increase shares of YouTube ads (Tellis et al. 2019). Beyond emotional content, previous studies have shown that emotional facial expressions capture visual attention (Sawada and Sato 2020). In sum, emotional and surprising content and emotional facial expression can increase people's attention and influence subsequent behavior. Based on the above, we suggest that surprising and emotional face expressions will lead to increased video clicks.

4.2 Video Title and Other Visual Cues

Perhaps, the second most dominant feature is the video title. A video title is restricted to 100 characters and the video owner can freely choose the title. Although, to the best of our knowledge, there is no research on video titles on YouTube and how they attract video views, there is a large number of studies on the importance of text in marketing (for an overview: Berger et al. 2020). In this study, we expect that text can increase people's

attention through capital letters and emotional words. Capital letters are used as an expression of emphasis, thus, making people more alerted (Posner and Boies 1971). In professional and personal settings capital letters are also used to signal strong emotions. Drawing on the elaboration likelihood model (Petty and Cacioppo 1986), we propose that people who are browsing through YouTube are in a low-effort mode, thus, being easily persuaded to click the video by visual cues that get their attention such as capital letters. Consequently, we expect the use of capital letters can increase video clicks.

Beyond capital letters, emotions are often expressed through positive and negative words. In our study, we can expect negative words to increase people's attention, hence, increase the likelihood of people clicking the video. This is underpinned by people's negativity bias (Rozin and Royzman 2001; Vaish 2008), which refers to people's tendency to attend more to negative stimuli rather than positive stimuli, which in turn has a greater effect on people's attitudes and behaviors. Therefore, we propose that negative words will lead to increased video clicks.

Other visual cues include the video duration and the verification badge. Practitioners and marketers alike have tried to find the optimal duration for videos on YouTube (Chi 2018; Tellis et al. 2019). Consumers live in a time-poor environment, which indicates that a video should be long enough to convey critical information, but short enough to suit the time constrained environment of consumers.

Thus, we can expect users to already take the video duration into account before even clicking a video. This is line with expectancy theory, which proposes that an individual selects a specific behavior based on the expected outcome (Vroom 1964). In our context, it is the time investment in relation to the benefit the video provides. While a very short or a very long video can likely provide benefits to the viewer, we expect videos with a mid-range length to show the highest benefit in relation to viewer's time investment. Thus, we argue an inverted U-shape between video duration and video clicks.

The verification badge next to the YouTube channel name is displayed when a channel has been verified by YouTube. To be eligible for verification, a channel needs to have at least 100,000 subscribers, a channel banner, description, profile picture, and content, and be active on YouTube (Google 2021). Consequently, the verification badge indicates credibility. Prior research on influencer credibility found that credibility can increase brand awareness and purchase intention (Lou and Yuan 2019; Weismueller et al. 2020). Drawing on source credibility theory, we hypothesize that the presence of a verification badge increases video clicks.

5 Conclusion

Influencer marketing has become an important marketing communications tool as it offers engagement with a large number of potential buyers in a short time period at lower cost than traditional advertising (Hudders et al. 2020). YouTube, which is one of the most successful social media platforms with more than 2 billion logged-in users each month, is the second most used platform for influencer campaigns (Mediakix 2019; YouTube 2021). Consequently, brands are regularly engaging those influencers to promote sponsored content on their YouTube channels. While a large number of studies focused on content characteristics and influencer characteristics to investigate how these

characteristics influence consumer attitudes and behaviors, research on what makes people click YouTube videos from influencers in the first place remains largely unexplored. Our study intends to close this gap and examine which features (i.e., thumbnail characteristics and video title) increase video clicks. In so doing, we provide specific advice on how changes in the thumbnail and the video title for a specific video can increase reach. An increased reach enables marketers to expose their advertising message to a larger audience beyond the followers of the influencer. More specifically, the advertising message may reach people who have similar interests as the followers of the influencer, but are not yet subscribed to the influencer's YouTube channel. What follows is a boost in performance for the influencer marketing campaign. A boost in performance is beneficial as influencer campaigns can increase brand awareness, brand attitudes and purchase intentions (Dehghani et al. 2016; Lee and Watkins 2016; Sokolova and Kefi 2020).

References

- Amsteus, M., As-Shaabani, S., Wallin, E., Sjöqvist, S.: Colors in marketing: a study of color associations and context (in)dependence. *Int. J. Bus. Soc. Sci.* **6**, 32–45 (2015)
- Berger, J., Humphreys, A., Ludwig, S., Moe, W.W., Netzer, O., Schweidel, D.A.: Uniting the tribes: using text for marketing insight. *J. Mark.* **84**(1), 1–25 (2020)
- Clement, J.: Social media - Statistics & Facts (2020). <https://www.statista.com/topics/1164/social-networks>
- Chi, C.: How Long Should Your Videos Be? Ideal Lengths for Facebook, Instagram, Twitter, and YouTube [Infographic] (2018). <https://blog.hubspot.com/marketing/how-long-should-videos-be-on-instagram-twitter-facebook-youtube>
- Dehghani, M., Niaki, M.K., Ramezani, I., Sali, R.: Evaluating the influence of YouTube advertising for attraction of young customers. *Comput. Hum. Behav.* **59**, 165–172 (2016)
- De Veirman, M., Cauberghe, V., Hudders, L.: Marketing through Instagram influencers: the impact of number of followers and product divergence on brand attitude. *Int. J. Advertising* **36**(5), 798–828 (2017)
- Djafarova, E., Trofimenko, O.: 'Instafamous' – credibility and self-presentation of micro-celebrities on social media. *Inf. Commun. Soc.* **22**(10), 1432–1446 (2019)
- Evans, N.J., Phua, J., Lim, J., Jun, H.: Disclosing Instagram influencer advertising: the effects of disclosure language on advertising recognition, attitudes, and behavioral intent. *J. Interactive Advertising* **17**(2), 138–149 (2017)
- Garaus, M., Halkias, G.: One color fits all: product category color norms and (a)typical package colors. *Rev. Managerial Sci.* **14**(5), 1077–1099 (2020)
- Gaur, S.S., Herjanto, H., Makkar, M.: Review of emotions research in marketing, 2002–2013. *J. Retail. Consum. Serv.* **21**(6), 917–923 (2014)
- Google: Verification badges on channels (2021). <https://support.google.com/youtube/answer/3046484?hl=en>
- Hall, K.: The Importance of Authenticity in Influencer Marketing (2016). <https://www.sproutcontent.com/blog/the-importance-of-authenticity-in-influencer-marketing>
- Hudders, L., De Jans, S., De Veirman, M.: The commercialization of social media stars: a literature review and conceptual framework on the strategic use of social media influencers. *Int. J. Advertising* 1–49 (2020)
- Lee, J.E., Watkins, B.: YouTube vloggers' influence on consumer luxury brand perceptions and intentions. *J. Bus. Res.* **69**(12), 5753–5760 (2016)

- Lou, C., Kim, H.K.: Fancying the new rich and famous? explicating the roles of influencer content, credibility, and parental mediation in adolescents' parasocial relationship, materialism, and purchase intentions. *Front. Psychol.* **10**(2567) (2019). <https://doi.org/10.3389/fpsyg.2019.02567>
- Lou, C., Yuan, S.: Influencer marketing: how message value and credibility affect consumer trust of branded content on social media. *J. Interactive Advertising* **19**(1), 58–73 (2019)
- Mediakix: Influencer marketing 2019: key statistics from our influencer marketing survey (2019). <https://mediakix.com/influencer-marketing-resources/influencer-marketing-industry-statistics-survey-benchmarks/#instagram>
- Petty, R.E., Cacioppo, J.T.: The Elaboration likelihood model of persuasion. In: Petty, R.E. (ed.) *Communication and Persuasion: Central and Peripheral Routes to Attitude Change*, pp. 1–24. Springer, New York (1986). https://doi.org/10.1007/978-1-4612-4964-1_1
- Posner, M.I., Boies, S.J.: Components of attention. *Psychol. Rev.* **78**(5), 391–408 (1971)
- Rozin, P., Royzman, E.B.: Negativity bias, negativity dominance, and contagion. *Pers. Soc. Psychol. Rev.* **5**(4), 296–320 (2001)
- Sawada, R., Sato, W.: Emotional attention capture by facial expressions. *Sci. Rep.* **5**(1), 14042 (2015)
- Scott, D.M.: *The New Rules of Marketing and PR*, 5th edn. Wiley, New York (2015)
- Sokolova, K., Kefi, H.: Instagram and YouTube bloggers promote it, why should I buy? How credibility and parasocial interaction influence purchase intentions. *J. Retail. Consum. Serv.* **53**, 26 (2020). <https://doi.org/10.1016/j.jretconser.2019.01.011>
- Sokolik, K., Magee, R.G., Ivory, J.D.: Red-hot and ice-cold web ads: the influence of web ads' warm and cool colors on click-through rates. *J. Interactive Advertising* **14**(1), 31–37 (2014)
- Tankosvka, H.: Daily social media usage worldwide 2012–2019 (2021). <https://www.statista.com/statistics/433871/daily-social-media-usage-worldwide>
- Tellis, G.J., MacInnis, D.J., Tirunillai, S., Zhang, Y.: What Drives virality (sharing) of online digital content? the critical role of information, emotion, and brand prominence. *J. Mark.* **83**(4), 1–20 (2019)
- Vaish, A., Grossmann, T., Woodward, A.: Not all emotions are created equal: the negativity bias in social-emotional development. *Psychol. Bull.* **134**(3), 383–403 (2008)
- Vroom, V.H.: *Work and Motivation*. Wiley, Oxford (1964)
- Weismueller, J., Harrigan, P., Wang, S., Soutar, G.N.: Influencer endorsements: how advertising disclosure and source credibility affect consumer purchase intention on social media. *Aus. Mark. J. (AMJ)* **28**(4), 160–170 (2020)
- Xiao, M., Wang, R., Chan-Olmsted, S.: Factors affecting YouTube influencer marketing credibility: a heuristic-systematic model. *J. Media Bus. Stud.* **15**(3), 188–213 (2018)
- YouTube.: *YouTube for Press* (2021). <https://www.youtube.com/intl/en-GB/about/press>
- Yu, C.-E., Xie, S.Y., Wen, J.: Coloring the destination: the role of color psychology on Instagram. *Tourism Manag.* **80**, 104110 (2020)
- Yuan, S., Lou, C.: How social media influencers foster relationships with followers: the roles of source credibility and fairness in parasocial relationship and product interest. *J. Interactive Advertising* **20**(2), 133–147 (2020)



Online E-Communication Channels: The Impact of CSR and Reviews on Purchase Intent

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Abstract. The ever-growing online shopping environment provides an opportunity for companies of all sizes to reach expanding customer bases across borders. However, research on the factors influencing online purchase intent are limited, and even more from an international point of view given that geographical marketplace barriers are less evident online. This paper explores the various antecedents of online purchase intent in terms of e-communication strategies (e.g. corporate social responsibility [CSR], peer reviews and expert opinion) for international consumers. To approach this as a global phenomenon, an international dataset of 804 international online consumers is analysed. The study finds complexity in the actors and pathways that inform purchase intent in the online retail context. Particularly, it finds that a company's CSR has no direct effect on purchase intent but is mediated by information received from online reviews by peers and experts as intermediary e-communications channels. This suggests that online retailers must consider other communication strategies, beyond the traditional buyer-seller dyad, to boost CSR perceptions and purchase intent. The study offers a first step to theorising the online retail context as an international phenomenon where traditional marketing concepts currently remain under-problematised.

Keywords: CSR · E-communication strategies · E-WOM · Influencers · Online relationship marketing

1 Introduction

Marketing communications in the online context is considered increasingly important to connect retailers and brands with their consumers (Killian and McManus 2015) by building relationship capital (Etter and Fieseler 2010) and trust (Kim and Peterson 2017). While there is the viewpoint that consumers prefer offline marketing channels in terms of the physical store (see Frambach et al. 2007), it is no longer adequate to assume such preferences given the rise in mobile technologies and online marketplaces (Bacile et al. 2014; Thaichon and Quach 2015). This is because the Internet is known as an interactive space for retailers and consumers to communicate with one another (Boateng

2019), where both products and brands can be regarded as international (see Yamin and Sinkovics 2006; Stallkamp and Schotter 2019).

In contrast to traditional unilateral marketing communications pathways (Gurău 2008), online marketing channels – or e-communications – is contingent on a dialogue between the retailer and consumer, which subsequently increases customer loyalty and equity over the duration of the relationship (Kumar and George 2007; Boateng 2019). Online marketing communications is considered distinct in terms of its *interactivity*, *transparency* and *memory* (Gurău 2008). Specifically, the Internet allows for multiple sources of interaction between retailers and their potential consumers, as well as other actors. Moreover, information is both transmitted and stored in cyberspace. This means that information about a retailer, brand or product is accessible to *all* internet users and is not as easily removed. Together, these aspects provide online consumers with more power in the relationship through intensified online social networks where multiple actors are involved in the transmission of information (see e.g. Constantinides et al. 2008; Labrecque et al. 2013; Lou and Yuan 2019; Melancon and Dalakas 2018).

Although studies into the antecedents of online purchase intent have been increasing in popularity, with implications for both online marketing communications theory and practice (e.g. Beukeboom et al. 2015; Lee et al. 2017), much remains to be known about how various antecedents interact. While some emphasise the importance of corporate branding (e.g. Chen-Yu et al. 2016) and reviews (c.f. Camilleri 2017) by not only the online retailer but also intermediary actors such as influencers (cf. Jacobsen 2015; Lindh and Lisichkova 2018; Lou and Yuan 2019), others explore the communicative effects of corporate social responsibility (CSR) in the online context as an emerging field of interest (see Anastasiadou et al. 2019; Dincer and Dincer 2010). Particularly, CSR is becoming increasingly important in the contemporary marketplace which attaches more importance to sustainable consumption. To this end, some argue that CSR can be used as a strategic tool for companies to interact with consumers in the co-creation of brand value in the online context (Etter 2013; Uzunoğlu et al. 2017). This is because consumers often attribute positive perceptions to companies that are socially responsible (Becker-Olson et al. 2011; Gürhan-Canli et al. 2018).

It currently remains unclear how various e-communication strategies interact on the online retail context to affect purchase intent for *international consumers* as an entity. Previous research into online consumer behaviour has looked at national or cross-national datasets (e.g. Hudson et al. 2016), asserting that retailers target marketing communications strategies to consumers in terms of their cultural orientations (e.g. Becker-Olsen et al. 2011). Nevertheless, others assert the Internet as a global phenomenon that knows no geographical, socio-political or cultural boundaries (see e.g. Safari et al. 2013). On the one hand, the conventional viewpoint asserts that online retailers should ‘personally’ communicate and interact with the global consumer through targeted e-communication strategies (Ang 2011). This would lead to targeted consumer groups in terms of product offering (Pope and Waeraas 2016). On the other hand, there is the assumption that online retailers can gain from broad-scope marketing and/or CSR strategies which target international consumers as an entity (see Anastasiadou et al. 2019). This is becoming especially evident as globalisation, internationalisation and digitalisation compress time and space. Consequently, Anastasiadou et al. (2019) argue that studies into the antecedents

of purchase intent as cross border, international and communicative phenomenon are needed. This responds to the notion that international marketing communications are not bounded by the limitations of space and time, in contrast to many traditional studies in international marketing, which traditionally concern physical and psychic distance to demonstrate the need of differences in strategies between countries (Safari et al. 2013; Yannopoulos 2011).

The aim of this study is to explore the various antecedents of online purchase intent in terms of e-communication strategies (e.g. CSR, peer reviews and expert opinion) for international consumers. Given the increasing importance attached to CSR for both domestic and international brands (Schramm-Klein et al. 2016; Ferreira and Ribeiro 2017), it investigates the consumers' perceived value of CSR (by the company and/or intermediaries)¹, product reviews by other users (usually posted by previous customers who already purchased the product (Elwalda and Lu 2016; Park et al. 2007) and expert opinion (via external influencers, who often express their opinion through social media platforms) as ever-important e-communication channels that interact to inform online purchase intent. These antecedents are tested through a structural equation model of 804 international consumers. This has the primary aim of developing e-communications marketing theory as an interactive phenomenon based on a series of (f)actors which incite global consumers to purchase online. Here, the antecedents of purchase intent are posed as decisive for building and sustaining relationships between the retailer and the online consumer (Park et al. 2007).

The findings contribute to online marketing communications studies by proposing that third-party actors (i.e. intermediaries such as influencers or the general population) are essential for building consumer *perceptions* of a product or a brand. It also contributes to relationship marketing theory by elaborating on the prerequisites for building consumer trust in the online context, beyond the physical store and physical interactions. Here, purchase intent is built through social interaction on, for example, social media websites that are not only set up by the store. Finally, the study contributes to emerging studies that present online consumers as an international phenomenon. For practitioners, it suggests that the use of intermediary actors and social media channels, as well as an openness to an international presence are profitable strategies. The study confirms that it is especially important for online consumers to engage in active and constructive dialogue with the company and its products.

2 Theoretical Background and Hypotheses

Online marketing communications is arguably contingent on both the e-communication strategies adopted by the retailer *and* the relationships between the involved actors. Nevertheless, in contrast to traditional marketing strategies, the outcome in the online context is not only contingent on the firm. This is because the online context provides a forum for both satisfied and unsatisfied stakeholders to express opinions about a product or a brand. Here, marketing e-communications strategies imply that consumers can be swayed by opinions from, for example, review websites, social media posts and online

¹ Note that the term 'intermediary' is used in this paper in its literal sense as an intermediary channel in the online context that could affect purchase intent such as an online influencer.

influencers in addition to the retailer. This ‘new’ marketing context allows consumers to communicate on equal terms (see Castello et al. 2016) with retailers as communication about a product or a brand is increasingly based on interpersonal relationships, trust and credibility.

2.1 E-Communication Strategies for Online Retailers

Online retailers strategise through new and adapted marketing channels to reach wider groups of consumers. E-communication strategies serve different functions for online retailers to manage corporate brand or product images by navigating online information and dialogues. It is no longer enough for companies to have nicely designed, functional websites; online consumers expect retailers to actively engage in dialogue with them (Jacobsen 2015). Particularly, the online context increasingly asserts that consumers’ opinions are heard, and their needs are met (Golob and Podnar 2014). To this end, Killian and McManus (2015) propose that e-communication strategies can be broadly categorised in terms of *a*) relationship management, *b*) providing news, *c*) customer engagement through creative campaigns and *d*) entertainment functions through, for example, games. Thus, online platforms can serve as a means for retailers to deliver information to potential customers in a timely manner (Colleoni 2013). This information, however, is no longer unidirectional as conventional marketing communications theory asserts. Rather, it embraces a duality between the retailer and consumer through multiple pathways for the online retail context.

Previous studies have found that the relationship between the retailer and consumer is improved through online discussions with peers and/or the brand (Johnstone and Lindh 2018; Shen et al. 2016). Here, relationship strength is based on social ties and interpersonal trust. Particularly, e-communication is more likely to be effective when consumers source information from others in their network who they perceive as trustworthy. Given that trust is socially embedded (Granovetter 1985), trustworthiness ultimately depends on the frequency of social interactions and the intimacy of the exchanges in terms of their personalisation (see Marsden and Campbell 1984; Ros-Diego and Castelló-Martínez 2012). This implies that user activity and connectivity in online platforms is directly proportional to the level of trust perceived between the involved actors, and subsequently the trust attributed to a certain retailer, brand or product. Therefore, online marketing communications arguably rests on the pillars of social interaction and online relationships between the involved actors.

2.2 Actors in the Online Retail Context

The online, international retail context challenges conventional marketing communication strategies as marketing relationships become more complex due to a higher number of actors being involved. To make sense of this complexity, it is first necessary to overview the actors that serve as information and communication conduits in the online context. This helps frame the antecedents of purchase intent through e-communications strategies based on those involved.

The Internet provides a wide array of information which can be accessed instantaneously from any geographical location. Consequently, consumers in the online context

can obtain information about a product or a retailer through two main channels, namely: the retailer itself or from intermediary actors in the online context. First, online retail websites can be regarded as primary actors in the consumers social network (Brown et al. 2007). These corporate websites communicate a particular message about the company, from the company, and are typically one-way channels. Nevertheless, retail websites increasingly offer consumers the opportunity to contact the company and/or give a review of a product they have tried; i.e. return a message which can help retailers improve their future product or service offerings. Second, conventional word of mouth (WOM) channels (e.g. family or friends) are increasingly complemented online by electronic-WOM (eWOM) sources, e.g. social media posts, review websites, blogs, celebrities, influencers etc. (Ghazi et al. 2013). These eWOM sources are regarded in this paper as intermediary actors in the online context between the retailer and the consumer. They exist in the cyberspace of social networks or other review platforms and do not constitute a physical meeting between two actors. Whereas WOM tends to occur between people in close proximity with prior ties, eWOM occurs between participants in various geographies that are connected through a network of people (Kozinets et al. 2010; Lou and Yuan 2019; Zahoor and Qureshi 2017). To this end, eWOM exhibits some unique characteristics in terms of its enhanced volume, reach, dispersion, anonymity and salience (see King et al. 2014 for an overview). Nevertheless, eWOM is increasingly important for informing consumer decisions, both online and in the physical store.

Peer reviews are considered extremely valuable eWOM channels for informing purchase intent (Gretzel and Yoo 2008). This is because (potential) consumers feel relatable to one another as part of a broader social network where trust and credibility are built through online interactions and exchanges. Additionally, expert reviews (i.e. from professionals in a particular field or celebrity influencers) are also deemed important in the online context (Johnstone and Lindh 2018; Lou and Yan 2019). Such ‘experts’ can influence their followers through product or brand reviews which often product a direct link to the retail website for potential consumers. While indeed they may be paid by companies to do this, the positive effect of expert reviewers in influencing purchase intent is widely known due to their perceived credibility and trustworthiness (Johnstone and Lindh 2018). This means that while online experts are often not physically close to their followers, they are often perceived as close in terms of their desirably attributes and characteristics as perceived by their followers. This is due to the Internet breaking down the physical or metaphorical boundaries of space and time. Generally, individuals follow others online who they feel similar to in terms of interests. They may also follow individuals who they aspire to be like. Thus, the potential role of online experts, particularly influencers, is huge and increasingly realised for marketing communications strategists. Nevertheless, the lack of ‘expertise’ for regular online reviewers (i.e. a peer on social media), however, is compensated by the fact that s/he is not paid to give an opinion (see Dou et al. 2012). This may, in fact, increase the legitimacy or trustworthiness of such opinion by a wider group of online shoppers, beyond the realm of the influencer’s sphere.

2.3 Hypotheses

It appears that the relationships and communication between online actors are increasingly important for increased online purchase intent. Online purchase intent can be defined as the intent to purchase a product from an online retailer, rather than merely signaling attitude towards that retailer (see Spears and Singh 2004). Consequently, it offers practitioners with estimations of future purchase likelihood. The discussion thus far suggests that international consumers are more likely to purchase from online retailers if they receive information and dialogue about the company or brand and its products from not only the company itself, but also other actors in the online context (e.g. social media peers or expert reviewers). This is implicitly founded upon the principles of relationship marketing and the notion of trust, particularly interpersonal trust between the involved actors (i.e. individuals, the company and its website). Resultantly, the following hypotheses are built by expanding on various types of communication by online actors as possible antecedents of increased purchase intent to build the research model.

2.3.1 CSR in Online Relationships

In recent years, corporate social responsibility (CSR) has become increasingly important due to various institutional pressures. On the one hand, companies are put under more pressure from multilevel governance structures that promote sustainable development. On the other hand, consumers are becoming more aware of the social and environmental implications of unsustainable consumption and business practices, thus making communicating CSR activities a relevant tool in marketing. This has led to a new wave of literature that looks at CSR, from a communications perspective and how consumers perceive it as relevant for their desire to purchase from a specific vendor.

In the general marketing communications and CSR literature, much work has already been done which is also relevant for the online context. CSR communication is deemed important for building corporate reputation and stakeholder relations (Becker-Olson et al. 2011). It has long been known to yield benefits in terms of sustained business (see Maignan et al. 1999), and globally irresponsible firms tend to suffer in terms of proposed purchase intent (e.g. Ferreira and Ribeiro 2017). Resultantly, companies are expected to communicate CSR openly and responsively by listening to external stakeholders and responding to criticism and questions in the online context (Perks et al. 2017).

Nevertheless, studies into online CSR communication are in their relative infancy and levels of online CSR interactivity tend to be low (Dincer and Dincer 2010). For example, Etter (2013) suggests that online retailers tend to adopt a *reactive* interaction approach to CSR communication on Twitter, responding only when their CSR issues are explicitly addressed by other users. Kent and Taylor (2016) further that the strength of e-communications channels as relationship-building tools between the company and consumer is currently under-utilised for CSR actions (see also Ros-Diego and Castelló-Martínez 2012). Moreno and Capriotti (2009) suggest that this is because online CSR communication remains largely a unidirectional phenomenon between the company and its (potential) consumers. Arguably, consumer perceptions of CSR by an online vendor is potentially decisive for informing purchasing behaviour. As the issue is becoming increasingly relevant, more and more consumers can be expected to take CSR into

consideration before making a purchase (Anastasiadou et al. 2019; Shabib and Ganguli 2017). This applies to both domestic and international retailers to varying degrees (Ferreira and Ribeiro 2017).

Arguably, online CSR communication can be used as a strategic tool for companies to *interact* with their consumers in the co-creation of brand values (Etter 2013; Uzunoğlu et al. 2017). There is a general understanding that the more interactive a CSR message is, the more it elicits a response from the user (Abitbol and Lee 2017). Consumer engagement with an online product or brand is therefore contingent on two-way communication (see Ettinger et al. 2018) and the congruence between the company's CSR messages and its overall mission or business model (Abitbol and Lee 2017). As such, there is the expectation that the online retailers' use of e-communications channels to convey messages and discuss their CSR efforts in order to build consumer trust through interactivity and transparency (Du et al. 2007), rather than merely adopting a reactive approach to this communication channel. By inciting a genuinely positive perception of the company's CSR and responding to consumer queries, companies can build their corporate reputation and consumer purchase intent (Kollat and Farache 2017). Consequently, the first hypothesis is proposed:

H1. An online retailer's perceived CSR work positively influences consumer purchase intent

Here, the emphasis is on the consumers' perception of an online retailer's CSR work. In this sense, it refers to a preference among the consumers for a company to appear to act sustainably, rather than being a divisive feature of a specific product.

2.3.2 Online Reviewers

Social media marketing is considered particularly effective for consumer relationship management and e-communication strategies (Filo et al. 2015). For example, it allows for e-WOM between not only retailers and consumers (Felix et al. 2017), but also between peers or celebrities and consumers (see Zeng and Gerritsen 2014) by sharing experiences with/about a brand or product (Hudson et al. 2016). Consequently, social media marketing can be viewed as an effective eWOM strategy which is a social phenomenon drawing on the fundamentals of relationship marketing, and particularly interpersonal trust (see Morgan and Hunt 1994). It is instrumental for relationship management (Maecker et al. 2016), brand loyalty and awareness (Bernritter et al. 2016; Shi et al. 2016) and increased sales (Trusov et al. 2009), particularly for weaker brands (Ho-Dac et al. 2013). It also helps predict consumer behaviour (see Hamilton et al. 2016).

Much research has been conducted on the influence of online reviews for increased purchase intent. Online reviews regard communication between various actors in the online retail context. Here, consumers evaluate product and corporate reviews based on the perceived trustworthiness and credibility of those reviewing the product, brand or company (Shan 2016). Therefore, online reviews are particularly relevant for the exploration of online marketing communications between the focal actors (i.e. the retailer and consumer) and intermediaries (i.e. eWOM sources).

While reviews are used to reduce uncertainty about a product, service or brand by informing consumer attitudes (Reimer and Benkenstein 2016), there are not exempt

from critique. Particularly, source credibility poses a major problem for online marketers (Banerjee et al. 2017) and the level of trustworthiness in online reviews can be questioned. The motivations to engage in online reviews are multiple. While some find that participants engage in eWOM for self-enhancement (e.g. De Angelis et al. 2012), others find that it is for altruistic reasons; i.e. to help other consumers (Hennig-Thurau et al. 2004). Moreover, various studies have found that ‘middle-of-the-road’ consumers are less likely to review products or services (e.g. Hu et al. 2009) and there is the need to ensure balanced feedback (King et al. 2014). This is because only those really happy or really unhappy about a product, brand or retailer are likely to use eWOM channels to express their opinions (Hu et al. 2009). To this end, the reviewers are caught in a relationship whereby they are not only reviewing the product or retailer but are also concurrently being reviewed by the potential customer. Particularly, potential consumers evaluate the reviewer and review through message content and review extremity (Filieri 2016). Here, the relationship between the reviewer and consumer within a social network is considered important for increasing brand trust, loyalty and sales (Jun et al. 2017).

Arguably, the distance between the consumer and the physical product in the online retail context leads consumers to seek online reviews. As such, the third-party review as intermediary actor in the online context can be considered an important antecedent of purchase intent. The review can also be considered an integral e-communications channel within which trust is established in not only the person reviewing, but also the product or a brand as an indirect effect (see Johnstone and Lindh 2018). As previously suggested, these reviewers as eWOM intermediaries regard both reviewers from the general population (i.e. peer reviewers) and those which entail some form of celebrity status (i.e. expert reviewers such as influencers). Together, these e-communication channels are deemed important for informing online purchase intent by strengthening the focal relationship between the retailer and consumer.

First, the opinions of reviewers and review websites, in addition to review functions on some retailers’ own websites have become more valuable as well as have intensified in recent years. This is because reviews provide (potential) consumers with information to inform not only attitudes, but purchase intent. Specifically, it has been argued that reviews made by the general population increase the trustworthiness of not only the reviewer but also the product or brand (Dou et al. 2012). This is in comparison to reviews made by the retailer or producer which may be viewed as biased. Therefore, the second hypothesis is:

H2. Online reviews of the product or retailer by the general population positively influence consumer purchase intent

Second, online ‘expert’ reviews made by celebrity influencers or professionals are also influential for increasing purchase intent for not only an online product, but also a specific webstore that they may be endorsed to promote. Rather than forming a part of the general population, online expert reviewers regard some form of celebrity status which is illustrated through their multitude of followers. These experts often test and comment product in films, which they post online. In contrast to reviews made by other consumers/users found on the retailer website, these are found in other external online

forums such as YouTube or other similar platforms. Thus, expert reviews have the potential to influence the purchase intent of vast groups of the general population. Arguably, they exhibit more power in the review process from a corporate strategic perspective and may be deliberately employed by a company to positively review their products. Various online marketing studies have highlighted the importance of top, celebrity reviewers or influencers for retailers marketing strategies (e.g. Banerjee et al. 2017; Johnstone and Lindh 2018). Therefore, the third hypothesis is:

H3. *Online reviews of the product or retailer by expert reviewers positively influence consumer purchase intent*

2.3.3 Potential Indirect Effects

Evidently, product or brand communication by the company as well as external reviewers as intermediaries in the online context are important for increasing purchase intent. Arguably, combining these antecedents can help improve the strength of the relationship between the consumer and retailer in terms of purchase intent for international consumers.

First, the conventional CSR communications model, based on one-way communication from the firm to the field to influencer consumer perceptions of the retailer, is presented as increasingly limited. In this sense, the effect of CSR communication by the online retailer itself may not be enough to explain purchase intent. This is because one-way communication channels can be regarded as *telling* stakeholders a particular story (i.e. sensegiving), rather than *involving* them in constructive dialogue (i.e. an iteration between sensegiving and sensemaking) (Morsing and Schultz 2006). Further, it may also call external stakeholders to question the true CSR practices of a firm by defending its legitimacy through extensive one-way CSR communications campaigns, which may be received with scepticism (Ashforth and Gibbs 1990). Consequently, Perks et al. (2017) argue that consumer involvement is significant in the evaluation of a company as socially responsible and therefore trustworthy. Thus, CSR currently requires ‘more sophisticated CSR communication strategies’ to ensure consumer engagement (Morsing and Schultz 2006, p. 323). This may involve consumers engaging in CSR dialogue with the company itself and/or intermediaries, thus having the potential to explain the focal relationship between CSR and purchase intent. Here, the opinion of other actors in the online context may help form consumer opinion about an online retailer and subsequently affect purchase intent. In this sense, even though direct CSR communication may be perceived as important, it alone may not be enough to inform purchase intent. Therefore, an indirect effect of CSR on purchase intent by opinions from reviewers and experts is proposed:

H4a. *The effect of an online retailer’s CSR as perceived by the consumer on purchase intent, is mediated by reviews by the general population*

H4b. *The effect of an online retailer’s CSR as perceived by the consumer on purchase intent, is mediated by expert reviews*

The final assumption rests on the notion that consumers who seek opinions online, do so from multiple sources. This asserts that trust in the product or retailer is increased

through various eWOM intermediaries who express opinions that guide action, rather than merely relying on one information source. Hence, the final hypothesis is offered:

H5. The effect of online peer reviews on purchase intent is strengthened by the reviews of experts

3 Method

The method to investigate is data collection through a standardized survey and hypotheses testing in three models, developed with LISREL. This part discusses the survey and shows the relevant statistical outputs for the analysis.

3.1 Survey Administration and Data Set

The aim of this study is to explore the various antecedents of online purchase intent in terms of e-communication strategies (e.g. CSR, peer reviews and expert opinion) on increased online purchase intent for international consumers. Particularly, the online retail context is considered global in its outlook and reach (Safari et al. 2013). Therefore, in accordance with recent online consumer research, this study looks at an international dataset of consumers as an emerging marketing phenomenon which requires broad-scope marketing strategies that account for consumption preferences as increasingly international (e.g. Anastasiadou et al. 2019). As such, the consumer sample is not segmented in terms of cultural or national orientations which arguably diminish over space and time for the online retail context.

Respondents were sent a weblink to the survey through online social networks, email and other mobile technologies. Potential respondents were further encouraged to forward the survey link to others in their social network, and where possible, survey links on social media platforms were shareable. The survey period lasted one month, yielding 804 responses from 57 countries (see Appendix A). This was composed of 51% females and 49% males, and most respondents were in the 21–30 age category, reflecting the predominance of millennials (i.e. those born between the early 1980s and mid-1990s (Mangold and Smith 2012)) using such interactive technologies (see Pate and Adams 2013).

3.1.1 Considerations

Searching for respondents buying fashion online poses several difficulties. First, it is impossible to define a population as it would require assessing the number of online consumers in the world. Therefore, no population is defined in this study and instead of assembling a “sample” in the conventional sense, appropriate respondents were searched for. This achieved a *data set* fulfilling the requirements of being a large and demographically varied group of online consumers around the globe. Furthermore, as the respondents received the weblink through different media forms for taking the survey, its cover letter clearly stated the purpose of the research and the role of the participants for this investigation.

3.2 Survey Items, Data and Validity

To test the hypotheses based on the four concepts of purchase intent, CSR, online peer review and expert opinion, latent variables were formed. Purchase intent indicates the intent for future purchases (see Spears and Singh 2004) and is an established performance variable. The items used in this study have been previously developed, serving as proxies of future purchase behaviour (Beldad et al. 2016; Hausman and Siekpe 2009; McKnight and Chervany 2001). These were specifically formulated to capture future *online* purchase intent as well as the expansion of online purchase intent into different product categories. While the effects of the various e-communication channels may also increase future in-store sales, this study concentrates on the online retail context as an international phenomenon whereby consumers can buy products from geographies beyond their locale. For CSR, the items used have been pretested in previous studies on the international consumer (Anastasiadou et al. 2019; Shabib and Ganguli 2017). These regard three items for CSR in terms of the activities a company presents as engaging (e.g. regarding environmentally friendly production and various social conditions). Meanwhile, the two items used to test the involved intermediaries of peer reviewers from the general population have been formulated specifically for this study, although inspired by previous research on e-WOM (e.g. Amblee and Bui 2011). Particularly, items were constructed to assess how online reviews from peers contribute to a sense of trust or security in the product and its evaluation (see also Costa e Silva et al. 2012), as well as an evaluation of the importance of online reviews. Finally, the extent to which expert advice informs purchase intent regards items which have been pre-tested in a previous study (Lindh and Lisichkova 2018). These regard the aspects of following experts and taking their advice seriously. Given that the survey contained both pre-tested and adapted items, which are necessary to find new knowledge in some contexts, the survey was pre-tested in a smaller group of 30 people to ascertain that the questions were logical, clear and that no two were nearly identical or possible to mix up.

When using scales that are only partly validated by previous research, as in this case, a way of validating them is by iterations in a measurement model. Fornell and Larcker (1981) and Steenkamp and van Treijp (1991) explain that through iterations, the program points to the appropriate latent variables (construct) by examining the data. In this case, a few of the items used in the standardised survey were omitted for the purpose of this research as they did not fit into the latent variables. For the items regarding new or unexplored constructs, such as those on reviews by other consumers or information from experts, these iterations are extra important. They show in this case that the items about reviews that were asked to measure the impact of online reviews by anyone who already purchased the product, indicate the same construct, which then is named “influence from reviews”. Similarly, the items on how experts are important are shown to indicate on the same construct, named “influence from experts”. This explorative approach does not diminish the importance of logic with theory, which on the contrary, is quite important (Eriksson 1998; Jöreskog and Sörbom 1993). However, in this survey, all items are grouped in an order that seems logical to respondents; which was also checked in the pre-testing process to remove errors. This means that the items indicating e.g. influence from reviewers are found in different places in the survey, but for the measurement model, they were put together.

The primary issue in testing the measurement model is to look for discriminant (that latent variables measure different phenomena) and convergence validity (that the items in one construct load adequately, i.e. measure the same phenomenon). The data important to examine are the R^2 loadings which should be over 0.2; the t-values which should be over 1.96 and the factor loadings (completely standardised solution) which should exceed 0.3 (Eriksson 1998; Holm et al. 1996; Jöreskog and Sörbom 1993). The items that meet these criteria for the suggested latent variables in the measurement model are displayed in Table 1.

Table 1. Constructs and indicators

Constructs and indicators	R2	t	Factor loading
<i>CSR</i>			
It is important to me that the company I buy from engages in environmentally friendly production	0.51	16.94	0.72
It is important to me that the company I buy from treats employees well	0.79	8.42	0.89
It is important to me that the company I buy from engages in fair trade	0.71	11.38	0.85
<i>Purchase intent</i>			
I intend to keep on buying from the Internet/web	0.48	17.04	0.69
I believe that I will buy more online in the future	0.90	3.32	0.95
I want to buy other things (that I have not bought previously) from the Internet in the future	0.59	14.51	0.77
<i>Influence from reviews</i>			
Reviews make me feel secure when buying online	0.44	9.68	0.75
When buying online, how important are reviews in your evaluation of products?	0.56	6.62	0.67
<i>Influence from experts</i>			
I follow experts in the field that I am interested in	0.68	5.93	0.82
I take advice from experts seriously	0.70	5.42	0.84

To find causalities, the hypotheses were tested in a structural equations model. Structural equation modelling is a frequently used method in marketing research to assess empirically complex models and contribute to new theoretical ideas (Martínez-López et al. 2013). In this paper, LISREL (as developed by Jöreskog and Sörbom 1993) is applied to develop the model (Fig. 1, shown in the results section) with a set of items to form each latent variable. The method also permits for mediating effects to be shown, although referred to as “indirect effects” in the LISREL output. A mediated effect according to Baron and Kenny (1986) is when a path (between e.g. A and B) is not significant (and the hypothesis rejected) but other paths between e.g. A -> C and C -> B are significant to imply that the relationship between A and B is explained by C. In the case

of this analysis, there are indirect effects supporting the set of hypotheses suggesting mediation. In the case of how CSR effects purchase intent, there is an indirect but not a direct effect. Meanwhile, in the case of the effects by reviews (expert and general) there are both direct and indirect effects. In the analysis of the causal model shown in Fig. 1, the indirect effect by CSR on purchase intent is displayed. It shows that reviews by the general public and experts together mediate. In order to analyse them separately, the model was divided into two in LISREL (testing additional to the main model). When running the model as two, all values and indexes still meet the given criteria for validity and in both cases the path from CSR to purchase intent is insignificant, and the indirect effect showing mediation are significant (their values shown in Fig. 1). The result for the specific model is elaborated on in the result section.

A causal model achieved through LISREL concerns also nomological validity, assessed in terms of p-value that is to be significant (btw 0.01–0.05). Other ways to ascertain fit of the data to the model are the use of fit indexes (their respective references shown in Table 2). All given criteria are met for the model developed (those values are presented in Table 1 and Fig. 1, this model is referred to as Model 1 in Table 2), but as the mediation test also involved testing the two mediating constructs in separate models, Table 2 on fit indexes shows the values also for the two other test models, referred to as Model 2 (to find mediation by reviews from the public) and Model 3 (developed to test for mediation by experts).

Table 2. Fit indexes, n = 804

Fit measures	Fit guideline	Reference	Model 1	Model 2	Model 3
(p-value)	$P \geq 0.05$		(0.03)	(0.02)	(0.04)
Chi-Square /df	$P \leq 3.0$	Segars and Grover (1993)	1.62	1.98	1.55
GFI	$P \geq 0.90$	Hayduk (1987)	0.99	0.99	0.99
AGFI	$P \geq 0.80$	Hayduk (1987)	0.98	0.98	0.98
CFI	$P \geq 0.90$	Byrne (2001)	0.99	0.99	0.99
TLI (NNFI)	$P \geq 0.90$	Bentler and Bonnet (1980)	0.99	0.99	0.99
RMSEA	$P \leq 0.08$	Byrne (2001)	0.03	0.03	0.03

4 Results

To test the models, paths were evaluated in terms of t-values and estimates. T-values that are > 2 and significant (estimates of at least 2*) are deemed as supporting the hypotheses, and those with lower values are not supported (Fig. 1).

Interestingly, H1 which proposes that the perceived CSR by the online retailer positively impacts purchase intent for international consumers is not supported. Nevertheless, all other paths are significant, thus supporting the other hypotheses. Particularly, not only

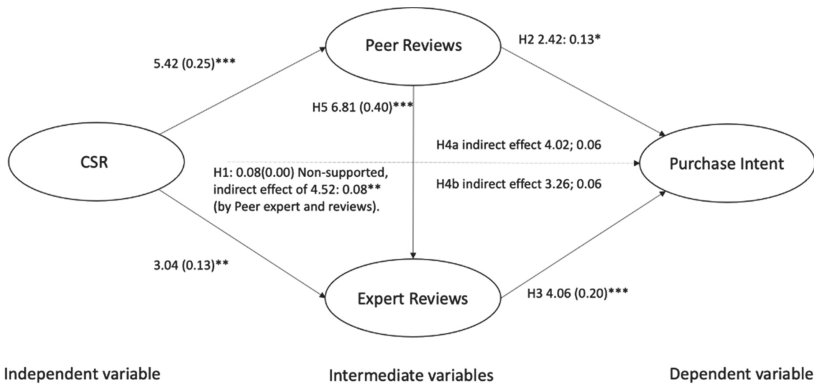


Fig. 1. Structural model

do online reviews from peers and experts directly impact purchase intent (H2 and H3 are supported), both forms of review help explain the relationship between CSR and increased purchase intent.

For the indirect pathways, claiming that H4a and H4b are supported requires H2 and H3 being significant, as well as the paths from CSR to the two review constructs. However, to be certain that the latter two function as intermediate variables and there is an indirect effect, the KSI on ETA effect must be significant too. In this case, they are significant (4.52: 0.08** as shown in Fig. 1 where the dotted arrow showing the first hypothesis is). This supports that the two constructs of public and expert reviews mediate CSR’s effect on purchase intent. In separation, the two constructs both mediate CSR, as shown along the dotted arrow in the right half of the model in figure (H4a and H4b). Finally, the model finds that the effect of online reviews by the general population is strengthened by the reviews of experts, supporting H5. This suggests that online international consumers seek multiple information sources to inform their purchase intent. Consequently, conventional unilateral communications channels are diversifying into multiple pathways for the online retail context. These pathways are becoming increasingly important for international consumers who continually expect more from retailers and their products.

5 Concluding Discussion

This study looked into the multiple actors and e-communications pathways that increasingly inform the online retail context. Specifically, it aimed to explore the various antecedents of online purchase intent in terms of e-communication strategies (e.g. CSR, peer reviews and expert opinion) for international consumers. To this end, the findings of this study have implications for both the e-communications strategies adopted by online retailers and marketers, as well as the development of e-communications theory in terms of the interaction between the antecedents of purchase intent in the online context as building consumer trust in a product or retailer. These key findings will be taken up in more detail in the following concluding paragraphs.

Together, the findings highlight the contingency of external actors as intermediary communications channels in the online retail context. First, the study highlights that online reviews are instrumental in informing purchase intent for international consumers. It appears that perceptions of product quality or value in the online retail context are obtained through secondary or intermediary channels such as peers or experts whereby influential opinions are formed through social interactions. In this sense, direct e-marketing campaigns between the retailer and the consumer are not enough to inform purchase intent given the physical distance between the virtual consumer and the store. Our findings reveal that consumer perceptions of the product and/or retailer are bridged through online social networks whereby information in the review process is instrumental in guiding buyer decisions. While increased purchase intent may be the product of deliberate market strategies by the retailer in the form of employed influencers, it may also be the product of unintentional strategies whereby previously satisfied consumers express their positive opinions of the retailer's product.

Second, the results of this study show that while CSR is gaining strategic importance worldwide as well as for marketing communications studies, perceptions of an online retailer's CSR work has no direct impact on purchase intent for online consumers as an international group. Particularly, the study suggests the necessity of external reviewers in assessing this CSR work as instrumental for informing consumer perceptions of the online retailer's CSR work. This implies that the credibility of the retailer as a socially responsive one in the online context is not taken at face value, as perceptions are built through intermediary channels. It also implies that CSR perceptions of a retailer cannot alone be considered as an antecedent of purchase intent for the international group of consumers in this study. Not only does this highlight limitations in the conventional buyer-seller dyad for the online retail context, it also signals that organisational attempts to communicate CSR work online may be deemed as non-credible, subject to perceptions of window-dressing and greenwashing. It appears that corporate legitimacy for CSR work in the online retail context is contingent on actors positioned externally to the retailer to build credibility. Arguably, this goes some way towards verifying Etter's (2013) earlier work which suggests that online retailers adopt a reactive approach to CSR communication only when the CSR issues of the company are addressed by external parties in the form of social media users.

5.1 Theoretical Contributions

This study contributes to growing research on online marketing as an international phenomenon, as well as more generally to the strategic marketing literature and relationship marketing theory. Particularly, it suggests in order to explain consumer behaviour in the online context, there is the need to elaborate on a multitude of new aspects in terms of the involved actors and multidirectional communications pathways (i.e. through intermediary actors and social media platforms). To this end, purchase intent is not only the product of one-sided communication from the buyer to the seller; it is the product of interpersonal social relationships between intermediaries and intermediary communication platforms. These, in turn, serve to reduce the physical distance between the consumer and the online retail store where traditional senses such as touch and sight cannot be used to ascertain product quality or the consumer experience. Consequently,

the findings suggest that effective e-communications strategies for international consumers are founded primarily on relationship management, while implying engagement through creative campaigns that utilise, for example, influencers as intermediary actors to incite trust in the product or the retailer (see Killian and McManus 2015).

Further, the findings suggest that the fundamentals of relationship marketing based on trust still exist for the online retail context (see Lamberton and Stephen 2016). However, as indicated, trust in the online retail context regards multiple relational pathways beyond the traditional buyer-seller dyad; i.e. building trust and credibility is based on something more than a physical relationship. Particularly, it regards potential consumers seeking information through social media exchanges. Trust in the product or retailer, in this sense, is based on the trust that the consumer feels for the reviewer who provides his or her opinion about a product or retailer. In addition to previous studies which find that trust through online social relationships regards the frequency of user interaction and the intimacy of the exchanges in terms of their personalisation (see e.g. Ros-Diego and Castelló-Martínez 2012), the findings of this study also emphasise the necessary involvement of third-party reviewers (e.g. peer or expert reviewers) who serve as information conduits which legitimise the organisation as 'independent' assessors. The idea of external input as impacting the buyer-seller relationships is not new, as conventional WOM channels have existed for many years. But, as the scene moves over to the online environment, new sources are increasingly available and thus there are new frontiers for research and practitioners which must be addressed.

Finally, previous studies tend to look at national or cross-national datasets (e.g. Hudson et al. 2016), asserting that retailers target marketing communications to consumers in terms of their cultural orientations (e.g. Becker-Olsen et al. 2011). However, few studies treat the international consumer as an emerging marketing phenomenon (Anastasiadou et al 2019). Given that broad-scope marketing strategies can be achieved through treating consumers as international, future e-communications research could build on this understanding of the online consumer as inherently international; thus, breaking down the proposed boundaries of space and time for online retailing which exists in cyberspace as a 24-h phenomenon.

5.2 Managerial Implications

Although the online shopping environment can create opportunities for retailers seeking to expand to new markets and increase sales, it also brings with it some challenges in terms of navigating multiple sources of information which are often beyond the retailer's control. The findings of this study emphasise the need to utilise multiple e-communications strategies through various channels which interact to improve purchase intent. There is the increasing expectation that online retailers personally communicate and interact with their consumers (Ang 2011). Therefore, to reduce the physical distance between the traditional buyer-seller dyad for the online context, intermediary actors and/or channels should be used. Particularly, given that the Internet offers multiple communication channels, online retailers should pay attention to the management of social media platforms, both in terms of CSR communication and perceptions, but also the general communication about the brand or the product. This involves two strategic approaches which can be regarded as internally or externally orientated as follows.

First, rather than adopting reactive responses, retailers can proactively take advantage of the opportunities provided by increasing digitalisation by, for example, setting up review pages and feedback platforms on their own websites. This would give the consumer more of a voice in terms of product evaluation. Importantly, these platforms should involve a discussion between the consumer and the retailer, rather than serving as one-sided communication pathways into or out from the firm. This means that specific personnel should be employed to respond to such messages in a transparent way that allows other (potential) consumers to assess how information was received and processed by the retailer.

Second, online retailers can set up external social media platforms whereby consumer opinions can be exchanged freely between each other, in addition to retailer. This may be also important for communicating CSR given that e-communications channels such as social media platforms are currently under-utilised for CSR work (Kent and Taylor 2016; see also Ros-Diego and Castelló-Martínez 2012). Additionally, other external actors such as influencers could be employed to review products or the retailer's CSR work to reach wider groups of global consumers beyond the retailer's website and/or social media platforms. External forums to receive information and exchange opinions are arguably more credible than traditional one-sided marketing communication strategies from the retailer to the consumer. As suggested, multiple e-communications pathways in the online context are necessary for increasing consumer trust and purchase intent likelihood.

5.3 Future Research

First, more research is needed in the emerging field of international consumer behaviour. This study not only highlights the need for more studies on the antecedents of purchase intent and their context, but also to develop the methods needed to conduct such studies. Larger data sets, involving more countries would increase the relevance of studies. Furthermore, future studies could expand on this research by differentiating between different product groupings to further explore international consumerism in terms of product offerings. This may be achieved by adding in more measurement items that regard the locality of online purchase intent in terms of different product groupings and/or the effects of CSR (see also previous work by Ferreira and Ribeiro 2017). Finally, it is recognised that online reviews by the general population often constitute the extremes in terms of voicing the opinion of those really happy or unhappy about a product, brand or retailer (see Hu et al. 2009). Moreover, it remains unclear through our data if product reviews directly translate into purchase for particular online retailers; that is, consumers could potentially purchase elsewhere. To this end, qualitative studies could complement this study in terms of focus group with online consumers could help address the validity of the online review process for informing purchase intent for certain online retailers.

Second, this paper suggests that the fundamentals of relationship marketing and trust exist in the online marketing communications process through intermediary actors that influence purchase intent. Nevertheless, in our research model does not explicitly explore the role of trust or how the characteristics of the reviewer (e.g. positivity, involvement, experience, reputation, competence, sociability (see Banerjee et al. 2017)) directly affect the trustworthiness of the intermediary and indirectly the trustworthiness of the brand or

online retailer. To this end, more work is required to build the theoretical premise of trust between actors in the online retail context. In addition to building more measurement items into future models, further studies may also benefit from qualitative studies that further elaborate of the characteristics deemed necessary to build trust in not only the reviewer, but also the product, brand and retailer.

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Appendix A. Countries in the Study

Home country	% of respondents
Sweden	30.33%
Bangladesh	17.02%
Germany	7.15%
UK	6.66%
Netherlands	4.69%
Greece	4.44%
Latvia	3.08%
Syria	3.08%
Switzerland	2.22%
Albania, France, Spain, USA	1% < X < 2%
Afghanistan, Australia, Bosnia, Bulgaria, Canada, China, Colombia, Congo, Cyprus, Denmark, Egypt, Ethiopia, Finland, Georgia, Hungary, India, Indonesia, Iran, Ireland, Italy, Japan, Jordan, Kazakhstan, Kosovo, Lithuania, Luxemburg, Mexico, Moldova, Morocco, Nepal, Norway, Pakistan, Portugal, Romania, Russia, Sri Lanka, Taiwan, Tanzania, Thailand, Turkey, Uganda, Venezuela, Vietnam	<1%

References

- Abitbol, A., Lee, S.Y.: Messages on CSR-dedicated Facebook pages: what works and what doesn't. *Public Relat. Rev.* **43**(4), 796–808 (2017)
- Amblee, N., Bui, T.: Harnessing the influence of social proof in online shopping: the effect of electronic word of mouth on sales of digital microproducts. *Int. J. Electron. Commer.* **16**(2), 91–114 (2011)

- Anastasiadou, E., Lindh, C., Vasse, T.: Are consumers international? A Study of CSR, cross-border shopping, commitment and purchase intent among online consumers. *J. Glob. Market.* **32**(4), 239–254 (2019)
- Ang, L.: Community relationship management and social media. *J. Database Market. Customer Strategy Manage.* **18**(1), 31–38 (2011)
- Ashforth, B.E., Gibbs, B.W.: The doubleedge of organizational legitimation. *Organ. Sci.* **1**(2), 177–194 (1990)
- Bacile, T.J., Ye, C., Swilley, E.: From firm controlled to consumer-contributed: consumer coproduction of personal media marketing communication. *J. Interact. Market.* **28**(2), 117–133 (2014)
- Banerjee, S., Bhattacharyya, S., Bose, I.: Whose online reviews to trust? Understanding reviewer trustworthiness and its impact on business. *Decis. Support Syst.* **96**, 17–26 (2017)
- Baron, R.M., Kenny, D.A.: The moderator–mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations. *J. Pers. Soc. Psychol.* **51**(6), 1173–1182 (1986)
- Becker-Olsen, K.L., Taylor, C.R., Hill, R.P., Yalcinkaya, G.: A cross-cultural examination of corporate social responsibility marketing communications in Mexico and the United States: strategies for global brands. *J. Int. Marketing* **19**(2), 30–44 (2011)
- Beldad, A., Hegner, S., Hoppen, J.: The effect of virtual sales agent (VSA) gender–product gender congruence on product advice credibility, trust in VSA and online vendor, and purchase intention. *Comput. Hum. Behav.* **60**, 62–72 (2016)
- Bentler, P.M., Bonett, D.G.: Significance tests and goodness of fit in the analysis of covariance structures. *Psychol. Bull.* **88**(3), 588–606 (1980)
- Beukeboom, C.J., Kerkhof, P., de Vreis, M.: Does a virtual like cause actual liking? How following a brand’s Facebook updates enhances brand evaluations and purchase intention. *J. Interact. Market.* **32**, 26–36 (2015)
- Bernritter, S.F., Verlegh, P.W., Smit, E.G.: Why nonprofits are easier to endorse on social media: the roles of warmth and brand symbolism. *J. Interact. Market.* **33**, 27–42 (2016)
- Boateng, S.L.: Online relationship marketing and customer loyalty: a signaling theory perspective. *Int. J. Bank Market.* **37**(1), 226–240 (2019)
- Brown, J., Broderick, A.J., Lee, N.: Word of mouth communication within online communities: conceptualizing the online social network. *J. Interact. Market.* **21**(3), 2–20 (2007)
- Byrne, B.M.: Structural equation modeling with AMOS, EQS, and LISREL: comparative approaches to testing for the factorial validity of a measuring instrument. *Int. J. Test.* **1**(1), 55–86 (2001)
- Castelló, I., Etter, M., Årup Nielsen, F.: Strategies of legitimacy through social media: the networked strategy. *J. Manage. Stud.* **53**(3), 402–432 (2016)
- Camilleri, A.R.: The Presentaiton format of review score information influencers consumer preferences through the attribution of outlier reviews. *J. Interact. Market.* **39**, 1–14 (2017)
- Chen-Yu, J., Cho, S., Kincade, D.: Brand perception and brand repurchase intent in online apparel shopping: an examination of brand experience, image congruence, brand affect, and brand trust. *J. Glob. Fashion Market.* **7**(1), 30–44 (2016)
- Colleoni, E.: CSR communication strategies for organizational legitimacy in social media. *Corp. Commun. Int. J.* **18**(2), 228–248 (2013)
- Constantinides, E., Romero, C.L., Boria, M.A.G.: Social media: a new frontier for retailers? *Eur. Retail Res.* **22**, 1–28 (2008)
- Costa e Silva, S., Bradley, F., Sousa, C.M.: Empirical test of the trust-performance link in an international alliances’ context. *Int. Bus. Rev.* **21**(2), 293–306 (2012)
- De Angelis, M., Bonezzi, A., Peluso, A.M., Rucker, D.D., Costabile, M.: On braggarts and gossips: a self-enhancement account of word-of-mouth generation and transmission. *J. Mark. Res.* **49**(4), 551–563 (2012)

- Dincer, C., Dincer, B.: An investigation of Turkish small and medium-sized enterprises online CSR communication. *Soc. Responsib. J.* **6**(2), 197–207 (2010)
- Dou, X., Walden, J.A., Lee, S., Lee, J.Y.: Does source matter? Examining source effects in online product reviews. *Comput. Hum. Behav.* **28**(5), 1555–1563 (2012)
- Du, S., Bhattacharya, C.B., Sen, S.: Reaping relational rewards from corporate social responsibility: the role of competitive positioning. *Int. J. Res. Mark.* **24**(3), 224–241 (2007)
- Elwalda, A., Lu, K.: The impact of online customer reviews (OCRs) on customers' purchase decisions: an exploration of the main dimensions of OCRs. *J. Customer Behav.* **15**(2), 123–152 (2016)
- Eriksson, K.: LISREL for Business Analysis, Uppsala university, repro HSC, Uppsala (1998)
- Etter, M.: Reasons for low levels of interactivity: (non-) interactive CSR communication in Twitter. *Public Relat. Rev.* **39**(5), 606–608 (2013)
- Etter, M., Fieseler, C.: On relational capital in social media. *Stud. Commun. Sci.* **10**(2), 167–190 (2010)
- Ettinger, A., Grabner-Kräuter, S., Terlutter, R.: Online CSR communication in the hotel industry: evidence from small hotels. *Int. J. Hosp. Manage.* **68**, 94–104 (2018)
- Filieri, R.: What makes an online consumer review trustworthy? *Ann. Tour. Res.* **58**, 46–64 (2016)
- Felix, R., Rauschnabel, P.A., Hinsch, C.: Elements of strategic social media marketing: a holistic framework. *J. Bus. Res.* **70**, 118–126 (2017)
- Ferreira, A.I., Ribeiro, I.: Are you willing to pay the price? The impact of corporate social (ir)responsibility on consumer behavior towards national and foreign brands. *J. Consum. Behav.* **16**(1), 63–71 (2017)
- Filo, K., Lock, D., Karg, A.: Sport and social media research: a review. *Sport Manage. Rev.* **18**(2), 166–181 (2015)
- Fornell, C., Larcker, D.F.: Evaluating structural equation models with unobservable variables and measurement error. *J. Mark. Res.* **18**(1), 39–50 (1981)
- Frambach, R.T., Roest, H.C.A., Krishnan, T.V.: The impact of consumer internet experience on channel preference and usage intentions across the different stages of the buying process. *J. Interact. Market.* **21**(2), 26–41 (2007)
- Ghazi, A.A., Muhammed, S.A., Khalil, A., Fwwaz, A., Raed, A.: Electronic networks and relationship marketing: qualitative evidence from Jordanian travel agencies. *J. Relat. Market.* **12**(4), 261–279 (2013)
- Golob, U., Podnar, K.: Critical points of CSR-related stakeholder dialogue in practice. *Bus. Ethics Eur. Rev.* **23**(3), 248–257 (2014)
- Gurău, C.: Integrated online marketing communication: implementation and management. *J. Commun. Manage.* **12**(2), 169–184 (2008)
- Gürhan-Canli, Z., Sarial-Abi, G., Hayran, C.: Consumers and brands across the globe: research synthesis and new directions. *J. Int. Market.* **26**(1), 96–117 (2018)
- Granovetter, M.: Economic action and social structure: the problem of embeddedness. *Am. J. Sociol.* **91**(3), 481–510 (1985)
- Gretzel, U., Yoo, K.H.: Use and impact of online travel reviews. *Inf. Commun. Technol. Tour.* **2008**, 35–46 (2008)
- Hamilton, M., Kaltcheva, V.D., Rohm, A.J.: Social media and value creation: the role of interaction satisfaction and interaction immersion. *J. Interact. Market.* **36**, 121–133 (2016)
- Hausman, A.V., Siekpe, J.S.: The effect of web interface features on consumer online purchase intentions. *J. Bus. Res.* **62**(1), 5–13 (2009)
- Hayduk, L.A.: Structural Equation modeling with LISREL: Essentials and Advances. The Johns Hopkins University Press, Baltimore (1987)
- Hennig-Thurau, T., Gwinner, K.P., Walsh, G., Gremler, D.D.: Electronic word-of-mouth via consumer-opinion platforms: what motivates consumers to articulate themselves on the internet? *J. Interact. Market.* **18**(1), 38–52 (2004)

- Ho-Dac, N.N., Carson, S.J., Moore, W.L.: The effects of positive and negative online customer reviews: do brand strength and category maturity matter? *J. Market.* **77**(6), 37–53 (2013)
- Holm, D.B., Eriksson, K., Johanson, J.: Business networks and cooperation in international business relationships. *J. Int. Bus. Stud.* **27**(5), 1033–1053 (1996)
- Hu, N., Zhang, J., Pavlou, P.A.: Overcoming the J-shaped distribution of product reviews. *Commun. ACM* **52**(10), 144–147 (2009)
- Hudson, S., Huang, L., Roth, M.S., Madden, T.J.: The influence of social media interactions on consumer–brand relationships: a three-country study of brand perceptions and marketing behaviors. *Int. J. Res. Mark.* **33**(1), 27–41 (2016)
- Jacobsen, G.D.: Consumers, experts, and online product evaluations: evidence from the brewing industry. *J. Public Econ.* **126**, 114–123 (2015)
- Johnstone, L., Lindh, C.: The sustainability-age dilemma: theories of (un)planned behaviour and the role of influencers. *J. Consum. Behav.* **17**(1), 127–139 (2018)
- Jöreskog, K., Sörbom, D.: LISREL 8: Structural Equation Modeling with the SIMPLIS Command Language. Scientific Software International, Chicago (1993)
- Jun, J., Kim, J., Tang, L.: Does social capital matter on social media? An examination into negative e-WOM toward competing brands. *J. Hosp. Market. Manage.* **26**(4), 378–394 (2017)
- Kent, M.L., Taylor, M.: From Homo Economicus to Homo dialogicus: rethinking social media use in CSR communication. *Public Relat. Rev.* **42**(1), 60–67 (2016)
- Kim, Y., Peterson, R.A.: A meta-analysis of online trust relationships in e-commerce. *J. Interact. Market.* **38**, 44–54 (2017)
- Killian, G., McManus, K.: A marketing communications approach for the digital era: Managerial guidelines for social media integration. *Bus. Horiz.* **58**(5), 539–549 (2015)
- King, R.A., Racherla, P., Bush, V.D.: What we know and don't know about online word-of-mouth: a review and synthesis of the literature. *J. Interact. Market.* **28**(3), 167–183 (2014)
- Kollat, J., Farache, F.: Achieving consumer trust on Twitter via CSR communication. *J. Consum. Market.* **34**(6), 505–514 (2017)
- Kozinets, R.V., De Valck, K., Wojnicki, A.C., Wilner, S.J.: Networked narratives: understanding word-of-mouth marketing in online communities. *J. Market.* **74**(2), 71–89 (2010)
- Kumar, V., George, M.: Measuring and maximizing customer equity: a critical analysis. *J. Acad. Mark. Sci.* **35**(2), 157–171 (2007)
- Labrecque, L., vor dem Esche, J., Mathwick, C., Novak, T., Hofacker, C.F.: Consumer power: evolution in the digital age. *J. Interact. Market.* **27**(4), 257–269 (2013)
- Lamberton, C., Stephen, A.T.: A thematic exploration of digital, social media, and mobile marketing: research evolution from 2000 to 2015 and an agenda for future inquiry. *J. Market.* **80**(6), 146–172 (2016)
- Lee, W.I., Cheng, S.Y., Shih, Y.T.: Effects among product attributes, involvement, word-of-mouth, and purchase intention in online shopping. *Asia Pac. Manage. Rev.* **22**(4), 223–229 (2017)
- Lindh, C., Lisichkova, N.: Rationality vs. emotionality among online shoppers: the mediating role of experts as enhancing influencer effect on purchasing intent. *J. Custom. Behav.* **16**(4), 333–351 (2018)
- Lou, C., Yuan, S.: Influencer marketing: how message value and credibility affect consumer trust of branded content on social media. *J. Interact. Adv.* **19**(1), 58–73 (2019)
- Maecker, O., Barrot, C., Becker, J.U.: The effect of social media interactions on customer relationship management. *Bus. Res.* **9**(1), 133–155 (2016)
- Maignan, I., Ferrell, O.C., Hult, G.T.M.: Corporate citizenship: cultural antecedents and business benefits. *J. Acad. Mark. Sci.* **27**(4), 455–469 (1999)
- Mangold, W.G., Smith, K.T.: Selling to Millennials with online reviews. *Bus. Horiz.* **55**(2), 141–153 (2012)
- Marsden, P.V., Campbell, K.E.: Measuring tie strength. *Soc. Forces* **63**(2), 482–501 (1984)

- Martínez-López, F., Gázquez-Abad, J., Sousa, C.: Structural equation modelling in marketing and business research. *Eur. J. Mark.* **47**(1/2), 115–152 (2013)
- McKnight, D.H., Chervany, N.L.: What trust means in e-commerce customer relationships: an interdisciplinary conceptual typology. *Int. J. Electron. Commer.* **6**(2), 35–59 (2001)
- Melancon, J.P., Dalakas, V.: Consumer social voice in the age of social media: segmentation profiles and relationship marketing strategies. *Bus. Horiz.* **61**(1), 157–167 (2018)
- Moreno, A., Capriotti, P.: Communicating CSR, citizenship and sustainability on the web. *J. Commun. Manage.* **13**(2), 157–175 (2009)
- Morgan, R.M., Hunt, S.D.: The commitment-trust theory of relationship marketing. *J. Market.* **58**(3), 20–38 (1994)
- Morsing, M., Schultz, M.: Corporate social responsibility communication: stakeholder information, response and involvement strategies. *Bus. Ethics Eur. Rev.* **15**(4), 323–338 (2006)
- Park, D.H., Lee, J., Han, I.: The effect of on-line consumer reviews on consumer purchasing intention: the moderating role of involvement. *Int. J. Electron. Commer.* **11**(4), 125–148 (2007)
- Pate, S.S., Adams, M.: The influence of social networking sites on buying behaviors of millennials. *Atlantic Market. J.* **2**(1), 7 (2013)
- Perks, K., Recalde, M., Farache, F., Kollat, J.: A critical reflection on the role of dialogue in communicating ethical CSR through digital platforms. In: Lindgreen, A., Vanhamme, J., Maon, F., Watkins, R. (eds.) *Digital Social Responsibility*. Routledge, London (2017)
- Pope, S., Wæraas, A.: CSR-washing is rare: a conceptual framework, literature review, and critique. *J. Bus. Ethics* **137**(1), 173–193 (2016)
- Reimer, T., Benkenstein, M.: Altruistic eWOM marketing: more than an alternative to monetary incentives. *J. Retail. Consum. Serv.* **31**, 323–333 (2016)
- Ros-Diego, V.J., Castelló-Martínez, A.: CSR communication through online social media. *Revista Latina de Comunicación Social* (67), 47 (2012)
- Safari, A., Thilenius, P., Hadjikhani, A.: The impact of psychic distance on consumers' behavior in international online purchasing. *J. Int. Consum. Market.* **25**(4), 234–249 (2013)
- Schramm-Klein, H., Zentes, J., Steinmann, S., Swoboda, B., Morschett, D.: Retailer corporate social responsibility is relevant to consumer behavior. *Bus. Soc.* **55**(4), 550–575 (2016)
- Segars, A., Grover, V.: Re-examining perceived ease of use and usefulness: a confirmatory factor analysis. *Manage. Inf. Syst. Q.* **17**(4), 517–525 (1993)
- Shabib, F., Ganguli, S.: Impact of CSR on consumer behavior of Bahraini women in the cosmetics industry. *World J. Entrep. Manage. Sustain. Dev.* **13**(3), 174–203 (2017)
- Shan, Y.: How credible are online product reviews? The effects of self-generated and system-generated cues on source credibility evaluation. *Comput. Hum. Behav.* **55**, 633–641 (2016)
- Shen, G.C.C., Chiou, J.S., Hsiao, C.H., Wang, C.H., Li, H.N.: Effective marketing communication via social networking site: the moderating role of the social tie. *J. Bus. Res.* **69**(6), 2265–2270 (2016)
- Shi, S., Chen, Y., Chow, W.S.: Key values driving continued interaction on brand pages in social media: an examination across genders. *Comput. Hum. Behav.* **62**, 578–589 (2016)
- Spears, N., Singh, S.N.: Measuring attitude toward the brand and purchase intentions. *J. Curr. Issues Res. Adv.* **26**(2), 53–66 (2004)
- Stallkamp, M., Schotter, A.P.: Platforms without borders? The international strategies of digital platform firms. *Glob. Strategy J.* (2019)
- Steenkamp, J.-B.E.M., van Trijp, H.C.M.: The use of LISREL in validating marketing constructs. *Int. J. Res. Market.* **8**, 283–299 (1991)
- Thaichon, P., Quach, T.N.: The relationship between service quality, satisfaction, trust, value, commitment and loyalty of Internet service providers' customers. *J. Glob. Scholars Market. Sci.* **25**(4), 295–313 (2015)
- Trusov, M., Bucklin, R.E., Pauwels, K.: Effects of word-of-mouth versus traditional marketing: findings from an internet social networking site. *J. Market.* **73**(5), 90–102 (2009)

- Uzunoglu, E., Turkel, S., Akyar, B.Y.: Engaging consumers through corporate social responsibility messages on social media: an experimental study. *Public Relat. Rev.* **43**(5), 989–997 (2017)
- Yannopoulos, P.: Impact of the Internet on marketing strategy formulation. *Int. J. Bus. Soc. Sci.* **2**(18), 1–7 (2011)
- Yamin, M., Sinkovics, R.R.: Online internationalisation, psychic distance reduction and the virtuality trap. *Int. Bus. Rev.* **15**(4), 339–360 (2006)
- Zeng, B., Gerritsen, R.: What do we know about social media in tourism? A review. *Tour. Manage. Perspect.* **10**, 27–36 (2014)
- Zahoor, S.Z., Qureshi, I.H.: Social media marketing and brand equity: a literature review. *IUP J. Market. Manage.* **16**(1), 47–64 (2017)



Social Media in FMCG Marketing: Understanding How Supermarkets Use Facebook During the COVID-19 Pandemic

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Abstract. Social media is regarded as one of the most cost-effective, yet efficient tools for marketing communication and promotion. The current study examined the usage and applications of social media among supermarket retailers in New Zealand. This study also examined how grocery stores and supermarkets in New Zealand had used social media for implementing six strategic marketing objectives: customer involvement, interaction, intimacy, influence, insights, and impacts. This study examined and analysed the Facebook pages of all six supermarket chains in New Zealand. Results indicated significant differences across supermarkets in terms of achieving those objectives. Results also suggested that retailers could do more in terms of enhancing customer interaction, intimacy, and impacts. The study provided direction on how retailers can better manage their social media contents to build profitable customer relationships.

Keywords: Social media marketing · Retail · Digital marketing · Engagement strategies

1 Introduction

Retailers of food and other fast-moving consumer goods represent the largest segment of retailers around the world (Filipe et al. 2017). According to the recent report from Deloitte, grocery supermarkets accounted for the largest number of companies (136) in the top 250 businesses in the world and have contributed more than 67% of the total revenue of the top 250 (Deloitte 2020). Despite the Covid-19 pandemic and subsequent lockdown of various global markets, the global food and grocery retail market is expected to grow at a Compound Annual Growth Rate (CAGR) of 5.0% from 2020 (Grand View Research 2020). Further, supermarkets and grocery stores were the only industry in New Zealand that recorded a substantial increase in sales and profits during the national lockdown which occurred between 25 March and 8 June 2020. During the June quarter of 2020, the supermarkets earned NZ\$5.6 billion from New Zealand sales, an increase of 12% (NZ \$615million) compared to the same time period of the previous year (Statistics New Zealand 2020). Grocery stores are a highly competitive industry in New Zealand with two major brands controlling 85% of the market. This study examines how grocery

stores and supermarkets have used social media, particularly Facebook for marketing their goods and services and implementing customer relationship management strategies during the national lockdown due to Covid-19 pandemic.

Social media is considered as one of the most cost-effective, yet efficient tools for marketing communication and promotion (Assimakopoulos et al. 2017; John et al. 2018; Yoon et al. 2018). As social media networks are platforms for online consumers to interact with and influence one another, these channels have a direct impact on brand communities, sales and overall firm performance (Wang and Kim 2017). Further, social media channels enable online users from being mere passive users of the information to become active users who can create and share brand-related information including marketers (Wang and Kim 2017). Research indicates that social media applications enable current and potential customers to interact directly with the producers which empower them to take an active role in the co-creation of customer value and experience (Brodie et al. 2013; Prahalad and Ramaswamy 2004). With these facts in mind, retailers have increasingly used social media for implementing customer relationship management strategies. These strategies include customer involvement, interaction, intimacy, influence, insights, and impacts (John et al. 2018; Stevenson and Hamill 2016; Yoon et al. 2018). The current study examines how grocery stores and supermarkets in New Zealand have used social media for implementing those six strategic objectives. Hence, the current study seeks to establish a baseline for social media activities for New Zealand supermarkets and identify what strategies are being used for maximising the effects of their social media-based marketing. Towards, this objective following research questions were developed.

RQ1: How do retailers use social media for marketing activities?

RQ2: Is there any significant difference in the use of social media across grocery stores and supermarkets?

RQ3: What are the significant issues faced by grocery stores and supermarkets when using social media for marketing and promotion?

2 Literature Review

Social media plays a major role in today's digital marketing landscape. Unlike traditional marketing channels, social media networks are powerful channels for interactive marketing (John et al. 2018). Research suggests that a significant proportion of current and potential customers search for product information before their purchase over social media (Torres de Oliveira et al. 2020). Social media channels enable customers to interact freely with the firm, request product information, provide feedback on products and services, and even make complaints (Neslin et al. 2006; Torres de Oliveira et al. 2020). Therefore, monitoring and analyzing social media channels help the marketers to understand customer motivations and preferences before, during and after their purchase (Hays et al. 2013). According to Chan and Guillet (2011), a social media evaluation criterion should monitor four digital marketing strategic objectives: attracting, engaging, retaining, and learning (John et al. 2018). Kietzmann et al. (2011) noted seven functional building blocks of social media: identity, conversations, sharing, presence, relationships,

reputation and groups. Hays et al. (2013), suggested three areas of social media analysis that are useful for the marketers. These include 1) Audience size (e.g. number of followers), 2) Level of customer interaction (e.g. number of comments and shares), and 3) Customer sentiments (e.g. nature and types of comments posted, number of likes and dislikes).

Based on the current research, Stevenson and Hamill (2016) proposed a simple, yet comprehensive model for monitoring and measuring the functional use of social media in tourism marketing. The model proposed six key performance indicators (the 6Is) for social media monitoring. These include involvement, interaction, intimacy, influence, insights and impact. Social media involvement refers to the level of audience's interest, emotional attachment or arousal with social media contents (Amaro and Duarte 2015) and these can be measured by the number of users, fans or followers (Phelan et al. 2013). Interaction refers to the level of user engagement over social media. Social media interaction indicates the online activities of the users such as reading posts, creating and sharing useful contents such as pictures, videos and reviews (John et al. 2018). Intimacy indicates the level of customer sentiments towards brands (Stevenson and Hamill 2016). Brands build customer intimacy over social media through online interactions and conversations. Influence refers to the ways social media is being used to influence customers' attitudes and purchase decisions. Influence indicates how a brand manages its social media for advocacy, referrals and recommendations (John et al. 2018). Obtaining valuable consumer insights is another key objective of a brand's social media usage. According to Stevenson and Hamill (2016), insights refers to the "*level of actionable insights received from monitoring online conversations*". The sixth dimension, impact refers to the effects of social media marketing measured against their marketing objectives. Brands provide multiple options on social media for customers for purchasing products or make product inquiries Options include among other aspects, providing toll-free numbers, email addresses and links to online shopping sites.

3 Methodology

Based on previous literature, this study employed both quantitative and qualitative research methods. Several previous studies related to social media marketing (Chan and Guillet 2011; John et al. 2018; Phelan et al. 2013) have employed qualitative data analysis. Qualitative data analysis, particularly content analysis is useful for monitoring digital marketing initiatives particularly communication via social media as it helps researchers to examine a topic in great detail without restricting the data collection to pre-defined survey questions (Phelan et al. 2013). Content analysis is a widely accepted technique for investigating social media use as it assists researchers to examine the contents and data trends systematically, and identify an empirical basis for social media usage (Cheung et al. 2020; Phelan et al. 2013). This study examined and assessed the social media contents posted by six major grocery supermarket brands in New Zealand. Currently, the supermarket industry is a duopoly in New Zealand with only two major players: Foodstuffs New Zealand (owns Countdown, Super Value, and Fresh Choice) and Woolworths (that owns Pak n Save, New World, and Four Square) (Foxcroft 2020). This study examined the Facebook data posted by all six supermarket brands in New

Zealand. Facebook is the only social media platform that is being used by all six brands in New Zealand. Links to the social media pages were identified from their corporate websites and the required data from Facebook pages were downloaded using NCapture tool for the Google Chrome browser. Data were collected during the first six weeks of the national lockdown period starting from 25 March 2020. Once the data was downloaded, a comprehensive review, coding and analysis of the contents were performed using NVivo version 12. This study examined the social media contents based on the Social media monitoring framework (SMM) proposed by Stevenson and Hamill (2016). Twenty-seven items were used in this study to measure six digital marketing dimensions in social media. The measurement items were either recorded by frequency or count. Some items have used a dichotomous scale, where criteria were coded as either present or absent. SPSS version 24 was used for further quantitative analysis of the collected data.

4 Results

The post level data from six major retailers, referred to as posting strategy, was the first step in understanding retailers social media landscape. The descriptive statistics of these posting strategies are shown in Table 1. Key social media posting strategies employed by retailers as per the SMM framework is provided in Table 2. We have examined the number of posts, type of posts (e.g. images, videos), post frequency, the purpose of posts (e.g. announcements, entertainment, engagement, informative), and engagement statistics such as page likes, page followers, post likes, post comments and post shares in the first stage. As shown in Table 1, we can see that most supermarket retailers were consistent in providing timely updates regarding Covid-19 lockdown and related news, the announcement regarding the product availability, supply and online deliveries, and high-quality contents to educate, entertain and engage their online customers. An average of 31 posts was made by six retailers during the 35 days with a minimum of 10 and a maximum of 68 posts. An average of .89 posts was uploaded daily. Two retailers were outstanding in using social media for marketing communication with an average of nearly 2 posts per day. Photos and images were found to be popular content types. Photos and images accounted for a minimum of 71% to a maximum of 179% per post. On the other hand, videos accounted for only 23% of the post contents on average. Informative (28.3%), announcements (23%), and engagement (15%) type posts accounted for most of the content types. All retailers (at varying levels) were found to be providing useful customer information during lockdown such as safety advices, news, recipes, product usage information, product care suggestions, contests, quizzes, polls and so on.

As shown in Table 2, retailers were having mixed opinion in terms of using social media for marketing purposes. For example, only 50% of retailers were actively using social media for increasing customer involvement and participation. Regarding customer interaction with posts, only one-third of the retailers were updating their contents daily and another 50% weekly to daily. All retailers were keen on providing useful information and thus developing customer intimacy. Examples of work from home tips, safety advice, recipes, the announcement of special delivery and services were available on all retailer social media pages. While all social media pages provide links to their corporate websites,

Table 1. Descriptive statistics of the posts and engagement strategies

Posts	Mean	SD	R1	R2	R3	R4	R5	R6
Total posts	30.67	21.54	68.00	23.00	22.00	44.00	17.00	10.00
Post frequency (posts/ day)	0.89	0.60	1.94	0.66	0.49	1.26	0.49	0.50
Average characters per post	69.83	19.27	69.00	83.00	99.00	51.00	48.00	69.00
Post types								
Photos	32.17	26.42	48.00	18.00	21.00	79.00	17.00	10.00
Videos	10.67	13.79	35.00	9.00	2.00	18.00	0.00	0.00
Announcements	7.00	4.47	12.00	9.00	10.00	8.00	2.00	1.00
Promotions	3.83	3.97	7.00	6.00	0.00	9.00	1.00	0.00
Informative	8.50	8.31	25.00	5.00	5.00	8.00	6.00	2.00
Engagement	4.50	5.54	15.00	0.00	4.00	3.00	0.00	5.00
Thanksgiving	2.50	2.35	7.00	2.00	2.00	2.00	2.00	0.00
Greetings	1.67	0.52	2.00	1.00	1.00	2.00	2.00	2.00
Percentage of photos	103.97	38.96	70.59	78.26	95.45	179.55	100.00	100.00
Percentage of videos	23.43	22.99	51.47	39.13	9.09	40.91	0.00%	0.00
Engagement								
Page likes	176959.50	167355.85	309967.00	315063.00	39237.00	360992.00	23854.00	12644.00
Page followers	173254.67	162740.39	305367.00	310161.00	39366.00	347523.00	24294.00	12817.00
Total likes	28036.33	33245.69	71671.00	24450.00	3154.00	67042.00	1866.00	35.00
Total comments	10475.67	13109.15	32965.00	6674.00	629.00	19386.00	3200.00	0.00
Total shares	4051.00	5169.62	12246.00	2814.00	381.00	8602.00	256.00	7.00
Total engagement	42563.00	51029.21	116882.00	33938.00	4164.00	95030.00	5322.00	42.00
Engagement (%)	18.23%	13.64%	38.28%	10.94%	10.58%	27.34%	21.91%	0.33%
Average comments per post	193.49	171.00	484.78	290.17	20.05	88.68	188.24	89.00
Average shares per post	94.24	84.38	180.09	122.35	33.11	199.86	15.06	15.00
Average likes per post	526.32	469.39	1053.99	1063.04	166.00	691.15	109.76	74.00
Percent of posts with likes	100.00%	0.00	100.00	100.00	100.00	100.00	100.00	100.00
Percent of posts with comments	82.40%	18.13	98.53	100.00	70.00	97.00	58.90	70.00
Percent of posts with shares	94.41%	9.66	100.00	100.00	100.00	100.00	76.47	90.00

only 17% of the retailers provide links to the firm’s other social media pages. Nearly 180 posts with 193 photos and 64 videos were posted by six retailers during the first six weeks of the lockdown. Various content types such as announcements, brand and store promotions, festival greetings, informative, thanksgiving, and user engagement posts were provided by New Zealand retailers. Regarding the consumer insights, while all retailers provided some form of customer service channels such as instant messaging and post replies with a response time of less than a day, none of the retailers was found to be providing options for customer reviews and testimonials. Also, online users were unable to rate or rank retailers based on their purchasing or shopping experience. Finally, the conversion of the active audience to customers is also an important function of social media today. As shown in Table 2, nearly 83% of the retailers provided hyperlinks to online shopping/booking in their social media. Also, 67% of the retailers have provided their nearest address and map. Nearly 33% of the retailers have provided reservation hotlines, and email addresses for potential customer contacts. It was found that only one of the six supermarket retailer groups had provided any customer hotline numbers, links to loyalty cards and mobile applications in their social media pages. This study

Table 2. Social media monitoring strategies of FMCG retailers in New Zealand

Involvement			
	No. of fans or followers	0–10000	
		10001–50000	50.00%
		50001–100000	
		More than 100000	50.00%
Interaction			
	Dynamic Content	Update daily	33.00%
		Daily-weekly	50.00%
		More than weekly	16.00%
	Promotions for individuals/groups		50.00%
	Promotions for special holidays or events		66.67%
	Provision of contests/games/quizzes		66.67%
	Reply to customer queries		83.33%
Intimacy			
	Brand introduction/success stories		33.33%
	Useful customer information (work from home tips, recipe etc.)		100.00%
	Announcement of special services		100.00%
	Links to brand's official websites		100.00%
	Links to brands other social media pages		16.67%
Influence			
	Total number of posts		179
	Average posts per day		0.89
	Total number of photos/images		193
	Total number of videos		64
Insights			
	Provision of online customer service		100.00%
	provision of customer reviews/testimonials		0.00%
Impact			
	Provision of online booking		83.33%
	Provision of reservation hotlines		33.33%
	Provision of call Centre hotlines		16.67%
	Provision of email addresses		33.33%
	Provision of address/map		66.67%
	Link to Clubcard/loyalty card		16.67%
	Links to mobile app		16.67%

contributes to digital marketing and e-commerce literature in many ways. First of all, it is evident from the literature that social media can be efficiently used for marketing and customer value creation through its interactive communication platforms. However, not many studies have examined or monitored the actual usage of social media in retail marketing. This study attempts to fill this gap. Secondly, the current study has extended the Social Media Monitoring framework (Stevenson and Hamill 2016) by examining the social media behaviour of supermarkets and grocery retailers in New Zealand. The findings also indicate the need for retail brands to involve, interact and to develop intimate relationships with online customers over social media channels.

References

- Amaro, S., Duarte, P.: Travel social media involvement: a proposed measure. In: Tussyadiah, I., Inversini, A. (eds.) *Information and Communication Technologies in Tourism 2015*, pp. 213–225. Springer, Cham (2015). https://doi.org/10.1007/978-3-319-14343-9_16
- Assimakopoulos, C., Antoniadis, I., Kayas, O.G., Dvizac, D.: Effective social media marketing strategy: Facebook as an opportunity for universities. *Int. J. Retail Distrib. Manage.* **45**(5), 532–549 (2017). <https://doi.org/10.1108/IJRDM-11-2016-0211>
- Brodie, R.J., Ilic, A., Juric, B., Hollebeck, L.: Consumer engagement in a virtual brand community: an exploratory analysis. *J. Bus. Res.* **66**(1), 105–114 (2013). <https://doi.org/10.1016/j.jbusres.2011.07.029>
- Chan, N.L., Guillet, B.D.: Investigation of social media marketing: how does the hotel industry in Hong Kong perform in marketing on social media websites? *J. Travel Tour. Market.* **28**(4), 345–368 (2011). <https://doi.org/10.1080/10548408.2011.571571>
- Cheung, M.L., Pires, G.D., Rosenberger, P.J., Leung, W.K.S., Ting, H.: Investigating the role of social media marketing on value co-creation and engagement: an empirical study in China and Hong Kong. *Australas. Mark. J.* (2020). <https://doi.org/10.1016/j.ausmj.2020.03.006>
- Foxcroft, D.: NZ too small for another supermarket to break Foodstuff and Countdown duopoly. *Stuff*, January 2020
- Deloitte: Global powers of retailing 2020 (2020). From Deloitte. <https://www2.deloitte.com/content/dam/Deloitte/at/Documents/consumer-business/at-global-powers-retailing-2020.pdf>. Accessed 25 Jan 2021
- Filipe, S., Marques, S.H., de Fátima Salgueiro, M.: Customer' relationship with their grocery store: direct and moderating effects from store format and loyalty programs. *J. Retail. Cons. Serv.* **37**, 78–88 (2017). <https://doi.org/10.1016/j.jretconser.2017.03.002>
- Grand View Research: Food & Grocery Retail Market Size, Share & Trends Analysis Report By Product (Packaged Food, Unpackaged Food), By Distribution Channel, By Region, And Segment Forecasts, 2020–2027. From GVR website (2020). <https://www.grandviewresearch.com/industry-analysis/food-grocery-retail-market>. Accessed 25 Jan 2021
- Hays, S., Page, S.J., Buhalis, D.: Social media as a destination marketing tool: its use by national tourism organisations. *Curr. Issues Tour.* **16**(3), 211–239 (2013). <https://doi.org/10.1080/13683500.2012.662215>
- John, S., Larke, R., Kilgour, M.: Applications of social media for medical tourism marketing: an empirical analysis. *Anatolia* **29**(4), 553–565 (2018). <https://doi.org/10.1080/13032917.2018.1473261>
- Kietzmann, J.H., Hermkens, K., McCarthy, I.P., Silvestre, B.S.: Social media? Get serious! Understanding the functional building blocks of social media. *Bus. Horiz.* **54**(3), 241–251 (2011). <https://doi.org/10.1016/j.bushor.2011.01.005>

- Neslin, S.A., et al.: Challenges and opportunities in multichannel customer management. *J. Serv. Res.* **9**(2), 95–112 (2006). <https://doi.org/10.1177/1094670506293559>
- Phelan, K.V., Chen, H.T., Haney, M.: “Like” and “Check-in”: how hotels utilize Facebook as an effective marketing tool. *J. Hosp. Tour. Technol.* **4**(2), 134–154 (2013). <https://doi.org/10.1108/JHTT-Jul-2012-0020>
- Prahalad, C.K., Ramaswamy, V.: Co-creation experiences: the next practice in value creation. *J. Inter. Mark.* **18**(3), 5–14 (2004). <https://doi.org/10.1002/dir.20015>
- Statistics New Zealand: Retail sales plummet in lockdown (2020). From Statistics New Zealand website. <https://www.stats.govt.nz/news/retail-sales-plummet-in-lockdown>. Accessed 25 Jan 2021
- Stevenson, A., Hamill, J.: Social media monitoring: a practical case example of city destinations. In: *Social Media in Travel, Tourism and Hospitality: Theory, Practice and Cases*, p. 293 (2016)
- Torres de Oliveira, R., Indulska, M., Steen, J., Verreyne, M.L.: Towards a framework for innovation in retailing through social media. *J. Retail. Cons. Serv.* **54**, 101772 (2019). <https://doi.org/10.1016/j.jretconser.2019.01.017>
- Wang, Z., Kim, H.G.: Can social media marketing improve customer relationship capabilities and firm performance? Dynamic capability perspective. *J. Interact. Mark.* **39**, 15–26 (2017). <https://doi.org/10.1016/j.intmar.2017.02.004>
- Yoon, G., Li, C., Ji, Y. (Grace), North, M., Hong, C., Liu, J.: Attracting comments: digital engagement metrics on Facebook and financial performance. *J. Advertising* **47**(1), 24–37 (2018). <https://doi.org/10.1080/00913367.2017.1405753>



The Role of Social Media to Re-design the Brand Image of Small Villages

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Abstract. This paper seeks to contribute to the literature on the design of brand image for small and little-known destination, on the premise that social media are a major source for the formation and the promotion of a new brand image. The analysis focuses on the brand reshaping of a small Italian village and shows the existence of a strong link between social media and the economic and social development of the territory.

The results make a contribution to the literature on destination branding and social media with implications for researchers and policy makers. They open up new trajectories of research and new applications opportunities for the effective and successful use of social media in the context of small and unknown destinations: social media enables small destinations to promote new development patterns and enhance the regeneration of their distinctive resources. Thanks to social media small destinations become a great generator of economic, cultural and social value that benefit entire territories

Keywords: Brand image · Destination image · Territorial marketing · Social media · UGC

1 Introduction

Over the past decade destination branding and tourism competitiveness of small and unknown destinations have received increasing attention from policy makers, academics and practitioners. This renewed interest has intensified as the widespread of social media (e.g., social networks, digital platforms, etc.) has changed the way destinations are promoted and experienced (Iglesias-Sánchez et al. 2020). For example, rural hosts, who typically do not engage in professional hosting activities, use popular social networks and online booking websites (e.g., Airbnb) to provide tourists with authentic and unique leisure experiences based on interactions with the areas and their entire communities (Airbnb 2017), while tourists use social networks to share their travel and stay experiences by posting photos and receiving feedback via comments and discussions (Munar and Jacobsen 2014).

Social media has a strong influence on creating the image of a destination as well as how a destination is experienced and remembered (Iglesias-Sánchez et al. 2020;

Palazzo et al. 2021), so using social media to promote a globally small and unknown city is now a common and successful practice. This is also confirmed by the success of the social media strategy promoted by Airbnb and the Italian Ministry of Cultural Heritage and activities in 2018 (e.g., Italian villages project). It strengthened the brand image and positioning of small Italian villages, allowing such unknown destinations to become places to explore (Cracolici and Nijkamp, 2009) and to take a leading role in strengthening the sustainable development of local and regional economies (Caridà 2018). More recently, scholars from different perspectives agree that social media and word of mouth play a key role in promoting destination branding (Ruiz-Real et al. 2020) and, consequently, in building destination image and perception of sustainability (Palazzo et al. 2021). These aspects open many interesting opportunities for exploring the use of digital strategies and tools to shape and promote the brand image of unknown and small destinations. Notwithstanding, small destinations have received little attention (Goffi and Cucculelli 2018), as most research has focused on the role of social media in the formation and promotion of the image of well-known destinations (Munar and Jacobsen 2014, 2013; Fatanti and Suyadnyab 2015).

For the above reasons, this paper aims to analyze the impact of social media on the destination branding of small villages and specifically on the formation and promotion of a new brand image. For this purpose, we consider the case of Civita di Bagnoregio (e.g., one of the most important tourist attractions of the Lazio region - Italy), which exploited social media to change its brand image from a “dying town” to a “living town”.

As Goffi and Cucculelli (2018) recently pointed out, “Italy is a typical example of this emerging pattern, with almost three quarters of total tourism flows going towards smaller destinations” (p. 2), which have many opportunities to attract tourists (e.g., a perfect mix of beauty, history, culture and traditions) but are at risk of disappearing.

Therefore, this study enriches the existing literature on destination branding with implications for scholars and policy makers. It opens up new trajectories of research and new opportunities for using social media to build and promote the positioning (e.g., brand image) of small destinations around the world. It also addresses the recent call (Ruiz-Real et al. 2020) to investigate the relationships between social media and relevant elements of destination branding, such as local development or entrepreneurship in new travel and tourism markets, such as small destinations.

The remainder of the paper/chapter is organized as follows: the Sect. 2 addresses the literature background to outline the interplay between destination branding and social media and illustrate its potential impact on small destinations. The Sect. 3 describes the research context we focused on. The Sect. 4 illustrates the main findings of the study. Finally, the main findings and implications are discussed.

2 Literature Background

2.1 Branding Destination

Destination branding has emerged in the field of tourism marketing as a powerful tool for consolidating and promoting tourist destinations (Ruiz-Real et al. 2020). It results from a complex process that includes both symbolic (e.g., name, symbol, logo, wordmark, or

other graphic: Ritchie and Ritchie 1998) and experiential elements that affect tourists' decision-making process (Almeyda-Ibanez and George 2017).

Successful destination branding promotes a positive destination image (Ritchie and Ritchie 1998) to influence and drive consumers' destination choice (Blain et al. 2005). It mainly aims to enhance destination positioning and uniqueness to provide consumers/tourists with a unique and memorable travel experience (Cai 2002).

Destination branding and destination image are strongly related concepts: Destination image influences tourists' evaluation of the destination and their intentions to revisit and recommend the places to others (Qu et al. 2011). It is a prerequisite for successful destination branding (Pike 2009), as a positive destination image attracts visitors and provides them with positive experiences that reinforce their intention to spread positive word of mouth (WOM) about their stay experience.

Some scholars (Almeyda-Ibanez and George 2017; Morgan et al. 2011) emphasize the relevance of exploiting soft factors (e.g., natural landscape, friendliness of locals, art and cultural traditions, etc.) to build a positive image that influences tourists' behavior by emphasizing the uniqueness of destinations. This trend fits well with the specificities of small destinations and the increasing interest of tourists in authentic and interactive experiences with locals (Goffi and Cucculelli 2018).

2.2 Social Media as Destination Image Builder

Recently, social media has emerged as an active component of destination image (Iglesias-Sánchez et al. 2020), as widespread use of User-Generated Content (UGC) raises destination expectations and thus influences tourists' decisions (Fatanti and Suyadnyab 2015). Tourists use popular social networking platforms (e.g., Instagram, Facebook, Foursquare, Tripadvisor, etc.) to freely create and share information about their travel experiences with everyone through photos, stories, likes, comments and hashtags. Therefore, the tourist plays the role of a proactive performer (Palazzo et al. 2021; Stylianou-Lambert 2012), able to reinvent the main features of a physical area (Ciuccarelli et al. 2014) and start WOM through social media to promote the image of the destination they perceive and experience.

As claimed above and according to Hanan and Putit (2014), social media also represents a powerful tool to promote travel destinations through engaging and impressive content that is consumed worldwide. To this end, visual content on Instagram is recognized by scholars (Iglesias-Sánchez et al. 2020; Fatanti and Suyadnya 2015; Palazzo et al. 2021) as the most effective tool for influencing tourists' decisions, and travel Instagrammers are also recognized as the most influential contributors in shaping a tourism destination's brand (Fatanti and Suyadnya 2015; Valderrama-Santomé et al. 2019). In summary, tourists are attracted by advertised destination images and are able to disseminate their perceived images, which can redefine the pre-existing ones (Palazzo et al. 2021).

2.3 Small Villages and Social Media: A New Source of Value

In recent years, lesser-known tourist destinations have increasingly gained the attention of policymakers and private companies (e.g., Airbnb). Through public and private collaborations, programs and activities have been developed to prevent the depopulation of small villages and to support the self-sustainability of such areas. That is, social media is becoming a powerful tool to help small villages promote cultural tourism (e.g., shows high propensity to consume and stronger profitability) and revitalize local economies; indeed, as previously argued, social media could help unknown destinations access the tourism market (e.g., nationally and internationally) and offer millions of travelers a unique value proposition combining culture, beauty, and an authentic lifestyle.

Social media can valorize and monetize the intrinsic and still underutilized potential of small villages (Calomino 2020) by placing such areas at the center of many countries' development policies/strategies (Goffi and Cucculelli 2018). Therefore, this issue deserves special attention due to its economic and social impact.

3 The Research Context: Civita of Bagnoregio in Brief

Civita of Bagnoregio is an ancient Etruscan village in far northern Lazio, Italy. It is known as the “dying city” because the natural phenomenon of erosion has marked it over the centuries. Landslides gradually reduced the original built-up area, and in the 1990s the village was abandoned, and with it the social, cultural and economic strength of the town collapsed.

Today, only ten people live in Civita, but more than one million tourists visited it in 2019, and in less than fifteen years it has become a model of territorial development based on a system of public and private actors that includes local, national and international authorities. The popularity of Civita is growing globally as its image spreads worldwide through social media.

The following results explain this statement by providing some contextual examples of the role of social media in the image and transformation process of Civita. For this purpose, the results were treated according to a narrative strategy. Data were collected through various sources of information – in-depth interviews reports, newsletters, YouTube interviews (Eisenhardt 1989; Yin 2009). The former mayor and the External Affairs Advisor of the municipality of Bagnoregio were interviewed to gain insights into the transformation process that enabled the sustainable development of Civita. The interviews were conducted via Skype; each interview lasted approximately 45 min. The data collection was carried out from August 2019 to January 2020.

4 Re-imaging and Promoting the Dying City

Image has played a central role in the emergence of Civita as a global tourist destination. The slogan/image of the dying village was originally conceived to draw the attention of authorities to Civita's fragile natural ecosystem, while more recently it has been used as a marketing strategy to promote tourism development.

The next quote illustrates the process by which the municipality has transformed the dying village from an abandoned place into a unique tourist destination that attracts up to 10,000 visitors a day.

In ten years, we have reinvented ourselves and our image. We created our own identity by simply becoming aware of our extraordinary beauty, which had always existed but was unknown. That was the first step: becoming aware of what we had, respecting it, improving it, and then promoting it. Initially we promoted an overtourism strategy, which has continued to evolve towards quality tourism. The success of Civita has attracted the attention of Lazio Region, which has made our territory one of the reference points of its cultural policy, making it even better known, especially at national and international level.

(Francesco Bigiotti - Civita of Bagnoregio former mayor).

Today, the 70% of tourist flows are international and come mainly from Asia -China, Korea and Japan (data from Roberto Pomi, External Affairs Consultant - Municipality of Bagnoregio 2018).

Civita is known as a mystical, historical and original medieval town; its image has been reshaped to emphasize the idea of a place beautifully frozen in a mythical past, promoted worldwide through a variety of different visual sources, practices, languages and digital tools. In the past, traditional media, including many films and TV series, have disseminated this image worldwide. Now, however, the media success of Civita is being driven by social media. The words of Roberto Pomi illustrate the role of social media in Civita's development strategy.

While traditional media attracted the attention of a wider tourist audience, Civita's image went straight to popular social media. It seems to be made for Instagram (...) no one comes home without posting at least one click on their own social profile. This mechanism is constantly feeding on itself, reinforcing the impressive spread of Civitas Image around the world.

(Roberto Pomi, External Affairs Consultant of the Municipality of Bagnoregio).

The above quote confirms the key role that social media has played in the impressive spread of the Civita image around the world. The success of this form of communication is mainly due to the social profiles of the tourists who visit Civita every day. In this context, it is interesting to note that the social channels managed by the municipality play a minor role in this valuable strategy, as most of the success comes directly from the WOM activities of tourists (e.g., the hashtag #civita-dibagnoregio was posted more than 132k times on Instagram, while the hashtag #lovecivita promoted by the official accounts of the municipality was posted 500 times). Another interesting aspect related to Civita's media success is the collaboration with public institutions, private companies and influencers who signed a pro-project manifesto to save Civita. To this end, in 2017 Civita was proposed as a UNESCO World Heritage Site and selected by Airbnb as a pilot village to evaluate the feasibility of the broad project Airbnb Italian Villages.

Airbnb promoted Civita through its social media. This gave us more visibility, also because many national and international newspapers spread the news about our partnership worldwide. It's amazing that a multinational company is interested in us. This

creates curiosity and catalyzes the interest of tourists from all over the world toward Civita and the surrounding villages. In a few years Bagnoregio has become the driving force of the economy of the entire Teverina; many people have moved from other municipalities to work in restaurants and tourism activities.

(Roberto Pomi, External Affairs Consultant of the municipality of Bagnoregio).

To combine the need to sustain the economic development of Civita with the need to preserve its fragile ecosystem of Civita a sustainable approach to tourism has been promoted (e.g., whoever wants to invest now can do so in Bagnoregio, not in Civita: the former mayor Francesco Bigiotti). Such approach improved the lives of locals and produced many positive externalities (e.g., social and economic): two hundred new business activities (e.g., B&Bs, self-catering accommodation and restaurants) have opened around Bagnoregio. The accommodation capacity in the wider area has increased to 23 B&Bs, 26 holiday farms and 38 holiday apartments, whereas, unemployment has fallen from 10% a decade ago to less than 1%.

Today, Civita is known as “the living village”. The main driving forces of this transformation are: i) the construction of a strong territorial identity capable of changing the negative image of Civita, ii) the development of public-private partnerships to create a territorial development model, and iii) the role of social media in promoting and sustaining the new image of Civita worldwide.

Before we could tell anything, we had to define an identity capable of communicating the beauties of Middle Ages and the natural landscapes of the entire Teverina area (...). The positive effects generated by the photos that visitors constantly post on their Facebook and Instagram profiles were unimaginable until a few years ago.

Social media has allowed us to promote the image of an unknown village, but also to create and strengthen our territorial identity, making Civita the driving force of the economic and cultural development of the whole Teverina area.”

(Francesco Bigiotti - Civita of Bagnoregio former mayor).

5 The Role of Social Media in Reshaping the Image of the Destination: A Proposal of Framework

The rise of social media has revolutionized the way residents and tourists perceive small destinations and contributed to the transformation of the tourism landscape. Social media is becoming an essential component of destination branding as well as a tool to transform unknown small destinations into a well-known tourist attraction. This study focuses on the role of active social media users (e.g., tourists) in shaping and promoting the image of destinations by sharing their travel experiences worldwide. It is a highly debated topic in the literature on tourist destinations, however, there are no studies to date that address the impact and implications of social media on the regeneration process of small villages. Our findings show that the use of social media to communicate the uniqueness of un-known small destinations deserves more attention from both academics and policy makers.

Image formation and the whole process of destination branding is based on territorial identity, which is perceived and valued by both residents and visitors (Kavaratzis and

Ashworth 2006). Especially in the case of small and abandoned villages struggling to survive, the image of the territory can lead to negative feelings that hinder any possibility of territorial regeneration. The case we present allowed us to elaborate a framework that shows the contribution of social media in reshaping the image of a territory and promoting it (Fig. 1).

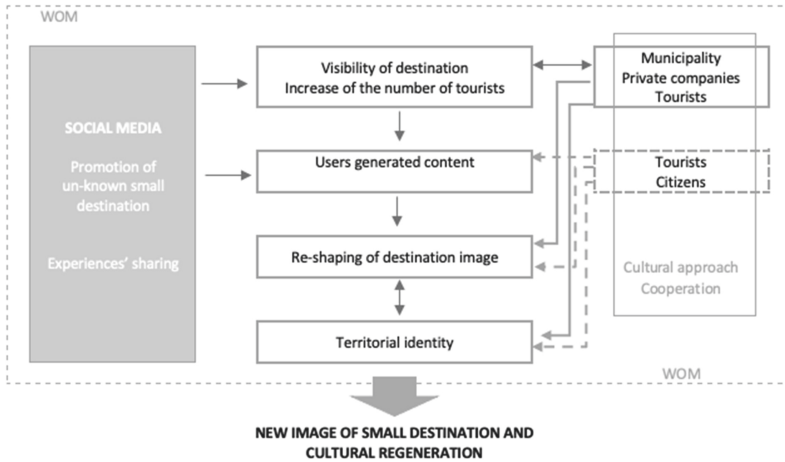


Fig. 1: The role of social media in reshaping the image of the destination

The shaping of the new image of Civita starts with urban and cultural regeneration actions through public and private collaborations (e.g., manifesto to Save Civita, application for inscription on the World Heritage List UNESCO, the Airbnb Italian Village project, etc.) and continues with the users’ generated contents that reinforce and/or reshape the image of the destination (Palazzo et al. 2021). Social media channel highly engaged communities around Civita’s image by creating a closer connection between policy makers, private companies, tourists and locals (e.g., locals and/or Civita’s official account reply to and publish comments from tourists).

This mechanism mitigates the risk of losing control over the image, as the content generated by tourists matches the characteristics that the municipality wants to highlight. It also ensures the higher impact of advertising activities and the reduction of their costs (Iglesias-Sánchez et al. 2020; Fatanti and Suyadnya 2015). To this end, social media offer small destinations new opportunities to fully exploit their great potential by reducing the fragmentation of destination marketing activities and the lack of coordination and resources that challenge them (Goffi and Cucculelli 2018).

6 Conclusion and Implication

More than in other contexts, policy makers need to consider the potential of social media and the proactive role of tourists (Palazzo et al. 2021; Stylianou-Lambert 2012), who act as resource connectors (e.g., viral ambassadors). They increase the positive WOM

of the small destination worldwide and create the conditions that allow other tourists and visitors to live unique experiences; in this, tourists become co-creators of value. Our findings are consistent with previous studies that prioritize well-known destinations (Giannopoulos et al. 2020; Iglesias-Sánchez et al. 2020).

This study enriches current studies on destination branding and social media with implications for researchers and policy makers. It opens new trajectories of research and new applications opportunities for the effective and successful use of social media in the context of small and unknown destinations. The example we illustrate advances the literature on destination branding by demonstrating the existence of a strong link between social media and relevant elements of destination branding, such as local development, new market opportunities, etc. (Ruiz-Real et al. 2020): social media could enable small destinations to promote new development patterns to enhance and regenerate their unique resources (e.g., historical, cultural, and natural) that have been largely unknown. In this vein, small destinations become a great generator of economic, cultural and social value that benefit entire territories.

However, some negative externalities associated with the activation of WOM mechanisms may arise for small villages in terms of sustainability and cultural approach to tourism. Massive and concentrated flows during certain periods may be unsustainable for small villages in terms of overcrowding, quality of life and waste disposal. For these reasons, it is extremely important that processes to reshape the image of a small destination are accompanied by broader interventions that are based on collaboration between institutions, citizens and businesses and are targeted. Social media can only play a strategic role in the economic and social development of small villages if cultural and institutional variables play a role as facilitators of the whole process of promoting and building the territorial image itself. Indeed, territorial identity depends on the respect that tourists and citizens have for the characteristic elements of the small village (natural, cultural, historical...) and on the history of the experience conveyed through social media.

References

- Airbnb newsroom: Italy Rural Report: Sharing Rural Italy A Community Overview (2017). https://s3.amazonaws.com/airbnbcitizenmedia/2017/10/Sharing_Rural_Italy_2017.pdf
- Almeyda-Ibanez, M., George, B.P.: The evolution of destination branding: a review of branding literature in tourism. *J. Tour. Heritage Serv. Market.* **3**(1), 9–17 (2017)
- Blain, C., Levy, S.F., Ritchie, J.R.B.: Destination branding: insights and practices from destination management organizations. *J. Travel Res.* **43**(4), 328–338 (2005)
- Cai, L.A.: Cooperative branding for rural destinations. *Ann. Tour. Res.* **29**(3), 720–742 (2002)
- Calomino, D.: Sharing economy and villages' development through the application of technology: the Italian case. In: *The Emerald Handbook of ICT in Tourism and Hospitality*. Emerald Publishing Limited (2020)
- Caridà, A.: *Le tecnologie interattive per la co-creazione di valore*. Aracne editrice: Roma (2018). ISBN 978-88-548-6969-1
- Ciuccarelli, P., Lupi, G., Simeone, L.: *Visualizing the Data City: Social Media as a Source of Knowledge for Urban Planning and Management*. Springer, Cham (2014)
- Cracolici, M.F., Nijkamp, P.: The attractiveness and competitiveness of tourist destinations: a study of southern Italian regions. *Tour. Manage.* **30**(3), 336–344 (2009)

- Eisenhardt, K.M.: Building theories from case study research. *Acad. Manage. Rev.* **14**(4), 532–550 (1989)
- Fatanti, M.N., Suyadnya, I.W.: Beyond user gaze: how Instagram creates tourism destination brand? *Procedia Soc. Behav. Sci.* **211**, 1089–1095 (2015)
- Giannopoulos, A., Piha, L., Skourtis, G.: Destination branding and co-creation: a service ecosystem perspective. *J. Prod. Brand Manage.* **30**(1), 148–166 (2020)
- Goffi, G., Cucculelli, M.: Explaining tourism competitiveness in small and medium destinations: the Italian case. *Curr. Iss. Tour.* **22**(17), 2109–2139 (2018)
- Hanan, H., Putit, N.: Express marketing of tourism destination using Instagram in social media networking. In: Sumarjan, N., Mohd Zahari, M.S., Mohd Radzi, S., Mohi, Z., Mohd Hanafiah, M.H., Saiful Bakhtiar, M.F., Zainal, A. (eds.) *Hospitality and Tourism: Synergizing Creativity and Innovation in Research*, pp. 471–474. Taylor & Francis Group, Croydon, Great Britain (2014)
- Iglesias-Sánchez, P.P., Correia, M.B., Jambrino-Maldonado, C., de las Heras-Pedrosa, C.: Instagram as a co-creation space for tourist destination image-building: Algarve and Costa del Sol case studies. *Sustainability* **12**(7), 2793 (2020)
- Kavaratzis, M., Ashworth, G.J.: City branding: an effective assertion of identity or a transitory marketing trick? *Place Brand.* **2**(3), 183–194 (2006)
- Morgan, N., Pritchard, A., Pride, R.: Tourism places, brands, and reputation management. In: Morgan, N., Pritchard, A., Pride, R. (eds.) *Destination Brands: Managing Place Reputation*, pp. 3–19. Routledge-Taylor & Francis Group, New York (2011)
- Munar, A.M., Jacobsen, J.K.S.: Trust and involvement in tourism social media and web-based travel information sources. *Scand. J. Hosp. Tour.* **13**(1), 1–19 (2013)
- Munar, A.M., Jacobsen, J.K.S.: Motivations for sharing tourism experiences through social media. *Tour. Manage.* **43**, 46–54 (2014)
- Palazzo, M., Vollero, A., Vitale, P., Siano, A.: Urban and rural destinations on Instagram: exploring the influencers' role in #sustainabletourism. *Land Use Policy* **100**, 104915 (2021)
- Pike, S.: Destination brand positions of a competitive set of near-home destinations. *Tour. Manage.* **30**(6), 857–866 (2009)
- Qu, H., Kim, L.H., Im, H.H.: A model of destination branding: integrating the concepts of the branding and destination image. *Tour. Manage.* **32**(3), 465–476 (2011)
- Ritchie, J.R.B., Ritchie, R.J.B.: The branding of tourism destination: Past achievements and future challenges. In: Keller, P. (ed.) *Destination marketing – Scope and Limitations*. International Association of scientific Experts in tourism: Proceedings of 48th Annual Congress Aiest, Marrakesh, Morocco, pp. 89–116 (1998)
- Ruiz-Real, J.L., Uribe-Toril, J., Gázquez-Abad, J.C.: Destination branding: opportunities and new challenges. *J. Dest. Market. Manage.* **17**, 100453 (2020)
- Stylianou-Lambert, T.: Tourists with cameras: reproducing or Producing? *Ann. Tour. Res.* **39**(4), 1817–1838 (2012)
- Valderrama-Santomé, M., Fernández-Souto, A.B., Vázquez-Gestal, M.: Travel igers: innovation, influence and persuasion through a photo gallery. In: *Communication: Innovation & Quality*, pp. 447–461. Springer, Cham (2019)
- Yin, R.K.: *Case Study Research: Design and Methods*. 4th edn. In United States: Library of Congress Cataloguing-in-Publication Data (2009)



Influencer Marketing: Current Knowledge and Research Agenda

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Abstract. Over the past few years, the increasing popularity of social media influencers has made influencer marketing a prominent and prevalent strategy for businesses. Its unique aspects, innovative approaches, and significant commercial value have attracted an increasing body of research. The literature has collectively accumulated a sizable and dispersive list of factors that affect followers' attitude and intention towards influencers' recommended products/brands. This paper provides an integrative and cohesive framework, based on Berlo's SMCR model of communication, to consolidate these factors in a structured manner and provide a comprehensive view on the effect mechanism of influencer marketing. Under this framework, it reviews key factors studied and the major conclusions drawn. Additionally, the paper delineates several important yet understudied areas for future search.

Keywords: Influencer marketing · Social media influencers · Instagram · Advertisement

1 Introduction

The popularity of social networking sites has increased significantly in recent years. Instagram alone had over 1 billion monthly active users in 2020 (Omnicores 2021). The growth of these platforms has intrigued companies to use these environments for marketing purposes. Subsequently, influencer marketing via social media influencers has become a prominent business phenomenon. Social media influencers are users of social media who have built a significant social network with a noticeable number of people following their online activities (Khamis et al. 2017). Due to their targeted audience and established follower relationship, they have turned out to be an effective marketing venue. The global market size of influencer marketing on Instagram has seen a continuous steep increase, reaching 2.3 billion US dollars in 2020, a 35% increase from its size of 1.7 billion in 2019 (Statista 2021).

The unique perspective and significant business value of influencer marketing have led to an intense discussion from business communities and increasing interests from researchers. A Google Scholar search reveals that the annual publications containing

“influencer marketing” has increased from just over 100 in 2011 to about 5,780 in 2020. A key theme in the research publications is to examine the relationship between factors in influencer marketing and outcome attitude and intention of followers. Through various angles and methods, researchers have identified a sizable list of factors of a wide variety, without an integrative framework to link them together. The focus on individual factors and the lack of a comprehensive view have made it difficult to appreciate and apply the overall body of knowledge generated and to build on it.

To fill this gap, this paper draws on the view of Berlo’s SMCR (Sender-Message-Channel-Receiver) model of communication and presents a cohesive framework to integrate prior findings in influencer marketing research and provide a comprehensive view. Based on this review, it offers several important yet understudied areas for future research.

2 A Framework for Influencer Marketing

Berlo’s SMCR model of communication is a well-known model on the communication process (Stead 1972). It specifies sender, message, channel, and receiver of communication as the key elements to study. Based on Berlo’s SMCR model, we provide a framework of influencer marketing, shown in Fig. 1, to integrate factors studied in prior research and for future research to build on.

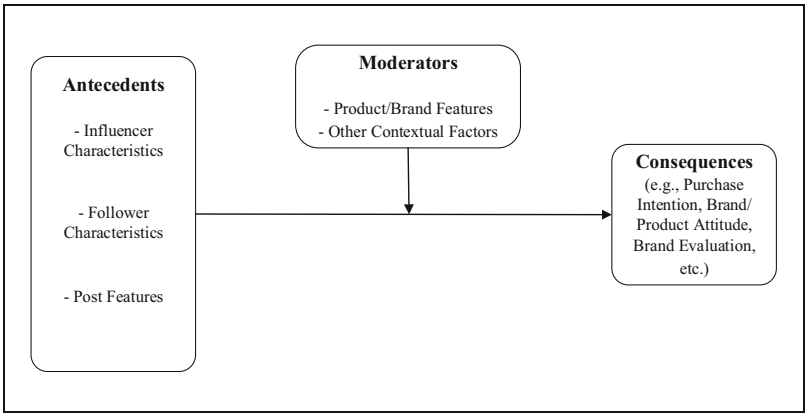


Fig. 1. Conceptual framework

Shown in Fig. 1, the characteristics of sender (i.e., influencer), message (i.e., post), and receiver (i.e., follower) constitute the antecedents of the communication consequences, which relationship is moderated by product/brand features and other contextual factors. Table 1 summarizes factors on these communication components that are studied in prior research.

Social media influencers are distinctly different from figures in mass media advertisements such as celebrities. Thus, their features are studied and often compared with those of mass media figures. Among influencer characteristics, opinion leadership and physical attractiveness have been widely examined and their effects on followers’ intention

Table 1. Current literature and studied factors.

Research focus	Studied factors	References
Influencer characteristics (Source/Sender)	<ul style="list-style-type: none"> ● Opinion leadership ● Physical attractiveness ● Social attractiveness ● Credibility ● Trustworthiness ● Popularity ● Expertise ● Likeability 	Breves et al. (2019); De Veirman et al. (2017); Casaló et al. (2018); Lou and Yuan (2019); De Veirman and Hudders (2020); Singh et al. (2020); Sokolova and Kefi (2020); Farivar et al. (2021)
Follower characteristics (Receiver)	<ul style="list-style-type: none"> ● Parasocial relationship ● Homophily/similarity ● Wishful identification ● Envy ● Self-esteem ● Loneliness 	Hu et al. (2020); Jin and Ryu (2020); Ki et al. (2020); Schouten et al. (2020); Sokolova and Kefi (2020); Hwang and Zhang (2018)
Post features (Message)	<ul style="list-style-type: none"> ● Uniqueness ● Quality ● Informativeness ● Visual attractiveness ● Ad/sponsorship disclosure ● Hedonic content ● Post type ● Commercial orientation 	Boerman (2020); Casaló et al. (2018); Ki and Kim (2019); De Veirman and Hudders (2020); Farivar et al. (2021); Martínez-López et al. (2020); Stubb and Colliander (2019)
Product/brand features	<ul style="list-style-type: none"> ● Product type ● Brand differentiation ● Brand uniqueness ● Brand value 	Lee and Watkins (2016); Hill et al. (2017); De Veirman et al. (2017); Fink et al. (2020)

have been established (e.g., Casaló et al. 2018; Lou and Yuan 2019). Trustworthiness is suggested as an advantageous feature of social media influencers in marketing. Findings show that social media users better relate to social media influencers and influencers' messages are perceived as more credible than those of celebrity endorsers (De Veirman et al. 2017). Other influencer characteristics studied in prior research include social attractiveness, likeability, popularity, and expertise (e.g., Lou and Yuan 2019; Sokolova and Kefi 2020).

Studies on follower characteristics draw from psychological processes and theories to explain their effects. A key factor studied is parasocial relationship, which refers to the illusionary one-sided friendship followers perceive with influencers (Farivar et al. 2021). Additionally, wishful identification (i.e., desire to be like the influencer), homophily (i.e., similarity with the influencer), envy towards influencers, as well as followers' self-esteem and loneliness affect followers' attitudes and intentions towards influencers' promotional posts (e.g., Hwang and Zhang 2018; Jin and Ryu 2020).

Features of influencers' promotional posts mostly concern various dimensions of post contents. Content characteristics such as uniqueness (i.e., how different they are from others), informativeness, quality, visual attractiveness, and use of hedonic elements are shown to positively impact followers' attitudes and intention (e.g., Casaló et al. 2018; Ki and Kim 2019; Lou and Yuan 2019). Posts can be studied and compared by their types as well, such as storytelling vs. informational posts (Farivar et al. 2021). Influencers are increasingly required by government agencies and advertising watchdogs to disclose paid partnership or personal affiliation with the product/brand they endorse (FTC 2019); however, ad disclosures are not a uniform practice. Findings show that ad disclosure could negatively impact the followers' attitudes (Evans et al. 2017; Boerman 2020), but if the content includes both positive and negative attributes of the advertised product, ad disclosure would not have negative impacts on followers' attitudes (De Veirman and Hudders 2020).

The relationship between characteristics of communication components and outcomes could be moderated by product/brand features and other contextual factors. Extant research has found that the product type of experience vs. search goods moderates the effect of influencer popularity on followers' intention (Hill et al. 2017). It also indicates that brand features such as image, value, and uniqueness may affect followers' intention (Lee and Watkins 2016; De Veirman et al. 2017). The moderation effects of these factors on the communication process could be tested. Additional product types and categories such as luxury goods and sustainable products could also be considered.

3 Future Research Areas

As shown in Table 1, extant research has touched on all aspects of communication in Berlo's SMCR model. An integrative framework like one in Fig. 1 can effectively provide a comprehensive view on what we know and an inclusive ground for new factors. Nevertheless, the literature survey reveals several important understudied areas for future research.

3.1 A Performance-Driven Angle

A central question in influencer marketing is its effectiveness. For businesses who wish to hold their influencer marketing expenditure accountable, this effectiveness means sales. Extant research largely used followers' attitudes and intentions to measure the effect of influencer marketing and has studied outputs such as followers' brand/product attitude, word-of-mouth intention, interaction intention, and purchase intention (e.g., Casaló et al. 2018; Ki and Kim 2019; Sokolova and Kefi 2020). The most relevant measure to business sales is the purchase intention; however, the proxy could suffer from significant inaccuracy due to the well-known intention-behaviour gap. Followers' actual purchase has been rarely studied, which provide a significant room for future research.

A performance-driven angle calls for research frameworks with a focus on performance. Extant studies are often perspective driven, i.e., they focus on certain interesting perspectives of influencer marketing, such as parasocial relationship (e.g., Hwang and

Zhang 2018) or influencer attractiveness (e.g., Lou and Yuan 2019), and examine the factor-attitude/intention relationship to validate the importance of the factors studied. The framework presented in this paper, which aggregates factors based on key components in the communication process, is process driven. While the framework is inclusive, it may not be efficient or selective from a performance-driven angle. A performance driven framework, such as one based on the dual process models, may help to select and structure key factors in effect through a parsimonious instead of an exhaustive way.

3.2 Finding the Right Influencers

According to recent reports, 61% of US marketers stated that they have difficulties in finding the right influencers (Harrington 2018; Influencer Marketing Hub 2020). It is critical for businesses to understand the differences among social media influencers in order to select the right ones. The industry has categorized influencers to several major types based on their number of followers, including nano influencers – who have 1000 to 10,000 followers; micro influencers – who have 10,000 to 100,000 followers; macro influencers – who have 100,000 to 1 million followers; and mega influencer – who have more than 1 million followers on social media (PromoRepublic 2016). Additionally, virtual influencers, which are computer generated fictional characters, are becoming common (Robinson 2020). Extant research has focused on micro influencers to study features and effects of influencer marketing, and rarely addressed influencers of other types.

In addition, influencers present different information focuses: meformers post mostly about themselves and their daily lives; and informers post mainly for in-formation sharing (Lee 2014). These differences could significantly affect influencers' marketing endeavours but have not been examined in the existing influencer marketing literature.

3.3 Followers' Wellbeing

Individuals' wellbeing is sensitive to social interactions (Hotard et al. 1989), thus can be significantly affected by participating in social media activities. Extant studies have reported contradictory roles of social media in users' wellbeing. Early studies focused on positive effect of social media, such as strengthening social ties, social capital, and self-enhancement, which can improve users' overall well-being (Ellison et al. 2007; Valenzuela et al. 2009). Recent research stressed mostly on undesirable outcomes of social media, like anxiety, depression, and addictive behaviours (Labrague 2014; Pantic 2014). In view of both positive and negative effects, it is suggested that the impact of social media should be explored by activities users engage in (Krasnova et al. 2015; Matook et al. 2015).

Influencer-following is among the most participated activities of social media users. According to a recent report (Iqbal 2021), around 63 percent of Instagram users check the influencer contents on a daily basis. Nonetheless, its impact on the wellbeing of social media users remains largely unknown. Future research could examine this crucial aspect of social media influencer phenomenon.

3.4 Platform Differences

Extant research has examined influencers on several platforms, including Insta-gram (mostly studied), YouTube, and Weibo, in a single platform approach without a cross-platform comparison. Contextual factors of various platforms could greatly alter the influencer marketing tactics and effect mechanisms. A comparative study could reveal novel insights that a single platform approach is incapable of.

4 Conclusion

This paper offers an integrative framework of influencer marketing to consolidate previous research findings and provide a comprehensive view. The framework depicts the relationship between important elements in the communication process (namely influencers, followers, and posts) and communication outputs of followers' attitude and intention; and converges a wide variety of factors studied in prior research in a structured way. It posits the moderating role of brand/product type in this relationship and suggests contextual factors of platforms as potential moderators. It delineates four understudied areas/themes for future research, including a performance-driven angle, finding the right influencers, followers' well-being, and platform differences.

References

- Boerman, S.C.: The effects of the standardized instagram disclosure for micro- and meso-influencers. *Comput. Hum. Behav.* **103**, 199–207 (2020)
- Breves, P.L., Liebers, N., Abt, M., Kunze, A.: The perceived fit between instagram influencers and the endorsed brand. *J. Advert. Res.* **59**, 440–454 (2019)
- Casaló, L.V., Flavián, C., Ibáñez-Sánchez, S.: Influencers on instagram: antecedents and consequences of opinion leadership. *J. Bus. Res.* **117**, 510–519 (2018)
- De Veirman, M., Cauberghe, V., Hudders, L.: Marketing through instagram influencers: the impact of number of followers and product divergence on brand attitude. *Int. J. Advert.* **36**(5), 798–828 (2017)
- De Veirman, M., Hudders, L.: Disclosing sponsored instagram posts: the role of material connection with the brand and message-sidedness when disclosing covert advertising. *Int. J. Advert.* **39**(1), 94–130 (2020)
- Ellison, N.B., Steinfield, C., Lampe, C.: The benefits of Facebook 'Friends': social capital and college students' use of online social network sites. *J. Comput. Mediat. Commun.* **12**(4), 1143–1168 (2007)
- Evans, N.J., Phua, J., Lim, J., Jun, H.: Disclosing instagram influencer advertising: the effects of disclosure language on advertising recognition, attitudes, and behavioral intent. *J. Interact. Advert.* **17**(2), 138–149 (2017)
- Farivar, S., Wang, F., Yuan, Y.: Opinion leadership vs. para-social relationship: key factors in influencer marketing. *J. Retail. Cons. Serv.* **59**, 102371 (2021)
- Fink, M., Koller, M., Gartner, J., Floh, A., Harms, R.: Effective entrepreneurial marketing on Facebook – a longitudinal study. *J. Bus. Res.* **113**, 149–157 (2020)
- FTC: Disclosures 101 for Social Media Influencers (2019). https://www.ftc.gov/system/files/documents/plain-language/1001a-influencer-guide-508_1.pdf

- Harrington, J.: Exclusive survey: what PR and marketing chiefs really think about influencer marketing, PR Week. <https://www.prweek.com/article/1491798/exclusive-survey-pr-marketing-chiefs-really-think-influencer-marketing>
- Hill, S.R., Troshani, I., Chandrasekar, D.: Signalling effects of vlogger popularity on online consumers. *J. Comput. Inf. Syst.* **60**(1), 76–84 (2017)
- Hotard, S.R., McFatter, R.M., McWhirter, R.M., Stegall, M.E.: Interactive effects of extraversion, neuroticism, and social relationships on subjective well-being. *J. Pers. Soc. Psychol.* **57**(2), 321–331 (1989)
- Hu, L., Min, Q., Han, S., Liu, Z.: Understanding followers' stickiness to digital influencers: the effect of psychological responses. *Int. J. Inf. Manage.* **54** (2020)
- Hwang, K., Zhang, Q.: Influence of parasocial relationship between digital celebrities and their followers on followers' purchase and electronic word-of-mouth intentions, and persuasion knowledge. *Comput. Hum. Behav.* **87**(2018), 155–173 (2018)
- Influencer Marketing Hub: "80 Influencer Marketing Statistics For 2020," Influencer Marketing Hub, pp. 1–38 (2020). <https://influencermarketinghub.com/influencer-marketing-statistics/>. Accessed 13 Aug 2020
- Iqbal, M.: "Instagram Revenue and Usage Statistics-2021," Business of Apps (2021). <https://www.businessofapps.com/data/instagram-statistics/>. Accessed 4 Feb 2021
- Jin, S.V., Ryu, E.: 'I'll Buy What She's #wearing': the roles of envy toward and parasocial interaction with influencers in instagram celebrity-based brand endorsement and social commerce. *J. Retail. Cons. Serv.* **55**, (2020)
- Khamis, S., Ang, L., Welling, R.: Self-branding, 'Micro-Celebrity' and the rise of social media influencers. *Celebrity Stud.* **8**(2), 191–208 (2017)
- Ki, C.C., Kim, Y.: The mechanism by which social media influencers persuade consumers: the role of consumers' desire to mimic. *Psychol. Mark.* **36**(10), 905–922 (2019)
- Ki, C., Cuevas, L.M., Chong, S.M., Lim, H.: Influencer marketing: social media influencers as human brands attaching to followers and yielding positive marketing results by fulfilling needs. *J. Retail. Cons. Serv.* **55**, (2020)
- Krasnova, H., Widjaja, T., Buxmann, P., Wenninger, H., Benbasat, I.: Why following friends can hurt you: an exploratory investigation of the effects of envy on social networking sites among college-age users. *Inf. Syst. Res.* **26**(3), 585–605 (2015)
- Labrague, L.J.: Facebook use and adolescents' emotional states of depression, anxiety, and stress. *Health Sci. J.* **8**, 80–89 (2014)
- Lee, J.E., Watkins, B.: YouTube Vloggers' influence on consumer luxury brand perceptions and intentions. *J. Bus. Res.* **69**(12), 5753–5760 (2016)
- Lee, K.: "6 Guaranteed Ways to Get More Followers on Facebook, Twitter, and Google+ | Time.Com," Time (2014). <http://time.com/2843469/get-more-followers-facebook-twitter/>. Accessed 15 Feb 2019
- Lou, C., Yuan, S.: Influencer marketing: how message value and credibility affect consumer trust of branded content on social media. *J. Interact. Advert.* **19**(1), 58–73 (2019)
- Martínez-López, F.J., Anaya-Sánchez, R., Fernández Giordano, M., Lopez-Lopez, D.: Behind influencer marketing: key marketing decisions and their effects on followers' responses. *J. Mark. Manage.* **36**, 579–607 (2020)
- Matook, S., Cummings, J., Bala, H.: Are you feeling lonely? The impact of relationship characteristics and online social network features on loneliness. *J. Manage. Inf. Syst.* **31**(4), 278–310 (2015)
- Omnicores: "Instagram by the Numbers (2021): Stats, Demographics & Fun Facts", January 2021. <https://www.omnicoreagency.com/instagram-statistics/>. Accessed 28 Jan 2021
- Pantic, I.: Online social networking and mental health. *Cyberpsychol. Behav. Soc. Netw.* **17**(10), 652–657 (2014)

- PromoRepublic: "What Is a Social Media Influencer? Definition, Types & More," Promo Republic (2016). <https://promorepublic.com/en/blog/glossary/what-is-social-media-influencer/>. Accessed 28 Nov 2019
- Robinson, B.: Towards an ontology and ethics of virtual influencers. *Australas. J. Inf. Syst.* **24** (2020)
- Schouten, A.P., Janssen, L., Verspaget, M.: Celebrity vs. influencer endorsements in advertising: the role of identification, credibility, and product-endorser fit. *Int. J. Advert.* **39**(2), 258–281 (2020)
- Singh, J., Crisafulli, B., Quamina, L.T., Xue, M.T.: 'To trust or not to trust': the impact of social media influencers on the reputation of corporate brands in crisis. *J. Bus. Res.* **119**, 1–17 (2020)
- Sokolova, K., Kefi, H.: Instagram and YouTube bloggers promote it, why should i buy? How credibility and parasocial interaction influence purchase intentions. *J. Retail. Cons. Serv.* **53**, (2020)
- Statista: "Instagram Influencer Market Size 2017–2020," Statista Research Department (2021). <https://www.statista.com/statistics/748630/global-instagram-influencer-market-value>
- Stead, B.A.: Berlo's communication process model as applied to the behavioral theories of Maslow, Herzberg, and McGregor. *Acad. Manage. J.* **15**(3), 389–394 (1972)
- Stubb, C., Colliander, J.: This is not sponsored content – the effects of impartiality disclosure and e-commerce landing pages on consumer responses to social media influencer posts. *Comput. Hum. Behav.* **98**, 210–222 (2019)
- Valenzuela, S., Park, N., Kee, K.F.: Is there social capital in a social network site? Facebook use and college students' life satisfaction, trust, and participation. *J. Comput. Mediat. Commun.* **14**(4), 875–901 (2009)



What Digital Marketers Should Learn from the Struggles of an Ageing Society on Social Media

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Abstract. The underlying principle of digital inclusiveness is to enable accessibility for everyone from all walks of life. However, the question arises on how digital inclusiveness support, maintain or improve the wellbeing of an ageing society when communication technology slowly taking effect in their life? Also, are the existing social media platforms adequate to sustain the demand for better communication and ensure their essential communication needs are met without marginalising them? This issue is of particular concern to the old age group, which is growing due to low population growth and an increasingly long-life span of 71.7 years for males and 75 years for females. Considering the context, the social media usage of the elderly needs further scrutinisation to help digital marketers continuously understand the ageing market segment and discourage the burnout effect from occurring to them. This is important to ensure the geriatric market experience a worthy customer journey from the marketing communication targeted to them on the digital front. Henceforward, this research generates new knowledge on the social media usage of the elderly and revisits the Stressor-Strain-Outcome (SSO) model where the aspect of social media fatigue and isolation are addressed.

Keywords: Ageing society · Geriatric · Social media usage · Digital inclusiveness · Stress-Strain-Outcome model · Good health and wellbeing · Digital marketing

1 Introduction

An ageing population is a global phenomenon faced by many developed countries as the number of older persons is projected to accelerate in the coming decades. Countries with an increasing share of older persons in the population are categorised as ageing population nations (United Nations 2015). Many factors contribute to this emerging trend. Apart from an increase in the aged population, people live longer, as evidenced

by the rise in life expectancy (Mafauzy 2000), which are mainly contributed by a significant improvement in healthcare services and growing socio-economic status of modern society.

The increase in the number of elderly in society has posed significant challenges in several aspects. The ageing process together with physical limitations, and demand to be technologically ready, has become a challenge for the ageing society. This results in them being bored, lonely, and socially isolated. The influence of social isolation on an ageing society's wellbeing is a phenomenon that cannot be ignored (Vangelisti and Perlman 2006) as it has serious health consequences such as poor nutrition, re-hospitalisation, cognitive decline, and heavy alcohol consumption (Nicholson 2009).

According to Wellman et al. (2001), social networks serve a significant number of functions in offline life. They provide social and emotional support, information resources, and make it easy to communicate with other people. Internet and social media are a great help to an ageing society to benefit them satisfy social needs by participating on social networks. They use social media to enhance their feeling of connectedness and social support (Teng and Joo 2017) and maintain old ties and create new ones (Goswami et al. 2010). Research conducted among an ageing society showed the elderly mainly use social media to connect with their family and friends (Teng and Joo 2017). Nimrod (2013) claims that joining an online group helps the elderly reinforce their mental self-view, a feeling of freedom, and being socially available.

Past studies have documented various social media's benefits for an ageing society, for example, reduced loneliness, boredom and social isolation (Cotten et al. 2014; Zhang and Kaufman 2015; Nowland et al. 2018). These factors directly contribute to psychological wellbeing. It should be noted that some studies indicate that computer and Internet use does not impact the social wellbeing of the elderly, but more on the psychological aspect (Chen and Persson 2002; Dickinson and Gregor 2006; Slegers et al. 2009; Nimrod 2013). Yet, a study conducted on an ageing society claimed that they had becoming too engrossed on the social media to the extent they have forgotten about everything around them in their life (Teng and Joo 2017). This article provides a better understanding of ageing societies regarding social media effect on them and the indirect impact on digital marketers. The issues highlighted raise several questions that need answers through an empirical investigation.

2 Literature Review

2.1 Social Media Landscape

Social media has many definitions, which come from bloggers, pundits and self-described experts in this field. Kaplan and Haenlein (2010) define social media as "a collection of Internet-based applications that build on the technological foundations of Web 2.0 and allow the creation and exchange of user-generated content". Generally, it covers blogs, Facebook profiles, social media games, and even wiki's such as Wikipedia. Specifically, social media include: (i) blogs, (ii) social networking sites (e.g. Facebook, Instagram, WhatsApp), (iii) virtual social worlds (e.g. Second Life), (iv) collaborative contents (e.g. Wikipedia), (v) content communities (e.g. YouTube) and (vi) open online games (e.g. DotA, Mobile Legends).

Social media is often associated with a set of theories, including social presence, media richness, self-presentation and self-disclosure. Social networking sites (SNS), for example, are considered high on self-presentation/self-disclosure. They are defined as any 'type of social interaction that comes with the desire to control others' impressions on them' (Kaplan and Haenlein 2010). If used as a medium for social presence/media richness, it is defined as 'the acoustic, visual, and physical contact that can be achieved -allow to emerge between two communication partners'. Given the increasing number of SNS users, this article concentrates on the use of SNS, primarily Facebook and WhatsApp, among the ageing society.

According to Boyd and Ellison (2007), SNS are web-based services that allow individuals to (i) construct a public or semi-public profile within a bounded system, (ii) articulate a list of other users with whom they share a connection, and (iii) view and traverse their list of connections with others within the system. Inlay terms, SNS is any digital medium that allows people to communicate and interact socially. SNS are apps, websites or web-based pages that enable social media activities as defined above to work. Even though social media usage like instant messaging and text messaging is widespread, it only offers one-to-one or small group-oriented communication.

2.2 Ageing Population and Social Media

Ageing can be defined from many perspectives. From a human development perspective, ageing is viewed as a lifelong process from conception and birth to maturity and finally, death (Tengku Abdul Hamid 2015). From a societal view, it is perceived as an aggregated statistic of the births and deaths of the population in a society that reflected a successful health outcome of the country's socio-economic development (Tengku Abdul Hamid 2015). No doubt, life expectancy has improved throughout the world due to medical advancements and economic development (Alavi et al. 2011). Statistics show that one in nine people in the world aged is above 60, and it is projected to be one in five by 2050 (UNFPA and International 2012).

According to the United Nations (2015), 9% of the population today is aged 60 years or over in developing countries. Still, that proportion will turn to more than double by 2050, reaching 19%, and triple by 2100, reaching 27%. For example, Japan has an unprecedented ageing population with 23% aged 65+ years in 2009, and 26% in 2014. Rapid acceleration is projected in the United States, Russia, U.K., France, Italy and Germany in upcoming years (Jacobse et al. 2011). Tengku Abdul Hamid (2015) claimed the number of older people aged 60 years and above would equal the number of young people aged under 15 between 2050 and 2055. She further argues ageing populations will bring economic, health, social, psycho-spiritual, and environmental challenges.

According to Perrin (2015), social media usage among those 65 and older has tripled since 2010. In 2015, 35% of those 65 and older reported actively using social media, compared with just 2% in 2005. Meanwhile, CBS (2017) showed that the percentage of Dutch citizens from 45 to 64 using social networking sites rose from 70% to 83%. Its use has taken off especially among 65 to 74-year-old in recent years. In 2017, 64% of the respondents in this age category said they had used social media three months before the survey, versus 24% five years previously. Social networking sites, such as WhatsApp, surged in people aged 45 and above due to increased smartphone ownership. A study by

Rosales and Fernández-Ardèvol (2016) states that WhatsApp is the most used app by older adults in Spain because it is a cheap communication service.

Notably, older adult users of SNS increased gradually over the past few years. In February 2012, one third (34%) of internet users ages 65 and older in America used social networking sites such as Facebook, and only 18% did so on a typical day (Zickuhr and Madden 2012). This number rose dramatically to 46% in 2014, and older adults expressed that SNS created a stable social connection with the people they care about. The survey further reveals that some 81% of older adults who use SNS socialise with others daily or near-daily (Perrin 2015). A study done by Wong (2011) shows that senior citizens in Malaysia perceive and use a mobile phone in their daily lives as a social device, emotional tool, reminder aid and personal guide. The usage of SNS among older adults has been shown to strengthen their relationships with family and friends and helps them maintain contact with other users (Goswami et al. 2010). While Joinson (2008) claim that one of the reasons that motivate SNS users is the social connection (the desire to connect and communicate with others), other researchers state the primary motivation is to communicate with the family (Ji et al. 2010).

A study by Teng and Joo (2017) on social media found that Facebook was the most popular social media platform used by older adults, followed by WeChat. Additionally, it is also the most used social media to connect with family and friends, gain knowledge and enjoy leisure. However, the same study also discovered that social media usage among older adults could distract them from their routine and be detrimental to health and sleep quality. In this context, the use of specific technological platforms is worrying if the use is compulsive (Meerkerk et al. 2009) or problematic (Kaplan and Haenlein 2010). According to Griffiths and Szabo (2014), individuals are not addicted to the technological medium, but rather to certain online activities, namely social networking, email and chat, and videos and movies. Research shows that social networking has become the most popular form of online activity (Kuss and Griffiths 2011). There is growing evidence that social media addiction is an evolving problem (Van Den Eijnden et al. 2016). In older people, this could be an isolation factor, and social media addiction could increase vulnerability. A study by Milyavskaya et al. (2018) found that more frequent experiences of fear of missing out (FOMO) were associated with adverse outcomes daily and night, and over the time it could contribute to negative wellbeing like fatigue and stress.

2.3 Importance of Ageing Society Wellbeing

With advancements in technology, social networks are created and maintained by conventional methods but extend in the virtual world. The Internet is a novel vehicle of communication, and it has become one of the means of overcoming barriers to social interaction for elderly (Hutchison et al. 1997; Kubeck et al. 1999). White et al. (2002) affirm that the Internet offers the opportunity to frequently communicate with family and friends, explore interest and hobbies, meet new people with similar interests, and obtain consumer information and community resources. In a nutshell, people can reconnect, strengthen, and broaden their connection to the outside world. As a result, internet usage improves wellbeing, life satisfaction, and self-esteem (Lawhon et al. 1996; Jones and Bayen 1998).

Noting on the importance of social media among the elderly, a club known as Old People Playing Young Club (OPPY Club) was established in Thailand by a private organisation that teaches older people to use computers and the Internet (Club 2010). The reasons older people join this program are to (a) to learn essential computer and internet functions (e.g., email, presentation, digital images); (b) to electronically communicate with young family members (e.g., children, grandchildren); and (c) to search for information. One of the members said that “being at home on my own does not make me feel lonely anymore because I have a computer for company” (Club 2010). A study on elderly Japanese people and their online experience revealed that the Internet helped them build social connectedness, especially in crisis times. Also, they often progressed from virtual relationships to face-to-face meetings (from virtual to physical). The study reports that elderly Japanese people who use the Internet feel socially connected as it provides meaningful community participation which eventually enhances their lives (Kanayama 2003).

Another study conducted among older people in China on their usage of OldKids, an online community maintained by a Shanghai-based organisation, shows that internet usage offers companionship, information, and emotional support (Xie 2008). The study examined the relationship between three different modes of computer-mediated communication (CMC) and the types of social support exchanged within an online community of elderly Chinese people (age 50 or older). Based on interviews and participant observation from a sample of 33, it was discovered they used various modes of computer-mediated communication (CMC) such as voice chat rooms, instant messaging, and online forums to interact and develop relationships.

Dickinson and Gregor (2006) conducted a meta-analysis on computer and internet usage and older adults’ wellbeing based on empirical studies published in journals, reports and PhD theses from 1980–2004. They argue that most studies recommended training and other types of assistance to older adults in using computers and the Internet. While using the technologies, most participants in the studies can interact and socialise with the trainers, nurses, volunteers, and other participants when they undergo training. Thus, it is unclear whether the usage of computer and the Internet alone has an independent effect on older adults’ wellbeing or it is, in fact, a combination of training, social contact and computer/internet usage. Therefore, it is difficult to claim that computer/internet usage has an exclusive effect without considering the possible impact of the training and social interaction that accompanied it.

SNS is a more comfortable and cheaper way for older adults to keep their social ties active, and this platform creates better access to relevant information, emotional and appraisal support. A study by Goswami et al. (2010) proposes that active participation in SNS has positive implications for the overall wellbeing of the elderly. The focus group interview found that the primary motivation to join SNS is to keep in frequent touch with grandchildren, family, friends, and acquaintances. When asked what were their expectations in terms of an online social network, most of them indicated they want information related to locally organised social and community events, set up meetings with friends, healthcare and emergency services, and other locally relevant information. Since this is on-going research, data on the wellbeing of older adults is not included. However, they propose two primary aspects of social interaction: social connectedness

and social support from SNS, enhancing older people's lives. The extent of social isolation amongst older people has emerged as a major concern for health (Cotterell et al. 2018). Social isolation has been linked with cardiovascular disease, strokes, (Valtorta et al. 2016), depression (Matthews et al. 2016), and premature death (Stephoe et al. 2013) among older people. Though it has been described that the regular social media improves social connection and wellbeing in old age, excessive social media has been associated with a higher level of emotional loneliness (Sum et al. 2008).

3 Conceptual Model Development

3.1 Boredom and Social Media Addiction

Boredom, the unfulfilled desire for satisfying activity, can occur in anyone who has too much time and too little meaning or purpose in their life. One of the earliest available descriptions of boredom is based on a psychoanalytic case study (Greenson 1953), who suggested that the state be cast as either apathetic or agitated. Boredom represents a negative experience caused by situations deemed deficient in meaning, interest, and challenge, such as depression (Goldberg et al. 2011), lack of sense of life (Fahlman et al. 2009), and excessive gambling (Mercer and Eastwood 2010). A study by Li et al. (2015) identified boredom as a common trigger of excessive Internet use. It is significantly associated with Internet addiction and Internet-related functional impairment in university students. Meanwhile, a study by Nichols and Nicki (2004) found that an individual's propensity toward boredom was significantly correlated with internet addiction.

Retirement from 60 years old enhances free-time and could lead to retirement boredom (Mukku et al. 2018). Bernstein and Trauth (2007) reported that 40% of retirees, five years into their retirement claimed they were happier before retiring and experienced sadness, worry, and boredom after retirement. As they find themselves having more free time, they tend to face endless daytime television, the possibility of gaining weight because they have stopped being active (Doughty 2013). Today with the presence of SNS such as WhatsApp and smartphone ownership, its usage has risen among people 45 and older. In 2016 survey conducted by Nielsen shows that adults 50 years and above spent 64% more time on social media than the same period in 2015 (Leibowitz 2017). The downside of social media usage among an ageing society is social media addiction. They might spend more time using social media as they find it interesting, new and bored with free time. However, literature that studied the relationship between boredom and social media addiction is almost non-existent. In view of the above, the following hypothesis is posited:

Hypothesis 1: *Boredom significantly impacts social media addiction in the ageing society.*

3.2 Fear of Missing Out (FOMO) and Social Media Addiction

FOMO is a pervasive apprehension that others might be having rewarding experiences from which one is absent (Przybylski et al. 2013; Hunt et al. 2018). In past research, it was suggested that people who face FOMO are likely to be engrossed in psychological demands towards being connected and intimate with others (Beyens et al. 2016). Researchers also claim people with a low emotional state and life satisfaction are likely to confront FOMO (Przybylski et al. 2013). Recent studies have linked FOMO with different adverse psychological and physiological conditions, such as high-level alcohol consumption (Riordan et al. 2015), depression, and other emotional and physical problems (Lin 2015; Baker et al. 2016).

Recently there is a trend in past findings where researchers started to investigate the negative consequences concerning FOMO experienced by social media users (Dhir et al. 2018; Fabris et al. 2020; Rozgonjuk et al. 2020). Studies show that social media users with high FOMO are likely to spend more time on social media and suffer from depression and negative emotions (Baker et al. 2016), insomnia, compulsive social media use, eating disorders (Beyens et al. 2016), low life satisfaction, competency and personal interconnection (Elhai et al. 2016); and deterioration of physical and mental wellbeing (Alt 2015). Users who have a more significant FOMO are assumed to have a greater desire to stay continually up-to-date of what others are doing, for example, through social media. People also need to feel constantly socially engaged, and this behaviour leads to Internet addiction, namely social media addiction. Previous studies on FOMO have suggested that a high level of FOMO has negative psychological and physiological consequences. However, it is not yet clear whether FOMO is significantly related to social media addiction, which leads to the following proposition.

Hypothesis 2: *Fear of missing out (FOMO) significantly impacts social media addiction in the ageing society.*

3.3 Social Media Addiction and Social Media Fatigue

A comprehensive review of literature in M'hiri and Costanza (2015) shows that there is limited to almost no data on social media's adverse side. Kuss and Griffiths (2011) and Ryan et al. (2014) claim the research on social media addiction is relatively lacking, especially among the elderly compared to other types of Internet addiction such as gaming addiction.

Addictive behaviour such as smoking and gambling is defined as “a repetitive habit pattern that increases the risk of disease and/or associated personal and social problems”, or “the behaviour continues to occur despite volitional attempts to abstain or moderate use”. Clearly, there is a connection in the literature between the term “addiction” and substance use disorders. Therefore some researchers advocate others terms to distinguish excessive Internet uses from formal clinical “addiction” conditions (Sun and Zhang 2021). Hence, social media addiction refers to the excessive use of social media. Terms such as “compulsive”, “excessive use,” “addiction,” “dependency,” and “problematic use” have often been used interchangeably to refer to the negative aspects of

Internet/social media usage (Can and Kaya 2016; Choi and Lim 2016; Van Den Eijnden et al. 2016; Casale et al. 2018; Klobas et al. 2018; Tarafdar et al. 2020).

Social media fatigue is a prevalent factor which negatively influences users' mental and behavioural conditions. Dhir et al. (2018) examined the relationship between social media fatigue and psychosocial wellbeing by utilising different variables: compulsive usage, FOMO, anxiety, and depression. However, majority of studies in the literature were conducted in industrialised Asian countries, such as South Korea, Taiwan, Japan and China (Lin 2015; Zhang et al. 2016; Luqman et al. 2017). Social media addiction appears to be present in some people who use social networking sites excessively (Young, 2009). This requires them to handle more social demands, which then they would feel overburdened or strained, which matches the description of social media fatigue. Social media fatigue is rooted in the idea that too much information stemming from social media can lead to feelings of being over-whelmed (Bright et al. 2015). In view of the above discussion, the following hypothesis is postulated.

Hypothesis 3: *Social media addiction significantly impacts social media fatigue in the ageing society.*

3.4 Social Media Fatigue and Perceived Social Isolation

It is evident that social media are considered important channels to seek and maintain social connections (Grieve et al. 2013). Still, it recently emerges that an increasing number of social media users are straying from their social media participation as they are beginning to experience social media fatigue (Owsinski 2017). According to Ayyagari et al. (2011), this phenomenon might be because of technostress resulting from the overuse of technological platforms such as mobile devices and social media (Lee et al. 2016) where users are likely to experience an emotional decline, such as psychological fatigue, mental weaknesses and satisfaction decay (Hsiao 2017).

Frequent exposure to unrealistic portrayals on social media may give people the impression that others live happier, more connected lives. These depictions may make them feel more socially isolated in comparison (Primack et al. 2017). Social isolation occurs typically when an individual lacks a sense of social belonging, engagement with others, and fulfilling relationships. It is associated with increased morbidity and mortality (Pantell et al. 2013). The following hypothesis is proposed in relations to the above discussion. In conclusion, based on the assumption made, Fig. 1 depicts the proposed conceptual study that needs to be empirically tested.

Hypothesis 4: *Social media fatigue significantly impacts perceived social isolation in the ageing society.*

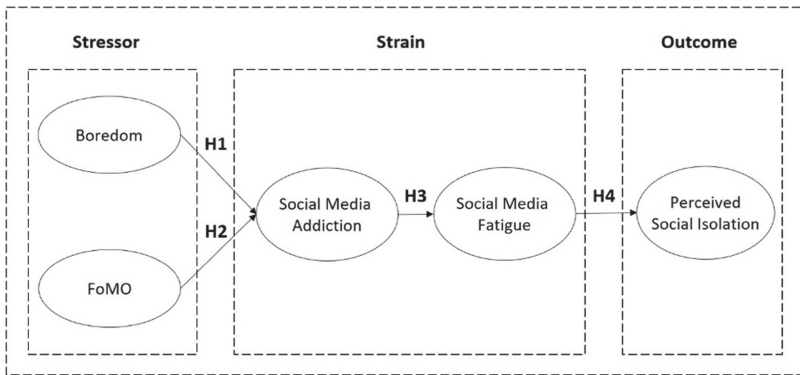


Fig. 1. Proposed conceptual model

4 Theoretical Underpinning

Freudenberger (1974) described burnout syndrome in their scientific articles in 1974. Then, Freudenberger, a German-born U.S. psychologist and psychotherapist popularised the term in several publications (Freudenberger 1975; Freudenberger 1977a, 1977b; Freudenberger and Richelson 1980). He is, therefore, widely considered as the founding father of the concept. Burnout is a syndrome viewed as chronic exhaustion, cynicism, and a lack of personal accomplishment. Exhaustion is described as an emotionally and physically drained person. Cynicism is a distant and callous attitude toward one's job and especially the people with whom one interacts when working (e.g., students, clients, patients). Finally, a lack of professional efficacy refers to feelings of incompetence, uselessness, and lost self-confidence. Based on the three dimensions of burnout, namely exhaustion, cynicism, and inefficacy, (Maslach and Jackson 1981) developed the Maslach Professional Burnout Inventory (MBI) to assess burnout construct has been the standard for research on burnout since the 1990s. Today it is one of the most widely used questionnaires for measuring burnout.

Koeske and Koeske (1993) acknowledge the merit of the MBI for measuring burnout-related phenomena but propose a re-conceptualisation of the burnout construct by linking it to extensive empirical research on stress. This re-conceptualisation identifies burnout exclusively with the MBI's emotional exhaustion subscale. They claim by reworking on the conceptual underpinnings of the burnout construct in this way preserve the tradition of psychometric excellence associated with the MBI and provide more continuity in the study of burnout. Therefore, Koeske and Koeske (1993) provide a conceptualisation of burnout that is less global than the tri-component conceptualisation proposed by Maslach and Jackson (1981) by considering burnout to be reflected only in the "emotional exhaustion" subscale items of the MBI. Also, Koeske and Koeske (1993) specify variables with a mediating and/or moderating influence that is considered to ground burnout more firmly in stress behaviour and health outcomes. Koeske and Koeske (1993) propose a stressor-strain-outcome (SSO) model with three principal components (stress, strain, and outcome). It links stressors/stress on the one hand with attitudinal, behavioural, and health outcomes. On the other, it identifies mediating factors that arise from subjective

stress and result in adverse effects. Strain in this research using the burnout model is identified as emotional exhaustion (of an ageing society).

This research proposes a new fundamental framework based on the stressor-strain-outcome (SSO). The main reason behind theorising SSO was that the SSO framework is aligned to investigate which stressors trigger social media addiction and the adverse outcomes to the ageing society. Studies show that the SSO model has been utilised for analysing stress-related situations and their outcomes in the context of technology use (Ayyagari et al. 2011; Cao et al. 2018; Dhir et al. 2018). However, there is no known study of the above among the elderly cohort.

The SSO model comprises three principal components, namely, stimulators (stressor), emotionally stressed states (strain) and psychological or physical results (outcome). Stressors refer to those factors that create stress. Thus, in this research boredom and fear of missing out (FOMO) are proposed as stressors. According to (Merrifield and Danckert 2014), people can get just as stressed from being bored as they can from being over-worked. That is because boredom is typically the result of a failed effort to engage with one's surroundings. The resulting irritation leads to emotional strain. Frequent experiences of FOMO were associated with adverse outcomes, including increasing negative affect, fatigue, and stress (Milyavskaya et al. 2018).

On the other hand, strain refers to psychological outcomes of stress in individuals. It could take various forms, and, in this proposed research, social media addiction and social network fatigue are insinuated as the strain factors. Irrevocably, perceived social isolation is the outcome of strain, which refers to a behavioural response to a stressful situation.

5 Conclusion

In a world where communication technology keeps track of today's living, ageing with dignity is the mantra that needs to be achieved for the elders. Ageing should not just be about the accumulation of damage within cells that leads to a loss of function. Ageing should be regarded as a success story of humankind. Analysing it from the view of longevity, ageing means we have made successful improvements and innovations in public health, medicine, social values, science, and technology that have led to people living longer.

This research contributes to the growing body of knowledge about social media and ageing societies, a subject that has been widely studied around the world. In particular, this study contributes significantly to the body of knowledge in several ways by revisiting the Burnout Theory and Stressor-Strain-Outcome (SSO) model. The underpinning theory is expected to strengthen its predictions towards predicting the relationship between the causal and effect of social media usage in ageing societies. It provides in-depth explanations which are crucial for understanding the antecedents and consequences of social media addiction and fatigue.

This issue should be of a significant focus to digital marketers. If digital marketers do not consider these issues, they might not reach this segment from the digital front perspective. The psychological aspect of social media on the elderly must be studied in detail to avoid giving an unpleasant customer journey to this fragile cohort.

With many countries in the world are experiencing growth in the ageing population, more concerted research efforts should be made to understand this growing consumer segment further. Furthermore, the purchasing power of this cohort cannot be denied. They have high spending power and spend gracefully but are without hesitation to spend more if needed. However, as noted in the earlier discussion, ageing societies are going through a certain phase of readiness and adaptation relating to social platforms because of the significant consequences affecting their wellbeing.

In tapping into this, digital marketers are encouraged to find a mechanism to ensure the stressor-strain-outcome would turn out positive for this cohort and avoid the effect of burnout. This study attempts to allow digital marketers to understand the dynamic factors that de-motivate and discourage a positive online customer journey for the elderly.

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References

- Alavi, K., Sail, R.M., Idris, K., Samah, A.A., Omar, M.: Living arrangement preference and family relationship expectation of elderly parents. *Pertanika J. Soc. Sci. Hum.* **19**(SPEC. ISSUE), 65–73 (2011)
- Alt, D.: College students' academic motivation, media engagement and fear of missing out. *Comput. Hum. Behav.* **49**, 111–119 (2015). <https://doi.org/10.1016/j.chb.2015.02.057>
- Ayyagari, R., Grover, V., Purvis, R.: Technostress: technological antecedents and implications. *MIS Quart. Manage. Inf. Syst.* **35**(4), 831–858 (2011)
- Baker, Z.G., Krieger, H., LeRoy, A.S.: Fear of missing out: relationships with depression, mindfulness, and physical symptoms. *Trans. Issues Psychol. Sci.* **2**(3), 275–282 (2016). <https://doi.org/10.1037/tps0000075>
- Bernstein, A., Trauth, J.: *Your Retirement, Your Way: Why It Takes More Than Money to Live Your Dream*. McGraw-Hill, New York (2007)
- Beyens, I., Frison, E., Eggermont, S.: "I don't want to miss a thing": adolescents' fear of missing out and its relationship to adolescents' social needs, Facebook use, and Facebook related stress. *Comput. Hum. Behav.* **64**, 1–8 (2016a). <https://doi.org/10.1016/j.chb.2016.05.083>
- Boyd, D.M., Ellison, N.B.: Social network sites: definition, history, and scholarship. *J. Comput. Mediated Commun.* **13**(1), 210–230 (2007). <https://doi.org/10.1111/j.1083-6101.2007.00393.x>
- Bright, L.F., Kleiser, S.B., Grau, S.L.: Too much Facebook? An exploratory examination of social media fatigue. *Comput. Hum. Behav.* **44**, 148–155 (2015). <https://doi.org/10.1016/j.chb.2014.11.048>
- Can, L., Kaya, N.: Social networking sites addiction and the effect of attitude towards social network advertising. *Procedia Soc. Behav. Sci.* **235**, 484–492 (2016). <https://doi.org/10.1016/j.sbspro.2016.11.059>
- Cao, X., Masood, A., Luqman, A., Ali, A.: Excessive use of mobile social networking sites and poor academic performance: antecedents and consequences from stressor-strain-outcome perspective. *Comput. Hum. Behav.* **85**, 163–174 (2018). <https://doi.org/10.1016/j.chb.2018.03.023>
- Casale, S., Rugai, L., Fioravanti, G.: Exploring the role of positive metacognitions in explaining the association between the fear of missing out and social media addiction. *Addict. Behav.* **85**, 83–87 (2018). <https://doi.org/10.1016/j.addbeh.2018.05.020>

- CBS: Older generation catching up on social media (2017). <https://www.cbs.nl/en-gb/news/2017/26/older-generation-catching-up-on-social-media>
- Chen, Y., Persson, A.: Internet use among young and older adults: relation to psychological wellbeing. *Educ. Gerontol.* **28**(9), 731–744 (2002). <https://doi.org/10.1080/03601270290099921>
- Choi, S.B., Lim, M.S.: Effects of social and technology overload on psychological wellbeing in young South Korean adults: the mediatory role of social network service addiction. *Comput. Hum. Behav.* **61**, 245–254 (2016). <https://doi.org/10.1016/j.chb.2016.03.032>
- Club, O.: OPpy Club (2010). www.happyoppy.com
- Cotten, S.R., Ford, G., Ford, S., Hale, T.M.: Internet use and depression among retired older adults in the United States: a longitudinal analysis. *J. Gerontol. Series B Psychol. Sci. Soc. Sci.* **69**(5), 763–771 (2014). <https://doi.org/10.1093/geronb/gbu018>
- Cotterell, N., Buffel, T., Phillipson, C.: Preventing social isolation in older people. *Maturitas* **113**, 80–84 (2018). <https://doi.org/10.1016/j.maturitas.2018.04.014>
- Dhir, A., Yossatorn, Y., Kaur, P., Chen, S.: Online social media fatigue and psychological wellbeing—a study of compulsive use, fear of missing out, fatigue, anxiety and depression. *Int. J. Inf. Manage.* **40** (December 2017), 141–152 (2018). <https://doi.org/10.1016/j.ijinfomgt.2018.01.012>
- Dickinson, A., Gregor, P.: Computer use has no demonstrated impact on the wellbeing of older adults. *Int. J. Hum. Comput. Stud.* **64**(8), 744–753 (2006). <https://doi.org/10.1016/j.ijhcs.2006.03.001>
- Doughty, S.: So much for a new lease of life! Joy of retirement wears off after just TEN MONTHS as bickering and daytime TV take their toll (2013). <https://www.dailymail.co.uk/news/article-2507404/Joy-retirement-wears-just-TEN-MONTHS-bickering-daytime-TV-toll.html>
- Elhai, J.D., Levine, J.C., Dvorak, R.D., Hall, B.J.: Fear of missing out, need for touch, anxiety and depression are related to problematic smartphone use. *Comput. Hum. Behav.* **63**, 509–516 (2016). <https://doi.org/10.1016/j.chb.2016.05.079>
- Fabris, M.A., Marengo, D., Longobardi, C., Settanni, M.: Investigating the links between fear of missing out, social media addiction, and emotional symptoms in adolescence: the role of stress associated with neglect and negative reactions on social media. *Addict. Behav.* **106**, 106364 (2020). <https://doi.org/10.1016/j.addbeh.2020.106364>
- Fahlman, S.A., Mercer, K.B., Gaskovski, P., Eastwood, A.E., Eastwood, J.D.: Does a lack of life meaning cause boredom? results from psychometric, longitudinal, and experimental analyses. *J. Soc. Clin. Psychol.* **28**(3), 307–340 (2009). <https://doi.org/10.1521/jscp.2009.28.3.307>
- Freudenberger, H.J.: The staff burn out syndrome in alternative institutions. *Psychotherapy* **12**(1), 73–82 (1975). <https://doi.org/10.1037/h0086411>
- Freudenberger, H.J.: Burnout: the organisational menace. *Train. Dev. J.* **31**(7), 26–27 (1977a)
- Freudenberger, H.J.: Staff burn-out. *J. Soc. Issues* **30**(1), 159–165 (1974). <https://doi.org/10.1111/j.1540-4560.1974.tb00706.x>
- Freudenberger, H.J.: Burnout: occupational hazard of the child care worker. *Child Care Quart.* **6**(2), 90–99 (1977b). <https://doi.org/10.1007/BF01554695>
- Freudenberger, H.J., Richelson, G.: *Burn-out: The High Cost of Achievement*. Anchor Press, Garden City (1980)
- Goldberg, Y.K., Eastwood, J.D., Laguardia, J., Danckert, J.: Boredom: an emotional experience distinct from apathy, anhedonia, or depression. *J. Soc. Clin. Psychol.* **30**(6), 647–666 (2011). <https://doi.org/10.1521/jscp.2011.30.6.647>
- Goswami, S., Köbler, F., Leimeister, J.M., Kremer, H.: Using online social networking to enhance social connectedness and social support for the elderly. In: *ICIS 2010 Proceedings - Thirty First International Conference on Information Systems* (2010)
- Greenson, R.R.: On boredom. *J. Am. Psychoanal. Assoc.* **1**(1), 7–21 (1953). <https://doi.org/10.1177/000306515300100102>

- Grieve, R., Indian, M., Witteveen, K., Anne Tolan, G., Marrington, J.: Face-to-face or Facebook: Can social connectedness be derived online? *Comput. Hum. Behav.* **29**(3), 604–609 (2013). <https://doi.org/10.1016/j.chb.2012.11.017>
- Griffiths, M.D., Szabo, A.: Is excessive online usage a function of medium or activity? An empirical pilot study. *J. Behav. Addictions* **3**(1), 74–77 (2014). <https://doi.org/10.1556/JBA.2.2013.016>
- Hsiao, K.L.: Compulsive mobile application usage and technostress: the role of personality traits. *Online Inf. Rev.* **41**(2), 272–295 (2017). <https://doi.org/10.1108/OIR-03-2016-0091>
- Hunt, M.G., Marx, R., Lipson, C., Young, J.: No more FOMO: limiting social media decreases loneliness and depression. *J. Soc. Clin. Psychol.* **37**(10), 751–768 (2018). <https://doi.org/10.1521/jscp.2018.37.10.751>
- Hutchison, D., Eastman, C., Tirrito, T.: Designing user interfaces for older adults. *Educ. Gerontol.* **23**(6), 497–513 (1997). <https://doi.org/10.1080/0360127970230601>
- Jacobse, L.A., Mather, M., Lee, M., Kent, M.: America’s aging population. *Popul. Bull.* **66**, 1–20 (2011)
- Ji, Y.G., Choi, J., Lee, J.Y., Han, K.H., Kim, J., Lee, I.K.: Older adults in an aging society and social computing: a research agenda. *Int. J. Hum.-Comput. Interact.* **26**(11–12), 1122–1146 (2010). <https://doi.org/10.1080/10447318.2010.516728>
- Joinson, A.N.: “Looking at”, “looking up” or “keeping up with” people? Motives and uses of Facebook. In: *Conference on Human Factors in Computing Systems – Proceedings*, pp. 1027–1036 (2008). <https://doi.org/10.1145/1357054.1357213>
- Jones, B.D., Bayen, U.J.: Teaching older adults to use computers: recommendations based on cognitive aging research. *Educ. Gerontol.* **24**(7), 675–689 (1998). <https://doi.org/10.1080/0360127980240705>
- Kanayama, T.: Ethnographic research on the experience of Japanese elderly people online. *New Media Soc.* **5**(2), 267–288 (2003). <https://doi.org/10.1177/1461444803005002007>
- Kaplan, A.M., Haenlein, M.: Users of the world, unite! The challenges and opportunities of Social Media. *Bus. Horiz.* **53**(1), 59–68 (2010). <https://doi.org/10.1016/j.bushor.2009.09.003>
- Klobas, J.E., McGill, T.J., Moghavvemi, S., Paramanathan, T.: Compulsive YouTube usage: a comparison of use motivation and personality effects. *Comput. Hum. Behav.* **87**, 129–139 (2018). <https://doi.org/10.1016/j.chb.2018.05.038>
- Koeske, G.F., Koeske, R.D.: A preliminary test of a stress-strain-outcome model for reconceptualising the burnout phenomenon. *J. Soc. Serv. Res.* **17**(3–4), 107–135 (1993). https://doi.org/10.1300/J079v17n03_06
- Kubeck, J.E., Miller-Albrecht, S.A., Murphy, M.D.: Finding information on the World Wide Web: exploring older adults’ exploration. *Educ. Gerontol.* **25**(2), 167–183 (1999). <https://doi.org/10.1080/036012799267945>
- Kuss, D.J., Griffiths, M.D.: Online social networking and addiction—a review of the psychological literature. *Int. J. Environ. Res. Public Health* **8**(9), 3528–3552 (2011). <https://doi.org/10.3390/ijerph8093528>
- Lawhon, T., Ennis, D., Lawhon, D.C.: Senior adults and computers in the 1990s. *Educ. Gerontol.* **22**(2), 193–201 (1996). <https://doi.org/10.1080/0360127960220205>
- Lee, S.B., Lee, S.C., Suh, Y.H.: Technostress from mobile communication and its impact on quality of life and productivity. *Total Qual. Manage. Bus. Excellence* **27**(7–8), 775–790 (2016). <https://doi.org/10.1080/14783363.2016.1187998>
- Leibowitz, G.: This Demographic Is Even More Addicted to Social Media than Millennials, Says New Research (2017). <https://www.inc.com/glenn-leibowitz/this-demographic-is-even-more-addicted-to-social-media-than-millennials-says-new.html>
- Li, W., O’Brien, J.E., Snyder, S.M., Howard, M.O.: Characteristics of internet addiction/pathological internet use in U.S. university students: a qualitative-method investigation. *PLOS One*, **10**(2), e0117372 (2015). <https://doi.org/10.1371/journal.pone.0117372>

- Lin, K.M.: Predicting Asian undergraduates' intention to continue using social network services from negative perspectives. *Behav. Inf. Technol.* **34**(9), 882–892 (2015). <https://doi.org/10.1080/0144929X.2015.1027736>
- Luqman, A., Cao, X., Ali, A., Masood, A., Yu, L.: Empirical investigation of Facebook discontinues usage intentions based on SOR paradigm. *Comput. Hum. Behav.* **70**, 544–555 (2017). <https://doi.org/10.1016/j.chb.2017.01.020>
- M'hiri, K., Costanza, A.: Problematic internet use in older adults, a critical review of the literature. *J. Addiction Res. Ther.* **06**(04), 253 (2015). <https://doi.org/10.4172/2155-6105.1000253>
- Mafauzy, M.: The problems and challenges of the aging population of Malaysia. *Malaysian J. Med. Sci. MJMS* **7**(1), 1–3 (2000). <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3406209/>
- Maslach, C., Jackson, S.E.: The measurement of experienced burnout. *J. Organ. Behav.* **2**(2), 99–113 (1981). <https://doi.org/10.1002/job.4030020205>
- Mathews, G.A., Nieh, E.H., Vander Weele, C.M., Halbert, S.A., Pradhan, R.V., Yosafat, A.S., Tye, K.M.: Dorsal raphe dopamine neurons represent the experience of social isolation. *Cell* **164**(4), 617–631 (2016). <https://doi.org/10.1016/j.cell.2015.12.040>
- Meerkerk, G.J., Van Den Eijnden, R.J.J.M., Vermulst, A.A., Garretsen, H.F.L.: The Compulsive Internet Use Scale (CIUS): some psychometric properties. *Cyberpsychol. Behav.* **12**(1), 1–6 (2009). <https://doi.org/10.1089/cpb.2008.0181>
- Mercer, K.B., Eastwood, J.D.: Is boredom associated with problem gambling behaviour? It depends on what you mean by “boredom”. *Int. Gambl. Stud.* **10**(1), 91–104 (2010). <https://doi.org/10.1080/14459791003754414>
- Merrifield, C., Danckert, J.: Characterising the psychophysiological signature of boredom. *Exp. Brain Res.* **232**(2), 481–491 (2014). <https://doi.org/10.1007/s00221-013-3755-2>
- Milyavskaya, M., Saffran, M., Hope, N., Koestner, R.: Fear of missing out: prevalence, dynamics, and consequences of experiencing FOMO. *Motivation Emot.* **42**(5), 725–737 (2018). <https://doi.org/10.1007/s11031-018-9683-5>
- Mukku, S.S.R., Harbishettar, V., Sivakumar, P.T.: Psychological morbidity after job retirement: a review. *Asian J. Psychiatry* **37**, 58–63 (2018). <https://doi.org/10.1016/j.ajp.2018.08.003>
- Nichols, L.A., Nicki, R.: Development of a psychometrically sound internet addiction scale: a preliminary step. *Psychol. Addict. Behav.* **18**(4), 381–384 (2004). <https://doi.org/10.1037/0893-164X.18.4.381>
- Nicholson, N.R.: Social isolation in older adults: an evolutionary concept analysis. *J. Adv. Nurs.* **65**(6), 1342–1352 (2009). <https://doi.org/10.1111/j.1365-2648.2008.04959.x>
- Nimrod, G.: Applying Gerontographics in the study of older Internet users. *J. Audience Recep. Stud.* **10**(2), 46–64 (2013). <https://doi.org/10.1093/esr/jcq043>
- Nowland, R., Necka, E.A., Cacioppo, J.T.: Loneliness and social internet use: pathways to reconnection in a digital world? *Perspect. Psychol. Sci.* **13**(1), 70–87 (2018). <https://doi.org/10.1177/1745691617713052>
- Owsinski, B.: Facebook Is Facing User Fatigue - hypebot. Guest Post (2017). <http://www.hypebot.com/hypebot/2017/02/facebook-facing-user-fatigue.html>
- Pantell, M., Rehkopf, D., Jutte, D., Syme, S.L., Balmes, J., Adler, N.: Social isolation: a predictor of mortality comparable to traditional clinical risk factors. *Am. J. Public Health* **103**(11), 2056–2062 (2013). <https://doi.org/10.2105/AJPH.2013.301261>
- Perrin, A.: Social Networking Usage: 2005–2015. Pew Research Center (2015)
- Primack, B.A., et al.: Social media use and perceived social isolation among young adults in the U.S. *Am. J. Preventive Med.* **53**(1), 1–8 (2017). <https://doi.org/10.1016/j.amepre.2017.01.010>
- Przybylski, A., Murayama, K., DeHaan, C.R., Gladwell, V.: Motivational, emotional, and behavioral correlates of fear of missing out. *Comput. Hum. Behav.* **29**, 1841–1848 (2013)
- Riordan, B.C., Flett, J.A.M., Hunter, J.A., Scarf, D., Conner, T.S.: Fear of missing out (FoMO): the relationship between FoMO, alcohol use, and alcohol-related consequences in college students. *J. Psychiatry Brain Func.* **2**(1), 9 (2015). <https://doi.org/10.7243/2055-3447-2-9>

- Rosales, A., Fernández-Ardèvol, M.: Beyond whatsapp: older people and smartphones. *Romanian J. Commun. Public Relat.* **18**(1), 27–47 (2016)
- Rozgonjuk, D., Sindermann, C., Elhai, J.D., Montag, C.: Fear of Missing Out (FoMO) and social media's impact on daily-life and productivity at work: do WhatsApp, Facebook, Instagram, and Snapchat Use Disorders mediate that association? *Addict. Behav.* **110**, (2020). <https://doi.org/10.1016/j.addbeh.2020.106487>
- Ryan, T., Chester, A., Reece, J., Xenos, S.: The uses and abuses of facebook: a review of Facebook addiction. *J. Behav. Addictions* **3**(3), 133–148 (2014). <https://doi.org/10.1556/JBA.3.2014.016>
- Slegers, K., van Boxtel, M., Jolles, J.: Effects of computer training and internet usage on cognitive abilities in older adults: a randomised controlled study. *Aging Clin. Exp. Res.* **21**(1), 43–54 (2009). <https://doi.org/10.1007/BF03324898>
- Steptoe, A., Shankar, A., Demakakos, P., Wardle, J.: Social isolation, loneliness, and all-cause mortality in older men and women. *Proc. Natl. Acad. Sci. U.S.A.* **110**(15), 5797–5801 (2013). <https://doi.org/10.1073/pnas.1219686110>
- Sum, S., Mathews, R.M., Hughes, I., Campbell, A.: Internet use and loneliness in older adults. *Cyberpsychol. Behav.* **11**(2), 208–211 (2008). <https://doi.org/10.1089/cpb.2007.0010>
- Sun, Y., Zhang, Y.: A review of theories and models applied in studies of social media addiction and implications for future research. *Addict. Behav.* **114**, 106699 (2021). <https://doi.org/10.1016/j.addbeh.2020.106699>
- Tarafdar, M., Maier, C., Laumer, S., Weitzel, T.: Explaining the link between technostress and technology addiction for social networking sites: a study of distraction as a coping behavior. *Inf. Syst. J.* **30**(1), 96–124 (2020). <https://doi.org/10.1111/isj.12253>
- Teng, C.E., Joo, T.M.: Analysing the usage of social media: a study on elderly in Malaysia. *J. Hum. Soc. Sci.* **11**(3), 737–743 (2017). <https://doi.org/10.5281/zenodo.1130321>
- Hamid, T.A., Aizan, T.: Population Ageing in Malaysia A Mosaic of Issues, Challenges and Prospects, p. 92. Universiti Putra Malaysia Press (2015)
- UNFPA and HelpAge International: Ageing in the Twenty-First Century: A Celebration and a Challenge. United Nations Population Fund & HelpAge International (2012)
- United Nations: Population Facts, World Population Ageing 2015 (2015)
- Valtorta, N.K., Kanaan, M., Gilbody, S., Ronzi, S., Hanratty, B.: Loneliness and social isolation as risk factors for coronary heart disease and stroke: systematic review and meta-analysis of longitudinal observational studies. *Heart* **102**(13), 1009–1016 (2016). <https://doi.org/10.1136/heartjnl-2015-308790>
- Van Den Eijnden, R.J.J.M., Lemmens, J.S., Valkenburg, P.M.: The Social Media Disorder Scale: validity and psychometric properties. *Comput. Hum. Behav.* **61**, 478–487 (2016). <https://doi.org/10.1016/j.chb.2016.03.038>
- Vangelisti, A., Perlman, D.: *The Cambridge Handbook of Personal Relationships*. Cambridge University Press, Cambridge (2006). <https://doi.org/10.1017/cbo9780511606632>
- Wellman, B., Quan Haase, A., Witte, J., Hampton, K.: Does the Internet increase, decrease, or supplement social capital? Social networks, participation, and community commitment. *Am. Behav. Sci.* **3**, 436–455 (2001). <https://doi.org/10.1177/00027640121957286>
- White, H., McConnell, E., Clipp, E., Branch, L.G., Sloane, R., Pieper, C., Box, T.L.: A randomised controlled trial of the psychosocial impact of providing internet training and access to older adults. *Aging Ment. Health* **6**(3), 213–221 (2002). <https://doi.org/10.1080/13607860220142422>
- Wong, C.Y.: Exploring the relationship between mobile phone and senior citizens: a Malaysian perspective. *Int. J. Hum.-Comput. Interact.* **2**, 65–77 (2011)
- Xie, B.: Multimodal computer-mediated communication and social support among older Chinese internet users. *J. Comput. Mediated Commun.* **13**(3), 728–750 (2008). <https://doi.org/10.1111/j.1083-6101.2008.00417.x>
- Young, K.: Facebook Addiction Disorder? The Center for Online Addiction, Bradford (2009)

- Zhang, F., Kaufman, D.: Social and emotional impacts of internet use on older adults. *Eur. Sci. J.* **11**(17), 1–15 (2015). <https://doi.org/10.19044/esj.2015.v11n17p%p>
- Zhang, S., Zhao, L., Lu, Y., Yang, J.: Do you get tired of socialising? An empirical explanation of discontinuous usage behaviour in social network services. *Inf. Manag.* **53**(7), 904–914 (2016). <https://doi.org/10.1016/j.im.2016.03.006>
- Zickuhr, K., Madden, M.: Older Adults and Internet Use. Pew Research Center's Internet & American Life Project. Pew Research Center's Internet & American Life Project (2012)



Who Is a Digital Agency? Delving into the Value Proposition

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Abstract. The marketing communication services market has been transformed by digitisation, which has led to the evolution of traditional agencies, the emergence of new digital agencies, and the entry of consulting firms into the market. The literature on agencies has investigated the differences between traditional and digital agencies in terms of structures, processes, and culture. However, little is known about new players' value propositions. Given the phenomenological variety of digital agencies found in the management literature, the research aims to investigate the characteristics of these players' value proposition. Through a qualitative exploratory approach based on 22 in-depth interviews with communication professionals and the subsequent thematic content analysis, the authors identified three different digital agencies' typologies: *strategic digital consultants*, *integrated digital communication agencies*, and *specialised digital communication agencies*. Given the absence of studies on the topic, the paper contributes to the literature on agencies by outlining the key characteristics of the value proposition of the three typologies of digital agencies identified in terms of the offering, target and strategy. From a managerial perspective, this study may reduce client disorientation, better define the competitive landscape, and, finally, improve the communication network's performance.

Keywords: Marketing communication · Digital agency · Value proposition · In-depth interviews · Content analysis

1 Introduction

The digital revolution has profoundly transformed the marketing communication services market (Kassaye 1997) and has led to increased communication network complexity (Grant and McLeod 2007; Ceccotti and Vernuccio 2013). Due to digitalisation, the following has occurred: (1) the evolution of traditional agencies (i.e., creative and media agencies born before the digital revolution) (Wagler 2013; Lynch 2019; Stuhlfaut and Windels 2019); (2) the emergence of new agencies specialising in consulting on digital media (Windels and Stuhlfaut 2018; Hughes and Vafeas 2019); and (3) the market entry of large consulting firms (e.g., *Accenture Interactive* and *Deloitte Digital*) that, while supporting clients in their digital transformation process, also provide digital communication services (Lynch 2019; Ceccotti et al. 2019).

Studies on communication agencies have focused almost exclusively on traditional agencies' digital transformation (Ceccotti et al. 2020; Lynch and West 2017; Windels and Stuhlfaut 2018; Turnbull and Wheeler 2017). Although Rodgers and Chen stressed the importance of investigating "new agencies" as early as 2002, the literature on this topic is scant and restricted to the analysis of specific issues, such as the differences between these new agencies and traditional agencies in terms of structures, processes and corporate culture (Mallia and Windels 2011; Patwardhan et al. 2019; Rodgers and Chen 2002). These new players are defined generically as agencies specialising in interactive digital media, such as internet advertising (Rodger and Chen 2002), mobile advertising, social media marketing, etc. (Mallia and Windels 2011; Vernuccio and Ceccotti 2015). The literature seems to lack an in-depth examination of their value proposition. Instead, the latter could be relevant to investigate for different reasons.

First, by analysing the managerial literature (e.g., Guttman 2020) and the websites of specialised digital category associations (e.g., Interactive Advertising Bureau – IAB - Europe and IAB Italy), one can find a tremendous phenomenological variety of digital agencies. This variety could be at the basis of advertisers' disorientation in the face of players that do not have a distinctive value proposition (Ceccotti and Vernuccio 2013) and the resulting difficulty in assessing the work of the communication partner (Ceccotti et al. 2019). Second, some authors underline clients' opportunity to internalise digital communication activities, especially for low budgets (Hughes and Vafeas 2019). The managerial literature also stresses this trend for advertisers with high digital communication budgets (Vizard 2020; Whiteside 2019). Therefore, the need emerges for digital agencies to market themselves with a value proposition that is distinctive and relevant for clients.

In the absence of previous research on the subject, this paper aims to contribute to the advancement of knowledge in marketing communication agency studies by outlining the key characteristics of digital agencies' value proposition. From a managerial perspective, this study will better define the competitive landscape (on the supply side) and reduce client disorientation (on the demand side of communication services), thus improving the communication network's overall performance.

The remainder of this paper is structured as follows: after a description of the digital agency studies, the research question (Sect. 2) and the method (Sect. 3) will be introduced, and then the results (Sect. 4) and conclusions of the work (Sect. 5) will be presented.

2 Theoretical Background and Research Questions

As early as 1997, Kassaye stressed the profound transformation of the competitive landscape in the advertising industry with the introduction of new players that the author calls "*computer graphic studios and boutiques for web-related accounts*" (p. 85). In the academic literature on communication agencies, there is a remarkable variety of terms to represent players specialising in digital media: "*new-media firms*", "*internet boutiques*" and "*new-media agencies*" (Rodgers and Chen 2002); "*interactive agencies*" (Mallia and Windels 2011); "*digital agencies*" (Vernuccio and Ceccotti 2015); "*pure-play digital agencies*" (Stuhlfaut and Windels 2019); "*new agencies*" (Hughes and Vafeas 2019); and "*digitally focused agencies*" (Patwardhan et al. 2019).

In this paper, we will use “*digital agencies*” to refer to born-digital players (Sebastian et al. 2017) that offer services for marketing communication on interactive media (Mallia and Windels 2011; Vernuccio and Ceccotti 2015).

In the literature on marketing communication agencies, the analysis of these new players has not been in-depth, despite the growing relevance of digital communication (Iab Europe 2020). Previous studies have only investigated digital agencies in a comparative way to identify their differences from traditional agencies. The main differences that have emerged are related to structures and competencies, processes and corporate culture (Rodger and Chen 2002; Mallia and Windels 2011; Patwardhan et al. 2019).

Digital agencies are very lean organisations with high functional diversity in terms of resources, knowledge and specialisations, which allows them to generate innovation through the continuous contamination of experiences between teams (Kwantes et al. 2005). The traditional creative couple -consisting of an art director and a copywriter- is replaced by mixed teams, mainly coordinated by a project manager who often takes the account manager’s place (Mallia and Windels 2011). Technical and marketing analysis skills are at the heart of the organisational structure of these agencies (Ceccotti 2018; Patwardhan et al. 2019). Moreover, thanks to continuous updating and internal growth paths, these players can attract and retain the best talent in the job market (Patwardhan et al. 2019).

As opposed to traditional agencies, where some routines were consolidated over time, digital agencies do not follow rigidly codified processes and present high flexibility and speed in responding to client needs (Patwardhan et al. 2019).

Concerning the culture in digital agencies, there is a more collaborative approach than in traditional agencies: the project proposed to the client is often the result of the collaboration between different professionals working in teams and not of a single professional (e.g., the creative director) who takes pride in idea authorship (Mallia and Windels 2011). Another cultural trait that characterises digital agencies is the orientation towards performance and data-driven results (Patwardhan et al. 2019). This latter aspect characterises the value proposition of such agencies, which offer advertising services with measurable returns (e.g., conversion rates), enabling clients to develop campaigns that are more effective and efficient than those of traditional agencies and optimisable in the short term (Guercini 2008; Patwardhan et al. 2019).

By analysing the management studies (Advertising Age 2020; Guttman 2020) and the websites of the leading trade associations specialising in digital marketing and communication (e.g., Iab Europe), we can find a tremendous phenomenological variety of digital agencies. This variety also seems to be at the basis of the client disorientation that some studies on agency-client relationships highlighted (Ceccotti et al. 2019). Moreover, the “vagueness” of the value proposition may generate difficulties for the client to correctly judge the value of the service offered by the communication partner (Ceccotti 2018).

Digital agencies must present themselves with a clear and relevant offer to position themselves distinctively in the communication services market and to reduce the risk of clients internalising digital communication activities (Hughes and Vafeas 2019). Some recent studies have investigated the appropriateness of internalising online advertising

activities according to their return in terms of sales/ROI/ROS, highlighting the convenience of using digital agencies only in cases of high budgets dedicated to these activities (Porto and de Abreu 2019). However, the management literature also states that several large clients with significant budgets for digital communication have started to conduct these activities internally, both on the creative side and in terms of media planning and buying (Vizard 2020; Whiteside 2019).

In marketing communication agency studies, there are no specific contributions to the topic of digital agencies' value proposition in contrast to traditional agencies (Childers et al. 2018; Linch and West 2017; Wagler 2013).

The value proposition is one of the three components of a company's business model (Richardson 2008) and describes "*what the firm will deliver to its customers, why they will be willing to pay for it, and the firm's basic approach to competitive advantage*" (p. 138). In particular, value proposition comprehends the following three aspects: 1) the activities conducted, and the services provided (offering), 2) the target, and 3) the business strategy to win customers and gain a competitive advantage. Following this conceptualisation, this study aims to outline the key characteristics of the value proposition of digital agencies from the perspective of communication professionals, answering the following RQ:

RQ – What is the value proposition of a digital agency in terms of the offering, the target customer and the competitive strategy?

By representing the different aspects of the digital agencies' value proposition, it will be possible to define the competitive landscape more clearly and, at the same time, to better guide the client in choosing the most appropriate agency to meet his digital communication needs.

3 Methodology

Due to the lack of previous studies on digital agencies' value proposition, qualitative exploratory research was conducted based on 22 in-depth personal interviews (Creswell 1998) with marketing communication professionals belonging to Italian organisations with a strong international presence. In particular, three categories of respondents were involved:

- 1) Trade associations specialising in digital communication (n = 2) to have a broad vision of the offering of digital agencies;
- 2) Advertisers (n = 8), top spenders in digital communication, to investigate their perception of the digital agencies' value proposition as users of the services they deliver; and
- 3) Digital agencies (n = 12), to deepen the characteristics of their offering, the target customer, and the competitive strategy adopted.

Moreover, an in-depth collection and analysis of secondary data (i.e., industry reports, websites of trade association members, websites of agencies belonging to large

advertising networks) were conducted with the dual aim of identifying digital agencies to be involved in the research and gathering information to better interpret the results (Muninger et al. 2019).

Given the subject of the study, the key informant approach was adopted in the selection of the respondents (Robson and Foster 1989): only professionals with a long experience in digital communication and a leading role in their organisations were involved in the theoretical sample (Dexter 1970) (e.g., chief marketing officers, communication directors, head of digital for trade associations and advertisers; founders, partners, CEOs, general managers, and vice presidents of sales and marketing for digital agencies). To define the dataset size, the criterion of theoretical saturation was adopted: the data collection was only closed when the contribution of new interviews did not bring new knowledge useful for achieving the study goal (Francis et al. 2010; Corbin and Strauss 2014). The interview guide, based on open-ended questions, was the same for the different categories of respondents: after the definition of digital agency, the different aspects of the value proposition (i.e., offering, target customer, and strategy) were explored in depth.

The interviews were conducted by telephone or Skype and lasted between 45 and 70 min. Each interview was recorded and transcribed in full. The interviews were analysed using thematic content analysis (King and Horrocks 2010), which allowed highlighting the key characteristics of the value proposition (in terms of offering, target and strategy) for three categories of digital agencies.

The so-called “code-confirming” procedure was used to ensure the reliability of the results, and the procedure involved two independent coders who were experts on the topic under investigation. The agreement level among the coders was 89%, above the minimum required for the exploratory approach (Powell 2007). Finally, the results were reviewed by four respondents who substantially agreed and validated them (Lincoln and Guba 1985).

4 Findings

First, the respondents highlighted the indeterminacy of the adjective «digital», which does not adequately qualify the agency as it does not identify the specificities of the value proposition of these players. *“Digital is the era in which we live. Everyone interprets the digital being in their own way. In a competitive arena, everyone can be called a ‘digital agency’, and for this reason, the term is too vague”* (CEO, Digital agency). Simultaneously, the necessary conditions have emerged for an agency to be called digital: the strong technological connotation, the strategic data-driven and customer-centric approach, the culture of experimentation and collaboration.

However, there is a certain variety in the value proposition of these players. Three typologies of digital agencies emerged from the interviews, which present an increasing level of specialisation: (1) *strategic digital consultants*, (2) *integrated digital communication agencies*, and (3) *specialised digital communication agencies*.

In the next pages, we will briefly present the key characteristics of the value proposition (in terms of offering, target customer, and competitive strategy) for each type of agency identified.

1) *Strategic digital consultants*

Strategic digital consultants are real partners in the customer's digital transformation process (e.g., *Reply*, *AKQA*, and *Alkemy*). They have strong technological expertise and support companies in redefining business models enabled by big data, cloud computing, artificial intelligence, and the Internet of Things. The consultancy offered is at several levels: (a) technology (e.g., platform and solution), (b) processes (e.g., service design), and (c) strategy and communication (e.g., creativity and media planning).

"We support our customers in extracting value from technology. We assist them in designing processes, applications and digital communication. Clients look to us for business innovation, for solutions that can also significantly impact their organisation and, above all, their results" (VP Sales and Marketing, Digital agency).

According to some interviewees, these players are not "digital agencies" in a strict sense: they are strategic business consultants, not merely digital communication consultants. They state that they are digital technology 'generalists' in this market, and for this very reason they are chosen: *"A company that only needs a digital communication campaign is unlikely to turn to us, whereas a company that we are supporting in the broader digital transformation process is very likely to turn to us for its digital campaigns"* (VP Sales and Marketing, Digital agency).

To complete their communication offerings, they often acquire communication agencies specialising in various digital areas (e.g., social media, influencer marketing, etc.).

Due to their breadth of consultancy services, these players mainly target large companies, establishing stable medium- to long-term relationships with them.

On a competitive level, *strategic digital consultants* compete with large management consulting firms (e.g., *Accenture Interactive* and *Deloitte Digital*), which are acquiring specialised skills to complete their offering with communication services. Instead, they do not feel particularly threatened by other types of digital agencies.

2) *Integrated digital communication agencies*

Integrated digital communication agencies are communication partners that support clients in defining and implementing their digital communication strategy (e.g., *Doing* and *Caffeina*). In most cases, they result from processes of extension of activities conducted by agencies that have progressively integrated different communication services to provide clients with a complete offer. They are characterised by a *"horizontal vision and vertical professionalism"* (Communication Director, Advertiser).

They combine brand consultancy (which used to be the exclusive domain of traditional advertising agencies) with a data-driven approach and measurability of communication results. By proposing an integrated offer, they reduce the coordination efforts of the network of specialised agencies that would have to be conducted by the client.

"The company that turns to us can find all digital specialisations under one roof, and this brings significant advantages in terms of coordination, speed and consistency of campaigns. We start with the customer's needs and build a strategy around them using various digital tools and channels" (Founder, Digital agency).

Concerning the customers, *integrated digital communication agencies* target medium to large companies with an evolved approach to digital communication with whom they manage to build stable relationships and increasingly smaller customers who want to build an online presence.

On the strategy side, *integrated digital communication agencies* are generalists in digital communication, and their main competitors are the traditional agencies that also offer digital services. However, compared to the latter, they are more credible in consultancy as they have a digital mindset from their start:

“Even if the proposition to the client looks similar ‘on paper’ (a digital communication campaign), ours is the result of a digital mindset that traditional agencies do not have. We are digital in our approaches, methodologies, and processes; therefore, our value proposition is certainly more credible for the client than that of traditional agencies” (General Manager, Digital agency).

Finally, *integrated digital communication agencies* also compete with agencies specialised in specific digital communication areas (i.e., *“specialised digital communication agencies”*) when the client requires consultancy for just one of these areas.

3) *Specialised digital communication agencies*

Specialised digital communication agencies are communication agencies that base their value proposition on a certain degree of specialisation or hyper-specialisation (e.g., *We Are Social* and *Webranking*) and can offer more significant expertise in this area than *integrated digital communication agencies*. The consultancy focuses on a single communication project (e.g., social media strategy) or the implementation of a particular activity (e.g., chatbot development) or a specific channel (e.g., mobile advertising).

The respondents agree on the significant fragmentation of the offer and the wide variety of players due to the numerous specialisations of digital communication: *“There has been a huge fragmentation of digital activities that makes it impossible to map agencies and produce a taxonomy”* (Marketing Director, Trade Association).

The target customer of these agencies is “liquid” and includes the following: (a) large enterprises seeking a hyper-specialised service, (b) small-/medium-sized enterprises that do not have an evolved approach to digital communication and are seeking a single digital consultancy service, and (c) traditional agencies that have not yet developed digital skills in-house and complete their offer by resorting to external suppliers. In the latter case, the supplier’s identity very often remains hidden from the client and is only revealed when the reputation of the specialised agency can qualify the overall value proposition of the traditional agency.

Several respondents stressed different strategic alternatives for specialised digital communication agencies. In particular, they can accomplish the following:

- (a) Progressively broaden their expertise to other consultancy areas to offer the client a more comprehensive service in the digital field and become an *integrated digital communication agency*: *“Often agencies that are born specialising in a certain service broaden their offer to increase business opportunities in neighbouring areas in which they can quickly build up expertise and be credible”* (Marketing Director, Trade association),

- (b) Covering market niches in order to be the best in a specific field. These are medium-sized to large agencies that support even large companies in a specific activity: “*When we redesigned all the company websites in all the countries where we operate, we turned to a specialised agency to get the maximum expertise in this field*” (Communication Director, Advertiser),
- (c) Grow to become appealing to, and be acquired by, the large communication networks and consultancy firms: “*When there is a disruption, the medium/small vertical agencies that drive that change start to grow and become attractive to the large structures that need those specialised skills, and then the process of acquisition by the latter begins in order to remain competitive in the market*” (CEO, Digital agency).

Depending on the strategy adopted, the competitive arena varies and may include *integrated digital communication agencies* offering consultancy on a specific service and other agencies specialising in the same digital field.

5 Conclusion

The present work is part of the literature on communication agencies, particularly by exploring the key characteristics of the value proposition of digital agencies, i.e., born-digital players specialised in the offering of services on interactive media. By adopting a broad perspective involving communication professionals from different categories (namely, Trade associations, Advertisers and Digital agencies), it was possible to outline the variety of the value propositions of these new players from the professionals’ perspective and to identify three types of digital agencies: (1) *strategic digital consultants*, (2) *integrated digital communication agencies*, and (3) *specialised digital communication agencies*. For each typology, the offering, the target customer, and the competitive strategy were presented; the competitors perceived as most relevant were also outlined.

There are three contributions of this study to the literature on communication agencies.

First, this research focuses on a category of agency, i.e., digital agencies, which have received scant attention in previous studies. Previous literature deepened the traditional players and delved into the “new” ones only to outline the differences between the two types of agencies in terms of processes, structures and culture (Rodger and Chen 2002; Mallia and Windels 2011; Patwardhan et al. 2019).

Second, focusing on digital agencies, the research investigated one of the dimensions of the business model, namely, the value proposition, for the first time by adopting Richardson’s (2008) model and deepening its three components: the offering, the target and the strategy.

Third, this study made it possible to overcome the vagueness of the value proposition found in previous contributions (Guercini 2008; Patwardhan et al. 2019). The expression “digital agency”, which refers to any agency specialised in digital media (Mallia and Windels 2011; Vernuccio and Ceccotti 2015), is not adequate to indicate these new players’ specificities and needs to be further qualified to better explicate the positioning of agencies in the communication services market. Therefore, this study contributes to

the literature by proposing three different types of digital agencies (identifiable with three different “labels”) according to the specificity of their value proposition.

The results also provide managerial implications for both advertisers and each type of digital agency. For the former, understanding the value proposition variety of the digital agencies is useful to orient themselves in a very complex communication scenario and to be able to better evaluate the projects and the results proposed by their consultants. Additionally, depending on the level of consultancy (business, strategic brand, and on specific communication projects), they will enter into medium-term partnerships or short-term supply relationships.

On the agencies’ side, *strategic digital consultants* should present themselves as real business partners for clients, and they should also play a relevant training role in their digital transformation process. They should aim for stable and high-quality relationships with clients, including high-level corporate counterparts (i.e., C-level executives).

Integrated digital communication agencies are strategic communication partners for clients. They must differentiate themselves from traditional agencies by providing strategic brand consulting with a native digital mindset and, at the same time, delivering measurable and optimisable results in the short term. Compared to *specialised digital communication agencies*, they must present themselves as one-stop consultants who can support their clients in all areas of digital communication.

Specialised digital communication agencies are suppliers of specific communication projects. They should find their growth path either by maintaining a high level of focus in their offerings or, on the contrary, by aiming for integration and, thus, transformation into *integrated digital communication agencies*.

Moreover, this study can help marketing communication and digital marketing students orientate themselves according to the value propositions of various digital agencies.

The research has some limitations related to the methodological approach and the geographical focus of the set of respondents. The adoption of the qualitative method does not allow the generalisation of the results obtained. Moreover, the involvement of respondents belonging to Italian realities, albeit with an international perspective, could lead to results that cannot be observed in other countries. These limitations give rise to some future lines of research. First, it might be interesting to widen the geographical context of the investigation. Second, a case study analysis could be conducted to deepen the specificities of each type of digital agency proposed in this paper. On a thematic level, it seems interesting to study another component of the business model proposed by Richardson (2008) and not investigated so far in the literature: value capture, i.e., the cost structure and revenue models of the three different types of digital agencies that emerged in this study.

References

- Advertising Age: Agency report (2020). <https://acn-marketing-blog.accenture.com/wp-content/uploads/2020/05/Ad-Age-Agency-Report-2020-FINAL.pdf>. Accessed from 11 May 2020
- Ceccotti, F.: *Le agenzie di comunicazione nel nuovo scenario della comunicazione integrata di marketing*. Innovazione, competizione, relazioni. McGraw-Hill education, Milano (2018)

- Ceccotti, F., Vernuccio, M.: The communication network evolution: a qualitative study on emerging relational issues and future architectures. In: 42nd European Marketing Academy Annual Conference, Istanbul, 4–7 June 2013
- Ceccotti, F., Vernuccio, M., Mattiacci, A.: The evolution of agency-client relationships within the communication network in Italy: the perspective of communication partners. *Sinergie* **37**(3), 63–85 (2019)
- Ceccotti, F., Vernuccio, M., Mattiacci, A., Pastore, A.: Trasformazione digitale ed evoluzione dei business model delle agenzie tradizionali in Italia: un'analisi esplorativa sui professionisti della comunicazione. In: Proceedings XVII SIM Conference “Il marketing per una società migliore”, LIUC – University of Castellanza, Varese, 28–30 October 2020
- Childers, C.C., Haley, E., McMillan, S.: Achieving strategic digital integration: views from experienced New York City advertising agency professionals. *J. Current Issues Res. Advert.* **39**(3), 244–265 (2018)
- Corbin, J., Strauss, A.: *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. Sage Publications (2014)
- Creswell, J.W.: *Qualitative Inquiry and Research Design: Choosing Among Five Traditions*. Sage, Thousand Oaks, CA (1998)
- Dexter, A.: *Elite and Specialized Interviewing*. North-Western Press, Evanston (1970)
- Francis, J.J., Johnston, M., Robertson, C., Glidewell, L., Entwistle, V., Eccles, M.P., Grimshaw, J.M.: What is an adequate sample size? Operationalising data saturation for theory-based interview studies. *Psychol. Health* **25**(10), 1229–1245 (2010)
- Grant, I., McLeod, C.: Advertising agency planning—conceptualising network relationships. *J. Market. Manage.* **23**(5–6), 425–442 (2007)
- Guercini, S.: Le nuove agenzie di comunicazione nell'on line media market. *Economia e Diritto del Terziario* **2**, 315–343 (2008)
- Guttmann, A.: Leading digital agency networks worldwide 2019 (2020). <https://www.statista.com/statistics/466411/digital-agency-networks/>
- Hughes, T., Vafeas, M.: Marketing agency/client service-for-service provision in an age of digital transformation. *J. Bus. Bus. Market.* **26**(3–4), 265–280 (2019)
- IAB Europe: AdEx Benchmark 2019 (2020). https://iab europe.eu/wp-content/uploads/2020/06/IAB-Europe_AdEx-Benchmark_2019_2020_FINAL_03.06.20.pdf
- Kassaye, W.W.: The effect of the world wide web on agency–advertiser relationships: towards a strategic framework. *Int. J. Advert.* **16**(2), 85–103 (1997)
- King, N., Horrocks, C.: *Interviews in Qualitative Research*. Sage, London (2010)
- Kwantes, C.T., Bergeron, S., Kaushal, R.: Applying Social Psychology to Diversity. In: Schneider, F.W., Gruman, J., Coutts, L.M. (eds.) *Applied Social Psychology: Understanding and Addressing Social and Practical Problems*. Sage Publications, Thousand Oaks, CA (2005)
- Lincoln, Y., Guba, E.G.: *Naturalistic Inquiry*. Sage, Newbury Park, CA (1985)
- Lynch, J.: Advertising industry evolution: agency creativity, fluid teams and diversity. An exploratory investigation. *J. Market. Manage.* **35**(9–10), 845–866 (2019)
- Lynch, J., West, D.C.: Agency creativity: teams and performance: a conceptual model links agency teams' knowledge utilization, agency creativity, and performance. *J. Advert. Res.* **57**(1), 67–81 (2017)
- Mallia, K.L., Windels, K.: Will changing media change the world? An exploratory investigation of the impact of digital advertising on opportunities for creative women. *J. Interact. Advert.* **11**(2), 30–44 (2011)
- Muninger, M.I., Hammedi, W., Mahr, D.: The value of social media for innovation: a capability perspective. *J. Bus. Res.* **95**, 116–127 (2019)
- Patwardhan, P., Habib, S., Patwardhan, H.: Managing change and finding identity: a grounded analysis of advertising agency leadership. *J. Curr. Issues Res. Advert.* **40**(3), 315–333 (2019)

- Porto, R.B., de Abreu, F.A.: Investment in online advertising and return on sales: does it pay to outsource the services to an advertising agency? *J. Market. Commun.* **25**(8), 843–860 (2019)
- Powell, S.: Organisational marketing, identity and the creative brand. *J. Brand Manage.* **15**(1), 41–56 (2007)
- Richardson, J.E.: The business model: an integrative framework for strategy execution. *Strateg. Change* **17**, 133–144 (2008)
- Robson, S., Foster, A.: *Qualitative Research in Action*. Hodder and Stoughton, London (1989)
- Rodgers, S., Chen, Q.: Post-adoption attitudes to advertising on the internet. *J. Advert. Res.* **42**(5), 95–104 (2002)
- Sebastian, I., Ross, J., Beath, C., Mocker, M., Moloney, K., Fonstad, N.: How big old companies navigate digital transformation. *MIS Quart. Executive* **16**(3), 197–213 (2017)
- Stuhlfaut, M.W., Windels, K.: Altered states: the effects of media and technology on the creative process in advertising agencies. *J. Market. Commun.* **25**(1), 1–27 (2019)
- Turnbull, S., Wheeler, C.: The advertising creative process: a study of UK agencies. *J. Market. Commun.* **23**(2), 176–194 (2017)
- Vernuccio, M., Ceccotti, F.: Strategic and organisational challenges in the integrated marketing communication paradigm shift: a holistic vision. *Eur. Manag. J.* **33**(6), 438–449 (2015)
- Vizard, S.: PepsiCo marketing becomes ‘more selective’ with focus on fewer, bigger activities. *Marketing week*, 14 July (2020)
- Wagler, A.: Embracing change: Exploring how creative professionals use interactive media in advertising campaigns. *J. Interact. Advert.* **13**(2), 118–127 (2013)
- Whiteside, S.: How P&G is responding to the in-housing trend, *Warc*, 1 May 2019
- Windels, K., Stuhlfaut, M.: New advertising agency roles in the ever-expanding media landscape. *J. Curr. Issues Res. Advert.* **39**(3), 226–243 (2018)



Moments of Truth in Social Commerce Customer Journey: A Literature Review

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Abstract. Companies should know their customers, and more than simply the market expectations, managers should track consumers' experiences, particularly the interactions they have in the online environment. The understanding of the user experience allows the design of strategic touchpoints, through digital media techniques. Considering the growing importance of digital transactions through social networks, this chapter consists on a review of academic literature about online customer journey in social commerce platforms, in order to inform readers about the metrics used to identify the moments of truth and possible obstacles that compromise the online experience and consequently sales conversion.

Keywords: Social commerce · Customer experience · Online customer journey · Digital touchpoints · Moments of truth

1 Introduction

Customers interact with companies through various points of contact on various channels. In this sense, companies need to understand the consumer's journey in order to create the right touchpoints (Lemon and Verhoef 2016). The increasing popularity of social networks as an effective communication has evolved electronic commerce to social commerce (Liang and Turban 2011). Social Commerce, based on the assumptions of engagement that social networks potentiate in consumers, allows companies to create perceptions of trust, increasing sales and decreasing marketing costs. However, social commerce brings new challenges and advantages to the customer's shopping experience, motivating the analysis of consumer buying behaviour and their online purchase experience (Yadav et al. 2013).

Lemon and Verhoef (2016, p. 70) found that "what people really want are not products, but satisfying experiences". This experience is determined by whether or not the consumer confirms satisfaction with the product/service and its quality. In order to make this experience satisfactory, it is essential to manage the relationship with the client, focusing all activities on the needs that the client demonstrates in a cooperative and collaborative way.

The online consumer journey is recognized as the treatment of the customer experience, as an interactive and dynamic process, which encompasses the journey that a

customer takes with a company during a purchase cycle where there are several critical moments known as touch points. It is necessary for companies to identify these moments, that is, those that exert a great influence on customers, with the aim of understanding what their public preferences are.

This chapter explores the phenomenon of social commerce through the academic literature and proposes techniques based on digital analytics to research the customer experience in social commerce and the moments of truth that require particular online touchpoints.

2 Social Commerce

Social Commerce relates to the transactions in social networks and online places where people can find goods or services, share experiences of use and easily buy those products. The popularity of social networks led individuals to easily contact and interact with the others in online platforms, allowing also the evaluation of products and the share of information and experiences regarding a certain product or service (Yadav et al. 2013). Two types of social commerce are also identified: traditional e-commerce sites that incorporate social tools to implement interaction and information sharing, in order to fit the customer expectation about recommend and received advices regarding purchases (Costa and Casais 2020); and social networking sites that implement commercial resources that allow transactions and advertisements (Zhang and Benyoucef 2016). While e-commerce is more about increasing efficiency, using sophisticated research strategies (one-click shopping, virtual catalogues, recommendations based on consumers' previous buying behaviour) and unidirectional interactions between customers and the system, the social commerce brings the social side to the online shopping process (Chen et al. 2011). Here, buyers have the possibility to obtain more suggestions to support their purchase decisions when acquiring information through communities, observing the actions of the other buyers or interacting directly with online sellers (Wang and Zhang 2012).

One of the advantages of social commerce is the interaction and sharing of opinions that influence future individuals, which consequently makes them co-create value for the brand (Hajli et al. 2014; Costa and Casais 2020). On the other hand, the lack of the presence of human and social elements is a problem that hinders the growth of e-commerce. Therefore, social commerce emerges as a way of trying to solve this problem, bringing back the social aspect of purchases by increasing the degree of social presence in the online environment and consequently the trust between the company and the buyer (Lu et al. 2016).

Trust is a crucial point when talking about economic and social transactions, especially when it takes place in online environments (Pavlou 2003). Jones and Leonard (2008) share the same opinion that trust is a critical point in online context and also add that a good relationship between companies and consumers is essential. However, Featherman and Hajli (2015) state that given the context of social commerce, uncertainty is usually greater due to the large amount of content created by the community and the lack of face-to-face interaction. This lack of face-to-face interaction leads to the of increasing customers' suspicion, even more when there is little knowledge about the seller which directly influences online purchases (Kaiser and Muller-Seitz 2008). This led researchers

to conduct a survey on the background of trust and the effects it has on purchase intentions on social commerce platforms (Kim and Park 2013). Seven characteristics of social commerce are revealed, which are identified as the key to trust: reputation, size, quality of information, safe transaction, communication, economic viability and references.

As a way of creating trust in this context, e-commerce can be supported by social commerce because, if the opinions shared are mostly positive, the level of consumer confidence will increase and the perception of risk will decrease (Hajli and Lin 2014). Kim and Park (2013) defended the same idea, adding that social interactions between consumers create word-of-mouth that positively affects trust. The most satisfied customers are those who share their opinion, and not the most loyal to the company. That is why it is essential that companies provide a good customer experience, since negative opinions stand out relatively from positive ones (Barreto 2014). It is also important to note that companies must establish a good relationship with opinion leaders so that they transmit positive information about the company (Nwaizugbo and Ifeanyiichukwu 2016).

3 Online Touchpoints

Online touchpoints between the company and the customer refers to the interactions through several points of contact, which occur throughout the purchase. The experience can begin through direct contact, when the customer initiates the purchase without any incentive from the company, or indirectly, when the company bets on advertising. The customer journey is a sequence of events in which the customer goes to look for information, buy and interact with a certain product/service. In other words, it regards to the all interactions between the company and the customer at any point of contact (Norton and Pine 2013). From the moment the customer enters the website until the purchase, there are several critical moments known as contact points (Rawson et al. 2013). Lemon and Verhoef (2016) complement that the customer experience is an interactive and dynamic process, which encompasses the journey that a customer takes with a company during a purchase cycle that requires several points of contact. From the point of view of companies, analyzing the consumer journey is essential to strengthen a response to the consumer experience (Homburg et al. 2017). Despite being a complex job, it is essential that companies identify their critical points of contact, as those that exert a great influence on customers, understanding what are the customer's preferences in order to discover the path that leads to the end of the purchase goal (Lemon and Verhoef 2016; Verhoef et al. 2016).

4 Analysis of the Customer Journey

The consumer's journey can be represented through a diagram that demonstrates the various interactions and points of contact that a customer makes until the purchase. Traditionally, the consumer's journey was associated with a funnel with five stages - Awareness, Consideration, Preference, Action and Loyalty in which the customer can go through all these stages or jump from stage 1 (Awareness) to stage 4 (Action), when, for example, you have the influence of someone you trust.

However, these stages are connected with the purchase process: Discovery, Research, Decision, Purchase and Post-Experience. A form of analysis of the consumer journey is referred by Richardson (2010) as a simple graphic illustration that shows the steps that the customer takes. This analysis is used as a way to help companies to better understand all the steps taken by customers that allows the identification of the main interactions, raising questions such as the customer's feelings, their motivations and some considerations for each contact point made. If, on the one hand, the contact points are an important part of the analysis of the consumer journey, attention should be on the journey itself (Rawson et al. 2013). The result of this analysis will lead to the discovery of the motivations that lead the customer to purchase, and the company should highlight the days that ended successfully so that it is possible to redesign and sustain a better consumer experience. With the competitive market facing today, anticipating the client's movements and desires is essential, instead of just reacting to the journey chosen by the client. Companies must start defining their clients' path by anticipating them (Edelman and Singer 2015).

Verleye (2015) proposes an alternative approach to the measurement of the customer experience by identifying four phases of analysis of this experience, namely peace of mind, moments of truth, focus on results and experience with the product.

In the same line of thought, Adamson (2008) proposes a model that encompasses three phases: Research and Analysis, Design and Measurement. In the first phase, of research and analysis, the author divides it into three sections, the definition of the consumer, the mapping of the experience and the moments of truth. The mapping of the experience is fundamental in order to understand the importance of the different channels, that is, the multichannel perspective, and their connections in order to generate a greater profit. It is at this stage that the KPI's are established. Finally, the moments of truth, refer to the key points of contact for the conversion of the customer, that is, points essential throughout the journey of the consumer, that lead the experience to the final objective of the company (Adamson 2008). The second phase, the design, refers to the structure and graphic presentation of the company through which it is intended to create the experience. The consumer experience becomes more effective according to the coherence in the distribution of the message between the contact points, as these are the ones that identify the places that consumers will follow (Neumie 2016; Patrício et al. 2008). Finally, monitoring is the analysis of the consumer journey in order to rethink the way it is structured and check if the contact points are making the consumer experience the best possible. In this phase, Key Performance Indicators and Return On Investments are also analyzed (Adamson 2008).

The multichannel perspective was mentioned in the first phase of analysis, perhaps this being the most developed aspect in the analysis of the customer journey (Lemon and Verhoef 2016). Considering the channel's choice behavior offers important insights to analyze, manage and influence. The retailer with better integration between their channels is more likely to have higher sales growth (Cao and Li 2015).

The digital analytics metrics are varied, from basic indicators as visitors and page views (Fagan 2013) to metrics defined by Jansen (2009) organized in four categories: Commerce, Content, Support and Lead Generation. The first metric, Average Order Value, falls into the trade category because it refers to the relationship between total

order revenue and the number of orders during a given time. It thus provides the cost of a transaction, which can be used to analyze the success of marketing campaigns. Also associated with the trade category is the Metric Average Visit Value which considers the quality of traffic and represents the total number of visits to total revenues. Having a lot of traffic on the site and little conversion means that the quality of traffic is low, which can be caused by inappropriate promotional campaigns, such as those that do not determine a specific target audience, by confusing layouts or even with registration or completion problems of purchase (Jansen 2009).

The bounce rate analyzes the proportion of visitors who leave the site after visiting only one page or staying on the site for 5 s or less, which is usually the result of visitors who were not interested in the content of the site. Conversion rate measures the percentage of visitors who complete a given action. Many managers analyze the comparison of users who initiate a particular action with those who complete it (Jansen 2009). Content can also be a metric when it is interesting for the business to assess how relevant content is to the user, being demonstrated when the user stays longer on a given page. Visit depth considers the number of pages visited by a user and the time spent on the site, although this time can be spent at the same time that the user is performing other tasks while the company's website is open (Fagan 2013). It is also worth noting that through this metric, it is possible to check if users learned about the site from social networks and are interested throughout their journey. This may indicate that social networks are valuable.

Despite the long list of existing metrics, the company that intends to analyze the consumer's journey must choose a few kpi's, selecting those that fit their objectives defined for this analysis (Fagan 2013). With the current power of the internet, the importance of subjective metrics decreases and highlights more objective, standardized and quantitative metrics that are easier to measure (Seggie et al. 2007). In contrast, the abundance of metrics complicates the use of digital analytics as it is difficult to decide which metrics are most critical to analyze, so it is best to identify key performance indicators and differentiate them from metrics (Welling and White 2006; Chaffey and Patron 2012).

As a way of measuring data, the main phases are: acquiring data, analyzing and interpreting data, reporting results, and action (Bourne et al. 2005). The search for reliable data for metrics systems is a challenge, so an advantage of digital analytics is that they can be acquired by default and automatically the search for data is not expected to be an obstacle (Stewart 2009; Russell 2010). However, these data are useless without proper analysis, so this phase is essential in order to gain insight and improve the current journey (Chaffey and Patron 2012).

5 Conclusion

Social commerce encompasses all types of activities related to the exchange of information that occur and/or influence in online social environments. The lack of human and social elements in online transactions is a problem that hinders the growth of this trade. With this, social commerce has two important components, which aim to counter this situation, being the commercial and social component. It is this social aspect that helps to build trust with the consumer. With the development of these components, it is possible to facilitate the purchase to customers.

As the community in general increasingly interacts through digital media, it is necessary to track customer's interactions with the company and evaluate its performance. As a way to make this possible, companies adopt digital analytics, which is a way to collect, measure and analyze the acquired data. This online experience can be measured using metrics, and they will need to be able to answer the questions previously stated. The selected metrics that answer corporate performance becomes the KPIs that should be analysed.

References

- Adamson, A.P.: *Brand Digital*. Palgrave MacMillan, New York (2008)
- Barreto, A.M.: The word-of-mouth phenomenon in the social media era. *Int. J. Mark. Res.* **56**(5), 631–654 (2014)
- Bourne, M., Kennerley, M., Franco-Santos, M.: Managing through measures: a study of impact on performance. *J. Manuf. Technol. Manage.* **16**(4), 373–395 (2005)
- Cao, L., Li, L.: The impact of cross-channel integration on retailers' sales growth. *J. Retail.* **91**(2), 198–216 (2015)
- Chaffey, D., Patron, M.: From web analytics to digital marketing optimization: Increasing the commercial value of digital analytics. *J. Dir. Data Digital Mark. Pract.* **14**(1), 30–45 (2012)
- Chen, Y., Wang, Q., Xie, J.: Online social interactions: a natural experiment on word of mouth versus observational learning. *J. Mark. Res.* **48**(2), 238–254 (2011)
- Costa, T., Casais, B.: Social Media and E-commerce: a study on motivations for sharing content from E-commerce websites. In: Alavi, S., Ahuja, V. (eds.) *Managing Social Media Practices in the Digital Economy*, Chapter 6, pp. 121–149. IGI Global (2020)
- Edelman, D.C., Singer, M.: Competing on customer journeys. *Harvard Bus. Rev.* **93**(1), 88–100 (2015)
- Fagan, J.: The suitability of web analytics key performance indicators in the academic library environment. *J. Acad. Libr.* **40**(1), 25–34 (2013)
- Featherman, M.S., Hajli, N.: Self-service technologies and e-services risks in social commerce era. *J. Bus. Ethics* **139**, 1–19 (2015)
- Hajli, N., Lin, X.: Exploring the security of information sharing on social networking sites: the role of perceived control of information. *J. Bus. Ethics* **133**, 1–13 (2014)
- Hajli, N., Lin, X., Featherman, M., Wang, Y.: Social word of mouth: How trust develops in the market. *Int. J. Mark. Res.* **56**(5), 673–689 (2014)
- Homburg, C., Jozić, D., Kuehn, C.: Customer experience management: toward implementing an evolving marketing concept. *J. Acad. Mark. Sci.* **45**(3), 377–401 (2017)
- Jansen, B.J.: Understanding user—web interactions via web analytics. In: Marchionini, G. (ed.) *Morgan-Claypool lecture series*. San Rafael, Morgan-Claypool (2009)
- Jones, K., Leonard, L.N.K.: Trust in consumer-to-consumer electronic commerce. *Inform. Manage.* **45**(2), 88–95 (2008)
- Kaiser, S., Müller-Seitz, G.: Leveraging lead user knowledge in software development: the case of weblog technology. *Ind. Innov.* **15**(2), 199–221 (2008)
- Kim, S., Park, H.: Effects of various characteristics of social commerce (s-commerce) on consumers' trust and trust performance. *Int. J. Inform. Manage.* **33**(2), 318–332 (2013)
- Lemon, K.N., Verhoef, P.C.: Understanding customer experience throughout the customer journey. *J. Mark.* **80**(6), 69–96 (2016)
- Liang, P., Turban, E.: Introduction to the special issue social commerce: a research framework for social commerce. *Int. J. Electron. Commer.* **16**(2), 5–14 (2011)

- Lu, B., Fan, W., Zhou, M.: Social presence, trust, and social commerce purchase intention: an empirical research. *Comput. Hum. Behav.* **56**, 225–237 (2016)
- Neumeier, M.: *The Brand Flip*. New Riders, San Francisco (2016)
- Norton, D.W., Pine II, B.J.: Using the customer journey to road test and refine the business model. *Strateg. Leadersh.* **41**(2), 12–17 (2013)
- Nwaizugbo, I., Ifeanyichukwu, C.: Understanding consumers behaviour towards online shopping. *Int. J. Sales, Retail. Mark.* **5**, 28–37 (2016)
- Patrício, L., Fisk, R.P., Falcão, J.: Designing multi-interface service experiences: the service experience blueprint. *J. Serv. Res.* **10**(4), 318–334 (2008)
- Pavlou, P.A.: Consumer acceptance of electronic commerce: integrating trust and risk with the technology acceptance model. *Int. J. Electron. Commer.* **7**(3), 101–134 (2003)
- Rawson, A., Duncan, E., Jones, C.: The truth about customer experience. *Harvard Bus. Rev.* **91**(11), 26 (2013)
- Richardson, A.: Using customer journey maps to improve customer experience. *Harvard Bus. Rev.* **3** (2010)
- Russell, M.: A call for creativity in new metrics for liquid media. *J. Interact. Adv.* **9**(2), 44–61 (2010)
- Seggie, S., Cavusgil, E., Phelan, S.: Measurement of return on marketing investment: a conceptual framework and the future of marketing metrics. *Ind. Mark. Manage.* **36**(6), 834–841 (2007)
- Stewart, D.: Marketing accountability: linking marketing actions to financial results. *J. Bus. Res.* **62**(6), 636–643 (2009)
- Verhoef, C.P., Kooge, E., Walk, N.: *Creating Value with Big Data Analytics: Making Smarter Marketing Decisions*. Routledge, New York (2016)
- Verleye, K.: The co-creation experience from the customer perspective: its measurement and determinants. *J. Serv. Manage.* **26**(2), 321–342 (2015)
- Wang, C., Zhang, P.: The evolution of social commerce: the people, management, technology, and information dimensions. *Commun. Assoc. Inform. Syst.* **31**(1), 105–127 (2012)
- Welling, R., White, L.: Web site performance measurement: promise and reality. *Manag. Serv. Qual.* **16**(6), 654–670 (2006)
- Yadav, M.S., de Valck, K., Hennig-Thurau, T., Hoffman, D.L., Spann, M.: Social commerce: a contingency framework for assessing marketing potential. *J. Interact. Mark.* **27**(4), 311–323 (2013)
- Zhang, K.Z.K., Benyoucef, M.: Consumer behavior in social commerce: a literature review. *Decis. Support Syst.* **86**(C), 95–108 (2016)



Aspect-Based Recommendation Model for Fashion Merchandising

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Abstract. An aspect-based recommendation model (ARM) was proposed to detect local and global aspect representations in customer reviews available on ecommerce websites for fashion merchandising. This model was constructed with two independent paths to process user/item reviews simultaneously, and each path had a convolutional neural network (CNN), a long-short time memory network (LSTM) with attention mechanism to separately capture local aspect features and global aspect features. To enhance the generalization of the ARM model, the local and global aspect features from both user and item reviews were merged through mutual operations prior to the rating prediction. The Clothing, Shoes & Jewelry dataset from Amazon 5-core was used to train and test ARM. The significance of the extracted aspects regarding user preferences and item properties from the reviews were examined as opposed to several state-of-the-art fashion recommenders.

Keywords: Aspect-based recommendation · Review documents · Attention mechanism · Deep learning

1 Introduction

Personalized recommendation is an effective ecommerce marketing tool for business, such as Amazon and, Yelp. One of its main functions is to predict the overall rating of a user toward a target item based on existing user reviews. Many studies used semantic reviews to model latent factors of users to improve the accuracy and interpretability of recommendations, as they are available on most ecommerce websites and possibly contain fine-grained information about user preferences. Generally, the reviews made by one user for all sought/bought items (e.g., fashion products) are regarded as a user review document, while the reviews associated with one item across all users are referred to as an item review document. To avoid data sparsity and cold-start problems in traditional collaborative filtering algorithms, some work used topic modelling techniques, such as Latent Dirichlet Allocation (Blei et al. 2003), to extract latent semantic information from reviews and fused it with ratings to make recommendations more interpretable. The sentiment-consistency and text-consistency of both user and item reviews were used to

predict ratings (Song et al. 2017). Although a review-based recommendation can help to understand/predict ratings, it lacks the ability to capture user preferences and item properties, which inspired aspect-based recommendations lately.

An aspect-based recommender model intends to extract aspects from textual reviews using either external natural-language-processing (NLP) tools (Zhang et al. 2014; Wang et al. 2018) or an internal framework (Guan et al. 2019; Wu and Ester 2015) to represent different aspects in a user or item review. Chin et al. combined user and item aspect-level representations with aspect importance, and then estimated an overall rating for any user-item pair (Chin et al. 2018). Cheng et al. designed an aspect-aware topic model via a multinomial distribution over the reviews to learn different user and item aspects in the topic space (Cheng et al. 2018). Aspects reflecting user preferences and product features in user/item review documents, and the interactions of user and item data were detected by nonnegative matrix factorization for establishing recommendation models. However, it may not integrate different polarities of the same word in a sentence (local aspect representation) and in a whole review (global aspect representation). Currently, no recommendation model has been widely accepted for fashion merchandising.

2 Aspect-Based Recommendation Model

In this paper, we propose an aspect-based recommendation model (ARM) for fashion merchandising by extracting local and global aspect representations from user and item review documents to predict ratings. Figure 1 displays a network structure with two parallel paths to extract the aspect features from user reviews and item reviews, respectively, and each path contains side-by-side CNN and bi-LSTM modules combined with attention mechanisms.

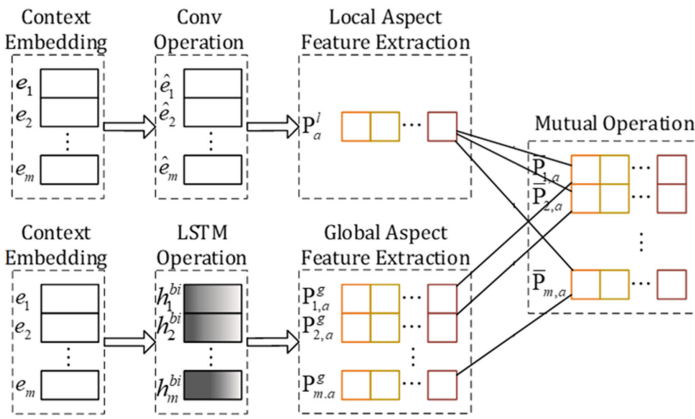


Fig. 1. Aspect-based Recommendation Model (ARM)

Latent factors reflecting a user’s fashion preferences and a fashion item’s properties are abstracted when a review is input through a context embedding module to capture

local-aspect and global-aspect features, and then a mutual operation is applied to these two aspect features to enhance the robustness of the model.

Context Embedding Module: Assume that a user review text is $R_U = (r_1, r_2, \dots, r_m)$, where m refers to the number of words in a review, and r_i denotes the i -th word in the review. We first map each word to its embedding representation $E_U = (e_1, e_2, \dots, e_m) \in \mathbb{R}^{m \times d}$ via a context embedding layer, in which e_i is the embedding vector for the i -th word, and d is the number of dimensions for the embedding vector of each word. The embedding layer can be simply regarded as a look-up operation in a shared embedding matrix which can be initialized using word vectors that have been pre-trained on large corpora, and the embedding matrix can facilitate a better semantic representation of the user reviews. The word2vec (Google 2013) was used for the pre-trained word embedding.

Local Aspect Extraction Module: Given an embedded user/item review representation, the goal of this module is to extract a set of local aspect user/item features. Initially, we can encode the embedded context from the massive given review texts and ratings [4], the CNN can learn the importance of each word and its aspect representation, and its attention mechanism can extract latent local aspect semantic features. Attention is a powerful mechanism in the deep learning field. As the output of a dense layer, attention mechanism can flexibly select a reference for context information to facilitate global learning by using the softmax function (Xu et al. 2015).

Global Aspect Extraction Module: In addition to the local aspect feature extraction module, a parallel module is used to extract a set of global aspect user/item features. Inspired by the previous studies (Ma et al. 2019; Zeng et al. 2019), we employed a bi-LSTM (Schuster and Paliwal 1997) to model the global long-term dependency and to find global aspect features by utilizing both previous and future contexts and by processing the sequence in both forward and backward directions. The global long-term dependency of text sequence information is obtained based on the embedded context, and the global aspect representations are extracted by an attention mechanism.

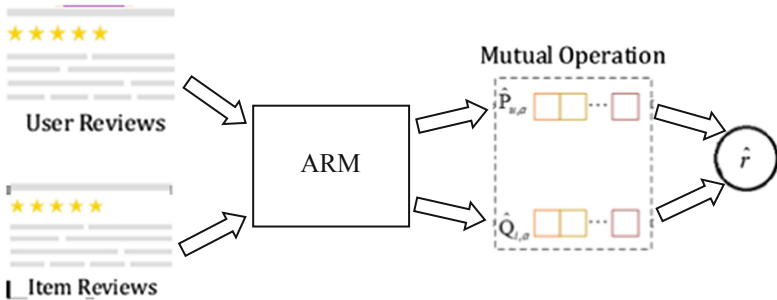


Fig. 2. Mutual learning between user and item reviews for rating prediction

Mutual Operation Module: Local aspects and global aspects representations can be concatenated using a summation and an attention mechanism (Lu et al. 2018; Seo et al. 2017)

Rating Prediction by Optimization: Figure 2 shows a mutual learning framework between user and item reviews for customer rating prediction. The two parallel channels are used to learn representations of user aspect features and item aspect features, $\gamma_{u,a}$ and $\gamma_{i,a}$, which can be combined to create the overall rating, \hat{r} , by

$$\hat{r} = \sum_a (\gamma_{u,a})^T \gamma_{i,a} + b_u + b_i + b_0$$

where b_u , b_i , and b_0 are the user, item, and global biases (Chin et al. 2018), respectively. The above estimation can be considered as a regression problem in which all parameters are trained jointly through the backpropagation technique, in which the mean squared error (MSE) is used as a loss function. To learn the parameters of this model, the objective function, J , can be written as:

$$J = \sum (r - \hat{r})^2 + \lambda_{\Theta} \|\Theta\|^2$$

where r is the known rating, \hat{r} is the predicted rating, Θ denotes the set of all the parameters and $\lambda_{\Theta} \|\Theta\|^2$ is the regularization to prevent the model from overfitting. The stochastic gradient descent (SGD) algorithm and the backpropagation are used to optimize the parameters of the model, and the Adaptive Moment Estimation is utilized over mini-batches (Liu et al. 2019).

3 Experiment

Dataset: Shoes & Jewelry dataset from Amazon 5-core (Amazon 2020) was the dataset used. The dataset was filtered to ensure that each user or item review has at least one rating. After the filtering, the dataset has 39,387 users, 23,033 items and 278,677 ratings, the density is 0.0307%, and the sparsity is 99.9693%.

Performance: The performance of the ARM was compared with those of five state-of-the-art recommendation models. Table 1 displays the experimental results from the DeepCoNN (a), D-Attn (b), NARRE (c), ANR (d), DAML (e), and ARM (f) models, in which the best result is highlighted by bold, and the second-best by underlined. $\Delta\%$ denotes a relative difference in MSE or MAE between a baseline method and ARM, which measures the performance improvement by ARM (f).

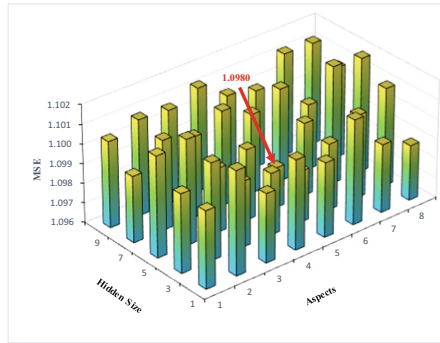
The result shows that ARM (f) achieved the best MSE and MAE scores and outperformed the five baselines. The second-best performer was ANR (d) on D1, from which ARM improved MSE by 0.43% and MAE by 1.51%, respectively. For D2, the second-best performer was DAML (e) if MSE was concerned or ANR (d) if MAE was concerned. But ARM improved MSE and MAE from the second-best performers by 5.74% and 5.14%, respectively. The experiment demonstrated that the aspect-based

Table 1. MSE and MAE performance

Models		MSE	MAE
Error	(a)	1.1885	0.8409
	(b)	1.1644	0.8376
	(c)	1.1583	0.8222
	(d)	<u>1.1027</u>	<u>0.8139</u>
	(e)	1.1488	0.8402
	(f)	1.0980	0.8016
$\Delta\%$	(a)	7.61	4.67
	(b)	5.70	4.30
	(c)	5.21	2.51
	(d)	0.43	1.51
	(e)	4.42	4.59

method with attention mechanism between the user and item reviews can offer more accurate rating predictions than the other five models.

Hidden Layer and Humber of Aspects: The selections of the hidden size, d_h , and the number of aspects, k , have direct impacts on the rating predictions. In our experiment, the hidden size of ARM was chosen from $\{1, 3, 5, 7, 9\}$, and the number of aspects varied from 1 to 8. Figure 3 illustrates the effects of d_h and k on the predicted ratings for the reviews in the dataset. The graph shows the optimal performances (smallest MSE) when $d_h = 5$ and $k = 5$. This is why we set k at 5 in our experiment.

**Fig. 3.** Influences of Hidden Size and Aspects.

Interpretability: Similar to what was found in [4], [6], the following five fashion aspects were most frequently captured among the reviews in the dataset: $\mathcal{A} = \{\text{size/fit, color, fabric/texture, price, style}\}$. The ‘background’ distribution of each embedding word e_i is defined as $b_e = \sum_{a \in \mathcal{A}} \psi_a / |\mathcal{A}|$ where $\psi_a = \sum_{u \in \mathcal{U}} \psi_{u,a} / |\mathcal{U}| +$

$\sum_{i \in I} \psi_{i,a}/|I|$. ψ_a refers to the importance of word e_i for aspect a , and $\psi_{u,a} = \sum_i \text{attn}_{i,a}$ is the importance of each word e_i by $\text{attn}_{i,a}$ with respects to user $u \in \mathcal{U}$ and aspect $a \in \mathcal{A}$ over vocabulary \mathcal{V} . Therefore, we can represent aspect a using its top words on $(\psi_a - b_e)$. Table 2 lists the top eight words used in the reviews for each aspect. These words in the five aspects properly reflect the relationships among the users, reviews, and ratings.

Table 2. Top words of each aspect

Size/fit	Color	Fabric	Price	Style
Length	Colors	Material	Price	Style
Medium	Black	Shirt	Deal	Comfort
Usually	White	Soft	Cost	Classic
Sizes	Design	Fabric	Value	Particular
Normally	Blue	Cotton	Paid	Fashion
Shape	Red	Lace	Reasonable	Unique
Sizing	Brown	Sweater	Bargain	Statement
Fitted	Dark	Smooth	Unbeatable	Styling

Attention Layer: We analyzed the impacts of the local attention layer, global attention layer, and mutual attention layer. Table 3 provides the performance comparisons when attention layers in ARM changed and other parameter settings remained the same. ARM-local and ARM-global are ARM without the local or global attention layer. ARM-Local&global is ARM without local and global attention layers. ARM-mutual and ARM-All are ARM without the mutual attention layer or all attention layers.

Table 3. Influence of attention layers in ARM on MSE

ARM	ARM-Local	ARM-Global	ARM-Local&Global	ARM-Mutual	ARM-All
1.0980	1.0994	1.0988	1.0984	1.1010	1.1020

ARM can obtain the best MSE when all the attention layers were included, and the worst MSE when all the attention layers were removed (ARM-All). In the other four scenarios (ARM-Local, Global, Local&Global, and Mutual), attention mechanisms performed. Among them, the removal of the mutual attention mechanism had the greatest impact on MSE, indicating that the attention layers, especially the mutual attention layer, can improve the recommendation performance. This is because the mutual attention layer can combine different polarities of the same word in a sentence and the aspect semantic meanings of the whole sentence.

4 Summary

This paper presented an aspect-based recommendation model (ARM) to predict review ratings. This model used two parallel paths to extract latent aspects about users and items separately and a mutual operation to merge the two outputs for rating predictions. On each path, a convolutional neural network (CNN) and a long short-term memory (LSTM) network, both having an attention mechanism, captured local aspects and global aspects respectively, and the mutual operation combined them to enhance ARM's generalization. As demonstrated in the experiments, ARM outperformed the five state-of-the-art recommenders in terms of the accuracy of predicting customer ratings on fashion products.

References

- Amazon: Amazon product data. <http://jmcauley.ucsd.edu/data/amazon>. Accessed on 14 Feb 2020
- Blei, D.M., Ng, A.Y., Jordan, M.I.: Latent dirichlet allocation. *J. Mach. Learn. Res.* **3**, 993–1022 (2003)
- Cheng, Z., Ding, Y., Zhu, L., Kankanhalli, M.: Aspect-aware latent factor model: rating prediction with ratings and reviews. In: *Proceedings of the 2018 World Wide Web Conference*, pp. 639–648 (2018)
- Chin, J.Y., Joty, S., Zhao, K., Cong, G.: ANR: aspect-based neural recommender. In: *Proceedings of the 27th ACM International Conference on Information and Knowledge Management*, pp. 147–156 (2018)
- Google: word2vec. <https://code.google.com/archive/p/word2vec/>. Accessed on 29 July 2013
- Guan, X., et al.: Attentive aspect modeling for review-aware recommendation. *ACM Trans. Inf. Syst.* **37**(3), 1–27 (2019)
- Lu, Y., Dong, R., Smyth, B.: Coevolutionary recommendation model: mutual learning between ratings and reviews. In: *Proceedings of the 2018 World Wide Web Conference*, pp. 773–782 (2018)
- Liu, D., Li, J., Du, B., Chang, J., Gao, R.: DAML: dual attention mutual learning between ratings and reviews for item recommendation. In: *Proceedings of the ACM SIGKDD Conference on Knowledge Discovery and Data Mining*, pp. 344–352 (2019)
- Ma, Q., Yu, L., Tian, S., Chen, E., Ng, W.W.Y.: Global-local mutual attention model for text classification. *IEEE/ACM Trans. Audio Speech Lang. Process.* **27**(12), 2127–2139 (2019)
- Schuster, M., Paliwal, K.K.: Bidirectional recurrent neural networks. *IEEE Trans. Signal Process.* **45**(11), 2673–2681 (1997)
- Seo, S., Huang, J., Yang, H., Liu, Y.: Interpretable convolutional neural networks with dual local and global attention for review rating prediction. In: *Proceedings of the 11th ACM Conference on Recommender Systems*, pp. 297–305 (2017)
- Song, K., Gao, W., Feng, S., Wang, D., Wong, K.F., Zhang, C.: Recommendation vs sentiment analysis: a text-driven latent factor model for rating prediction with cold-start awareness. In: *Proceedings of the Twenty-Sixth International Joint Conferences on Artificial Intelligence*, pp. 2744–2750 (2017)
- Wang, N., Wang, H., Jia, Y., Yin, Y.: Explainable recommendation via multi-task learning in opinionated text data. In: *The 41st International ACM SIGIR Conference on Research and Development in Information Retrieval*, pp. 165–174 (2018)
- Wu, Y., Ester, M.: FLAME: A Probabilistic model combining aspect based opinion mining and collaborative filtering. In: *WSDM 2015 – Proceedings of the 8th International Conference on Web Search and Data Mining*, pp. 199–208 (2015)

- Zeng, J., Ma, X., Zhou, K.: Enhancing attention-based LSTM with position context for aspect-level sentiment classification. *IEEE Access* **7**, 20462–20471 (2019)
- Xu, K., et al.: Show, attend and tell: neural image caption generation with visual attention. *Int. Conf. Mach. Learn.* **3**, 2048–2057 (2015)
- Zhang, Y., Lai, G., Zhang, M., Zhang, Y., Liu, Y., Ma, S.: Explicit factor models for explainable recommendation based on phrase-level sentiment analysis. In: *Proceedings of the 37th International ACM SIGIR Conference on Research & Development in Information Retrieval*, pp. 83–92 (2014)



Leveraging Malicious Joy to Influence Consumer Word-of-Mouth Transmittal in Social Networks

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Abstract. The proliferation of user-generated posts about brands on social media has inspired interest by both practitioners and scholars in the factors promoting the diffusion of information within social networks. This has led to efforts by firms to seed and exert control over consumer-driven word of mouth on social media platforms (often referred to as buzz marketing) with varying degrees of success. The question still remains however, as to why information about certain brands is shared more than others. In the current paper we extend the conceptualization originating from the “strength of weak ties” theory to encompass tie valence as a separate dimension alongside tie strength. We then identify consumer schadenfreude (the feeling of joy over another’s misfortune) as a critical motivator of information diffusion between network members who share a negatively valenced tie. Finally, we outline the value to marketers in incentivizing consumers to share information among their negative network ties since this is expected to lead to more widespread sharing of information about low equity brands.

Keywords: Word-of-mouth · Social networks · Schadenfreude · Tie valence · Buzz marketing

1 Introduction

The explosive growth of social media platforms and the willingness of consumers to share experiences and product information over these networks has intensified the need for marketers to understand the dynamics of online word-of-mouth (eWOM). The empowerment of consumers to share user generated content online can significantly boost the profile of less familiar brands but also creates challenges for marketers since it can facilitate the rapid dissemination of negative product information (Hornik et al. 2019). In response, marketing managers have attempted to assert their influence over eWOM through the strategy of buzz marketing, which can be thought of as “firm engineered” WOM that is initiated by the firm and implemented by consumers (Godes and Mayzlin 2009).

To date, much of the research on buzz marketing has been devoted to identifying the characteristics of the ideal buzz agent (Awotunde and Jimoh 2019). We suggest however,

that our understanding of the eWOM diffusion process can be enhanced by focusing on the valence of the ties that connect consumers in social networks and the motives that underpin their desire to transmit information within their network. Specifically, we examine the concept of *schadenfreude* and argue that this feeling of pleasure in the misfortune of others (Moisieiev et al. 2020) can motivate buzz agents to share information that will negatively impact individuals in their network.

Our theorizing thus builds on the strength of weak ties theory advanced by Granovetter (1973) by incorporating the concept of tie valence to explain situations where information is transmitted between network members who have an adversarial relationship. Locating our conceptual framework in the context of buzz marketing also calls attention to the ability of marketers to incentivize buzz agents to share information about low quality brands among members of their network with whom they have a negative relationship. This paper thus answers the call for increased research on the management of social interaction by marketers (Dost et al. 2019).

2 Network Dynamics and Information Transfer

According to Granovetter's "strength of weak ties theory", individuals cluster in networks wherein each individual is connected to others through strong ties. The strength of weak ties lies in their nature of acting as "bridges" connecting islands or networks of strong ties. This theory has been widely used to explain the market-level spread of WOM (Goldenberg et al. 2007) with the general consensus that weak ties have greater impact on transmission. We contend however, that this conceptualization of ties as being either strong or weak is somewhat limited and propose that senders of eWOM also take the valence of the relationship or tie into account. This is a critical distinction; focusing on the emotional dimension of the tie rather than the degree of interaction between network members. We thus challenge the notion that these two aspects of network ties are isomorphic.

Adding the concept of tie valence to our theorizing allows us to make predictions about the nature of the information transfer that will occur in a consumer's social network. First, we argue that consumers will be more willing to transmit information about products which they believe to be of superior value to members of their network with which they have a positive relationship. Moreover, when consumers view the product less favourably, they are also likely to share this information with persons who they are positively tied to in order to prevent them from having a negative experience. The implication for marketers is that incentives provided to consumers to create "buzz" may not represent value for money if individuals are inclined to naturally share brand information only with their positive ties.

However, if the valence of the tie between the network members is negative, we would expect the likelihood that they would transmit any information to be significantly lower, irrespective of the strength of the tie between network members. It would appear therefore, that buzz agents would be biased towards sharing information with a smaller subset of their entire networks with whom they share positive ties, potentially limiting the effectiveness of a buzz marketing strategy. We argue however, that the provision of incentives by marketers to buzz agents can not only mitigate the effect of negative

ties but also provide a mechanism for boosting the transmission of information of lower quality brands over ties with negative valence. The key to implementing such a strategy lies in the marketer's ability to elicit feelings of *schadenfreude* among consumers tasked with information transmission.

3 Schadenfreude as a Motivator of eWOM Diffusion

The emotion of *schadenfreude* or pleasure in the misfortunes of another is a common occurrence for consumers (Kim and Kim 2018). In a marketing context, research on *schadenfreude* has typically been used to explain the reactions of a brand's loyal fanbase to the misfortunes of a competing brand (Pancer et al. 2017). Consumers who experience *schadenfreude* are thus motivated to disseminate more negative and intense WOM regarding the commercial setbacks of rival brands (Hornick et al. 2019). Anecdotal evidence suggests this emotion may have contributed to the spike in snarky comments being posted on Twitter by Apple iPhone users following reports about the overheating problems associated with Samsung's Galaxy Note 7 smartphone. There is a lack of research however, into how marketers can strategically harness *schadenfreude* as an underlying motivator for the promulgation of information within consumer social networks.

We contend that when a buzz agent is provided with an incentive by the marketer to transmit WOM information to individuals with whom they have a negative tie, it increases the psychic cost of transmitting WOM. However, transmitting information that the sender knows will cause discomfort to the recipient – e.g. sharing information about a free product sample that the sender knows to be of low quality – may engender feelings of malicious pleasure. This motivational goal may thus be a powerful driver of the diffusion of information that is intended to negatively influence the recipient's decision about what products to purchase.

Schadenfreude feelings should thus motivate consumers towards social sharing with their negatively valenced network members or lead to information gerrymandering (Stewart et al. 2019) in order to punish the recipients by providing distorted information. Given the high level of arousal associated with *schadenfreude* (Kramer et al. 2011), we expect that the amount of distorted information being transmitted by buzz agents to negatively valenced ties may actually exceed the level of transmittal to persons with which the individual shares an affable relationship. Information disseminators may thus regard the feeling derived from sharing information that can potentially harm their enemies as more rewarding than the emotion derived from helping a friend make a better purchase decision. Such reasoning may account for the pervasive sharing of information about low quality or otherwise poorly reviewed products on the internet.

4 Conclusion

Given the importance of WOM shared in social networks in shaping consumer purchase decisions (Ha and Janda 2014), it is important to understand the factors that motivate consumers to share information online. Drawing on an expanded conceptualization of the "strength of weak ties" theory, we identify feelings of *schadenfreude* as a key factor responsible for the exchange of information between consumers who share a negatively

valenced tie. From a practical standpoint, we argue that managers who understand the impact of this emotion can strategically leverage such feelings to incentivize consumers to share information about lower quality products. It is therefore imperative that marketers pay close attention to the structure of the networks that potential buzz agents belong to in order to better manage the diffusion of information about their brands.

References

- Awotunde, J.B., Jimoh, R.G.: A model for identifying influential bloggers using social proof, mining comment, and emerging topics in social media. *Comput. Inf. Syst.* **23**(1), 19–25 (2019)
- Dost, F., Phielers, U., Haenlein, M., Libai, B.: Seeding as part of the marketing mix: word-of-mouth program interactions for fast-moving consumer goods. *J. Mark.* **83**(2), 62–81 (2019)
- Goldenberg, J., Libai, B., Moldovan, S., Muller, E.: The NPV of bad news. *Int. J. Res. Mark.* **24**(3), 186–200 (2007)
- Godes, D., Mayzlin, D.: Firm-created word-of-mouth communication: evidence from a field test. *Mark. Sci.* **28**(4), 721–739 (2009)
- Granovetter, M.S.: The strength of weak ties. *Am. J. Soc.* **78**(6), 1360–1380 (1973)
- Ha, H.Y., Janda, S.: The effect of customized information on online purchase intentions. *Internet Res.* **24**(4), 496–519 (2014)
- Hornik, J., Shaanan Satchi, R., Rachamim, M.: The joy of pain: a gloating account of negative electronic word-of-mouth communication following an organizational setback. *Internet Res.: Electron. Netw. Appl. Policy* **29**(1), 82–103 (2019)
- Kim, J.J., Kim, J.: Effects of social identity and schadenfreude on attitude toward brand sponsoring an instant replay review: the moderating role of rivalry and suspense. *J. Consum. Behav.* **17**(6), 542–552 (2018)
- Kramer, T., Yucel-Aybat, O., Lau-Gesk, L.: The effect of schadenfreude on choice of conventional versus unconventional options. *Organ. Behav. Hum. Decis. Process.* **116**(1), 140–147 (2011)
- Moisieiev, D., Dimitriu, R., Jain, S.P.: So happy for your loss: consumer schadenfreude increases choice satisfaction. *Psychol. Mark.* **37**(11), 1525–1538 (2020)
- Pancer, E., McShane, L., Poole, M.: Schadenfreude and product failures: the role of product deservingness and product status. *J. Mark. Manag.* **33**(15–16), 1236–1255 (2017)
- Stewart, A.J., Mosleh, M., Diakonova, M., Arechar, A.A., Rand, D.G., Plotkin, J.B.: Information gerrymandering and undemocratic decisions. *Nature* **573**(7772), 117–121 (2019)



Selling Global Luxury Brands in China: The Use of Social Media Advertising

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Abstract. This study shows that in order to develop their social media advertising strategies and obtain optimal results, global luxury brands that wish to enter the Chinese market, must consider a number of Chinese cultural peculiarities. Several studies have already used the cross-cultural theoretical framework for the purpose of identifying some effective luxury brands' marketing and communication strategies. This research recognizes specific features that can be used to create targeted and successful social media advertising approaches. As the majority of Chinese luxury consumers are Millennials and Gen Z, brands are even more challenged. In fact, these segments show preference for digital communication tools, media, and channels, with social media advertising representing the most valuable strategy. Global luxury brands that seek to profitably use social media advertising, besides taking into account specific Chinese cultural-related features and contexts, must also identify, understand, and learn how to employ any useful stratagem emerging from innovation in digital communication. This would allow brands to compete in the global marketplace while increasing their growth rate thanks to updated and effective social media advertising strategies.

Keywords: Global luxury brands · Social media advertising · Cross-cultural theory · Cultural differences · Chinese culture · Chinese luxury market

1 Introduction

In China the luxury market continues to contribute to the wealth of the global economy. In 2020 the pandemic-related reduction in international travel has produced an exponential increase in e-commerce spending (Bain & Company 2020). Its rising growth rate will continue to challenge global luxury brands active in the Chinese market while developing new business opportunities. The Bain report of 2020 identifies various factors behind the Chinese growth rate. The emergence of the Millennial and Gen Z consumers and the correlated digitalization of the marketplace along with its communication increasing paths and strategies are among these factors. While luxury brands are in fact augmenting their online penetration, the omnichannel paradigm increases as well. This entails mixed brands' physical and virtual marketing models, cross-channel strategies, and so on. Luxury brands must then develop sharp, pertinent, and functional up-to-date communication

tactics. Literature can be found according to which digital presence and digital communication may negatively affect the classical features of luxury brands (e.g. sense of rarity, personalization, exclusiveness, uniqueness, etc.) (among others, Kapferer and Bastien 2009; Okonkwo 2009; Ortvad 2011). Other studies, however, show that digital communication strategies and digital communication channels and tools are becoming essential even in this industry. This is especially true with reference to social media (among others, Gallagher and Ransbotham 2010; Harfoushi et al. 2013; Rialti et al. 2017; Park et al. 2021). Jin (2012), in particular, has shown the positive role of social media advertising in relation to the Asian luxury market. In order to entice consumers toward their final purchase, communication aims to enhance brand perception while providing a specific target audience with information about the products and the brands. Moreover, advertising stimulates purchases by convincing the consumer that a certain product meets his needs (Roderick 1999). However, the usefulness of this persuasion process is correlated to the degree through which consumers identify themselves with the good. Social, psychological, and economic factors are elements that can affect such path by determining consumers' needs. These can range from prestige and status to personal satisfaction, etc. and are linked to the culture of the society in which the consumers are based (Rani 2014). Therefore, as far as social media advertising is concerned, it is essential for luxury brands to identify market segments which are united by similar values and cultures. This will help develop more effective strategies tailored to the target audience (Acar et al. 2011). As China represents the most profitable audience for luxury brands that are seeking to expand their customer base (McKinsey & Company 2019), global luxury brands should take into account Chinese cultural peculiarities. As culture has a preeminent impact on consumers beliefs and behaviors (Maheswaran and Shavitt 2000; Kacen and Lee 2002), luxury brands must manage their advertising strategies through global and local social media platforms by heeding to these implications. This study aims then at identifying some culture-oriented features that may be useful to luxury brands seeking to conquer the Chinese market through social media advertising strategies. Today, tailoring such strategies to local Chinese culture is then a highly relevant marketing and managerial issue to be investigated. In order to do so, this study partially relies on cross-cultural theory.

2 Cultural Features and Advertising in China

In order to develop effective advertising strategies, luxury brands should regard how culture affects the buying behavior of consumers (Chevalier et al. 2013). Several studies have recognized a number of cultural peculiarities that can be employed in the development of social media advertising strategies for the selling of luxury brands in China. As an example, the culture-related hierarchical Chinese structure in business associations highlights the importance of creating a system of connections among individuals based on reciprocal obligations and the sharing of benefits. This phenomenon, called *Guanxi*, includes a component, called *Mianzi*, which refers to the concepts of honor, prestige, and trust in relationships (Hwang 1997; Buckley et al. 2010). Concurrently, following Hofstede's cultural dimensions model (2001) China appears to be mainly *collectivist*, that is, individuals rely on the other members of a group or community. Creating relationships is

then mandatory in order to gain success. Chinese collectivism can be also understood as an *in-group orientation* (House et al. 2004). Chinese individuals conform to the group to which they belong, or are significantly affected by the opinions and judgments of their family members. From a perspective of advertising, these above-mentioned cultural traits have precise implications for brands. For instance, they enhance the relevance of communication channels that employ and allow consumers' sharing processes of experiences and opinions, such as rating systems or word-of-mouth (WOM) which, on social media platforms represents a powerful information basis (Jalilvand and Samiei 2012; Yang 2017). Consumers that use social media want opinions and information from others in order to increase their knowledge of brands. Also, they take pleasure in sharing their individual experiences of luxury brands with their peers (Bian and Forsythe 2012). Moreover, if a brand is recommended by other satisfied consumers, this strategy may additionally increase brand loyalty.

Another Hofstede's relevant cultural dimension is *uncertainty avoidance*, in which China scores low (2001). This means that Chinese individuals are not forward planners. They are instead more prone to be concerned only when problems arise. This attitude shows that Chinese consumers are open toward innovation and modernization in advertising. Luxury brands perception may be then improved by the introduction of innovative advertising elements, while respecting tradition. In relation to time perspective, China is a country with a *long-term orientation* (Hofstede Insights 2020). Luxury brands should then emphasize long-term benefits for consumers through advertising. However, Chinese culture is also past-oriented (Yau 1988; Hwang 1997). Therefore such an attitude can increase brand loyalty by pushing consumers to repeat a purchase of the same brand if they have been satisfied by the first one. China also has a *masculinity-oriented* culture (Hofstede Insights 2020). Luxury brands must then communicate different values according to gender. If the role of men in China is linked to the breadwinner's figure, the role of women is more often linked to home caring and child rearing activities. Luxury brands must then be careful not to communicate goods through advertising campaigns based on identical gender roles (Yau 1988). As for Hofstede's *power distance* dimension, China features a societal hierarchical structure where people in high positions have power over their subordinates and where decision processes are made at the highest levels (Hofstede Insights 2020). This attitude reverberates onto the Chinese consumers' need of achieving success and increasing their power. Therefore, luxury brands advertising should focus on the ability of the product or the brand to provide consumers with prestige and prominence.

Hal's model, on the other hand, helps recognize that some communities communicate in different fashions whether their culture is high-context or low-context (Hall 1976). This model is useful to luxury brands selecting the advertising features (e.g. channels, methods, tools, contents, strategies, etc.) appropriate to the Chinese marketplace. The model shows that Chinese individuals who are part of a high-context culture prefer indirect and symbolic communication. It allows luxury brands, as a result, to translate such peculiarities into effective advertising expedients. Chinese luxury consumers are deemed to be more attracted by advertisements structured according to these communicative patterns than by advertisements conveying explicit and direct messages.

3 The Chinese Luxury Consumer

According to recent data (Statista 2020), the amount of HNWI in China has increased in recent years, reaching more than 1.5 million in 2019. Compared with Western HNWI, Asian HNWI prioritize luxury products in their spending habits (Chevalier et al. 2013). It has been ascertained that the Chinese elite also mainly lives in capital cities such as Beijing and Shanghai, is younger and younger (the average is 25 years old), and has an average income 10 times higher than the national average income. Luxury brands should then target a new, increasingly young audience that represents a high potential of consumers motivated to purchase luxury by similar drivers (Chevalier et al. 2013; Bain & Company 2020). Other than HNWI, Millennials and non-Millennials in general tend to possess the same drivers toward luxury consumption. A report from Statista (2017) indicated that in China in 2017 the main reasons for owning luxury products were equally shared and were linked to features such as a higher product quality (82%), products providing a better reflection of personality and tastes (40%), and products responding to the need of status and prestige (30%). The study of Chevalier et al. (2013) identifies other peculiarities of Chinese luxury consumers. For instance the authors subdivide them into the category of *luxury followers* and *luxury laggards* (more price-oriented) and the category of *luxury lovers* and *luxury intellectuals* (more analytical, as they process information in a systematic and rational way without evaluating price). The latter category is the more collectivist of the two. They buy luxury goods with the aim of conforming to the group whose values they share, whereas luxury followers and laggards show a more individualistic behavior. This study also proves that such differences depend on the city examined: in Beijing, a traditional city, luxury intellectuals constitute almost 50% of the whole luxury consumer audience. Conversely, in Chengdu, more influenced by the Western world, luxury goods consumers have a behavior similar to luxury laggards.

4 Advertising Strategies for Chinese Luxury Consumers

All in all, in China different communication characteristics coexist despite the fact that they frequently contradict each other. Implicitness is a common feature in Chinese communication and symbolism is often used. Yet, in order to understand how Chinese consumers react to advertisements' messages, context must be examined. For instance, given the social and cultural changes among Chinese consumers, Gehrke and Claes (2014) show that in recent years brands approaching the Chinese market use more explicit and self-expressive elements in advertising. Similarly, if words and images relating to the body and sex were originally banned from advertising, just as they were avoided in public, in the more Western-oriented Chinese capitals these restrictions and taboos have become outdated. This phenomenon was in part due to the effects of mass media globalization (Fang and Faure 2011). As a result, since in China attitudes toward communication may vary across regions and cities, brands that want to enter the Chinese market should take into account the opportunity to locally adapt advertising strategies to micro cultural differences. If standardized advertising can be effective where culture is not bound to tradition, in most cases communication, in order to be convincing, should

be adapted to the different contexts. However, luxury brands may maintain the global advertising strategy's elements which help position themselves in the upper levels as they indicate prestige and power (Chevalier et al. 2013). For instance, features such as logos, brand image, and seasonal advertising campaigns can be conceived on a global basis without any adaptation to cultural differences. On the other hand, retail stores, PR activities, and other communication's tools should be tailored to the Chinese culture in order to enhance brand positioning among competitors and its perception in the Chinese audience (Liu et al. 2016). A study investigating glocalization strategies aimed at the Chinese luxury marketplace indicates that Chinese consumers identify Western brands as more luxurious compared to Asian ones (Kim et al. 2019). This study also confirms that global luxury brands should keep their original name while for instance taking advantage, of a Chinese celebrity endorser for the purpose of advertising their items and, concomitantly, approaching the local community (Kim et al. 2019; Yu and Hu 2020).

5 Luxury Brands and Social Media Advertising in China

With the advance and the penetration of the Internet access, information technologies, search engines, and communication platforms, digital advertising has become a trendy format. The Internet is then seen as the main tool of advertisement (Taylor 2009). In China, digital advertising now represents a profitable model for social media (Wang 2008) and is gradually replacing the traditional offline advertising tools. A correlated Chinese trend is the rapid development of mobile apps, with digital advertising switching from desktop to mobile (Statista 2019). The 2019 Statista model identifies four segments of digital advertising: banner, video, search, and social media advertising. This last segment includes advertisement revenues deriving from social networks. Today, being the fastest-developing segment means to be the strongest advertising platform where users and consumers interrelate with each other and connect to brands (Chu et al. 2013). As a consequence, luxury brands must improve their advertising strategies through social media. They bring brand awareness, enhance and multiply WOM, and increase sales (Lee and Hong 2016). In fact, through social media advertising, social media help brands gain dramatic commercial benefits, especially when brands are able to employ users' social relationship data (Capatina et al. 2020). However, China applies rigid restrictions to global social media platforms and applications. Western luxury brands that want to compete in this country must then consider that besides a global presence on global social media channels, they must also be present in the Chinese ones.

Furthermore, Western luxury brands must take into account their targets' cultural differences when they develop their informative and visual advertising content. Lin et al. (2017) show, for instance, that in China the advertising strategies of luxury brands in regard to social media would be more effective if they used less direct messages, on account of China's high-context culture. Another study confirms the relevance for luxury brands to use, in their social media advertising strategies directed to China, references to values such as symbolic associations, high social status, interdependence, emotions, and popularity (Tsai and Men 2012). The same study also shows that, when using social media, Chinese consumers are more inclined to follow brands depending on specific

stimuli such as personal identification, entertainment, social integration, or information. These authors argue that the most useful elements in social media advertising aimed at China go from celebrities to emotional features, aesthetics, metaphors, etc., elements that are often disconnected from the products. In fact, through social media advertising campaigns global luxury brands may reach Chinese luxury consumers while providing them with exclusive content and personalized programs which help create a solid brand-customer relationship. Together with similar engagement tactics, they can adopt celebrity endorsement strategies just as WeChat does. This platform sends personal messages of influencers to target users, allowing them to feel like they have a real relationship with them. In doing so, luxury brands take advantage of the celebrity's fan base or the influencer's followers base, increasing their Internet traffic, their awareness, and - consequently - sales (Fu 2020).

According to Kapferer and Bastien's theory (2009), luxury brands should be cautious with respect to their presence on the Internet, since this may weaken the perception of luxury. However, to some extent this theory today appears weak. Empirical evidence shows in fact that already in 2018 all the leading forty global luxury brands in China used WeChat (Bain & Company 2018). This proves that today luxury social media advertising may be able to entertain and attract Chinese consumers while giving them unique experiences which enhance their perception of luxury. Concomitantly, but from a different perspective, the presence of luxury brands on such platforms allows in itself Chinese luxury consumers to share products information, opinions, etc., which are additional elements coherent with their cultural values.

References

- Acar, A., Premasara, J., Glen, J.: An exploratory study about culture and marketing strategy. *Asian J. Bus. Res.* **1**(1), 15 (2011)
- Bain & Company: Share of luxury brands using WeChat official account in China as of 2018, by account function (2018)
- Bain & Company: Report China's Unstoppable 2020 Luxury Market (2020)
- Bian, Q., Forsythe, S.: Purchase intention for luxury brands: a cross-cultural comparison. *J. Bus. Res.* **65**(10), 143–151 (2012)
- Buckley, P.J., Clegg, J., Tan, H.: Cultural awareness in knowledge transfer to China: the role of Guanxi and Mianzi. In: Burger, M.J., Karreman, B. (eds.) *Foreign Direct Investment, China and the World Economy*. Palgrave Macmillan, London (2010)
- Capatina, A., Kachour, M., Lichy, J., Micu, A.E., Micu, A., Codignola, F.: Matching the future capabilities of an artificial intelligence-based software for social media marketing with potential users' expectations. *TF&SC Technol. Forecast. Soc. Change* **151**, 2–12 (2020)
- Chevalier, M., Toledano, S., Lu, P.: *Luxury China: Market Opportunities and Potential*. Wiley, Hoboken (2013)
- Chu, S.C., Kamal, S., Kim, Y.: Understanding consumers' responses toward social media advertising and purchase intention toward luxury products. *J. Glob. Fashion Market.* **4**(3), 158–174 (2013)
- Fang, T., Faure, G.: Chinese communication characteristics: a Yin Yang perspective. *Int. J. Intercult. Relat.* **35**(3), 320–333 (2011)
- Fu, C.: Breaking down WeChat advertising for luxury brands (2020). <https://jingdaily.com/breaking-down-wechat-advertising-for-luxury-brands/>

- Gallaugher, J., Ransbotham, S.: Social media and customer dialog management at Starbucks. *MIS Q. Exec.* **9**(4), 197–212 (2010)
- Gehrke, B., Claes, M.: *Global Leadership Practices*. Palgrave Macmillan, Basingstoke (2014)
- Hall, E.: *Beyond Culture*, 1st edn. Doubleday Dell Publishing, New York (1976)
- Harfoushi, O., Alfawwaz, B., Obeidat, B., Obiedat, R., Faris, H.: Impact of internet advertisement and its features on e-commerce retail sales: evidence from Europe. *J. Softw. Eng. Appl.* **6**, 564–570 (2013)
- Hofstede Insights: China. Hofstede Insights (2020)
- House, R., Hanges, P., Javidan, M., Dorfman, P., Gupta, V.: *Culture, Leadership, and Organizations*. SAGE, Thousand Oaks (2004)
- Hwang, K.K.: Guanxi and Mintze: conflict resolution in Chinese society. *Intercult. Commun. Stud.* **7**(1), 17–40 (1997)
- Jalilvand, M.R., Samiei, N.: The effect of electronic word of mouth on brand image and purchase intention: an empirical study in the automobile industry in Iran. *Market. Intell. Plann.* **30**(4), 460–476 (2012)
- Jin, S.A.: The potential of social media for luxury brand management. *Market. Intell. Plann.* **30**(7), 687–699 (2012)
- Kacen, J.J., Lee, A.: The influence of culture on consumer impulsive buying behavior. *J. Consum. Psychol.* **12**(2), 163–176 (2002)
- Kapferer, J.N., Bastien, V.: *The Luxury Strategy: Break the Rules of Marketing to Build Luxury Brands*, 1st edn. Kogan Page, London (2009)
- Kim, S., Yi Luk, K., Xia, B., Xu, N., Yin, X.: Brand name and ethnicity of endorser in luxury goods: does a glocalization strategy work in China? *Int. J. Advert.* **1**(19), 824–842 (2019)
- Lee, J., Hong, L.B.: Predicting positive user responses to social media advertising: the roles of emotional appeal, informativeness, and creativity. *Int. J. Inf. Manage.* **36**(3), 360–373 (2016)
- Lin, H.C., Swarna, H., Bruning, P.F.: Taking a global view on brand post popularity: six social media brand post practices for global markets. *Bus. Horiz.* **60**(5), 621–633 (2017)
- Liu, S., Perry, P., Moore, C., Warnaby, G.: The standardization-localization dilemma of brand communications for luxury fashion retailers' internationalization into China. *J. Bus. Res.* **69**(1), 357–364 (2016)
- Maheswaran, D., Shavitt, S.: Issues and new directions in global consumer psychology. *J. Consum. Psychol.* **9**(2), 59–66 (2000)
- McKinsey & Company: *China Luxury Report 2019*. McKinsey Greater China's Apparel, Fashion and Luxury Group (2019)
- Okonkwo, U.: Sustaining the luxury brand on the Internet. *J. Brand Manage.* **16**(5–6), 302–310 (2009)
- Ortved, J.: Is digital killing the luxury brand? (2011). <https://www.adweek.com/news/advertising-branding/digital-killing-luxury-brand-134773>
- Park, J., Hyun, H., Thavisay, T.: A study of antecedents and outcomes of social media WOM toward luxury brand purchase intention. *J. Retail. Consum. Serv.* **58**, 1–12 (2021)
- Rani, P.: Factors influencing consumer behaviour. *Int. J. Curr. Res. Acad. Rev.* **2**(9), 52–61 (2014)
- Rialti, R., Zollo, L., Pellegrini, M.M., Ciappei, C.: Exploring the antecedents of brand loyalty and electronic word of mouth in social-media-based brand communities: do gender differences matter? *J. Glob. Market.* **30**(3), 147–160 (2017)
- Roderick, W.: What can advertising really do for brands? *Int. J. Advert.* **18**(1), 3–17 (1999)
- Statista: Main reasons for owning luxury product in China in 2017, by generation (2017)
- Statista: Digital advertising report (2019)
- Statista: Number of millionaires in China from 2012 to 2019 (2020)
- Taylor, C.R.: The six principles of digital advertising. *Int. J. Advert.* **28**(3), 411–418 (2009)
- Tsai, W.H., Men, L.R.: Cultural values reflected in corporate pages on popular social network sites in China and the United States. *J. Res. Interact. Market.* **6**(1), 42–58 (2012)

- Wang, C.: Research on the development of China's Internet advertising in the first ten years. Henan University, Henan (2008)
- Yang, F.X.: Effects of restaurant satisfaction and knowledge sharing motivation on eWOM intentions: the moderating role of technology acceptance factors. *J. Hosp. Tour. Res.* **41**(1), 93–127 (2017)
- Yau, O.: Chinese cultural values: their dimensions and marketing implications. *Eur. J. Market.* **22**(5), 44–57 (1988)
- Yu, S., Hu, Y.: When luxury brands meet China: The effect of localized celebrity endorsements in social media marketing. *J. Retail. Consum. Serv.* **54**, 1–12 (2020)



The Intention to Repurchase Apparel Online: A Case of South African Millennial Men

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Abstract. Online shopping, especially apparel shopping, is expected to grow rapidly in South Africa, one of the largest economies on the African continent. A market segment that shows lucrative growth opportunities is the male millennial online apparel shopper, but published research on the online buying behaviour of this group of consumers is scant. To address the academic and practical knowledge gaps on male millennial consumer behaviour in terms of online apparel shopping, this study set out to investigate a number of factors that can influence these consumers to repurchase apparel in an online environment. The study focused on South African millennial male consumers who had previously purchased apparel from a large and well-established South African online fashion retailer and semi-replicated a study conducted by Kim et al. (2012). Data were collected by means of an electronic self-administered non-interactive questionnaire. A total of 349 useable questionnaires were retrieved for statistical analyses. It was found that utilitarian shopping values do not directly influence the intention of millennial South African men to repurchase apparel from the investigated online fashion retailer. On the other hand, the results revealed that hedonic shopping values do influence the online apparel repurchase intention of this consumer cohort. The results of this study provide valuable insights in understanding the apparel repurchase intention of the South African millennial male consumer in the 21st century. The insights can be used by online retailers to develop more effective marketing strategies to capitalise on this lucrative market segment.

Keywords: Online shopping · Apparel · Repurchase intention · Male millennial consumers · South Africa

1 Introduction

Online shopping (a form of e-commerce) refers to the purchase of products and services from the Internet (Javadi et al. 2012). Although online shopping is regarded to be in its infancy in South Africa, accounting for approximately 1.4% of total retail sales (Mathe 2020), it is a growing phenomenon. The outbreak of the COVID-19 pandemic in early 2020 and the resulting measurements taken to protect human lives (such as lockdowns imposed in various countries, including South Africa) have also played a role to escalate the growth of online shopping in South Africa (Githahu and Charles 2020). A study by Mastercard, for example, revealed that 68% of South African consumers increased

their online shopping since the start of the COVID-19 pandemic (Businesstech 2020). It can be expected that the growth in online shopping will continue, as many behaviours adopted by South African consumers during the COVID-19 period are likely to become permanent (Githahu and Charles 2020).

A product category that shows a large increase in the share of products bought online is fashion products. It is expected that by 2021, the global online sales of fashion products (apparel, bags, accessories and footwear) will be in excess of US\$1 003 billion (Statista(a), n.d.). The global trend of increased online fashion shopping is also mirrored in South Africa where apparel, specifically, is the fastest growing product category in online retail (Rawlins 2018). It is estimated that the total revenue in the South African online apparel segment will amount to US\$785 million in 2021, while projections indicate that this figure could increase with a compound annual growth rate of 10.3% from 2021 to 2025 to reach an estimated market volume of US\$1 161 million by 2025 (Statista(b), n.d.).

A segment of the fashion industry that experiences noteworthy growth is the market for male apparel. In South Africa, male apparel is a marginally smaller product category than female apparel, but the male apparel segment is lucrative and has grown since 2010. The South African market for male apparel is expected to reach ZAR41 billion in value in 2021, driven by a growing interest among South African men in their appearance and personal grooming (Hartzenberg 2018). An interesting fact in this regard is that Swedish-based fashion retailer H&M, reports that approximately 25% of their South African consumers are men, whereas the global average is between 15% and 16% (Brown 2017). According to Maggioni (director of retail and buying at trend forecast group WGSN) a definite opportunity exists for South African fashion retailers to appeal to younger consumers, especially millennials, as they spend large amounts of time and money on their personal style and image (Tshandu 2018). A study by GrowthFromKnowledge (2017) on South African millennials (aged between 20 and 34) found that this cohort is strategic, determined, ambitious and sure of what they want.

In South Africa, male apparel is not only purchased at physical 'brick-and-mortar' stores, but also online. As noted previously, the fastest growing product category in a South African online retail context is apparel. However, there is a dearth of published research on male consumer behaviour in terms of online shopping of apparel in a South African context. It can, therefore, be argued that more research insights are needed to assist online apparel retailers in the development of effective marketing strategies to better engage with South African millennial male consumers. As this study wants to make theoretical as well as practical contributions, the decision was made to not only focus on a literature review, but to also consult with a large and well-established online fashion retailer operating in South Africa before the problem to be investigated was finalised. As a result, the decision was made to specifically investigate the following general aspect: What motivates South African male millennial consumers to revisit and repurchase apparel (in this case clothing and/or shoes) from an online retailer? To answer this research question, the study aims to investigate a number of online shopping factors that could lead to customer satisfaction and ultimately could encourage South African millennial men to repurchase apparel items from an online fashion retailer.

2 Theoretical Perspective and Hypothesis Development

This study is a semi-replication of a study conducted in Korea by Kim et al. (2012) in which factors that can influence online shopping behaviour were identified and investigated. Before these online shopping factors and their outcomes are discussed, it is, however, important to elaborate on the concept of value. According to Overby and Lee (2006) there seems to be a drive from scholars who argue that e-commerce research should study the desired value that consumers attach to the Internet as a purchasing medium, since superior value provided by an online retailer may encourage repurchase intention. The concept of Internet shopping value is, therefore, addressed in this study. Internet shopping value can be classified into two broad dimensions, namely utilitarian shopping value and hedonic shopping value which are key factors in determining consumer online shopping behaviour (Chiu et al. 2014; Gupta and Kim 2010).

Utilitarian shopping value refers to an overall assessment of functional benefits and sacrifices (Overby and Lee 2006). It represents behaviour where consumers aim to rationally and effectively seek solutions to problems, realise a specific purpose and finally acquire the optimal value of the online shopping process (Bakirtas et al. 2015). Hedonic shopping value is more personal and subjective than utilitarian shopping value (Bridges and Florsheim 2008) and refers to the fun and excitement aspects related to a shopping experience (Kim et al. 2012). In the past, utilitarian features such as price and availability were considered the most important factors in the motivation of a purchase, but more recently, there has been an increased interest in consumers' hedonic shopping value as utilitarian motivations are no longer exclusively a driving force of purchase behaviour (Parker and Wang 2016; Bridges and Florsheim 2008). There are researchers that argue that as humans are pleasure seeking in nature, they classically desire to experience the feeling of fun during a shopping encounter (Chiu et al. 2014). Apparel, a product category that continuously changes according to trends and is rich with symbolic meaning (Parker and Wang 2016), can be classified as a category with high hedonic properties (Blázquez 2014). The question can be asked: will the perception of utilitarian and hedonic shopping values influence the apparel repurchase intention of South African millennial men who have bought apparel from an online fashion retailer before? Therefore, in the following sections, online shopping factors that might influence consumers' online shopping behaviour will be elaborated on and a number of hypotheses (all related to South African millennial men who have made apparel purchases from a large and well-established South African online fashion retailer before) will be put forward. The first factor to be addressed is system quality.

2.1 System Quality

System quality refers to a customer's perception of the technical and functional aspects of an online shopping website (Yu et al. 2014). Various factors, including the reliability, online response time, ease of use, availability and adaptability of an online shopping website can contribute to system quality (Kim et al. 2012; DeLone and McLean 2004). The focal point of this study is on two significant aspects of system quality, namely system security and system accessibility. System security refers to the ability of an online shopping website to protect consumers' personal information from unauthorised

use (Ludin and Cheng 2014), whereas system accessibility refers to the provision of a reliable website that is easy to access, easy to use and responsive (Kim et al. 2012).

Creating a secure and easily accessible website increases satisfaction and intention to repurchase among online consumers (Cao et al. 2005). Bilgihan et al. (2016) argue that online shopping websites can increase their success rates by focusing on being trustworthy and reliable.

According to Kim et al. (2012), the accessibility to online shopping sites and security of personal information can have a significant influence on the hedonic (fun) and utilitarian (functional) shopping values of online consumers. To investigate the possible relationships between system security and system accessibility and both utilitarian and hedonic shopping value, the following hypotheses are proposed:

H1: There is a relationship between system security and utilitarian shopping value.

H2: There is a relationship between system security and hedonic shopping value.

H3: There is a relationship between system accessibility and utilitarian shopping value.

H4: There is a relationship between system accessibility and hedonic shopping value.

2.2 Information Quality

Information quality refers to the content created and provided by an online retailer to meet consumer needs (Yu et al. 2014) and is a key feature that influences customer satisfaction and intention to interact with an online retailer's website (Ludin and Cheng 2014). To increase customer satisfaction, the website content of online retailers must adhere to basic quality characteristics such as accuracy, relevancy, completeness, currency and ease of understanding the information for current and prospective customers (DeLone and McLean 2004). High levels of information quality may lead to increased customer satisfaction and repurchase intention and may also increase the excitement of the shopping process and enrich customers' experience (Yu et al. 2014). Kim et al. (2012) argue that consumers who shop online cannot be satisfied in utilitarian and hedonic ways unless the specific website provides resourceful and updated information. Therefore, the suggestion was made to investigate information variety and currency as notable features for consumers to achieve both utilitarian and hedonic value during their purchase. Information currency refers to the relevance of the information and accuracy of an online retailer's content (Nelson et al. 2005) and has been identified as a key element of contextual information quality (Cappiello et al. 2003). Customers' demand for currency fluctuates, and what one individual considers as current or relevant information the other might find outdated (Nelson et al. 2005). Nicolaou and McKnight (2006) maintain that one of the most critical aspects of information quality is providing up-to-date information. Current information assists consumers in their product and service search and purchasing process and adds to the excitement of the entire online shopping process (Ahn et al. 2007). Information currency may also lead to greater satisfaction among online consumers and increase hedonic and utilitarian shopping value (Kim et al. 2012).

Information variety refers to the amount of information made available by online retailers for different types of consumers (Kim et al. 2012). Consumers who do online shopping do not only shop for practical purposes but can also use online platforms to conduct research on products and services (Meyer and Schwager 2007). It can, therefore,

be argued that online retailers can enhance the hedonic and utilitarian shopping value by providing consumers with a large variety of relevant information. The following hypotheses are, therefore, posed:

H5: There is a relationship between information variety and utilitarian shopping value.

H6: There is a relationship between information variety and hedonic shopping value.

H7: There is a relationship between information currency and utilitarian shopping value.

H8: There is a relationship between information currency and hedonic shopping value.

2.3 Service Quality

According to Parasuraman et al. (1985: 42), service quality is “a measure of how well the service level delivered matches customer expectations.” In an online retailing environment, service quality refers to the overall customer evaluations and judgements of the quality of the online service delivery (Hsu et al. 2012). Ahn et al. (2007) argue that service quality is a significant construct as it refers to all the support services related to the purchasing process (finding, ordering, and delivering the products) as well as the post-purchase process (addressing customer complaints). It can be argued that the quality of service that an online retailer provides can have an impact on the utilitarian and hedonic shopping value needs of the customer. For example, the prompt and efficient delivery of an order or the manner in which a customer query is addressed might influence the customer’s perception of both hedonic and utilitarian shopping values. The present research study also explores service quality based on service quickness (speed of delivery of online service) and service receptiveness (handling of customer queries, for example return of online purchases) and the following hypotheses are put forward:

H9: There is a relationship between service quickness and utilitarian shopping value.

H10: There is a relationship between service quickness and hedonic shopping value.

H11: There is a relationship between service receptiveness and utilitarian shopping value.

H12: There is a relationship between service receptiveness and hedonic shopping value.

2.4 Internet Shopping Value, Customer Satisfaction and Repurchase Intention

Researchers have argued that the success of online retailers necessitates the provision of both utilitarian and hedonic shopping value since these two dimensions have been found to be related to customer satisfaction and repurchase intention (Kim et al. 2012; To et al. 2007).

According to Pizam and Ellis (1999), customer satisfaction is a psychological concept that has been investigated extensively and involves a consumer’s feeling of well-being and pleasure after obtaining what was hoped for and expected from an acquired product and/or service. Researchers have divided customer satisfaction into two dimensions, namely ‘service encounter satisfaction’ and ‘overall customer satisfaction’ (Chang and Chen 2008). ‘Service encounter satisfaction’ is transaction-specific and observes customer satisfaction from a post-choice evaluative judgement of a specific purchase encounter (Chang and Chen 2008). ‘Overall customer satisfaction’ is relationship-specific, as it represents the cumulative effect of a set of service encounters with a retailer

over a period of time (Chang and Chen 2008). The present study considers the ‘overall customer satisfaction’ dimension as the study centres on male consumers who have used the online shopping process before. The following hypotheses were investigated:

- H13:** There is a relationship between hedonic shopping value and customer satisfaction.
- H14:** There is a relationship between hedonic shopping value and customer repurchase intention.
- H15:** There is a relationship between utilitarian shopping value and customer satisfaction.
- H16:** There is a relationship between utilitarian shopping value and customer repurchase intention.

Enhancing the shopping experience should also result in customer loyalty and higher repurchase intention (Bilgihan et al. 2016). Previous studies support the notion that there is a direct positive relationship between customer satisfaction and repurchase intention among consumers in terms of products and services (Hellier et al. 2003). In other words, customers are likely to repurchase from an online retailer who previously satisfied their needs or expectations (Safa and Von Solms 2016). The study, therefore, proposes that customer satisfaction is vital to consumers’ repurchase intention and the following hypothesis is presented:

- H17:** There is a relationship between customer satisfaction and customer repurchase intention.

In conclusion, the proposed conceptual model depicting the relationships investigated in this study is presented in Fig. 1.

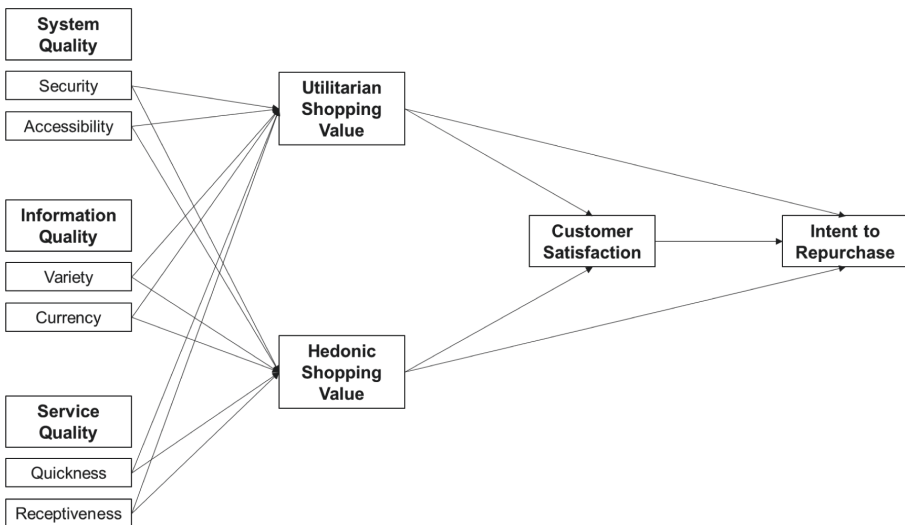


Fig. 1. Proposed conceptual model

3 Research Methodology

3.1 Measurement Instrument

The survey method was used to collect data by means of a structured self-administered, non-interactive online questionnaire. The questionnaire items used were based on those used by Kim et al. (2012). (The original items were adapted to all contain the name of the South African online fashion retailer that was investigated in this study).

3.2 Data Collection

The target population was defined as male South African citizens, between the ages of 18 and 38 (millennial cohort) who had previously purchased apparel from a large South African online fashion retailer. The retailer agreed to assist in data collection and offered to send the electronic link of the questionnaire via email to all the individuals on their database who complied with the inclusion criteria of the study. Once ethical clearance was obtained, the data collection process commenced. Participation was voluntary and anonymous, but an incentive to win one of five shopping vouchers was offered.

4 Results

A total of 475 questionnaires were received. These questionnaires were thoroughly screened, resulting in the elimination of 126 questionnaires. Therefore, a total of 349 questionnaires could be employed in the empirical analysis. To analyse the data, a two-phased approach was followed, namely the analysis of the measurement model, followed by the examination of the structural relationships among the latent variables (Anderson and Gerbing 1988) by means of the Partial Least Squares Structural Equation Modelling (PLS-SEM) technique.

4.1 Measurement Model Assessment

The internal consistency and reliability of the measurement items were investigated with two measures, namely Cronbach's alpha, and composite reliability (CR) (Hair et al. 2019). In addition, the convergent validity of each variable was also investigated by measuring the average variance extracted (AVE) for all items in each variable (Hair et al. 2019). The model was initially fitted on all items, but the results indicated some low average AVE values and non-significant item loadings. As a result items that indicated "low" loadings, were removed. Table 1 depicts the final reliability indices of each variable that was included in the measurement model.

All the Cronbach's alpha values are above the general rule of thumb of 0.70 (Wu et al. 2016). Furthermore, all CR values are greater than the rule of thumb of 0.6 (Wu et al. 2016), while AVE values of all the variables are higher than the recommended value of 0.50 (Hair et al. 2019). The conclusion can therefore, be made that the variables displayed satisfactory reliability and convergent validity. Next, the discriminant validity was investigated. The Heterotrait-Monotrait (HTMT) ratio of correlations proposed by

Table 1. Reliability indices for the variables included in the measurement model

Variable	Average variance extracted	Composite reliability	Cronbach's alpha
System security	0.573	0.843	0.750
System accessibility	0.551	0.860	0.800
Information variety	0.535	0.851	0.790
Information currency	0.594	0.854	0.770
Service quickness	0.830	0.951	0.930
Service receptiveness	0.560	0.863	0.800
Utilitarian value	0.838	0.912	0.810
Hedonic value	0.524	0.803	0.710
Customer satisfaction	0.724	0.929	0.900
Repurchase intention	0.703	0.921	0.890

Hair et al. (2011) was used instead of the “more traditional” Fornell-Larcker criterion. The results of the HTMT ratio assessment indicate that discriminant validity was confirmed for all the constructs except for the following correlations: Information Variety → Information Currency (1.091), Repurchase Intent → Customer Satisfaction (1.013); System Security → System Accessibility (1.108) and System Accessibility → Information Currency (1.054). These path correlations were, however, not removed from the measurement scale as the literature regarding these variables provided sufficient evidence that they were indeed individual entities and different from one another. Since the present study was a semi-replication, these variables had previously been differentiated from one another as individual variables and the HTMT values were not regarded as excessively high. In conclusion, it can be argued that the reliability and validity tests used on the variables confirmed that most of the items used were valid and reliable and, therefore, further analyses could commence by focusing on the assessment of the structural model.

4.2 Structural Model Assessment

The PLS technique was furthermore used to evaluate the proposed model and investigate the relationships between the different variables. The first step was to assess the structural model for possible collinearity; secondly, the coefficient of determination (R^2) was evaluated to ascertain the predictive power of the model and finally, the significance and relevance of the structural model relationships were assessed.

4.3 Assessment of Collinearity and the Coefficient of Determination (R^2)

The results of the test for collinearity indicated that all the VIF scores were below 5, indicating that collinearity was not a problem for the dataset (Hair et al. 2019). The coefficient of determination (R^2) was evaluated next. Six exogenous variables accounted

for 55.6% of the variance in hedonic value and 51.3% of the variance in utilitarian value, which in turn explained 72.7% of the variance in customer satisfaction. Hedonic value, utilitarian value and customer satisfaction together explained 81.8% of the variance in the repurchase intention, which can be regarded as substantial (Hair et al. 2019). Though the coefficient of determination (R^2) was valuable in determining the quality of a PLS model, other assessments were also needed. The assessment of the path coefficients is, therefore, addressed next.

4.4 Assessment of Path Coefficients and Hypotheses Testing

To assess the paths between the different variables in the conceptual framework, the standardised regression weights were examined. Table 2 provides a summary of the path coefficient statistics, p-values and outcomes of the proposed hypotheses. From Table 2 it is clear that in terms of the relationships between system, information and service quality and utilitarian shopping value, hypotheses H3, H7 and H11 were supported by the empirical results, while hypotheses H1, H5 and H9 were not supported. Secondly, in terms of the relationships between system, information and service quality and hedonic shopping value, H2, H8 and H12 were supported, while hypotheses H4, H6 and H10 were not supported. As far as the relationships between utilitarian and hedonic shopping value and customer satisfaction and repurchase intention are concerned, Hypotheses H13, H14 and H15 were supported, while hypotheses H16 was not supported. Finally the relationship between customer satisfaction and repurchase intention (H17) was supported.

Table 2. Path coefficient statistics

Path					
From	To	Path coefficient	p-value	Significant	Result
System security	Utilitarian value	-0.131	0.15	No	Do not support H1
System security	Hedonic value	-0.214	0.04*	Yes	Support H2
System accessibility	Utilitarian value	0.270	0.01*	Yes	Support H3
System accessibility	Hedonic value	0.141	0.15	No	Do not support H4
Information variety	Utilitarian value	-0.124	0.11	No	Do not support H5
Information variety	Hedonic value	0.120	0.14	No	Do not support H6
Information currency	Utilitarian value	0.322	0.00*	Yes	Support H7

(continued)

Table 2. (continued)

Path					
From	To	Path coefficient	p-value	Significant	Result
Information currency	Hedonic value	0.383	0.00*	Yes	Support H8
Service quickness	Utilitarian value	-0.052	0.35	No	Do not support H9
Service quickness	Hedonic value	-0.021	0.73	No	Do not support H10
Service receptiveness	Utilitarian value	0.452	0.00*	Yes	Support H11
Service receptiveness	Hedonic value	0.374	0.00*	Yes	Support H12
Hedonic value	Customer satisfaction	0.774	0.00*	Yes	Support H13
Hedonic value	Repurchase intention	0.199	0.01*	Yes	Support H14
Utilitarian value	Customer satisfaction	0.116	0.02*	Yes	Support H15
Utilitarian value	Repurchase intention	0.063	0.15	No	Do not support H16
Customer satisfaction	Repurchase intention	0.688	0.00*	Yes	Support H17

* Note: Significant at the $p < 0.05$ level

5 Discussion and Managerial Implications

Not only are the number of online shopping websites rapidly increasing around the globe, but the number of consumers doing online shopping, also in South Africa, are increasing. This is also the case for online fashion retailers. A major problem, however, is for online retailers to better understand consumers' online shopping behaviour, especially repurchase intention as it could be an important survival tool in a highly competitive market environment (Kim et al. 2012).

The findings of this study provide a number of significant implications that can be considered by online fashion retailers wishing to focus on male millennial South African consumers. This study found that utilitarian and hedonic shopping values lead to customer satisfaction that ultimately influences the intention of South African male millennial consumers to repurchase apparel from a specific online fashion retailer. The results further indicate that system accessibility, information currency and service receptiveness are important factors that could influence millennial male consumers' experience of utilitarian shopping value, while system security, information currency and service receptiveness seem to play an important role in hedonic shopping value. The findings,

however, also indicate that, for the realised sample, utilitarian shopping values do not necessarily lead directly to the intention to repurchase apparel online from the online fashion retailer investigated in this study. On the other hand, it seems that hedonic shopping value affects the intention of South African millennial men to repurchase apparel from the specific online fashion retailer. The argument can, therefore, be made that South African millennial men that have bought apparel from the online fashion retailer before, will probably buy apparel from the firm again based on their experience of fun and excitement (hedonic) rather than on their experience of being rational and goal orientated (utilitarian). The results, therefore, imply that, should the specific online retailer wish to increase sales from South African millennial men that have bought apparel from their website before, they should particularly focus on the 'fun and entertainment' aspect of the online repurchasing process, rather on the utility aspect and therefore the focus will now turn to the hedonic shopping value that male South African millennials might perceive when shopping for apparel online.

In terms of hedonic shopping value, an interesting finding was that there was a significant negative relationship between system security and hedonic shopping value. Thus, the more security related aspects respondents seemed to perceive, the less pleasure they acquired out of the online purchasing process which could ultimately result in decreased purchase intention. Cao et al. (2005) found that creating a secure and easily accessible online website increased customer satisfaction and repurchase intention. It should be a common fact that most consumers want secure websites and the protection of their personal information. The findings imply that excessive online security measures could decrease the pleasurable element for male millennial South African consumers when shopping for apparel online. Consumers who repeatedly have to provide their banking, delivery or contact information with every transaction might become dissatisfied with the additional time and effort every purchase entails, contributing to consumers not returning to the specific website. The online fashion retailer can alleviate this response by encouraging consumers to use third-party payment methods such as SnapScan and instant electronic fund transfers with PayU. These payment methods are quick and safe to use and protect the online consumer's personal information. The study reflected a significant relationship between information currency and hedonic shopping value. Information that is relevant and accurately represents the online retailer's content may lead to increased hedonic shopping value, which may lead to increased satisfaction and repurchase intention among the realised sample (Kim et al. 2012). Online retailers should, therefore, provide their millennial male online consumers with content that yield characteristics such as relevancy and accuracy to the online apparel. The online fashion retailer could also invest in style guides or online style assistants to assist male millennial consumers with their apparel purchases.

A significant relationship was also found between service receptiveness and hedonic shopping value. Service receptiveness refers to how well consumers receive the online retailer's website and how well it communicates information to its consumers. The online clothing retailer should ensure that all details regarding the process and guidelines for product returns and exchange processes are thoroughly explained on the website. In addition, contact details should be up-to-date and the flexibility of returns assured. The online clothing retailer could assist male consumers by simplifying the return process

and by creating flexible drop-off or pickup areas of parcels being returned. Since it was found that the realised sample predominantly use their phones to make a purchase, the online clothing retailer could create an application for mobile phones that allows consumers to locate the closest drop-off point or courier to them (similar to the method used by Uber). Consumers could request a courier service online, making the return of products quick and easy and increasing the hedonic shopping values of the online shopping process. Hedonic shopping value reflected significant relationships with both customer satisfaction and repurchase intention. The online clothing retailer should focus on creating a holistic (enjoyable) online shopping experience for their male consumers that could increase satisfaction and lead to repurchase intention. The final statistically significant relationship of the study was between customer satisfaction and repurchase intention. By providing excellent customer service, online retailers can expect higher retention rates and positive word-of-mouth from their consumers (Van Niekerk et al. 2016) resulting in increased levels of repurchase intention, customer lifetime value and business success (Bilgihan et al. 2016).

6 Conclusion, Research Limitations and Future Research

This study broadens the scope of research on the subject of online apparel repurchase, thus contributing to the general body of knowledge, whilst also making practical contributions. It is, however, important to note a few limitations, inherent in the research design, when dealing with the results of this study. The use of a specific sample (South African male millennials), a specific industry category (online apparel) as well as a specific online fashion retailer means that results cannot be generalised to the entire population or the entire online retail market. Although the sample size was large enough to produce reliable results, a larger sample size could have led to increases in validity and higher levels of generalisability. The study and its findings are focused on male millennial consumers who shop online for apparel; therefore, contributing to this specific body of research. The motivational factors of repurchase intention for the present study may, therefore, not be applicable to the strategic design of offline (brick-and-mortar) retailers.

The limitations of the study provides opportunities for future research projects. Millennials represent a young technology-savvy generation. These consumers have grown up with the Internet, and they are, therefore, familiar with online shopping. Future research could investigate the possible digital divide between millennials and other (older) generational cohorts (such as Generation X and Baby Boomers). The present study excluded respondents who have never used the online fashion retailer's website as the study focused on the repurchase intention of the realised sample. Future research, therefore, could focus on factors that would influence the online purchase intention of novice consumers who have never bought apparel from an online platform before.

References

- Ahn, T., Ryu, S., Han, I.: The impact of web quality and playfulness on user acceptance of online retailing. *Inf. Manage.* **44**(3), 263–275 (2007)

- Anderson, J.C., Gerbing, D.W.: structural equation modelling in practice: a review and recommended two-step approach. *Psychol. Bull.* **103**(3), 411–423 (1988)
- Bakirtaş, H., Bakirtaş, I., Çetin, M.A.: Effects of utilitarian and hedonic shopping value and consumer satisfaction on consumer behavioral intentions. *EGE Acad. Rev.* **15**(1), 91–98 (2015)
- Bilgihan, A., Kandampully, J., Zhang, T.: Towards a unified customer experience in online shopping environments. *Int. J. Qual. Serv. Sci.* **8**(1), 102–119 (2016)
- Blázquez, M.: Fashion shopping in multichannel retail: the role of technology in enhancing the customer experience. *Int. J. Electron. Commerc.* **18**(4), 97–116 (2014)
- Bridges, E., Florsheim, R.: Hedonic and utilitarian shopping goals: the online experience. *J. Bus. Res.* **61**(4), 309–314 (2008)
- Brown, J.: H&M pushes expansion. In: *Fin24* (2017). <https://www.fin24.com/Companies/Retail/hm-pushes-expansion-20170820-2>. Accessed 13 Feb 2021
- Businesstech. “68% of SA consumers are shopping more online since the start of pandemic, reveals Mastercard study” (2020). <https://businesstech.co.za/news/industry-news/452318/68-of-sa-consumers-are-shopping-more-online-since-the-start-of-pandemic-reveals-mastercard-study/>. Accessed 6 Feb 2021
- Cao, M., Zhang, Q., Seydel, J.: B2C e-commerce web site quality: an empirical examination. *Ind. Manage. Data Syst.* **105**(5), 645–661 (2005)
- Cappiello, C., Francalanci, C., Pernici, B.: Time-related factors of data quality in multi-channel information systems. *J. Manage. Inf. Syst.* **20**(3), 71–91 (2003)
- Chang, H.H., Chen, S.W.: The impact of customer interface quality, satisfaction and switching costs on e-loyalty: internet experience as moderator. *Comput. Hum. Behav.* **24**(6), 2927–2944 (2008)
- Chiu, C., Wang, E.T., Fang, Y., Huang, H.: Understanding customers’ repeat purchase intentions in B2C e-commerce: the roles of utilitarian value, hedonic value and perceived risk. *Inf. Syst. J.* **24**(1), 85–114 (2014)
- DeLone, W., McLean, E.: Measuring e-commerce success: applying the DeLone & McLean information systems success model. *Int. Model Electron. Commerc.* **9**(1), 31–47 (2004)
- Githahu, M., Charles, M.: SA sees surge in online shopping during Covid-19 lockdown (2020). <https://www.iol.co.za/capeargus/news/sa-sees-surge-in-online-shopping-during-covid-19-lockdown-47388977>. Accessed 2 Feb 2021
- GrowthFromKnowledge. “Unpacking South African Millennials,” (2017). <https://www.gfk.com/en-za/insights/news/unpacking-south-african-millennials/>. Accessed 12 Feb 2021
- Gupta, S., Kim, H.: Value-driven internet shopping: the mental accounting theory perspective. *Psychol. Mark.* **27**(1), 13–35 (2010)
- Hair, J.F., Ringle, C.M., Sarstedt, M.: PLS-SEM: indeed a silver bullet. *J. Mark. Theor. Pract.* **19**(2), 139–151 (2011)
- Hair, J.F., Risher, J.J., Sarstedt, M., Ringle, C.M.: When to use and how to report the results of PLS-SEM. *Eur. Bus. Rev.* **31**(1), 2–24 (2019)
- Hartzenberg, L.: Menswear in Africa: bold, brave and patriotic. In: *Bizcommunity* (2018). <https://www.bizcommunity.com/Article/196/462/174087.html>. Accessed 11 Feb 2021
- Hellier, P.K., Geursen, G.M., Carr, R.A., Rickard, J.A.: Customer repurchase intention: a general structural equation model. *Eur. J. Mark.* **37**(11/12), 1762–1800 (2003)
- Hsu, C., Chang, K., Chen, M.: The impact of website quality on customer satisfaction and purchase intention: perceived playfulness and perceived flow as mediators. *Inf. Syst. e-Bus. Manage.* **10**(4), 549–570 (2012)
- Javadi, M.H.M., Dolatabadi, H.R., Nourbakhsh, M., Poursaedi, A., Asadollahi, A.R.: An analysis of factors affecting on online shopping behavior of consumers. *Int. J. Mark. Stud.* **4**(5), 81–98 (2012)
- Kim, C., Galliers, R.D., Shin, N., Ryoo, J., Kim, J.: Factors influencing Internet shopping value and customer repurchase intention. *Electron. Commerc. Res. Appl.* **11**(4), 374–387 (2012)

- Ludin, H., Cheng, B.L.: Factors influencing customer satisfaction and e-loyalty: online shopping environment among the young adults. *Manage. Dyn. Knowl. Econ.* **2**(3), 462–471 (2014)
- Mathe, T.: E-commerce will assist economy (2020). <https://mg.co.za/business/2020-05-14-e-commerce-would-assist-economy/>. Accessed 1 Feb 2021
- Meyer, C., Schwager, A.: Understanding customer experience. *Harv. Bus. Rev.* **85**(2), 116–126 (2007)
- Nelson, R.R., Todd, P.A., Wixom, B.H.: Antecedents of information and system quality: an empirical examination within the context of data warehousing. *J. Manage. Inf. Syst.* **21**(4), 199–235 (2005)
- Nicolaou, A.I., McKnight, D.H.: Perceived information quality in data exchanges: effects on risk, trust, and intention to use. *Inf. Syst. Res.* **17**(4), 332–351 (2006)
- Overby, J.W., Lee, E.: The effects of utilitarian and hedonic online shopping value on consumer preference and intention. *J. Bus. Res.* **59**(10/11), 1160–1166 (2006)
- Parasuraman, A., Zeithaml, V.A., Berry, L.L.: A concept model of service quality and its implications for future research. *J. Mark.* **49**(4), 41–50 (1985)
- Parker, C.J., Wang, H.: Examining hedonic and utilitarian motivations for m-commerce fashion retail app engagement. *J. Fashion Mark. Manage.* **20**(4), 487–506 (2016)
- Pizam, A., Ellis, T.: Customer satisfaction and its measurement in hospitality enterprises. *Int. J. Contemp. Hosp. Manage.* **11**, 326–339 (1999)
- Rawlins, L.K.: Only 4% of South Africans are regular online shoppers. In: *IT Web* (2018). <https://www.itweb.co.za/content/xnklOqzb2lpq4Ymz>. Accessed 9 Feb 2021
- Safa, N.S., Von Solms, R.: Customer repurchase intention formation in e-commerce. *South Afr. J. Inf. Manage.* **18**(1), 1–9 (2016)
- Statista(a) (n.d). “Fashion eCommerce report 2020 (2020). <https://www.statista.com/study/38340/e-commerce-report-fashion/>. Accessed 1 Feb 2021
- Statista(b) (n.d). Digital market outlook, Apparel South Africa. <https://www.statista.com/outlook/249/112/apparel/south-africa>. Accessed 11 Feb 2021
- To, P., Liao, C., Lin, T.: Shopping motivations on Internet: a study based on utilitarian and hedonic value. *Technovation* **27**(12), 774–787 (2007)
- Tshandu, P.V.: SA fashion: why it’s a menswear world. In: *Pressreader* (2018). <https://www.pressreader.com/south-africa/sunday-times-1107/20180923/282467119812212>. Accessed 5 Feb 2021
- Van Niekerk, B.M., Petzer, D.J., De Beer, L.T.: The interrelationships between boutique store atmosphere, customer satisfaction, store loyalty and repurchase intention: a study of females in the North-West Province. *Retail Mark. Rev.* **12**(1), 70–88 (2016)
- Wu, W., Quyen, P.T.P., Rivas, A.A.A.: How e-servicescapes affect customer online shopping intention: the moderating effects of gender and online purchasing experience. *Inf. Syst. e-Bus. Manage.* **15**(3), 689–715 (2016)
- Yu, Y.-W., Chiu, S.-C., Chumpoothepa, S., Chen, J.K.: Factors influencing online repurchase intention: the case of clothing customers in Thailand. In: *Proceedings of PICMET 2014: Infrastructure and Service Integration*, pp. 658–669 (2014)



Understanding the Digital Communication Preference of Business-to-Business Purchasers and Sellers

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Abstract. In this paper, we explore the shift in digital communications by selling firms to enhance the value of their offerings. Based on in-depth interviews with professional purchasers, this paper's findings suggest that business-to-business relationships' future success will depend on a differentiated value approach by salespeople. Using the Kraljic matrix, we explore the offerings and digital communications focused around four types of business-to-business purchases—strategic, leverage, bottleneck, and non-critical products.

Keywords: Buyer-Seller · Sales conversation · Digital communications · COVID pandemic

1 Introduction

The Covid-pandemic has influenced the way buyers and sellers do business. Based on 86 in-depth interviews with professional purchasers, we find that purchasers perceive three major shifts in the buying process. First, the role of the purchasing function is expected to become more strategic. Second, they plan to take a differentiated approach towards dealing with their suppliers based on the criticality of the product for the purchasing firm. Third, they expect an increased focus on digital interactions with specific suppliers, including self-service options, including eCommerce. The Covid pandemic has also forced purchasers to evaluate a sales organization's digital communication and commercial platforms and rely on digital channels themselves to interact with the sales organization. This paper focuses on how supplier sales organizations can communicate effectively and efficiently with the purchasing function.

2 Effective and Efficient Communication with Purchasers

As purchasers increase their use of digital platforms, sales managers need to understand the most effective and efficient way of harnessing digital technology to enhance the relationship with their customers. To do this, they have to understand how the purchasing function views their offerings. The most commonly used framework to categorize products/services by the purchasing function is the Kraljic purchasing portfolio matrix (Kraljic 1983; Formentini et al. 2019). The two-by-two matrix is based on the relative profit impact for the purchasing firm on the one dimension and the supply risk (number of suppliers available and the consequence of not having the product or service for the purchasing firm) on the other dimension. This results in four product groups listed later in this article.

Paesbrugge et al. (2017) suggest that sales organizations need to adapt their sales strategies to how purchasers classify their offerings. Furthermore, Rangarajan et al. (2020) and Sharma et al. (2020) find that the COVID pandemic has made buyers and sellers adapt their communication strategies and move to digital channels to ensure business continuity. Consequently, we suggest that sales managers have to adapt their sales strategies according to purchasers’ categorization of their offerings and design the most effective way of harnessing digital technologies to ensure business continuity.

3 The Importance of Digital Communications to Improve the Buyer-Seller Relationships

This section discusses the preferred digital communications and platforms based on the purchasing function’s preference and classification of the different offer categories, and we provide the framework in Fig. 1.

	Low Supply Risk	High Supply Risk
High Profit Impact	<p>LEVERAGE PRODUCTS <i>Buyer:</i> Digital Marketing Channels <i>Seller:</i> Personal/Social ties</p> <p><u>Contractual Relationship</u></p>	<p>STRATEGIC PRODUCTS <i>Buyer:</i> Personal/ Social ties <i>Seller:</i> Personal/ Social ties</p> <p><u>Key Account/Contractual Relationship</u></p>
Low Profit Impact	<p>NON-CRITICAL PRODUCTS <i>Buyer:</i> Digital Communications <i>Seller:</i> Digital Communications</p> <p><u>E-Commerce</u></p>	<p>BOTTLENECK PRODUCTS <i>Buyer:</i> Personal/Social ties <i>Seller:</i> Digital Ties</p> <p><u>Key Account/EDI</u></p>

Fig. 1. Communication preference by buyers based on their purchasing classification.

Strategic Products. The offering is important for both purchasers and sellers for strategic products. Purchasing will be driven by the purchaser and salesperson in-person interactions. However, with the increased acceptance of virtual meetings by both parties, the

number of face-to-face meetings can be reduced. Furthermore, the use of advanced sales enablement platforms can also help salespeople effectively communicate with multiple stakeholders in the customers' organization. And finally, when customers engage in straight rebuy of offerings, the use of EDI (electronic data interchange) platforms might be more effective.

Leverage Products. Purchasers can use their purchasing position to obtain a good price. It is extremely important for the purchaser to have a quick buying process leading to a contractual relationship. This implies that there must be an easy access to information, and purchasers seek explicit information and have a strong preference for digital communication for the entire buying journey. For instance, the use of digital brochures or intranet portals where information about the offerings can be made available by the supplier would be preferred by purchasers. To drive down prices, customers can also deploy electronic bids or even reverse auctions to foster competition between suppliers.

Bottleneck Products. For bottleneck products, the focus on the purchasing function is to ensure a consistent supply. Since it is important for purchasers, they will seek personal/social ties with suppliers, sometimes with an EDI. However, the preference may be a digital communications platform for the selling firm as they do not need to sell their products aggressively. A suggestion for selling firms could be to use an inside sales force.

Non-critical Products. Purchasers strongly prefer to have all information they need to go through the buying process as conveniently as possible. In such instances, selling organizations should establish a self-service option for the customer, such as an e-commerce portal. Working with electronic marketplaces might be an option for both parties.

4 Conclusion

The study highlights that history has shown that there is a transformation within society during crises and pandemics. This research highlights how the buyer-seller relationships have been disrupted and the need for the selling firm to adopt digitization. Taking insights from the purchasing firms, we offer suggestions to help understand this relationship to inform future sellers and selling firms.

References

- Formentini, M., Ellram, L.M., Boem, M., Da Re, G.: Finding true north: design and implementation of a strategic sourcing framework. *Ind. Mark. Manage.* **77**, 182–197 (2019)
- Kraljic, P.: Purchasing must become supply management. *Harv. Bus. Rev.* **61**(5), 109–117 (1983)
- Paesbrugge, B., Rangarajan, D., Sharma, A., Syam, N., Jha, S.: Purchasing-driven sales: matching sales strategies to the evolution of the purchasing function. *Ind. Mark. Manage.* **62**, 171–184 (2017)
- Rangarajan, D., Sharma, A., Lyngdoh, T., Paesbrugge, B.: Business-to-business selling in the post covid era: developing an adaptive salesforce. *Bus. Horiz.* In press (2021)
- Sharma, A., Rangarajan, D., Paesbrugge, B.: Increasing resilience by creating an adaptive salesforce. *Ind. Mark. Manage.* **88**, 238–246 (2020)



eCommerce Within the Tourism Industry in the Global South: The Case of the Sharing Economy in South Africa

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Abstract. The emergence of the sharing economy is a reflection of the power of the internet to change the way of life and how the world of business has been changed. eCommerce has increased in intensity as peer-to-peer transactions and the sharing economy have increased by the sheer number of transactions ignited by the internet, smartphone penetration and the availability of wifi. The tourism industry has been a partner to the sharing economy and supported lifestyle entrepreneurship which is associated with the sharing economy. The paucity of public transport led to Uber emerging as a substitute and this led to mode switching. Mode switching attracted competitors, and intense competition led to the entry of Bolt in South Africa. Sharing economy companies have evolved to deliver food services, responding to changing consumer needs in South Africa. Airbnb is well entrenched in South Africa, and the need to involve the previously disadvantaged groups as entrepreneurs led to the establishment of Airbnb Africa Academy that trains entrepreneurs to become successful business people. The future of mobility which would drive ecommerce will be defined by urban mobility in the sky, and poses challenges for regulators.

Keywords: Uber · Airbnb · Sharing economy · Bolt · Covid19

1 Introduction

The growth of platform businesses has been fueled by the internet and mobile technologies and rapid advances in analytics, artificial intelligence (AI) and Big Data together with changing customer preferences according to Witz et al. (2019: 452). The emergence of the internet has been the biggest impact on the emergence of the sharing economy. The growth of smartphone penetration and the increased availability of wifi-hotspots has accelerated sharing economy consumption. The sharing economy, called the 2.0 is removing single asset ownership and allowing for collaborative consumption. “The sharing economy has radically changed the world and even the world of work. Technological changes usually create revolutionary changes in the world of business” Henama (2019: 1).

Kute (2017) noted that the Web 2.0 evolution of the Internet has given rise of the Internet has given rise to online platforms that promote user-generated, peer-produced

content, which is subsequently shared between one or more users. The sharing economy has been able to bypass regulatory barriers, much to the disgust of regulators in many localities. A great example of how Uber lost its license to operate in London for safety challenges that were flagged by the transport regulators. Companies in the sharing economy have been able to develop entrepreneurs in a country that has struggled since 1994, when apartheid ended to develop a culture of entrepreneurship. “The low levels of entrepreneurship in South Africa are further stifled by the high failure rate of small businesses within five years of operating” Henama (2019: 31). The sharing economy has presented itself as a viable partner for job creation and entrepreneurship in South Africa, by lowering the barriers of entry using technology platforms.

2 Sharing Economy

“The sharing economy or collaborative consumption, is a peer-to-peer (P2P) marketplace for gaining, giving and sharing goods/services through the internet and it has grown at an extraordinary rate” Malaziz et al. (2018: 1). “Most sharing economy organizations are operating as two-sided platforms bringing together and matchmaking providers (suppliers; sellers) of goods and services with consumers (buyers)” Grinevi et al. (2019: 862). Companies in the sharing economy, promote collaborative consumption and pride themselves for providing unique experiences for each guest. The intimacy, uniqueness and intimacy of the host-user interaction is highly valued in collaborative consumption. This unique feature of collaborative consumption is a reflection of postmodern consumption patterns. “User perceive sharing to be time and money saving, not accompanied by ownership duties and providing autonomy” Lalicic and Weismayer (2017: 782). The sharing economy has reduced the cost of doing business and promoted disruptive entrepreneurship. Henama (2019) noted that relationship between the sharing economy and tourism has led to the pooling of resources to provide services in the tourism industry. “The leisure and tourism industry have always attracted a large number of small business and non-growth oriented ownership-entrepreneurship” Marcketti et al. (2006: 397).

3 Theoretical Framework: Lifestyle Entrepreneurship

A theoretical framework grounds the research on a particular body of knowledge, which would be the basic for analyzing the objectives, and aims of the research to be conducted. According to Grant and Osanloo (2014) the theoretical framework provides a grounding base, or an anchor, for the literature review and most importantly, the methods and analysis. Lifestyle entrepreneurship is chosen as the theoretical framework as it created opportunities for economic benefit for millions of people. Entrepreneurship is a topic of interest in many countries as entrepreneurs create jobs, invest in the local economy, and diversify the range of services and products available to consumers. A lifestyle entrepreneur is passionate about the business that have started and builds his/her life around the business, and the business exists to support the individual’s lifestyle. Marcketti et al. (2006) defined lifestyle entrepreneurship as individuals who owned and operated businesses closely aligned with their personal values, beliefs, interests and passions. Instead of seeking fast and rapid growth, the entrepreneur seeks to acquire financial benefits from

running the business, and seeking a balance between family (non-financial reasons) and the business (financial reasons). The lifestyle and family domains of running the business therefore dominate the relationship between the owner(s), with the business. At times, it can be noted that lifestyle entrepreneurship can be anti-developmental, seeking to maintain the lifestyle instead of growing the business. The lifestyle entrepreneur do not follow economic motives. Lifestyle, non-economic motivate have been recognized as significant stimuli for tourism entrepreneurship according to Ateljevic and Doorne (2000). Masurel and Snellenberg (2017) noted that self-employed persons without any personnel seem to be good examples of entrepreneurs who have no growth ambitions and/or whose firms have no actual firm growth, because such firms do not show any growth (in terms of employment) at all, as they do not hire any employees. Peters et al. (2009) noted that lifestyle entrepreneurs usually stop entrepreneurial activities at the time they recognize they have reached the maximum level of personal quality of life. The sharing economy had provided entrepreneurship opportunities for a plethora of people and an additional income stream for others, the so-called “side hustle”. Marcketti et al. (2006) noted that the characteristics of lifestyle entrepreneurs includes:

- Motivated by quality of life rather than growth.
- Main priority is lifestyle rather than customer service.
- Very limited growth orientation.
- Underutilization of resources and capital investment.
- Low involvement within industry growth and industry structures.

The tourism industry is dominated by small-and medium-sized enterprises, and the tourism industry is a perfect fit for lifestyle entrepreneurship. Lifestyle entrepreneurship has been closely associated with tourism entrepreneurship. As noted by Henama (14) policy makers views entrepreneurship as a panacea for inclusive growth in South Africa.

4 Accommodation Providers in the Sharing Economy

Airbnb is possibly the most prominent sharing economy company providing accommodation services and is the largest commercial accommodation provider in the world, without owning any properties, unlike hotels. Malazizi et al. (2018) noted that Airbnb is a prominent platform for tourism to locate and book various types of accommodation in various countries across the world. Lin et al. (2019) note that Airbnb aims to make guests feel at home and bond with the local environment. As noted by Alrawadieh and Alrawadieh (2018) unlike traditional lodging businesses, the relationship between the hosts and guests is characterized by a higher degree of interaction and lower levels of formality or professionalism. Airbnb sought to differentiate itself from the monotonous experiences and physical outfitting that typify the normal hotel experience. The focus of Airbnb is on ensuring the stay and the intangible interaction between the guest and host was fulfilling, authentic and undertaken by a passionate local, with institutionalized memory about the locality. “Such are the digital opportunities for digital and technology in Africa that Airbnb last year, for example, announced it will invest \$1m through 2020 to promote and support community-led tourism projects on the continent” Bizcommunity

(2018: 1). The key resource of networked business-like Airbnb is that it provides places to stay, events to attend and recommendations on what do at the location. Cape Town's South Africa, located at the Southern Tip of the Africa has the highest number of Airbnb listings. This is not surprising considering that Cape Town is the leading city for tourism consumption in South Africa. Airbnb has grown significantly in South Africa, even getting backlash from the hotels and other tradition accommodation providers as it led to mode switching towards Airbnb. Zietsman (2018) noted that in 2017, Airbnb welcomed 830 inbound guests, and the average income for a South African host is R24 633 for an average of 17 nights. "Since the entry of Airbnb into the South African market, many South Africans have taken the opportunity to turn the primary residence into a side hustle or have invested in a second property for some extra, passing income opportunities" Eveleigh (2020: 1).

4.1 Airbnb Africa Academy

The tourism trade in South Africa is dominated by established tourism business enterprises, which are vertically and horizontally integrated and they benefit from the bulk of the tourism expenditure in South Africa. The initial entry of Airbnb in South Africa reflected ownership patterns that further entrenched the tourism expenditure patterns that are in high end, and established tourism zones, excluding areas located in previously disadvantaged communities. Because Airbnb seeks to create authentic experiences that are located in communities, the absence of Airbnb hosts in previously disadvantaged communities (PDCs), where the vast majority of Black South Africa reside, did not give an appropriate and comprehensive picture of the South Africa. The Airbnb Africa Academy (AAA) was established and piloted in South Africa, combining skills development and training for would be hosts, and then giving them 6 months of technology-induced support and back of the house support from Airbnb until they are fully competent to perform on as hosts on the Airbnb platform. This pro-poor tourism initiative sought to open up non-traditional tourism areas to the Airbnb platform, by promoting entrepreneurship linked through the AAA, and ensure business support leads to business success for the hosts. According to Henama and Apleni (2020) the AAA is a small business development success story that was developed to disproportionately benefit the poor.

4.2 Social Impact Experiences

Airbnb's Social Impact Experiences are organized by nonprofits on the Airbnb platform that have a compelling cause that would be tailor made as an Experience that directly benefits the nonprofit financially directly. Airbnb waives their 20% service fee for social impact experiences, so that the 100% fee paid goes directly to the nonprofits. Citizen (2018) noted that taking a class with "Boxing Grannies" will give you a glimpse into the sport and as another social impact experience, it benefits the A-Team Foundation which helps promotes fitness and bodybuilding in underservices areas. This non-governmental organization (NGO) is able to sustain itself through the unique experiences that are available on the Airbnb Experiences platform.

5 Food Services in the Sharing Economy

The changes in lifestyles in South Africa and increased urbanization had led to a rise in take away food consumption and this led to an increase in fast food outlets in both urban centres and residential districts. To respond from a business perspective to this trend, Mr D Food and Uber Eats have been matching supply and demand. Toyana (2019) noted that South Africa's online food delivery industry was worth R10.49 billion (\$713 million) in 2019. Almost all fast food outlets have a delivery scooter services in addition to the services provided by Mr D Food and Uber Eats. Bold, established in Estonia, will launch its own food delivery platform, and this will increase competition and reach in food delivery in South Africa. The sharing economy platforms had increased work opportunities for partner drivers who deliver food, and increased the financial sustainability of restaurants. The demand for motorcycles has also increased due to the increased demand for deliveries. Dahir (2016) noted that motorcycle taxis, locally known as boda bodas in Kenya and Tanzania or okada in Nigeria, are set to become a significant mode of transportation in Africa in the next five years, a new report shows. Businesswire (2019) noted that South Africa does not have a large number of people who commute by bike, and sales are predominantly commercial (delivery) and leisure at the high end, however, sales of small motorcycles under 500cc grew by 12.5% in 2018 in line with the growth of the fast food delivery sector which uses small bikes for deliveries, and this growth is set to increase.

McKane (2020) noted that the two food delivery platforms in South Africa are Uber Eats and Mr D Food, each of them offering a large selection of restaurants. Mr Delivery, which has been renamed Mr D Food, is a South African company that had pioneered food delivery in South Africa. Modise (2011) noted that in 2011, Mr Delivery as the company was initially conceptualized, changed the name to Mr D Food after being established in 1992. TechFinancials (2019) noted that Mr Delivery since 1992 had facilitated orders via the phone from printed menus on fridges. Gilbert (2017: 1)" originally known as Mr Delivery, the South African food delivery business was founded in Cape Town in 1992 and was fully acquired by Takealot.com in 2014. Since 2015, the company has undergone a complete digital makeover and rebranded as Mr D Food". Takealot is the largest ecommerce retailer in South Africa. The Takealot takeover of Mr D sought to transform the business to be more efficient. Gilbert (2017) noted that the business was 80% phone calls in June 2016 and by June 2017 it had become 95% app-based, so the business has gone from 20% online to 95% online in just 12 months. TechFinancials (2019) noted that the new Mr D Food cut delivery time by more than half, to an average time of 34 min. First National Bank (FNB), which is one the largest South African banks, has a rewards programme called eBucks.

Marce (2020) noted that FNB clients can now earn eBucks when they procure food from Mr D Food. This decision was intended to cement the Mr D, which is South African company in the sharing economy. The advent of the COVID19 pandemic on the world, changed the world of work immediately, and changes the operation of society to a 'new normal'. In the case of Mr D Food, the lockdown restrictions that restricted movement, seeking to reduce the spread of the COVID19 pandemic. Walker (2020) noted that Mr D Food delivered medication for customers stuck at home due to lockdown regulations from MediRite pharmacies. MediRite pharmacies are a subsidiary of the Shoprite Group,

the largest food retailer in Africa. IOL (2019) noted that research conducted indicates that a customer could be paying 32% more for your meal when you order your meal through Mr D and UberEats, excluding the R10 delivery charge. Richardson (2020) noted that some restaurateurs have considered bringing their delivery in-house because of the high commission rates charged by delivery services such as Mr Delivery and Uber Eats. Uber has tapped into local cuisine establishments and in turn introduced those establishments to a large market on the Uber Eats platform. Toyana (2020) noted that Uber Eats has added local dishes to its 480,000 menu items, adding dishes such as stewed tripe, cterpillars, cow heels and sheep's head to mostly middle-class customers who crave a taste of home, whilst improving sales by up to 50% for such establishments.

6 Transport Providers in the Sharing Economy

Uber has been operating in South Africa since September 2013 and has over 4000 Uber drivers according to Henama and Sifolo (2017). The institutionalization of Uber within the South African community had been proliferated by the absence of a reliable and safe public transport system, the emergence of Uber in South Africa led to modes witching primarily from the metered taxi industry and in the year 2020. This led to animosity and violence which destroyed lives and property from the Uber partner drivers and Uber passengers. Uber which is a pioneer in the sharing economy in South Africa has been able to adapt to local conditions and sought to remain relevant by establishing new product offerings. Uber in various other destinations had long established Uber Delivery and in the case of South Africa, it took several years for this dream to be fulfilled. The emergence of COVID19 as a pandemic, was the opportunity to for Uber to launch the home delivery service as millions of thousands were under lockdown, and there was available capacity in terms of the UberEat scooters to make deliveries. Stuff (2020) noted that in August 2020, Uber launched its delivery service called Uber Connect in the major cities such as Cape Town, Durban, Johannesburg and Port Elizabeth. "Uber will deliver packages over short distances in four cities in South Africa where its Uber Eats service is already available" Business Insider (2020: 1). During the eased lockdown period in South Africa, Uber largest competitor, Bolt launched Bolt Go, making it the cheapest ride-hailing service. "In addition of the low-cost category, according to Bolt, aims to significantly lower the barriers into the South African ride-sharing industry by empowering owners and drivers of hatchbacks vehicles to access the Bolt platform and earn an income for the first time, while offering rides a more affordable option" Malinga (2020: 2).

Uber has already pioneered and piloted a cheaper version of Uber, called Uber Go in the secondary city of Port Elizabeth. Uber retaliated to Bolt Go, by launching UberNam. UberBlog (2020) noted trips on UberNam begin at R19 and is only available in Johannesburg, Cape Town and Durban. Uber within the South African context has always been innovative, firstly allowing cash payments and not recently launching a pre-paid option. Mavundza (2020) launched Uber Cash, which would allow customers to lad money for upcoming trips. The entry of Uber in South Africa has not been without challenges, as violence against Uber drivers has been a major feature of the Uber experience. Kute (2017) noted that Uber had to contend with various incidents of violence towards Uber

driver-partners and Uber users. The primary suspects for the violence against Uber are metered taxi drivers, whose business transactions have ceased due to the operation of sharing companies such as Uber. Competition between Uber and Bolt in South Africa is increasing but can never match the classical competition between Uber and Grab in Southeast Asia, which led to Uber selling its Southeast Asia business to Grab and exiting that market. Uber will continue to focus on underserved continents in terms of public transport alternatives. Africa is firmly on the plans of Uber, and as Uber expands, so will the competitors such as Bolt.

7 The Future of Urban Mobility

The desire to continually innovation is ingrained in the culture and philosophy of Uber, which has been pioneering changes in urban mobility. The race to dominate urban mobility has seen many established car manufacturers, seeking to be at the forefront of innovations, the race is intensifying. Uber initiated Uber Elevate as a means of alleviating the high traffic congestion that had become a daily feature in almost all metropolitan areas, further challenged by increasing urbanization. The emergence of on-demand sharing economy cab services by Uber had reduced the demand for car ownership in many localities, and the development of on demand aviation would alleviate transport congestion. “On-demand aviation, has the potential to radically improve urban mobility, giving people back time lost in their daily commutes... A network of small, electric aircraft that take off and land vertically (called VTOL aircraft) will enable rapid, reliable transportation between the suburbs and cities, and ultimately within cities. The development of infrastructure to support urban VTOL network will likely have significant cost advantages over heavy infrastructure approaches such as roads, rail, bridges and tunnels” Uber (2016: 2). “The market for flying cars, now known as electric air taxis, should continue to mature during this decade, soaring to \$1.5 trillion globally by 2040, according to a Morgan Stanley Research study” Hornyak (2020: 1). The Uber Elevate project was abandoned when it became a major cash-burning subsidiary and it was sold off. Uber Elevate had been bought by Jody Aviation, an electric passenger aircraft developer as noted by Bellon (2020). Hornyak (2020) noted that Toyota had invested \$394 million into Silicon Valley based Joby Aviation, which is developing EVTOLs. Uber did not cease its plays to exist in the EVTOL future, as it decided to enter in an agreement with South Korean car maker Hyundai to develop electric flying taxis. Benevolo et al. (2016) lists a number of challenges regarding urban mobility.

- Reducing pollution
- Reducing traffic congestion
- Increasing people safety
- Reducing noise pollution
- Improving transfer speed
- Reducing transfer costs

Uber (2020) noted that at the Consumer Electronics Show (CES) in Las Vegas, Uber and Hyundai announced a partnership, were the mass production capacity of Hyundai would

be relied on to produce Uber electric flying taxis. The self-driving vehicles project initiated by Uber was sold, as it was another cash burning business. According to Rossolillo (2018) self-driving vehicles have long been touted as a panacea for the problem of paying driver, and seeking to keep cost down and profits high. Litman (2017) emphasized that the objective is to increase the accessibility in urban areas. He defines accessibility as “the ease of reaching goods, services, activities and destinations, which together are called opportunities. Offering new services and business models are also integral parts, as consumer behaviors are in a transitional phase.

8 Conclusion and Policy Proposals

Companies within the sharing economy, must work with regulators in developing policies that would be friendly to the operation in the companies in the sharing economy. The speed of technological change is happening at a breathtaking space, and this leads to a disconnect between technological change and legislation that is lagging behind. This means that companies in the sharing economy must play a leading role in lobbying for friendly-legislation and help legislators to draft such legislation, drawing from international experience in various localities. Data remains relatively expensive in South Africa, when compared to other African countries, and low data prices are a necessary precondition to reduce the cost of doing business for both companies within the sharing economy and consumers of the sharing economy. The tourism industry must continue to embrace the sharing economy, as sharing will achieve new peaks as technology evolves. Companies in the sharing economy will continue to drive innovation, finding new ways to improve urban mobility, seeking convergence between road transportation and aviation.

The intermodal transportation that Uber seeks to pioneer, would seek the active participation of the state authorities and regulators in adopting legislation that would be favorable to the continued operation and innovation of Uber. Localities that pioneer an enabling legislative environment would attract the investment and innovation from Uber, allowing it to change the reality of urban mobility forever. In the case of Uber, it is clearly a company that seeks to only operate from urban areas, and it neglects secondary towns and cities which have a sizeable population. Regulators are not keeping up abreast with the breathtaking speed of technological change and Uber would have a play a leading role in guiding regulators on how to regulate urban mobility which would include electronic vertical takeoff and landing aircraft. From a sustainability perspective, the sharing economy companies involved in transportation employ foreign labor, which does not match the principles of sustainable tourism. Employing local staff would improve their Quality of Life and also improve their standard of living, whilst retaining the economic benefits from employment firstly within the local community and secondly within the host country.

References

- Alrawadieh, Z., Alrawadieh, Z.: Exploring entrepreneurship in the sharing accommodation sector: empirical evidence from a developing country. *Tourism Manage. Perspect.* **28**, 179–188 (2018)

- Ateljevic, I., Doorne, S.: Staying with the fence: lifestyle entrepreneurs in tourism. *J. Sustain. Tourism* **8**(5), 378–92 (2000)
- BBC: Uber loses license to operate in London (2019). <https://www.bbc.com/uber>. Accessed 11 Jan 2021
- Bellon, T.: Jody Aviation takes over Uber's air taxi business, Elevate. Reuters (2020). <https://www.reuters.com/>. Accessed 11 Jan 2021
- Benevolo, C., Dameri, R.P., D'Auria, B.: Smart mobility in smart city: action taxonomy, ICT intensity and public benefits. In: Torre, T., Braccini, A.M., Spinelli, R. (eds.) *Empowering Organizations*. Springer International Publishing, Cham, pp 13–29 (2016)
- Bizcommunity: Africa and the digital tourism opportunity, Bizcommunity.com (2018). online resource available at <https://www.bizcommunity.africa/Article/410/788/181614.html>
- Bredvold, R., Skalen, P.: Lifestyle entrepreneurship and their identity construction: a study of the tourism industry. *Tourism Manage.* **56**, 96–105 (2016)
- Business Insider: Uber Etas motorcycles will now deliver your parcel of up to 15kg nearby-fast. *Business Insider Business* (2020). <https://www.businessinsider.co.za/>. Accessed 11 Jan 2021
- Businesswire: Analysis on the sale, maintenance and repair of motorcycles & parts in South Africa - ResearchAndMarkets.com (2019). <https://www.businesswire.com/news/home/20190510005261/en/Analysis-on-the-Sale-Maintenance-and-Repair-of-Motorcycles-Parts-in-South-Africa-2019---ResearchAndMarkets.com>. Accessed 11 Jan 2021
- Citizen: Walk in Mandela's footsteps who these Airbnb Experiences (2018). <https://citizen.co.za/lifestyle/1983438/>. Accessed 11 Jan 2021
- Dahir, A.L.: The value of motorcycle public transport will more than double in Africa (2016). <https://qz.com/africa/800070/the-value-of-motorcycle-public-transport-will-more-than-double-in-africa/>. Accessed 11 Jan 2021
- The Economic Times: Uber wins back license to operate in London (2020). <https://www.theeconomicstimes.com/>. Accessed 11 Jan 2021
- Eveleigh, K.: Here's how the coronavirus impacts on Airbnb industry. *The South African* (2020). <https://www.thesouthafrica.co.za/>. Accessed 11 Jan 2021
- Grant, C., Osanloo, A.: Understanding, Selecting, And Integrating A Theoretical Framework In Dissertation Research: Creating The Blueprint For Your "House", *Administrative Issues Journal Education Practice and Research* (2014)
- Gilbert, P.: Mr D Food to double customers in six months. *ITWeb* (2017). <https://www.itweb.co.za/content/2j5alr7QxBDvPYQk>. Accessed 11 Jan 2021
- GrineviCH, V., Huber, F., Karatas-Ozkan, M., Yavuz, C.: Green entrepreneurship in the sharing economy: utilising multiplicity of institutional logics. *Small Bus. Econ.* **52**, 859–876 (2019)
- Henama, U.S.: The Sharing Economy in South Africa's Tourism Industry: The Case of Uber E-Hailing Taxi Services. In: Oncioiu, I. *Improving Business Performance Through Innovation in the Digital Economy*. IGI Publishing, Hershey (2019)
- Henama, U.S.: Disruptive entrepreneurship using Airbnb: The South African experience. *Afr. J. Hospital. Tourism Leisure* **7**(1), 1–16 (2018)
- Henama, U.S., Sifolo, P.P.S.: Uber: The South African experience. *Afr. J. Hospital. Tourism Leisure* **6**(2), 1–10 (2017)
- Henama, U.S., Apleni, L.: Airbnb as a Tourism Supply Chain Champion for Small Businesses: The Case of South Africa. IGI Publishing, Hershey (2020)
- Hollick, M., Braun, P.: Lifestyle entrepreneurship: the unusual nature of the tourism entrepreneur. *Researchgate* (2005). <https://www.researchgate.net/publications/228435789>. Accessed 3 Aug 2019
- Hornyak, T.: The flying taxi market may be ready for takeoff, changing the travel experience forever. *CNBC* (2020). <https://www.cnb.com>. Accessed 3 Aug 2020

- Hyundai: News Release. Uber and Hyundai motor announces aerial ridesharing partnership, release new full scale air taxi model at CES (2020). <https://www.hyundai.com>. Accessed 03 Jan 2021
- IOL: You won't believe the mark-up restaurants charge through delivery apps. Personal Finance (2019). <https://www.iol.co.za/personalfinance>. Accessed 11 Jan 2021
- Knowler, W.: Some restaurants hike prices by up to 25% for using delivery apps. TimesLive (2019). <https://www.timeslives.co.za>. Accessed 03 Aug 2020
- Kute, S.W.: The Sharing Economy in the Global South: Uber's Precarious Labour Force in Johannesburg. Unpublished Masters in Development Studies. Faculty of Humanities. Wits University, Johannesburg (2017)
- Lalic, L., Weismayer, C.: The role of authenticity in Airbnb experiences. In: Schregg, R., Stangl, B. (eds.). *Information and Communication Technologies in Tourism*. Springer (2017)
- Lin, P.M.C., Fan, D.X.F., Zhang, H.Q., Lau, C.: Spend less and experience more: understanding tourists' social contact in the Airbnb context. *Int. J. Hospital. Manage.* **83**, 65–73 (2019)
- Litman, T.: Transportation Affordability: Evaluation and Improvement Strategies. In: *TDM Encyclopedia*, Victoria Transport Policy Institute. Victoria, Canada (2017)
- Malazizi, N., Alipour, H., Olya, H.: Risk perception of Airbnb Hosts: evidence from a Mediterranean Island. *Sustainability* **10**, 3–23 (2018)
- Malinga, S.: Governing bodies threaten shutdown of 'Bolt's manipulative system. ITWeb (2020). <https://www.itweb.co.za>. Accessed 11 Jan 2021
- Marce: Just in time: Mr D food partners with FNB to up your eBucks. Stuff (2020). <https://www.stuff.co.za>. Accessed 11 Jan 2021
- Marcketti, S.B., Niehm, L.S., Fuloria, R.: An exploratory study of lifestyle entrepreneurship and its relationship to life quality. *Fam. Consum. Sci. Res. J.* **34**, 241–259 (2006)
- Masurel, E., Snellenberg, R.: Does the lifestyle entrepreneur exist? An analysis of lifestyle entrepreneurs compared with other entrepreneurs on the basis of the development of entrepreneurial competences. School of Business and Economics. Vrije University, Amsterdam (2017)
- Mavundza, B.: Uber launches a pre-paid option in South Africa. Business Insider South Africa (2020). <https://www.mybroadband.co.za/Uber>. Accessed 11 Jan. 2021
- McKane, J.: Uber Eats vs Mr D Food-The cheapest food delivery app in South Africa. My Broadband (2020). <https://www.mybroadband.co.za/Uber>. Accessed 11 Jan 2021
- Modise, B.: Goodbye Mr Delivery, hello Mr D (2011). <https://www.news24.com/fin24/Entrepreneurs/Goodbye-Mr-Delivery-hello-Mr-D-20110629>. Accessed 11 Jan 2021
- O'Leary, A.: Uber wins back London license after appealing driver ban over safety concerns. Source Unknown (2020)
- Peters, M., Frehse, J., Buhalis, D.: The importance of lifestyle entrepreneurship: a conceptual study of the tourism industry. *PASOS* **7**(2), 393–405 (2009)
- Richardson, J.: Restaurants put off by high commission fees of delivery services. The South African (2020). <https://www.thesouthafrican.co.za>. Accessed 11 Jan 2021
- Rossilillo, N.: Here's Why Uber Conceding Defeat in Southeast Asia Matters. Source Unknown (2018)
- Stuff: Here's how to use Uber Connect to deliver packages locally (2020). <https://www.stuff.co.za>. Accessed 11 Jan 2021
- Sweeney, M., Docherty-Highes, J., Lynch, P.: Lifestyle entrepreneur's' sociological expressionism. *Ann. Tourism Res.* **69**, 90–100 (2018)
- Sveinsdottir, A.M.: Lifestyle Entrepreneurship in Hospitality: Using a multiple case study to investigate lifestyle entrepreneurs' motives to engage in sustainable destination development. Uppsala Universiteit, Uppsala (2020)
- TechFinancials: Why Mr D Food is SA's Biggest Online Food Delivery Business (2019). <https://www.techfinancials.co.za>. Accessed 11 Jan 2021

- Toyana, M.: Uber Eats goes local to find its niche in South African food fight. Reuters (2020). <https://www.reuters.com/businessnews>. Accessed 11 Jan 2021
- Uber: Hyundai and Uber announce aerial ridesharing partnership, release new Full-Scale Air Taxi Mode CES (2021). <https://www.uber.com/corporate/pressrelease>. Accessed 11 Jan 2021
- Uber: Uber: fast forward to a future of elevate on-demand urban air transportation (2016). <https://www.uber.com/elevate>. Accessed 11 Jan 2021
- UberBlog: Uber provides a more affordable option at your fingertips, UberNam (2020). <https://uberblog.co.za>. Accessed 11 Jan 2021
- Walker, A.: Mr D Food will deliver prescription meds from MediRite during lockdown. Memeburn (2020). <https://www.memeburn.co.za>. Accessed 11 Jan 2021
- Witz, J., So, K.K.F., Moy, M.A., Liu, S.Q., Chun, H.H.: Platforms in the peer-to-peer sharing economy. *J. Serv. Manage.* **30**(4), 452–483 (2019)
- WESGRO.: Shared Economy in Africa (2017). <https://www.wesgro.co.za>. Accessed 11 Jan 2021
- WorldEconomic Forum: Collaboration in Cities: From Sharing to Sharing Economy. WEF, Geneva (2017)
- Zietsman, G.: Beaufort West one of the fastest growing Airbnb destinations in SA. Traveller24 (2018). <https://www.traveller24.com/Explore/BusinessTravel>. Accessed 11 Jan 2021



Influencers on Instagram: The Influence of Disclosure, Followers and Authority Heuristic on Source Credibility

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Abstract. Social media has become an important instrument for marketers to include in their marketing arsenal. A social network site that is of specific importance to many global marketers, especially those targeting the millennial generation, is Instagram. A popular marketing strategy used on Instagram is that of influential marketing where brands use influencers to promote their products and brands. Despite the popularity of influential marketing, little research is available on the use of influential marketing in an Instagram context. This study was therefore conceptualised and executed to investigate the influence of selected system-generated cues and user-generated content on the perceived credibility of an influencer as brand endorser and thus source to consumers on Instagram. Both qualitative and quantitative research were conducted. In the qualitative phase, two focus group discussions confirmed the variables that were measured in quantitative research which consisted of a $2 \times 2 \times 2$ between-subjects factorial experiment. A non-probability convenience sampling technique realised a sample of 311 millennial female respondents (18–25) across 8 experimental groups. The results indicated that advertising disclosure significantly influenced overall perceived source (influencer) credibility, trustworthiness and homophily, while non-disclosure was perceived more positively by respondents than advertising disclosure. The findings of the study make a valuable contribution to a field in marketing that is growing in popularity and it is believed that insights gained can be used rewardingly by academic scholars and strategic marketers who have an interest in using Instagram as a marketing tool.

Keywords: Instagram · Influencer · Source credibility · User-generated content · System-generated content

1 Introduction

Celebrity endorsement of products and or brands has been popular for more than a century (Cavill 2018). Now, in the age of the Internet, social media platforms have become channels for anyone to express their support or dismay with a product/brand. No longer are celebrity opinions the only that matter – rather, consumers seem to be interested in the views of others irrespective of their fame and often particularly because

of their lack of fame. This notion has excelled the influencer trend as influencers and their views are seemingly perceived as more authentic and credible than traditional celebrities. It has been said that system-generated cues (SGC) and user-generated content (UGC) can influence the perceived credibility of an influencer. This research study attempted to identify the most influential SGC and UGC and explored the influence of these variables on the perceived credibility of an influencer as brand endorser and thus consumer information source. The study was conducted within the Instagram context due to the current popularity and growth of this platform and its prominence within the influencer realm.

2 Literature Review

Social media can be defined as the usage of web-based and mobile technologies to consume, create and share information without geographical, social, political or demographic boundaries (Kaplan and Haenlein 2010). Globally, social media is a growing phenomenon and users have surpassed the 3.5 billion mark, or approximately 48% of the global population in 2020 (McCarthy 2020). Social media has also become a popular marketing tool with global social media marketing expenditure exceeding US\$90 billion in 2020 (McCarthy 2020). This figure is expected to increase in the coming years.

One of the fastest-growing social network sites is Instagram (Beaulac 2020). Since its launch in 2010, Instagram has steadily grown and in 2020 it had more than 1 billion active users (Systrom 2020). Instagram is one of the most popular social network sites that marketers use to build brand equity (De Veirman and Hudders 2020). A popular advertising method used on Instagram is influential marketing (Wallsbeck and Johansson 2014) and many brands use influencers on Instagram to promote their products and build brand equity. An influencer is an individual who enjoys public recognition and who uses this recognition to promote goods to a consumer by appearing with it in an advertisement (Bergkvist and Zhou 2016). It can furthermore be argued that influencers are individuals who are perceived by their followers as their future selves and who act as consumer role models (Ge and Gretzel 2018). Therefore, consumers tend to re-enact and follow the behaviour, habits and norms of the influencer (Fleck *et al.* 2012). Individuals follow an influencer's behaviour as anchors to their own identity, believing that if they replicate the behaviour of an influencer, their identity may coincide with that of the influencer's (Bergkvist *et al.* 2016).

Influencer marketing grew by 48% in 2019 (Hutchinson 2019), and in 2020 there were over 500 000 active influencer accounts on Instagram alone (Systrom 2020). Because of the popularity of using individuals to promote products and brands, the number of influential advertising posts on Instagram increased by 48.9% from 2018 to 2019 and it is expected that influential advertising will continue to grow exponentially in the near future (Asano 2019; Hutchinson 2019).

It is important to reiterate that two main components can affect an influencer's status or credibility as a source of important informational cues on Instagram, namely, user-generated content (UGC) and system-generated cues (SGC). UGC is content published online that is "created outside of professional routines and practices" and is a manner through which individuals express themselves and communicate with other users (Roma

and Aloini 2019). For UGC, the influencer can decide on the type of personal information to use to communicate with followers. Popular types of UGC include: a biography, images/videos, image captions, a profile image, and general comments (Casaló *et al.* 2017). Another important aspect to mention here is that, on Instagram, influencers can decide whether to disclose or not disclose whether content has been sponsored by a brand. As the literature on advertisement disclosure on Instagram and its effects on Instagram users are limited and contradictory the decision was made to focus specifically on the UGC of disclosure in this study.

SGC are quantitative indicators that can influence an individual's identity, popularity and credibility (Lin *et al.* 2016). A variety of SGCs in Instagram can affect an influencer's source credibility. An influencer's profile can, for example, show system-generated information such as the number of posts and followers, likes, comments and the so-called blue tick to confirm authenticity of the account.

For this study, the number of followers and authority heuristics were selected as two SGC factors that may influence consumer responses in influential advertising. The marketing literature about the number of followers on source credibility is contradicting. Some authors have concluded that a higher number of followers increases the public's perception of source credibility (Jin and Phua 2014; Martensen *et al.* 2018; De Veirman *et al.* 2017), while others have concluded that the number of followers does not influence source credibility (Lee and Sundar 2013; Loureiro and Sarmento 2019; Westerman *et al.* 2012). The contradictory conclusions across the literature suggests that there is a need for more investigations about the relationship between source credibility and the number of followers in an Instagram context, hence the inclusion in this study. In terms of authority heuristics, Lee and Sundar (2013) argued that social media users employ heuristics as a "mental generalizations of knowledge based on experiences that provide shortcuts in processing information." Past literature has reported different effects of authority heuristics in social media. Vaidya *et al.* (2019) assert that the blue verified badge on Twitter informs people that an account of public interest is authentic. The verification badge on Twitter is similar to the badge used on Instagram, i.e. a white or black tick marked in a blue circle (Instagram 2019). By investigating the possible influence of authority heuristics on perceived source credibility in an Instagram context this study addresses a major gap in the literature.

The most popular generation to use Instagram is millennials (Statista 2020), an age cohort that comprises 63.1% of Instagram's total active users. Millennials are aged between 18 and 35 years and is a cohort that many global companies and marketers are eager to tap into. Millennials were raised in a technological era where the boundaries between religion, workplace and communities became less clear because of the increased exposure to external cultures and practices through social media (Ng and Johnson 2015). Consequently, millennials have used Instagram to assist in developing their identity by following influencers.

To conclude this section, it can be restated that influencers use SGC and UGC to develop their credibility in social media. Consumers use SGC and UGC in social media to judge the quality of the influencers' content, their trustworthiness and the believability of their opinion (Fileri 2015; Shan 2016; Wang *et al.* 2018). The credibility of the influencer as source on social media is therefore a vital concept concerning the influence

and persuasiveness of a message, as credibility perceptions affect a receiver's intention to alter his or her attitude towards the information presented (Shan 2016). Therefore, the following section will discuss source credibility (SC) in more detail.

2.1 Source Credibility

According to Shan (2016), source credibility refers to the extent to which a reviewer is perceived as a credible source of product information and can be trusted to give an objective opinion on a product. O'Keefe (1990) argue that SC can be regarded as a receiver-based construct where the audience bestows their perceived degree of credibility on the message source, while Xiao *et al.* (2018) are of the opinion that SC affects information credibility. Individuals are therefore more likely to believe the content of a message if the information is provided by a credible source over a less credible source.

A model regularly used alongside SC to determine how individuals make decisions and process information is the elaboration likelihood model (ELM) (Teng and Khong 2015). The ELM states that individual attitude change is based on two distinct routes to persuasion, namely a central route and a peripheral route (Tseng and Wang 2016). According to the ELM, individuals who are not motivated to process information employ heuristic or peripheral information cues to help them comprehend the perceived information (Xiao *et al.* 2018). In other words, information cues, such as the number of reviews, number of followers or the appearance of a spokesperson, influence a person's judgement of the information. The central route is activated when individuals carefully and thoughtfully consider all available information about a product, before a purchase decision is made (Tseng and Wang 2016). Although SC has been associated with the central route there are many studies linking SC to the peripheral route of persuasion as well (Tseng and Wang 2016; Xiao *et al.* 2018).

The peripheral route occurs "as a result of some simple cues" rather than critically analysing issue-relevant information (Tseng and Wang 2016: 2292) and can have a major effect on information adoption for people with low elaboration motivation (Bhattacharjee and Sanford 2006). Therefore, within some product categories, rather than analysing argument quality and accuracy of information (Xiao *et al.* 2018), consumers consider alternative cues to determine whether the information about the product is credible or not (Tseng and Wang 2016; Wang *et al.* 2018). As mentioned before, these 'alternative' cues are referred to as SGC and UGC (Aladhadh *et al.* 2019; Colicev *et al.* 2018).

On Instagram, consumers can only judge an individual's credibility based on their SGC and UGC as they most likely do not personally know the individual. Therefore, for this study, SC had to be defined in an Instagram context. By referring to the work of Ohanian (1990) and Shan (2016), SC was consequently defined as: the extent to which an influencer is perceived as a credible and trustworthy source of product information based on their SGC and UGC cues provided by their Instagram profile.

2.2 Dimensions of Source Credibility

SC is a term commonly used to imply a communicator's positive characteristics that affect the receiver's acceptance of a message (Ohanian 1990). Some authors have measured SC as a unidimensional construct (Cheung *et al.* 2018; Tseng and Wang 2016), while

others have proposed between two and four dimensions to measure SC. Two dimensions that are often incorporated into SC scales are expertise and trustworthiness (Ohanian 1990). Another popular dimension added by authors to the SC scale is the perceived attractiveness of the source (Cheung *et al.* 2018; Filieri 2015; Xiao *et al.* 2018). This study incorporated Ohanian's (1990) dimensions of SC (expertise, trustworthiness and attractiveness), based on the prominence of these dimensions in literature to capture the SC construct (Lou and Yuan 2019; Sokolova and Kefi 2019; Spry *et al.* 2011). Drawing from the work of Shan (2016), the decision was made to add another dimension to investigate SC, namely homophily, which can be defined as "the degree to which pairs of individuals who interact are similar with respect to certain attributes, such as beliefs, demographics and social status" (Shan 2016: 635). Homophily was included in the SC scale to capture the perceived similarities between the influencer and consumer (Wallace *et al.* 2017). Hereafter, each dimension of SC will be discussed independently, starting with expertise, trustworthiness, attractiveness and homophily.

2.2.1 Source Expertise

Expertise can be defined as the degree of perceived understanding, skills and knowledge of an individual (Wang and Scheinbaum 2018) or as an individual's competence or qualification to make certain claims relating to a certain subject or topic (Lou and Yuan 2019). In terms of endorsements, an individual's degree of expertise (i.e. source expertise) can be defined as the extent to which the source (endorser) is seen as being capable of providing correct information to his/her audience. The information shared by an expert source stems from previous knowledge and experiences and are not merely based on product or brand perception (Ismagilova *et al.* 2019). Therefore, information from expert sources on social media should be valuable to followers. One of the most influential effects of source expertise is its effect on consumer purchase intention. When consumers receive brand-related information from a source that is perceived to have a high level of expertise, they are more willing to accept the information and purchase the product (Ismagilova *et al.* 2019; Wang and Scheinbaum 2018; Xiao *et al.* 2018). Ismagilova *et al.* (2019) conducted a study to determine which characteristics of source credibility influence a consumer's behaviour. Out of expertise, trustworthiness and homophily, expertise was reported to be the most influential in predicting a consumer's intention to buy. The positive relationship between expertise and the intention to purchase is supported throughout the marketing literature (Shan 2016).

Studies have proposed and supported the relationship between SGC, UGC and SC. Ismagilova *et al.* (2019), for example, reported that consumers analyse UGC and SGC to determine a source's perceived level of credibility on review sites. On a product review site, consumers would assess three factors to determine the credibility of the information provided by the source, namely the source's number of reviews posted (SGC), the content of the review (UGC) and the duration the source has been on the platform (SGC) (Ismagilova *et al.* 2019). Shan (2016) conducted a study to investigate the interaction effects of SGC and UGC on perceived expertise of an online review. The study manipulated reviewer profiles to test the effect of argument quality and reviewer badge (authority heuristic) on the perceived credibility of a source. Shan (2016) concluded that reviewers with a "top reviewer badge" present higher levels of expertise and trustworthiness than

reviewer profiles with no badge. Strong arguments (UGC) have a more positive influence on the perceived expertise of a reviewer than weak arguments. Studies by Ismagilova *et al.* (2019) and Shan (2016) support the notion that SGC and UGC can influence an individual's perceived expertise and in turn, their credibility on social media.

2.2.2 Trustworthiness

Ismagilova *et al.* (2019) define trustworthiness as the willingness or intention to rely on someone's opinion about a subject, while Xiao *et al.* (2018) define trustworthiness as the apparent integrity of the source and the perceivers' confidence in the source to communicate valid and honest assertions. It can therefore be argued that it is not sufficient for the source of information to be perceived as knowledgeable or an expert, but users also need to acknowledge the source as reliable and trustworthy. Though the literature on trustworthiness is copious, few authors depict how individuals develop their perceived trust in a social media context. Shan (2016) attributes an individual's motive to produce content as an element that influences their perceived trustworthiness. For example, disclosing paid content on social media informs other users about the motive for content production. Therefore, a user's perceived level of trust towards an individual may vary depending on the disclosure of promotional content. In support of Shan (2016), Lou and Yuan (2019) report that trustworthiness negatively influences brand awareness and purchase intention. This relationship may be explained as follows. Although influencer UGC has value and generally influences followers' trust in their branded posts, followers may hold sceptical beliefs about the influencer's motive to produce the content. Thus, forming sponsored brand-related UGC may discredit influencers. Xiao *et al.* (2018) believe the interaction among YouTube influencers and their audience in the comment section applies to the influencer's perceived level of trust. This view could be attributed to the idea that relationships are built on the interaction between two individuals, in other words, when the influencer invests time in developing a relationship with their followers. Although the topic of trustworthiness has been thoroughly researched, the literature on how influencers could develop trust within their audience in the social media realm remains unclear. This study contributes to how influencers can build trust among their followers in the social media environment.

2.2.3 Attractiveness

Wang and Scheinbaum (2018) define attractiveness as an individual's outward physical appearance, while Lou and Yuan (2019) refer to attractiveness as a source's likeability or physical attraction. Ohanian (1990) proposed that attractiveness is a dimension of SC and is perceived as the classiness, beauty, elegance and sexiness of a source. Moreover, Ohanian (1990) perceives attractiveness as a function of a source's likeability, similarity and familiarity. It can therefore be concluded that an attractive source is someone likeable, shares similarities with the message receiver and portrays a degree of physical attractiveness. It can also be argued that an attractive source increases a message receiver's acceptance of shared information and can positively influence a consumer's brand attitude and purchase intention (Wang and Scheinbaum 2018; Xiao *et al.* 2018).

Wang *et al.* (2018) report that adding images on an individual's social media profile increases the perception of attraction and trustworthiness.

2.2.4 Homophily

The final dimension of SC investigated in this study denotes the similarity between the information source and the message receiver (Xiao *et al.* 2018). Social relationships can influence the credibility of a source, which can be measured through homophily. Homophily can be derived from the shared demographic characteristics (age, gender, education) or perceived attributes (values, preference, beliefs) of a source (Ismagilova *et al.* 2019). In online reviews, individuals tend to look for more than a source's trustworthiness, attractiveness and expertise. Individuals also look for characteristics, which they share with the source of information. According to the elaboration likelihood model, individual decision-making depends on the characteristics of the information source. Thus, if an individual discovers that an influencer has shared similarities with him/her, the message might become more persuasive to the reader (Tseng and Wang 2016). According to Pan and Chiou (2011), a relationship between the message source and the message receiver can influence the credibility of online content, which can be measured by homophily. In social media, a relationship between the source and individual does not always exist. Users employ SGC and UGC provided by the online platform to make inferences and heuristics about the shared similarities (Ismagilova *et al.* 2019). The SGC and UGC can lead to better comprehending the source's personality, values, preferences and experience, which in turn, leads to an increased desire for social interaction.

Ismagilova *et al.* (2019) conducted a study on the effect of characteristics of source credibility on consumer behaviour and concluded a significant relationship between homophily, purchase intention and credibility of the source exists. Xiao *et al.* (2018) support the findings of Ismagilova *et al.* (2019) and conclude that a positive relationship between source credibility and the receiver can be attributed to shared characteristics. Xiao *et al.* (2018) believe similar attitudes between the source and receiver have a stronger influence than similarities such as gender and appearance do. Therefore, it may occur that individuals perceive homophily as more influential than source attractiveness within the source credibility dimension.

To conclude: A literature study on SC has suggested that, in social media, SGC and UGC positively influence SC and its sub-dimensions, namely expertise, trustworthiness, attractiveness and homophily. The argument is, however, made that, to date, no literature study in the public domain seems to have investigated the influence of SGC and UGC on SC in an Instagram context. This study will therefore be a pioneering endeavour with the purpose to assess the influence of SGC, in the form of followers and authority heuristic, and UGC, in the form of disclosure, on perceived influencer SC (expertise, trustworthiness, attractiveness and homophily).

3 Objectives of the Study

Based on the purpose of the study, the following objectives were formulated:

1. Assess the influence of the SGC “followers” on perceived source credibility (expertise, trustworthiness, attractiveness and homophily).
2. Assess the influence of the SGC “authority heuristic” on perceived source credibility (expertise, trustworthiness, attractiveness and homophily).
3. Assess the influences of the UGC “disclosure” on perceived source credibility (expertise, trustworthiness, attractiveness and homophily).
4. Assess the influence of the interaction between followers, authority heuristic and disclosure on perceived source credibility (expertise, trustworthiness, attractiveness and homophily).

A mixed-method research approach was adopted to assess the stated objectives.

4 Methodology

For this study both qualitative and quantitative research was conducted. Two focus groups served as a platform for (1) discovering more about influencers and Instagram, (2) confirming the most relevant Instagram-related cues that influence consumers (3) identifying a suitable product category, brand and influencer for inclusion in the research, (4) developing the experimental stimuli for the quantitative experiment that followed, and (5) initially pre-testing the questionnaire that was later used to assess respondents’ perceived source credibility. Fitness was identified as a suitable product category due to its popularity among the population and as an Instagram influencer field of interest. The Trinity fitness-related apparel brand was confirmed to be relevant to this category and to consumers and the brand’s owners agreed to its inclusion in the study. A female model that could successfully represent an Instagram influencer in this category was identified. The UGC of disclosure and the SGC of followers and authority heuristic were identified as the most relevant cues that influence Instagram users. These factors became the three main effects of the study and resulted in a $2 \times 2 \times 2$ between-subjects factorial experiment. In total, 311 female respondents between 18 and 25 years of age were successfully recruited by means of non-probability convenience sampling with the assistance of a research agency. In accordance with recommendations in previous research, only female respondents were included in the research to enhance similarity and ensure congruence with the female influencer (De Bérail *et al.* 2019). The respondents were randomly assigned to eight experimental groups and each group was exposed to a unique set of stimuli in the form of a fictitious Instagram profile and fitness-related influencer. The stimuli were developed after an extensive analysis of influencers, brands and profiles on Instagram. As mentioned before, an individual that could successfully portray the role of influencer was identified, 42 images portraying this individual were scrutinised and ultimately 15 images were selected to constitute the influencer’s Instagram profile. After the development of a fictitious profile, screenshots were taken for inclusion in the final questionnaire. Eight versions of the questionnaire

were created, each reflecting a unique combination of the experimental main effects, namely (1) disclosure or non-disclosure, (2) a high or a low number of followers, and (3) the presence or absence of an authority heuristic. In the questionnaire respondents' attitude towards the Trinity brand was confirmed to be positive prior to exposure to the stimuli by means of a reliable ($\alpha = 0.92$) five-item seven-point semantic differential scale. After exposure to the stimuli, source credibility was assessed by means of a combined seven-point semantic differential scale. Source credibility was assessed as a multidimensional construct with four sub-dimensions, namely: attractiveness, trustworthiness, expertise and homophily. Attractiveness, trustworthiness and expertise were each measured with a five-item scale originally emanating from Ohanian (1990), whilst homophily was measured by means of four items that was added to the Ohanian (1990) source credibility scale by Xiao *et al.* (2018). The combined source credibility scale ($\alpha = 0.94$) was deemed reliable both for the overall data set and for the experimental groups respectively. This was also the case pertaining to the reliability of the source credibility sub-dimensions of attractiveness, trustworthiness, expertise and homophily (α equal to or > 0.7). Manipulation checks were conducted to confirm that the main effects were correctly perceived by respondents.

Prior to final data collection, the questionnaire was piloted among respondents representative of the eight experimental groups. No changes to the questionnaire were necessary. After the final data collection, the assumptions of ANOVA were considered. The normality of the data was assessed by means of a Kolmogorov–Smirnov normality test (Field *et al.* 2012). Given the sample size in this study the normality of the data was deemed acceptable (Pallant 2010). The homogeneity of the data was assessed by means of Levene's test. The significance level associated with source credibility was 0.442 ($p > 0.05$) and thus homogeneity could be assumed, and the inferential analyses could continue by means of Univariate ANOVA (Field *et al.* 2012).

5 Results

The results from the Univariate ANOVA indicated that SGC (both number of followers and authority heuristic) had no significant influence on overall perceived source credibility. However, overall perceived source credibility was significantly influenced (90% confidence interval) by the UGC of disclosure ($p = 0.07$) – non-disclosure ($\mu = 5.73$) resulted in a more positive perceived source credibility than disclosure ($\mu = 5.53$). There were no two-way or three-way interactions that exerted a significant influence on overall perceived source credibility.

Further inquiry into the sub-dimensions of perceived source credibility revealed that disclosure significantly influenced (90% confidence level) both trustworthiness ($p = 0.06$) and homophily ($p = 0.053$) with non-disclosure leading to more positive responses than disclosure in both instances (see Table 1). Number of followers significantly influenced (90% confidence level) homophily ($p = 0.053$) with a high number of followers leading to more positive responses than a low number of followers (see Table 1). Authority heuristics exerted no significant influence on any of the sub-dimensions of perceived source credibility, whilst source expertise and source attractiveness were also not significantly influenced by followers or disclosure. In terms of two-way interactions, both

trustworthiness ($p = 0.03$) and attractiveness ($p = 0.03$) were significantly influenced by the interaction between number of followers and disclosure, with non-disclosure and a low number of followers resulting in a more positive response in both cases – a mean of 6.28 in the case of trustworthiness and a mean of 6.21 in the case of attractiveness were reported. Noteworthy is that the lowest mean scores in terms of both trustworthiness and attractiveness resulted from the interaction between a low number of followers and disclosure, indicating that disclosure plays a driving role in the interaction between followers and disclosure. None of the sub-dimensions of perceived source credibility was significantly influenced by the three-way interaction between followers, authority heuristic and disclosure. The significant influences are summarised in Table 1 along with the mean values of the highest and lowest associated scores.

Table 1. Summary: significant influences and means

Dependent variable	Significantly influenced by	p-value	Highest mean	Lowest mean
Source credibility	Disclosure	0.07	Non-disclosure (5.73)	Disclosure (5.53)
Trustworthiness	Disclosure	0.06	Non-disclosure (6.10)	Disclosure (5.85)
	Number of followers × Disclosure	0.03	Low number of followers and Non-disclosure (6.28)	Low number of followers and Disclosure (5.76)
Homophily	Disclosure	0.053	Non-disclosure (4.54)	Disclosure (4.17)
	Number of followers	0.053	High number of followers (4.54)	Low number of followers (4.17)
Attractiveness	Number of followers × Disclosure	0.034	Low number of followers and Non-disclosure (6.21)	Low number of followers and Disclosure (5.78)

A discussion of the results follows along with reference to the limitations of the study and recommendations to influencers, brands and researchers.

6 Discussion and Managerial Implications

The purpose of this study was to assess the influence of followers (SGC), authority heuristic (SGC) and disclosure (UGC) on perceived influencer source credibility and the sub-dimensions of the construct, namely expertise, trustworthiness, attractiveness and homophily.

It was found that disclosure significantly influenced overall source credibility, trustworthiness and homophily with non-disclosure being more positively perceived by

respondents than disclosure. These findings suggest that consumers view influencers as more credible and trustworthy when there is no disclosure, in other words, when it appears that influencers have pure endorsement motives and their brand endorsements are by their own choice and not due to remuneration from the brand. Similarly, consumers view themselves as more similar to the influencer when there is no disclosure, in other words, when they are unaware that the influencer might be rewarded for endorsing specific brands. Homophily was significantly influenced by the influencer's number of followers with a high number of followers leading to a higher homophily score. It means that respondents viewed themselves as more similar to the influencer when the influencer had a high number of followers. This result could be informed by the image transfer effect (Smith 2004) and similarity attractiveness theory (Neimeyer and Mitchell 1988). The image transfer effect states that associations attributed to one entity can be transferred to a linked entity (Gwinner 1997). Similarity attractiveness theory states that people tend to be attracted to others who are viewed as similar to themselves in certain aspects (Neimeyer and Mitchell 1988). In this study it infers that a high number of followers can signal an image of influencer popularity. This image is then adopted by the follower due to the perceived similarity between the influencer and the follower. Thus, "if you are popular and we are alike then I am popular". Noteworthy is that the effect of number of followers is altered by its interaction with disclosure, with non-disclosure and a low number of followers resulting in more positive attractiveness and trustworthiness scores. It could be that non-disclosure and a low number of followers enhance follower perceptions of influencer authenticity and honesty – it signals to followers that the influencer has not yet reached the levels of fame and popularity often expected by brands prior to forming a paid endorsement relationship with the influencer. Therefore, influencers' opinions on their Instagram profiles are viewed as untainted by brand influence. However, although illegal and/or unethical in some countries, in reality, it might be that a paid endorsement has merely not been disclosed rather than not existing.

For influencers the results of this study mean that authority heuristics, in contrast to previous research, cannot be depended on as a significant indicator on Instagram among Millennials consumers, but that their number of followers and how they disclose their brand involvements should be carefully considered. A *modus operandi* policy in which the influencer clearly states to followers their views on endorsement and the disclosure thereof could be valuable. Such a policy could enhance influencer attractiveness, trustworthiness and ultimately perceived motives and authenticity by clearly stating that the influencer only endorses brands that they believe in rather than merely those who pay them.

For brands the results of this study mean that influencers with a lower number of followers could be as effective (whilst often begin more affordable) as those with a high number of followers, depending on the purpose of the campaign. Particularly when perceptions of authenticity and honesty is desired, brands could benefit from long-term relationships with micro-influencers or nano influencers who are truly interested in the brands that they showcase on their profiles. A micro-influencer typically has between 1 000 and 100 000 followers and they focus on niche areas of interest (Ismail 2018). Micro-influencers are generally viewed as opinion leaders within a particular product category or industry with quite a uniform follower base. This is also the case

with nano influencers (less than 1000 followers). The uniformity of the follower base holds positive potential for successful segmentation, targeting and consumer/follower alignment (Ismail 2018).

7 Conclusion and Suggestions for Future Research

The continued growth of social media network sites as marketing platforms necessitates marketing practitioners to innovate and consider a diversity of creative approaches to connect with consumers. Influential marketing represents such an approach. This study emphasised the continued popularity of Instagram as a social media platform, in particular among millennial consumers, and recommends the consideration of credible influencers (even micro and nano influencers) as important sources of brand cues to consumers.

This study focused on a selected number of SGC and UGC, perceived source credibility and a millennial cohort of 18- to 25-year-old females. It is recommended that the research be expanded to consider additional SGC and UGC and a broader sample of respondents. It is further suggested that the influence of SGC and UGC on consumer attitude and intentions are investigated to gain an understanding of the potential influence of these variables on a brand's sales and bottom-line. Perceived influencer honesty would also be a relevant construct to investigate in the influencer endorsement context. An exploration of psychological constructs such as parasocial relationships and how such relationships are affected by SGC and UGC can also be valuable.

References

- Aladhadh, S., Zhang, X., Sanderson, M.: Location impact on source and linguistic features for information credibility of social media. *Online Inf. Rev.* **43**(1), 89–112 (2019)
- Asano, E.: How powerful is instagram influencer marketing? [Infographic] (2019). <https://www.convinceandconvert.com/social-media-research/instagram-influencer-marketing/>. Accessed 15 July 2020
- Beaulac, H.: The ultimate list of social media statistics to know in 2020 | X-Cart (2020). <https://www.x-cart.com/social-media/statistics.html>. Accessed 13 Aug 2020
- Bergkvist, L., Zhou, K.Q.: Celebrity endorsements: a literature review and research agenda. *Int. J. Advert.* **35**(4), 642–663 (2016)
- Bergkvist, L., Hjalmarson, H., Mägi, A.W.: A new model of how celebrity endorsements work: attitude toward the endorsement as a mediator of celebrity source and endorsement effects. *Int. J. Advert.* **35**(2), 171–184 (2016)
- Bhattacharjee, A., Sanford, C.: Influence processes for information technology acceptance: an elaboration likelihood model. *MIS Quart.* **30**(4), 805 (2006)
- Casaló, L.V., Flavián, C., Ibáñez-Sánchez, S.: understanding consumer interaction on instagram: the role of satisfaction, hedonism, and content characteristics. *Cyberpsychol. Behav. Soc. Netw.* **20**(6), 369–375 (2017)
- Cavill, S.: History of celebrity endorsements in advertising: from Doris Day to Liza Koshy to George Clooney. *DMS insights* (2018). <https://insights.digitalmediasolutions.com/articles/history-celebrity-endorsements>. Accessed 25 Feb 2021

- Cheung, C., Sia, C.-L., Kuan, K.: Is this review believable? A study of factors affecting the credibility of online consumer reviews from an ELM perspective. *J. Assoc. Inf. Syst.* **13**(8), 618–635 (2018)
- Colicev, A., Kumar, A., O'Connor, P.: Modeling the relationship between firm and user generated content and the stages of the marketing funnel. *Int. J. Res. Mark.* **36**(1), 100–116 (2018)
- De Bérail, P., Guillon, M., Bungener, C.: The relations between YouTube addiction, social anxiety and parasocial relationships with YouTubers: a moderated-mediation model based on a cognitive-behavioral framework. *Comput. Hum. Behav.* **99**, 190–204 (2019)
- De Veirman, M., Cauberghe, V., Hudders, L.: Marketing through Instagram influencers: the impact of number of followers and product divergence on brand attitude. *Int. J. Advert.* **36**(5), 798–828 (2017)
- De Veirman, M., Hudders, L.: Disclosing sponsored Instagram posts: the role of material connection with the brand and message-sidedness when disclosing covert advertising. *Int. J. Advert.* **39**(1), 94–130 (2020)
- Field, A., Miles, J., Field, Z.: *Discovering Statistics Using R*. SAGE publications, London (2012)
- Filieri, R.: What makes online reviews helpful? A diagnosticity-adoption framework to explain informational and normative influences in e-WOM. *J. Bus. Res.* **68**(6), 1261–1270 (2015)
- Fleck, N., Korchia, M., Le Roy, I.: Celebrities in advertising: looking for congruence or likability? *Psychol. Mark.* **29**(9), 651–662 (2012)
- Ge, J., Gretzel, U.: Emoji rhetoric: a social media influencer perspective. *J. Mark. Manage.* **10**(July), 1–24 (2018)
- Gwinner, K.: A model of image creation and image transfer in event sponsorship. *Int. Mark. Rev.* **14**(3), 145–158 (1997)
- Hutchinson, A.: New report looks at the growth of influencer marketing on Instagram | Social Media Today (2019). <https://www.socialmediatoday.com/news/new-report-looks-at-the-growth-of-influencer-marketing-on-instagram-1/569277/>. Accessed 13 Aug 2020
- Instagram. (2019). <https://www.instagram.com/?hl=en>. Accessed 09 Oct 2018
- Ismagilova, E., Slade, E., Rana, N.P., Dwivedi, Y.K.: The effect of characteristics of source credibility on consumer behaviour: a meta-analysis. *J. Retail. Cons. Serv.* **53**(March), 1–9 (2019)
- Ismail, K.: Social media influencers: Mega, Macro, Micro or Nano. CMS wire (2018). <https://www.cmswire.com/digital-marketing/social-media-influencers-mega-macro-micro-or-nano/#:~:text=What%20is%20a%20Micro%2DInfluencer,relationships%20than%20a%20typical%20influencer>. Accessed 10 Dec 2018
- Jin, S.A.A., Phua, J.: Following celebrities' tweets about brands: the impact of twitter-based electronic word-of-mouth on consumers' source credibility perception, buying intention, and social identification with celebrities. *J. Advert.* **43**(2), 181–195 (2014)
- Kaplan, A.M., Haenlein, M.: Users of the world, unite! the challenges and opportunities of social media. *Bus. Horiz.* **53**(1), 59–68 (2010)
- Lee, J.Y., Sundar, S.S.: To Tweet or to Retweet? That is the question for health professionals on Twitter. *Health Commun.* **28**(5), 509–524 (2013)
- Lin, X., Spence, P.R., Lachlan, K.A.: Social media and credibility indicators: the effect of influence cues. *Comput. Hum. Behav.* **63**, 264–271 (2016)
- Lou, C., Yuan, S.: Influencer marketing: how message value and credibility affect consumer trust of branded content on social media. *J. Interact. Advert.* **19**(1), 58–73 (2019)
- Loureiro, S.M.C., Sarmento, E.M.: Exploring the determinants of instagram as a social network for online consumer-brand relationship. *J. Promot. Manage.* **25**(3), 354–366 (2019)
- Martensen, A., Brockenhuus-Schack, S., Zahid, A.L.: How citizen influencers persuade their followers. *J. Fash. Mark. Manage. Int. J.* **22**(3), 335–353 (2018)
- McCarthy, J.: Social media ad spend to surpass print for first time (2020). <https://marketingland.com/social-media-ad-spend-to-surpass-print-for-first-time-268998>. Accessed 12 Aug 2020

- Neimeyer, R.A., Mitchell, K.A.: Similarity and attraction: a longitudinal study. *J. Soc. Pers. Relat.* **5**(2), 131–148 (1988)
- Ng, E., Johnson, G.: Millennials: who are they, how are they different, and why should we care? In: Burke, R.J., Cooper, C., Alexander-Stamatios, A. (eds.). *The Multi-generational and Aging Workforce: Challenges and Opportunities*, pp. 121–137 (2015)
- O’Keefe, D.: *Persuasion: Theory and practice*. SAGE Publications, Newbury Park (1990)
- Ohanian, R.: Construction and validation of a scale to measure celebrity endorsers’ perceived expertise, trustworthiness, and attractiveness. *J. Advert.* **19**(3), 39–52 (1990)
- Pallant, J.: *SPSS Survival Manual*, 4th edn. WS Bookwell, Finland (2010)
- Pan, L.-Y., Chiou, J.S.: How much can you trust online information? Cues for perceived trustworthiness of consumer-generated online information. *J. Interact. Mark.* **25**(2), 67–74 (2011)
- Roma, P., Aloini, D.: How does brand-related user-generated content differ across social media? Evidence reloaded. *J. Bus. Res.* **96**, 322–339 (2019)
- Shan, Y.: How credible are online product reviews? The effects of self-generated and system-generated cues on source credibility evaluation. *Comput. Hum. Behav.* **55**, 633–641 (2016)
- Smith, G.: Brand image transfer through sponsorship: a consumer learning perspective. *J. Mark. Manage.* **20**(3–4), 457–474 (2004)
- Sokolova, K., Kefi, H.: Instagram and YouTube bloggers promote it, why should I buy? How credibility and parasocial interaction influence purchase intentions. *J. Retail. Cons. Serv.* **53**(January), 1–9 (2019)
- Spry, A., Pappu, R., Cornwell, T.B.: Celebrity endorsement, brand credibility and brand equity. *Eur. J. Mark.* **45**(6), 882–909 (2011)
- Statista. Instagram: age distribution of global audiences 2020 | Statista (2020). <https://www.statista.com/statistics/325587/instagram-global-age-group/> Accessed 13 Aug 2020
- System, K.: Instagram by the Numbers (2020): Stats, Demographics & Fun Facts (2020). <https://www.omnicoreagency.com/instagram-statistics/>. Accessed 13 Aug 2020
- Teng, S., Khong, K.W.: Conceptualising cues in social media. *Int. J. Internet Mark. Advert.* **9**(3), 233 (2015)
- Tseng, S.Y., Wang, C.N.: Perceived risk influence on dual-route information adoption processes on travel websites. *J. Bus. Res.* **69**(6), 2289–2296 (2016)
- Vaidya, T., Votipka, D., Mazurek, M.L., Sherr, M.: Does being verified make you more credible? Account verification’s effect on tweet credibility. In: *Conference on Human Factors in Computing Systems – Proceedings* (2019)
- Wallace, E., Buil, I., de Chernatony, L.: Consumers’ self-congruence with a “Liked” brand. *Eur. J. Mark.* **51**(2), 367–390 (2017)
- Wallsbeck, F.E., Johansson, U.: Instagram marketing - when brands want to reach generation Y with their communication. Halmstad University (2014). <http://www.diva-portal.org/smash/get/diva2:725701/FULLTEXT01.pdf>. Accessed 17 Sept 2018
- Wang, L., Qian, D., Zhu, L.: The effect of system generated cues on microblog rewarding repost behavior - a source credibility perspective. *J. Electron. Commer. Res.* **19**(1), 104–119 (2018)
- Wang, S.W., Scheinbaum, A.C.: Enhancing brand credibility via celebrity endorsement trustworthiness trumps attractiveness and expertise. *J. Advert. Res.* **58**(1), 16–32 (2018)
- Westerman, D., Spence, P.R., Van Der Heide, B.: A social network as information: the effect of system generated reports of connectedness on credibility on Twitter. *Comput. Hum. Behav.* **28**(1), 199–206 (2012)
- Xiao, M., Wang, R., Chan-Olmsted, S.: Factors affecting YouTube influencer marketing credibility: a heuristic-systematic model. *J. Media Bus. Stud.* **15**(3), 188–213 (2018)



The Effect of Covid-19 Pandemic on Client's Equity: The Case of a Senegalese Telecommunication Company

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Abstract. In the telecommunication industry, at the very top of the revenue generation hierarchy is the classification of the B2C and B2B cash flow sources broken down into various service packages available for each segment. The work-from-home during the pandemic has helped generate more revenues for telecom vendors coming from B2C pool. However, the revenues from the B2B side suffered as clients' cash flows are challenged during the pandemic. This study attempts to compute the clients' equity CE of the only local Senegalese telecommunication company. The net value of the average Customer Lifetime Value (CLTV) of all cohorts makes up the CE, whereas, the "net present value of all current and future profits generated from a customer over the life of his or her business with the firm" defines CLTV. The results suggest that Waw telecom will realize a surplus in CE at the end of the client's expected average lifespan.

Keywords: Customer Lifetime Value CLTV · Contractual CLTV · Customer equity CE

1 Introduction

The telecommunication industry's service models were transformed from the early 1990s to 2010 and 2010 onwards (International Telecommunication Union 2019, p .6). In Senegal, like other African countries, most of the telecom industry adopts a hybrid model where they provide prepaid and contractual customers in the B2C pool. In prepaid business models, churn rates are expected to be lower than the contractual context, and customers may often have split loyalty. Customers' churn rate is vital in the computations of the Customer Life Time Value (CLTV). The aggregate of CLTV of all acquired cohorts or segments forms the essence of understanding customer equity. For modelling CLTV, several assumptions need to be specified; such as the growth or constant rate of the behaviour of the following factors over time: revenue, variable costs, retention rate - which is dependent on churn rate - (Kumar et al. 2004), and the cost of capital or also referred to as the discount rate for the present value of money (Singh and Jain 2013).

The context and its underlying assumptions are essential in setting up the model for CLTV computation. The literature portrays multiple approaches for modelling CLTV

depending on the context (Singh and Jain 2013), such as (1) lost-for-good and always-a-share, (2) membership or non-membership, and (3) contractual and non-contractual, this is the most popular categorization of contexts, it describes a contractual context as one where the expected revenues can be forecasted accurately (Fader et al. 2005; Venkatesan and Kumar 2004; Reinartz and Kumar 2003). An example of contractual context is the case of contractual bindings in the telecommunication industry.

The customer/client base’s valuation is of paramount importance, especially in start-up companies’ early stages (Akkaya 2020). The measurement of customer equity depends on the determination of CLTV, which is defined as “the (net) present value of all current and future profits generated from a customer over the life of his or her business with the firm” (Gupta and Lehmann 2005, p. 15).

This paper aims at computing the customer equity of all acquired B2B cohorts for a start-up Senegalese telecom company since inception in 2017 up-to-date, to examine the effect of Covid-19 pandemic hit in 2020. For CLTV computation, we adopt the model proposed by Kumar et al. (2004) with adjustments to suit the case’s context. The general formula for computing the average CLTV for any cohort acquired after the first cohort is specified as

$$CLTV_k = \frac{1}{\sum_{k=0}^{\infty} n_k} \left[\sum_{k=0}^{\infty} \frac{n_k}{(1+d)^k} \left\{ \sum_{t=k}^{\infty} \left[\frac{GC - M}{(1+d)^{t-k}} r^{t-k} \right] - A \right\} \right]$$

We use Eq. 2 in the subsequent section to compute the average CLTV of cohort $k = 0$ in the first period, $i = 0$ where the period is defined in years.

Furthermore, the average lifespan is found to be a maximum of 4 years in the Senegalese market, the period denoted here by t . The underlying assumptions of the model is as follows: a varying gross customer contribution (GC), varying acquisition costs (A) and varying retention rate (r), varying marketing costs (M), and varying number of acquired customers in cohort k per period n_k . We adjusted the retention rate from r^{t-k} , to r^t due to period dependency of the retention rate in our case. It is worth mentioning that, we assume no churn rate for the first acquired cohort, $k = 0$, and that, the fees are paid at the end of each month. The client is expected to defect at the end of the renewable contract, expiring yearly.

Waw telecom (“Waw” or “Waaw” meaning “Yes” in Wolof, the main national language in Senegal) started operations in late 2017, the first client was acquired in March 2018. The data in hand is for the years 2018–2020. Given that the lifespan is found to be four years for contractual B2B, we estimate the future unknown values of elements necessary for computing the gross contribution of clients, such as revenue streams and variable cost objects, for the years beyond 2020 by the moving average technique containing the past three periods.

This paper is organized as follows; Sect. 2 depicts a brief literature on CLTV. Section 3 outlays the model and the underlying assumptions related to different factors affecting CLTV calculations for B2B clients. The paper is concluded in the last section.

2 Customer Lifetime Value CLTV and Customer Equity

To evaluate strategies in marketing and ecommerce, firms need to measure their performance in terms of profitability. One key difference that set aside marketing from sales activities is its holistic view in such a way that leverages historical data for predicting future anticipated customer profitability and not rely solely on one-time transaction to judge if a customer is profitable. This is where Customer Life Time Value (CLTV) enters the picture as a metric used to evaluate strategies of the firm (Borle et al. 2008; Gupta and Zeithaml 2006; Kumar et al. 2004).

The definition of CLTV varies in the literature. CLTV is defined as the sum of accumulated cash flows (discounted using the weighted average cost of capital) of a customer over her entire lifetime with the firm. In this case, the basic model for CLTV is structured as follows (Dipak and Singh 2002):

$$CLTV = \sum_{i=1}^n \frac{(R_i - C_i)}{(1 + d)^{i-0.5}}, \quad (1)$$

where i is the period of cash flow from the customer; R_i is the revenue from the customer in period i ; the total cost of generating the revenue in period i is denoted by C_i , and n is the total number of periods of projected life of the customer, and d is the discount rate. Dwyer (1997) defined CTLV as the present value of the expected benefits, that is gross margin less the direct costs of servicing and communicating with customers. Berger and Naser (1998) quote Kotler and Armstrong (1996) to define a profitable customer as “a person, household, or company whose revenues over time exceed, by an acceptable amount, the company costs of attracting, selling and servicing that customer.” Kumar et al. (2004) and Berger and Nasr (1998) considered costs, including the acquisition cost. The average CLTV of a customer belonging to the very first cohort, cohort 0 is expressed as (Kumar et al. 2004):

$$CLTV = \sum_{t=0}^{\infty} \left[\frac{(GC - M)}{(1 + d)^t} r^t \right] - A, \quad (2)$$

where (A) is the average acquisition cost per customer, the average gross contribution (GC), and marketing costs (M) per customer. The retention rate is (r), the cost of capital for the firm is (d). In this paper, we consider the technical definition of Kumar et al. (2004) with adjustments made to the assumptions of the model to suit the case study in hand. Regarding the conceptual definition, we adopt the conceptual definition of CLTV by Bejou et al. (2013), we quote it as follows, “Customer lifetime value takes into account the total financial contribution i.e., revenues minus costs – of a customer over his or her entire lifetime with the company and therefore reflects the future profitability of the customer.” It is worth noting that, Kumar et al. (2004) had adopted the computational logic suggested by Gupta et al. (2004). For the authors, the CLTV is the only metric that incorporates into one entity all the elements of revenue, expense, and customer behaviour that drive profitability. Figure 1 illustrates the conceptual approach to measure CLTV.

Factors affecting CLTV modelling could be classified into two groups, factors necessary to set up the assumptions for calculations, such as: interpurchase time, returns, marketing activities of the firm, network effects (e.g. WoM), and discount rate. The

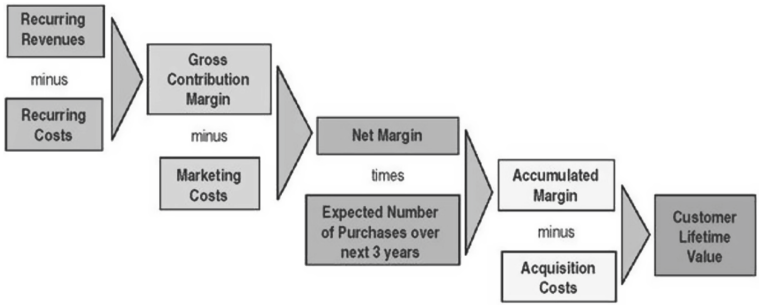


Fig. 1. Conceptual approach to measuring CLTV (Bejou et al. 2013, p. 10)

second group of factors established themselves as standards in the calculation of CLTV, and they are: cost of customer acquisition, cost of customer, retention, cost of returns, cost of marketing activities. The context determines the data necessary to estimate a CLTV model and is bounded by the data availability. Despite the importance of context for CLTV, there has been little systematic study of the contexts. Singh and Jain 2013 classified the context into categories that conveniently suited the purpose of the studies in the literature. Three main common context classifications are: (1) lost-for-good and always-a-share, in the “lost-for-good” category, customers stay with the firm until they defect, and after that, they never return, basically, they are lost for good (e.g., telecommunication system transactions where buyers typically select one service provider). In the “always-a-share” case, customers might do business with multiple vendors (Rust et al. 2004; Pfeifer and Carraway 2000; Venkatesan and Kumar 2004). (2) membership and non-membership, in membership category, customers have to join a firm as a member before purchasing from the firm or making use of its services. Examples are club memberships such as purchase clubs or health clubs (Borle et al. 2008; Bhattacharya 1998). (3) contractual and non-contractual, this is the most popular categorization of contexts, it describes a contractual context as one where the expected revenues can be forecast fairly accurately and increasing cumulative profits over the customer’s lifetime would be expected. Non-contractual contexts are those where the firm must ensure that relationship stays alive because customers typically have a split loyalty and split their expenses among several firms, e.g. department store purchases or mail-order purchases through a catalogue and direct marketing (Fader et al. 2005; Venkatesan and Kumar 2004; Reinartz and Kumar 2003).

3 CLTV Modelling and Results

From an accounting perspective, the classic measure of the profitability of goods and services sold is gross margin. It is calculated as revenues minus the Cost-of-Goods-Sold (COGS). However, for a CLTV calculation purpose, we are interested in contribution margin or Gross Contribution (*GC*) as in Eq. 2, this is because the goal here is to understand how a specific acquired cohort of clients contributes to Waw’s profit. Contribution margin shows the aggregate amount of revenue available after variable costs in order to cover fixed expenses and provide profit to the firm (Contribution margin = revenue –

variable costs). We use Eq. 2 to compute the CLTV of cohort 0 in the first period, $t = 0$. For the remaining periods (years), we use the following equation in Kumar et al. (2004):

$$CLTV_k = \frac{1}{\sum_{k=0}^{\infty} n_k} \left[\sum_{k=0}^{\infty} \frac{n_k}{(1+d)^k} \left\{ \sum_{t=k}^{\infty} \left[\frac{GC - M}{(1+d)^{t-k}} r^{t-k} \right] - A \right\} \right] \quad (3)$$

Where n_k is the number of customers in the k th cohort, and with the following assumptions:

- varying gross contribution (GC) per client, for period (t), (GC) is computed by (Variable cost objects subtracted from generated revenue per client). Revenue is projected by two methods, first, the moving average method, and second, through mathematical modeling of the rule of diminishing effect of the revenue growth rate.
- varying acquisition costs (A), depending on acquisition campaigns budget and the total number of acquired clients, all projected by the moving average for periods beyond 2020.
- varying retention rate (r), we adjusted the retention rate from r^{t-k} , to r^t in the equation, and we show later how the retention rate is estimated in the industry.
- varying marketing costs (M), however, marketing cost is set to be constant from 2021 and beyond. There was a reduction of marketing cost by 73% and 78%, for the years 2019 and 2020, respectively. Beyond a certain threshold, the firm expects not to further reduce the marketing costs.
- varying number of acquired customers in cohort k per period n_k , with the use of the moving average method of the past three periods to project the values beyond 2020.

We adjusted the retention rate from r^{t-k} , to r^t due to period dependency of the retention rate in our case. The data in hand is for the years 2018–2020. Based on the market research, the expected client lifespan is estimated to be four years. Thus, the net value of CLTV of all cohorts for four years makes up the clients' equity CE.

Revenue and Variable Costs. Waw Telecom mainly generates revenues from its monthly subscriptions. However, it also generates revenues from content (Facebook TV, Netflix, etc.) and services like voice, mobile phone, and SMS. Variable costs vary with the output produced or services rendered. What is fixed to one is variable for another, it is decision and time horizon dependent. From the financial Profit & Losses (P&L) statement of Waw, with the help of Waw's chief financial officer, we identified the variable cost objects and their proportions to the B2B pool under the COGS and the Expenses category of the P&L statement. The B2B pool of clients generated the highest portion of revenue, accounting to about 80% and 65.3% for 2018 and 2019, respectively.

Clients and Acquisition Cost. Knowing that 70, 39, and 27 acquired clients in the years 2018, 2019 and 2020, respectively, the given marketing budget for acquisitions campaigns, the acquisition cost per client is computed per year.

Churn Rate and Client's Lifespan. In 2019, Waw spent XOF700,000 for market research. The findings revealed that B2B clients will stay with the company as long as they are satisfied with the service, it is very unlikely to suspend the service unless

the business is closed or competitors provide a better offer. Churn rates over 2018–2020 and projected values beyond this period is shown in Fig. 2 for most Telecom service providers in Senegal. For years beyond 2023, the average churn rate is projected by the simple moving average of the past three periods.

Annual Churn by Operator	2018	2019	2020	2021	2022	2023
Min Churn Rate	1%	2%	3%	3%	3%	3%
Max Churn Rate	12%	10%	10%	9%	9%	9%
Average Churn Rate	6.8%	6.3%	5.8%	5.7%	5.6%	5.5%
Retention Rate	93.2%	93.8%	94.2%	94.3%	94.4%	94.5%
Orange Senegal	11%	10%	10%	9%	9%	9%
Expresso	12%	10%	9%	9%	9%	9%
Tigo	7%	6%	4%	4%	4%	4%
ARC INFORMATIQUE	3%	3%	3%	3%	3%	3%
AFRICA ACCESS	1%	2%	3%	3%	3%	3%

Fig. 2. Churn rate in the Telecom Industry in Senegal for B2B (2018–2023)

The average churn rate per vendor per year is computed as:

$$Estimated\ Churn\ rate_{year} = \frac{(\sum Churn\ rate_{operator} \times Internet\ Accounts_{operator})}{Total\ number\ of\ households(rural\ \&\ Urban)} \quad (7)$$

Table 1 shows the CLTV and CE calculations under two conditions. First condition is by projecting revenue under the current situation modeling the negative effect of Covid-19 pandemic on the growth rate of revenue by two methods; by projecting revenue using simple moving average for the client cohorts acquired in the period (2018–2021), and the secondly is by using Eq. 5.

Table 1. Customer equity and CLTV for all cohorts (2018–2021)

Cohort <i>k</i>	Year	<i>t</i>	CLTV	CE
0	2018–2021	0–3	–8,954,540	
1	2019–2022	1–4	–707,547	–6,475,707
2	2020–2023	2–5	2,527,796	–4,134,291
3	2021–2024	3–6	4,612,013	477,722

The results show that, Waw telecom will realize a surplus in CE at the fourth year of inception.

4 Conclusion

In evaluating the CE over a four-year lifespan of clients, the naïve projection using the simple moving average projected a surplus in CE by the end of the lifespan of clients at the end of the year. From a marketing perspective, clients start being profitable in the future as in an aggregate effect.

As per the limitation, this research was carried out in the telecommunication context in a developing economy, which limits the generalization of the results to other areas. The computations are case specific, which makes it difficult to control assumptions and thus generalize the results on similar firms. For future work, a prediction model with calibrated parameters to predict revenue with and without the Covid-19 pandemic to uncover the damaging effect in terms of delaying the realization of a surplus CE.

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References

- Akkaya, M.: Valuation Challenges and Solutions in Contemporary Business. IGI Global Publisher of Timely Knowledge, Hershey (2020)
- Bejou, D., Keningham, T., Aksoy, L.: Customer lifetime value: reshaping the way we manage to maximize profits. *J. Relation. Market.* **5**(2/3) (2013)
- Berger, P., Nasr, N.: Customer lifetime value: marketing models and applications. *J. Interact. Market.* **12**(1), 17–30 (1998)
- Bhattacharya, C.B.: When customers are members: customer retention in paid membership contexts. *J. Acad. Market. Sci.* **6**(1), 31–44 (1998)
- Borle, S., Singh, S.S., Jain, D.C.: Customer lifetime value measurement. *Manage. Sci.* **54**(1), 100–112 (2008). <https://doi.org/10.1287/mnsc.1070.0746>
- Digital Economic for Africa: Country Diagnostic of Senegal. International Bank for Reconstruction and Development/The World Bank Group (2019). <https://documents.worldbank.org/curated/en/814111559645179494/pdf/Country-Diagnostic-of-Senegal.pdf>
- Dipak, J., Singh, S.: Customer lifetime value research in marketing: a review and future directions. *J. Interact. Market.* **16**(2), 34–46 (2002)
- Dwyer, F.: Customer lifetime valuation to support marketing decision making. *J. Dir. Market.* **11**(4), 6–13 (1997)
- Fader, P., Bruce, G., Ka Lok, L.: More than meets the eye. *Market. Res.* **18**, 9–14 (2006)
- Fader, P.S., Bruce G.S., Hardie, K.L.L.: RFM and CLV: using Iso-value curves for customer base analysis. *J. Market. Res.* **XLII**, 415–430 (2005)
- Gupta, S., Lehmann, D.R.: Managing Customers as Investments: The Strategic Value of Customers in the Long Run. Wharton School Publishing, Upper Saddle River (2005)
- Gupta, S., Lehmann, D., Staurt, J.: Valuing customers. *J. Market. Res.* **41**, 7–18 (2004)
- Gupta, S., Zeithaml, V.: Customer metrics and their impact on financial performance. *Market. Sci.* **25**(6), 718–739 (2006)
- International Telecommunication Union: ITU Regional Economic Dialogue on Information and Communications Technologies in Europe and CIS (RED-19), Odessa, Ukraine, 30–31 October (2019)
- Kotler, P., Armstrong, G.: Principles of Marketing, 7th edn. Prentice-Hall, Englewood Cliffs (1996)
- Kumar, V., Girish, R., Bohling, T.: Customer lifetime value approaches and best practice applications. *J. Interact. Market.* **18**(3), 60–72 (2004)
- Reinartz, W., Kumar, V.: The impact of customer relationship characteristics on profitable life duration. *J. Market.* **67**(1), 77–99 (2003)
- Rust, R.T., Lemon, K.N., Zeithaml, V.A.: Return on marketing: using customer equity to focus marketing strategy. *J. Market.* **68**(January), 109–127 (2004)

- Singh, S.S., Jain, D.C.: Measuring customer lifetime value: models and analysis (February 11, 2013). INSEAD Working Paper No. 2013/27/MKT. <http://dx.doi.org/10.2139/ssrn.2214860>
- Pfeifer, P.E., Carraway, R.L.: Modeling customer relationships as Markov chains. *J. Interact. Market.* **14**(2), 43–55 (2000)
- Venkatesan, R., Kumar, V.: A customer lifetime value framework for customer selection and resource allocation strategy. *J. Market.* **68**(4), 106–125 (2004)



Yes, You Make Me Confused and Skeptic: Exploring Green Confusion and Green Advertisements Skepticism on Social Media

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Abstract. Businesses are increasingly marketing their products on social media platforms in order to better communicate with their customers. Considering stimulus-organism- response (SOR) theory, this study uncovers the impacts of social media (SM) greenwashing on SM green advertising skepticism and on its consequences including green purchase intention. The findings reveal that SM greenwashing affects SM green advertising skepticism. Further, SM green advertising negatively affect SM information utility and positively affect SM negative word-of-mouth. The study also highlights that SM information utility positively affects green purchase intention and negative word-of-mouth negatively affect green purchase intention. The study also reveals that SM green confusion moderates the relation between SM greenwashing and SM green advertising skepticism. The study offers several theoretical and practical contributions.

Keywords: Green advertisements · Social media · SOR · Greenwashing · Skepticism · Purchase intention

1 Introduction

Green products generally refer to products that are produced with lower resources and pose less environmental threats and hazards to human beings (Schuitema and de Groot 2015). Low use of the resources such as water and energy, using fewer toxic materials, and producing recyclable products manifest green products (Sun et al. 2018). As the rising pollution raised concerns for climate change to the global level, the interest in countering these environmental issues through green products has significantly grown in the last decade (Zhang et al. 2018). Consequently, this rapidly growing concern brings opportunities to enterprises to gain competitive advantages through green products that are ecologically friendly to stand apart from their competitors in the market (Epstein et al. 2017; Tan 2011).

An important element of pursuing the green products strategy that businesses are adopting is green advertising to promote green products and drawing its positive impact

on customer purchases (Ankit and Mayur 2013; Schmuck et al. 2018). Earlier several studies have explored this phenomenon from the perspective of green image built through green advertising i.e., making environmental claims to win customers (Brettel et al. 2015; Segev et al. 2016).

However, green advertising itself possess several challenges to execute it effectively, for example advertisements are often loaded with jargons, ambiguous facts, and messages. Green products advertisements also often lack the objective details on how the attributes of green products serve the environmental concerns and sometimes green products advertisements claim more than what these products can deliver (Do Paço and Reis 2012; Matthes and Wonneberger 2014). Especially, since the advent of internet and social media channels, that allow brands an easy access to customers, several accounts have been reported in which customers outrightly denounced the image of firms project on social media (e.g., #McDStories on Twitter) (Lyon and Montgomery 2013). With an increase in corporate green claims on social media, customers have increasingly become skeptical of the authenticity of such claims, for 98% of products that claimed green ingredients or made environmental claims, were later found to have misled customers by committing one of seven sins of greenwashing (TerraChoice 2009).

Accordingly, green advertising skepticism is widely prevalent and is defined as the cynicism an individual has for green advertising that mislead, or at least exaggerate in their advertisement messages (Atkinson and Kim 2015; Matthes and Wonneberger 2014; Vermeir and Verbeke 2006). While past research studies explored the antecedents of green advertisement skepticism, the role of green confusion has been overlooked. Similarly, earlier studies paid limited attention to the outcomes of green advertising skepticism (Luo et al. 2020).

Thus, this study aims to fill these gaps by investigating the role of social media (SM) greenwashing in developing SM green advertisement skepticism. Additionally, this study also aims to assess how the SM green advertisement skepticism driven by SM greenwashing affect SM information utility and SM negative word-of-mouth (WOM), and if this culminates into purchase intention. Moreover, this study explores the moderating effect of SM green confusion on the relationship between SM greenwashing and SM green advertisement skepticism.

The green advertisements on social media are explored in the study since advertisements on social media are less regulated and have easier global reach than traditional media. Social media environment is complicated for its social attributes (Brettel et al. 2015; Sin et al. 2012) and increases the propensity for misleading green advertisements (Luo et al. 2020) and therefore, exploring green advertisements on social media merits its high significance.

The next sections of this document are divided as follows: In Sect. 2 the theoretical background and formulation of hypotheses are discussed. Section 3 exposes the methodology adopted for this study, which includes information about data collection, sample characteristics, and pilot testing. Section 4 presents the results of the measurement and structural proposed model. Finally, Sect. 5 discusses the results that lead to the conclusions, theoretical and practical implications, and suggestions for future studies.

2 Theoretical Background and Hypotheses

2.1 SOR Theory

The conceptual model of the study is grounded in Stimulus-Organism-Response (S-O-R) theory (Mehrabian and Russell 1974) to explain the mechanism that lies behind customer's attitude and behaviors related to purchase of green products. The study determines how the external stimuli i.e. (SM greenwashing) effect on organism (SM green advertisement skepticism and SM information utility and if these affect on customers responses (SM negative WOM and green purchase intention). This study extends theoretical and empirical comprehension of green products and their purchase intention from the perspective of SOR. Theoretically, the study demonstrates that S-O-R is a valid theory to investigate and explain the customer behavior in the context of green products purchase.

The S-O-R theory was developed in the domain of environmental psychology and later it proved its usefulness in other contexts, including consumer behavior and consumer decision making (Islam and Rahman 2017; Rose et al. 2012; Sohaib and Kang 2015). The theory postulates that environmental stimuli influence the cognitive and affective responses (organism) of individuals and that eventually result in behavioral responses (Donovan and Rossiter 1982). Specifically stating, stimuli are explained those influences that stimulate internal and affective states of individuals. Regarding customer behavior, both marketing mix elements and complementary environmental elements and inputs are the stimuli. The organism aspect of S-O-R reflects the internal state of individuals that resides between the response and behavior elements. The final element of S-O-R is behavioral aspect which is the result of cognitive and affective states of individuals. Such behavioral responses include positive or negative actions directed towards a specific setting such as intention to purchase and purchasing behavior or no intention to purchase.

2.2 SM Greenwashing and SM Green Advertisement Skepticism

Greenwashing is the act of misguiding consumers that a product or service is environment friendly, but it is not (TerraChoice 2009; Torelli et al. 2020) whereas skepticism refers to as an individual's lack of belief and uncertainty (Nguyen et al. 2019). Skepticism also relates to an idea of doubtfulness, mistrust & suspicion (Boush et al. 1994; Forehand and Grier 2003; Nguyen et al. 2019). Studies have identified that green washing activates skepticism in consumer's mind (Nguyen et al. 2019). When companies make vague claims for products contributing to the environment quality and communicate it to customers, this may result in customers developing skepticism towards such communication. Based on the above, it can be proposed the following hypothesis:

H₁: SM greenwashing and SM green advertising skepticism are positively related.

2.3 SM Green Advertising Skepticism and SM Information Utility

Information utility is defined as the extent of consumers' perception of information in advertisements is helpful for customers in making right purchase decisions (Matthes

and Wonneberger 2014). Green advertising comprises the knowledge of product features that allow consumer to take better purchase decisions (Luo et al. 2018; Luo et al. 2020). Information utility level is likely to be lower when consumers are suspicious or doubtful of green advertising due to the misrepresented, deceptive, or potentially false facts in advertisements (Wei et al. 2017) whereas information utility level is high when the information provided in advertisements is clear and trustworthy (Wei et al. 2017). Following the same line of assumptions, we assume that social media green advertising skepticism is inversely connected with information utility and hypothesize that:

H₂: SM green advertising skepticism and SM information utility are negatively related.

2.4 SM Green Advertising Skepticism and SM Negative WOM

Customers generally express their product assessments to share their products experiences and knowledge of products features and uses (Leonidou 2017). Negative WOM refers to the personal communication of customers about a green product to express their disapproval of the product and the disappointment associated with the product (Laczniak et al. 2001). Mostly, consumers share their experiences with the product and make subjective remarks on the performance and usefulness of the product if it was good, bad, or average so that other people can make decisions on these bases (De Matos and Rossi 2008). Likewise, when customers are unhappy with the product, they share negative information regarding the product, showing their unfavorable attitude towards the product (Herr et al. 1991). It is observed that happy consumers are not engaged in WOM communication, but consumers whose judgments are unfavorable for the product are engaged in WOM communications (Anderson 1998). Compared to positive products information, negative information is more helpful for the consumers, as the negative information helps consumers build right expectations of the product quality and are able to differentiate between good or bad product (Herr et al. 1991). Therefore, a bad experience with a green product contrary to the claim, purchasers are likely to share their doubts and caution others of green products, expressing their negative perception of the product to friends or family members (Ferguson et al. 2011). Thus, we hypothesize that:

H₃: SM green advertising skepticism and SM negative WOM are positively related.

2.5 SM Information Utility and Purchase Intention

The advertisement literature concurs that customers are driven by the cognitive response to advertisements and make purchase decisions accordingly (Batra and Ray 1986). Thus, high information utility of green products is an important factor that develops purchase intention (Luo et al. 2020). In some cases, information asymmetry between customers and manufacturers cause lack of information about green products (Matthes and Wonneberger 2014) and customers may stretch themselves to acquire green products information to participate in the consumption of green products. Further, green advertisements are often composed of information on the primary sources of products on which customers make their final purchase decisions. When customers find the information in the green advertisements useful, they are likely to pay more attention to green products and eventually become interested in purchasing them. Therefore, exposure to a higher

degree of information on green products may lead customers to purchase green products. In comparison, when customers have a less degree of information utility for green products, they have less tendency to consume green products (Wei et al. 2017). Therefore, we hypothesize that:

H₄: SM information utility and purchase intention are positively related.

2.6 SM Negative WOM and Purchase Intention

Word-of-mouth or more commonly known as WOM refers to verbal expressions related to a brand or firm amongst customers and other stakeholders of the brand. The significance of WOM is established from the fact that customers tend to alter their consumption preferences in the light of WOM related to a brand or firm (Huete-Alcocer 2017). Since WOM information helps customers understand real-life experiences of products and services before purchasing them, it significantly forms their expectations related to products (Bansal and Voyer 2000). In this sense, negative WOM related to green products may result in developing unfavorable purchase intention of green products, especially because consumer decision-making is a direct result of WOM (Wang et al. 2018). Similarly, since positive WOM indicates high reliability of information towards customer purchase decisions, there exist a high possibility for customers to develop negative attitude towards green products purchase when they receive negative WOM. As WOM helps in reducing risks and uncertainty involving products purchase decisions (Hajli 2015), consumers' exposure to green products information such as online reviews significantly affects their purchase intention (Cheung et al. 2014; Tseng and Hung 2013). Therefore, we hypothesize that:

H₅: SM Negative WOM and purchase intention of green products are negatively related.

2.7 Moderating Effect of Green Confusion

When consumers perceive greenwash due to exaggerated claims of green products communication it creates confusion for customers regarding green product offerings. This essentially refers a relation between green wash and green confusion (Hoedeman 2002). Importantly, when customers are exposed to exaggerated green products communication on social media, they develop a bad perception of green products. This study explores if and how social media (SM) green confusion moderates between SM greenwash and SM green advertisement skepticism.

The current literature establishes that the effects of customer confusion are usually negative on the perception. For instance, consumers are dejected and annoyed by the products when they enter the state of confusion due to too much online information to process of products (Lee and Lee 2004). On the same lines, product-related unclarity such as product-specific terms, which essentially refers to customer confusion, can leave customers perplexed and skeptical of the performance of the product (Matzler et al. 2011). The literature on green customer confusion also explains that when customers perceive confusion related to green products, they may withdraw from the purchasing process and may not place their trust in the product producer again (Chen and Chang 2013). Thus, confused customer carries distrust (Walsh and Mitchell 2010), dissatisfaction

(Foxman et al. 1990), and cognitive dissonance (Mitchell and Papavassiliou 1999); all clear indicators to cause skepticism in the mind of green customers. Thus, we hypothesize that:

H₆: SM green confusion moderates the relationship between SM greenwash and SM green advertisements skepticism.

3 Methodology

3.1 Target Audience and Data Collection Instrument

The exponential growth in the usage of social media platforms have forced companies to promote their brands on social media platforms and this also heightened green advertising on social media platforms (Luo et al. 2020). Hence, the study caters social media users of Karachi, Pakistan who are above 18 years old as a target population of the study. The data was gathered through survey questionnaire that comprised of three sections. In first section, the definition of green product is stated to provide better understanding to respondents. The second part of the questionnaire comprised of demographic details such as age, gender qualification and income. The third part of the questionnaire contains items of the constructs that were extracted from past studies and measured on 5-point Likert scale representing 1 = strongly disagree and 5 = strongly agree. The items were adapted to make them align with the context of social media advertising.

The items of SM greenwashing were adapted from the study of Chen and Chang (2013). The items reflect social media in each statement such as “social media ad deceives with words in its environment features”. The items of SM green advertising skepticism were adapted from the study of Mohr et al. (1998) by adding social media for example “Most green advertisements on social media are exaggerated or false”. The items of SM information utility were adapted Matthes and Wonneberger (2014) by adding social media in the statements. Such as “Green advertisements on social media help me make green purchase decisions”. The items of SM green confusion were adapted from the studies of Chen and Chang (2013) and Aji and Sutikno (2015). The sample item is, “the environmental features are harder to identify in the social media ad”. The items of SM negative WOM were adapted from the study of Leonidou and Skarmeas (2015), and Weitzl et al. (2018). The sample statement is, “I would spread negative WOM on social media about this product”. The items of green purchase intention were adapted from Ajzen and Fishbein (1980) and Sun et al. (2018). The sample item is “I would like to buy green products from now on.”

3.2 Sample Size, Sampling and Statistical Technique

A priori-sample size calculator Daniel Soper was used in order to estimate the minimum sample size requirement for the study. The calculator suggested 161 minimum samples therefore the data was collected from 378 respondents that reduced to 363 after data screening. The sample of 296 achieves the minimum sample requirement of 10 times the number of arrows pointing to the latent construct (Hair et al. 2013). Non-probability purposive sampling technique is used for collecting the responses. This is the most widely

used sampling technique to gather the responses from specific type of people (Sekaran and Bougie 2016). The data was gathered between July 2020 and December 2020 through online Google doc form and few of the responses were gathered in hardcopies. The respondents were reached by posting the link of the questionnaire on different social media platforms such as Facebook, LinkedIn, Instagram etc. and, some of the responses were collected by sending questionnaire link to friends, family and colleagues through WhatsApp.

The statistical technique used in this study is partial least square (PLS) – structural equation modeling (SEM). By using PLS-SEM path modeling; measurement model and structural path coefficients, both can be measured at a same time, and in order to validate the model minimum assumptions are required in terms of a sample size (Chin et al. 2003).

3.3 Pilot Testing and Data Screening

To test the reliability of the questionnaire, first the data was gathered from the 50 respondents. The reliability of the constructs was tested by using SPSS 22. In order to achieve sufficient reliability, the value of Cronbach alpha should be above 0.7 (Hair Jr et al. 2016). The results showed that Cronbach's alpha values of green purchase intention, SM greenwashing, SM green confusion, SM negative WOM, SM green advertising skepticism, and SM information utility are 0.906, 0.859, 0.810, 0.922, 0.824, and 0.859, respectively.

After achieving desired Cronbach alpha values of the constructs, the questionnaire was further sent to the respondents and in total, 378 responses were collected. Before moving to test hypotheses, the data was screened for missing values and outliers. Missing values in the data was replaced by mean values whereas univariate outliers were detected by the method of z-score and deleted from the collected sample. Next, multivariate outliers were detected by using Mahalanobis distance method and removed. After this, the data reduced to 363 responses.

On the sample of 363, common method bias (CMB) also called common method variance (CMV) was tested by using SPSS 22. The results revealed that all the constructs of the study explain variance below 50% reflecting absence of CMB.

4 Results

4.1 Profile of the Respondents

In a sample of 363, 213 (59%) were males and 150 (41%) were females. Majority of the respondents fall in the age bracket of 18–25 i.e., 158 (44%) followed by 26–39 i.e., 114 (31%). Based on qualification, most of the respondents were graduate i.e., 213 (59%) followed by undergraduate i.e., 94 (26%). 40% (144) of the respondents have income level between 30000–60000 PKR, followed by above 60000 i.e., 120 (33%). Table 1 entails the information of the respondent's profile.

Table 1. Profile of the respondents

	Frequency	%
Age		
18–25	158	44%
26–39	114	31%
Above 40	91	25%
Gender		
Female	150	41%
Male	213	59%
Qualification		
Undergraduate	94	26%
Graduate	213	59%
Postgraduate	56	15%
Income (PKR)		
Less than 30,000	99	27%
30,000–60,000	144	40%
Above 60,000	120	33%

4.2 Measurement Model

4.2.1 Reliability and Convergent Validity

To assess measurement model, PLS-algorithm was performed by using Smart-PLS. The first step of the measurement model is to assess the internal consistency of the constructs (Hair Jr. et al. 2016). The internal consistency is measured through Cronbach alpha value that should be above 0.7. However, Hair Jr. et al. (2016) argued that composite reliability (CR) explains better reliability of the constructs. The value of CR above 0.7 explains sufficient consistency among items of the variables. The results of the CR provided evidence that all constructs have achieved the threshold value of 0.7 (See Table 2).

Convergent validity refers to what extent the items of the constructs are positively correlated (Hair Jr. et al. 2016). Convergent validity is assessed by outer loadings and average variance extracted (AVE) values. The value of outer loadings above 0.708 and the value of AVE above 0.5 explain the convergence of the constructs (Hair Jr. et al. 2016). However, outer loading below 0.7 and above 0.4 can be considered if it contributes to the value of CR and AVE. Considering this, outer loadings above 0.65 have retained in the analysis. Table 2 entails the values of outer loadings and AVE and ensured that all the constructs have met the recommended minimum threshold criteria.

Table 2. Cross-loadings

	SMGAS	SMGC	GPI	SMGW	SMIU	SMNWOM	CR	AVE
SMGAS1	0.757	0.338	-0.016	0.32	0.326	0.377	0.819	0.601
SMGAS2	0.78	0.342	-0.046	0.414	0.278	0.501		
SMGAS3	0.787	0.466	-0.125	0.454	0.249	0.526		
SMGC1	0.455	0.886	-0.143	0.46	0.105	0.54	0.865	0.762
SMGC2	0.413	0.859	-0.08	0.41	0.02	0.494		
GPI1	0.009	-0.086	0.673	-0.058	0.048	-0.188	0.759	0.513
GPI2	-0.083	-0.114	0.766	-0.032	0.109	-0.227		
GPI3	-0.103	-0.074	0.707	-0.056	0.091	-0.174		
SMGW1	0.386	0.34	0.01	0.738	0.05	0.4	0.859	0.605
SMGW2	0.402	0.41	-0.056	0.811	0.034	0.517		
SMGW3	0.423	0.422	-0.114	0.795	0.076	0.567		
SMGW4	0.397	0.378	-0.037	0.765	0.027	0.502		
SMIU1	0.31	0.051	0.101	0.044	0.831	0.138	0.768	0.624
SMIU2	0.259	0.068	0.085	0.053	0.747	0.109		
SMNWOM1	0.542	0.518	-0.312	0.543	0.152	0.867	0.933	0.735
SMNWOM2	0.53	0.538	-0.217	0.575	0.124	0.844		
SMNWOM3	0.53	0.482	-0.246	0.54	0.126	0.873		
SMNWOM4	0.519	0.534	-0.205	0.539	0.172	0.844		
SMNWOM5	0.495	0.47	-0.194	0.552	0.097	0.858		

Note: Bold values are outer loadings of the constructs

4.2.2 Discriminant Validity

Discriminant validity assures that the constructs are different and unique from each other (Hair Jr. et al. 2016). In order to assess discriminant validity all of the three methods have used i.e., Fornell and Larcker, hetrotrait-monotrait (HTMT) and cross-loadings. According to Fornell and Larcker criteria, relationship of the constructs is compared with the square root of AVE and it is recommended that square root of AVE must exceed the correlational values (Fornell and Larcker 1981). The results of Fornell and Larcker are in Table 3, the diagonal values are the value of the square root of AVE and the off-diagonal values represent the values of relationship among the constructs. Henseler et al. (2015) proposed new criteria to assess discriminant validity and according to that all the HTMT values should be less than 0.90. The results of HTMT are reported in Table 3 and revealed that all the values of HTMT are below 0.9, meeting the suggested criteria.

In last, cross-loading method is used to further assess the discriminant validity. This criterion suggests that cross-loadings of a constructs must be greater in row than all the off-loadings in the other constructs (Hair Jr. et al. 2016). The results of cross-loadings are reported in Table 3 and have confirmed that all the loadings are high in its own construct. Hence confirm discriminant validity.

Table 3. Fornell and Larcker and HTMT

	Fornell and Larcker						HTMT					
	SMGAS	SMGC	GPI	SMGW	SMIU	SMNWOM	SMGAS	SMGC	GPI	SMGW	SMIU	SMNWOM
SMGAS	0.775											
SMGC	0.498	0.873					0.724					
GPI	-0.086	-0.129	0.716				0.163	0.207				
SMGW	0.517	0.5	-0.066	0.778			0.705	0.679	0.118			
SMIU	0.362	0.074	0.118	0.06	0.79		0.702	0.138	0.248	0.121		
SMNWOM	0.622	0.594	-0.276	0.641	0.157	0.857	0.771	0.749	0.39	0.758	0.257	

Note: In Fornell and Larcker results, bold values are the square root of AVE and off-diagonal values are correlational values

4.3 Structural Model

After assessing measurement model, structural model was performed by performing bootstrapping method. In running this process, 5000 bootstrapping samples were considered as suggested by Hair Jr. et al. (2016). The results (Fig. 1) reveal that SM greenwashing has a significant impact on SM green advertising skepticism ($\beta = 0.419$, p-value < 0.05). The results further reveal that SM green advertising skepticism significantly affect SM information utility ($\beta = -0.362$, p-value < 0.05) and SM negative WOM ($\beta = 0.611$, p-value < 0.05). Moreover, SM information utility positively affect green purchase intention ($\beta = 0.166$, p-value < 0.05) whereas SM negative WOM negatively affect green purchase intention ($\beta = -0.303$, p-value < 0.05). The findings further reveal that SM green confusion positively moderates the relationship between SM greenwashing and SM green advertising skepticism ($\beta = 0.367$, p-value < 0.05).

The value of R-square is assessed also known as co-efficient of determination (Garson 2016). The R-square value of green social media advertising skepticism is found 0.368 and the R-square value of information utility and negative WOM is found 0.131 and 0.373, respectively. Lastly, the value of R-square for green purchase intention is found 0.103.

The predictive relevance (Q^2) is also determined by performing blindfolding. The acceptable Q^2 value is greater than 0 (Hair Jr. et al. 2016) and all the model's values are found greater than 0 which confirms the substantial relevancy of the model.

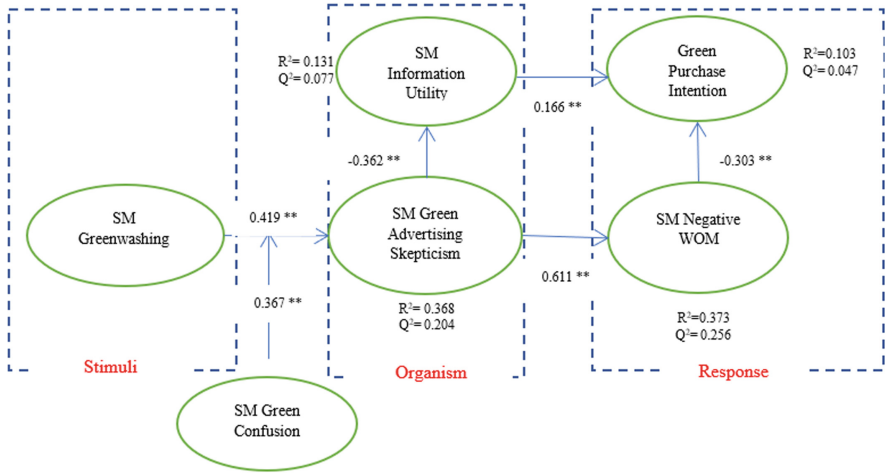


Fig. 1. PLS-SEM results

5 Conclusion and Discussion

The use of social media has resulted in the emergence of nuanced, multifaceted, and amplified interactions between businesses and their customers over the last decade (Li et al. 2021). Businesses are increasingly using social media platforms to better engage and reach their customers (Aslam et al. 2019a; Aslam et al. 2019b). This increase usage is also evident by green brands as social media also offers opportunities to sustainable brands to better communicate to their audience (Mukherjee and Onel 2013; Reilly and Hynan 2014; Shahbaznezhad et al. 2021). However, studies that connect social media and green advertising are rare (Mukherjee and Onel 2013; Luo et al. 2020). Social media platforms are effective as customers can pick their sustainable development lifestyle groups and engage with other users (Minton et al. 2012). However, social media advertising is less regulated than traditional media (Luo et al. 2020) as it creates complicated environment in which consumers assess green advertising (Brettel et al. 2015; Luo et al. 2020). Companies often pretending to claim green but in real they don't practice pro-environmental process refers as "greenwashing" (Nguyen et al. 2019; Guo et al. 2017; Smith and Font 2014; Siano et al. 2017) that nurtures green advertising skepticism (Nguyen et al. 2019; Matthes and Wonneberger 2014). This study tested the relationship of SM greenwashing on SM green advertising skepticism and reveals that SM greenwashing positively affect SM green advertising skepticism. This finding is consistent with the past findings of Nguyen et al. (2019) and Aji and Sutikno (2015) as they determined positive impact of greenwashing on green skepticism. This finding reveals that the misleading claim of the advertising on social media platforms develops high SM green skepticism.

The study further examines the impact of SM green advertising skepticism's impact on SM information utility and SM negative WOM. The findings reveal that SM green advertising skepticism negatively affects SM information utility. This finding is consistent with past literature argued the existence of negative impact between green advertising skepticism and information utility (Luo et al. 2020; DeLorme et al. 2009; Wei et al.

2017). Customers perceive information useful if they are less skeptical. The findings further disclose that SM green advertising skepticism positively affect SM negative WOM. This finding is consistent with the past literature that claimed that unfavorable judgments related to the brand elicits customers to spread negative WOM (Herr et al. 1991; Leonidou and Skarmas 2017). By expressing their concerns to friends and coworkers, customers vent anger and frustration (Chan and Wan 2008). Therefore, SM green advertising skeptic customers more likely to ask questions, express concerns and share their reservations (Ferguson et al. 2011), depict negative feelings to their friends and coworkers (Leonidou and Skarmas 2017). The results further declare that SM green advertising skepticism largely affects SM negative WOM followed by SM information utility.

The study further declares that SM information utility positively affect green purchase intention whereas SM negative WOM negatively affects green purchase intention. The results of SM information utility and green purchase intention are alike with the past findings of Luo et al. (2020). Hence, it reveals that useful and helpful information on social media motivates customers to take purchase decision. When customers found useful and helpful information, their interest develops in purchasing green brands (Matthes and Wonneberger 2014; Wei et al. 2017).

However, SM negative WOM reduces customer purchase intention of the green products. Keller and Fay (2012) claimed that customers buy particular product if they heard positive reviews. Customers are highly affected by other people's perception and opinion about a particular product and make decision accordingly to avoid any ambiguity in their decision making (Zhao and Xie 2011; Zhang et al. 2018; Chen et al. 2014).

Lastly, SM green confusion positively moderates the relation between SM greenwashing and SM green advertising skepticism. The findings explain that SM green confusion intensify the effect of SM greenwashing on SM advertising skepticism. In other words, green confusion and greenwashing develops a multiplier effect and make customer more skeptics. The doubtfulness in the marketing communications develops confusion (Mitchell et al. 2005).

5.1 Managerial Implications

The study provides several implications to the managers. The results of the study highlighted that SM greenwashing affects SM green advertising skepticism. Hence, in order to avoid skepticism, marketers should provide relevant and clear communication regarding green products to their customers in their social media advertising. Green advertisements promote green and eco-friendly products; hence, the information showed in the advertisements must be clear and truthful in order to avoid advertising skepticism. The findings further highlight that SM green advertising skepticism is one of the causes of SM negative WOM. Based on this finding, it is suggested to reduce skepticism as the skeptic customers are more likely to spread SM negative WOM. Brand managers should develop a proper communication strategy that clearly describes product features by not exaggerating the product attributes. If customers receive proper social media advertising communication, they surely avoid spreading negative feelings related to the green product. Useful information develops green purchase intention; hence it is recommended to provide valuable information. Moreover, SM negative WOM reduces green purchase

intention. Hence, in order to develop green purchase intention, manager should develop appropriate strategies that reduces SM negative WOM and develops green purchase intention.

The study makes notable contributions to the marketing literature and specifically to the advertising literature. The extant literature reflects an increasing emphasis on leveraging green products knowledge to stimulate green purchase and how green advertising plays its positive role in this (Ankit and Mayur 2013; Zhu 2012). While a growing number of research studies have been published concerning green advertisement skepticism and its antecedents, the underlying mechanism of how SM green wash contributes to SM green advertisement skepticism and its following impact on SM information utility and SM negative WOM has received little attention in the literature. To this end, supported by the literature, the study conceptualizes that the moderating role of SM green confusion enhances green skepticism which is followed by SM information utility, SM negative WOM and purchase intention. The hypothesized relationships enhance the knowledge on SOR theory in the literature. Importantly, the study provides a much-needed account of the role of SM green confusion in developing SM green advertisement skepticism.

5.2 Area for Future Research

While the study has several contributions, it also has some limitations that need to be addressed in the future. The study focuses the sample of Karachi, Pakistan. This reduces the generalizability of the study. Hence, it is recommended to consider other cities and countries. The study only considers SM greenwashing in addressing SM green advertising skepticism. However, in future, researchers can consider other antecedents of SM green advertising skepticism. The study considers cross-sectional data; hence longitudinal study can be done to get the better insights. The study only assessed the direct relation between the constructs. However, there is a chance that SM information utility and SM negative WOM act as mediator. It is suggested to future researchers to check the mediating relationships. It is also suggested to perform multi-group analysis to check the significant differences among male and female etc. In future, other moderating variables can be considering that reduces the SM green advertising skepticism and improve green purchase intention.

References

- Aji, H.M., Sutikno, B.: The extended consequence of greenwashing: perceived consumer skepticism. *Int. J. Bus. Inf.* **10**(4), 433 (2015)
- Ajzen, I., Fishbein, M.: Predicting and understanding consumer behaviour: attitude-behaviour correspondence. In: *Understanding Attitudes and Predicting Social Behaviour*, pp. 148–172. Prentice Hall Publishers, Englewood Cliffs, NJ (1980)
- Anderson, E.W.: Customer satisfaction and word of mouth. *J. Serv. Res.* **1**(1), 5–17 (1998)
- Ankit, G., Mayur, R.: Green marketing: impact of green advertising on consumer purchase intention. *Adv. Manage.* **6**(9), 14 (2013)
- Aslam, W., Farhat, K., Arif, I.: Role of electronic word of mouth on purchase intention. *Int. J. Bus. Inf. Syst.* **30**(4), 411–426 (2019a)

- Aslam, W., Ham, M., Farhat, P.: Building brand loyalty: an application of expectation confirmation model in mobile social commerce. *Pakistan J. Commer. Soc. Sci. (PJCSS)* **13**(4), 806–825 (2019b)
- Atkinson, L., Kim, Y.: “I drink it anyway and i know i shouldn’t”: understanding green consumers’ positive evaluations of norm-violating non-green products and misleading green advertising. *Environ. Commun.* (2015). <https://doi.org/10.1080/17524032.2014.932817>
- Bansal, H.S., Voyer, P.A.: Word-of-mouth processes within a services purchase decision context. *J. Serv. Res.* (2000). <https://doi.org/10.1177/109467050032005>
- Batra, R., Ray, M.L.: Affective responses mediating acceptance of advertising. *J. Consum. Res.* (1986). <https://doi.org/10.1086/209063>
- Boush, D.M., Friestad, M., Rose, G.M.: Adolescent skepticism toward TV advertising and knowledge of advertiser tactics. *J. Consum. Res.* **21**(1), 165–175 (1994)
- Brettel, M., Reich, J.C., Gavilanes, J.M., Flatten, T.C.: What drives advertising success on Facebook? An advertising-effectiveness model: measuring the effects on sales of “likes” and other social network stimuli. *J. Advert. Res.* **55**(2), 162–175 (2015)
- Chan, H., Wan, L.C.: Consumer responses to service failures: a resource preference model of cultural influences. *J. Int. Market.* **16**(1), 72–97 (2008)
- Chen, Y.S., Lin, C.L., Chang, C.H.: The influence of greenwash on green word-of-mouth (green WOM): the mediation effects of green perceived quality and green satisfaction. *Qual. Quant.* **48**(5), 2411–2425 (2014)
- Chen, Y.-S., Chang, C.-H.: Greenwash and green trust: the mediation effects of green consumer confusion and green perceived risk. *J. Bus. Ethics* **114**(3), 489–500 (2013). <https://doi.org/10.1007/s10551-012-1360-0>
- Cheung, C.M.K., Xiao, B.S., Liu, I.L.B.: Do actions speak louder than voices? The signaling role of social information cues in influencing consumer purchase decisions. *Decis. Support Syst.* (2014). <https://doi.org/10.1016/j.dss.2014.05.002>
- De Matos, C.A., Rossi, C.A.V.: Word-of-mouth communications in marketing: a meta-analytic review of the antecedents and moderators. *J. Acad. Market. Sci.* **36**(4), 578–596 (2008)
- DeLorme, D.E., Huh, J., Reid, L.N.: Direct-to-consumer advertising skepticism and the use and perceived usefulness of prescription drug information sources. *Health Market. Q.* **26**(4), 293–314 (2009)
- Do Paço, A.M.F., Reis, R.: Factors affecting skepticism toward green advertising. *J. Advertising* (2012). <https://doi.org/10.1080/00913367.2012.10672463>
- Donovan, R., Rossiter, J.: Store atmosphere: an environmental psychology approach. *J. Retail.* **58**, 34–57 (1982)
- Epstein, M.J., Buhovac, A.R., Elkington, J., Leonard, H.B.D.: Making sustainability work: Best practices in managing and measuring corporate social, environmental and economic impacts. *Making Sustainability Work: Best Practices in Managing and Measuring Corporate Social, Environmental and Economic Impacts* (2017). <https://doi.org/10.4324/9781351276443>
- Ferguson, J.L., Ellen, P.S., Piscopo, G.H.: Suspicion and perceptions of price fairness in times of crisis. *J. Bus. Ethics* **98**(2), 331–349 (2011)
- Fornell, C., Larcker, D.F.: Evaluating structural equation models with unobservable variables and measurement error. *J. Market. Res.* **18**(1), 39–50 (1981)
- Foxman, E.R., Muehling, D.D., Berger, P.W.: An investigation of factors contributing to consumer brand confusion. *J. Consum. Affairs* **24**(1), 170–189 (1990). <https://doi.org/10.1111/j.1745-6606.1990.tb00264.x>
- Garson, G.D.: *Partial Least Squares Regression & Structural Model Statistical Associates Blue Book Series.*-Garson (2016)
- Guo, R., Tao, L., Li, C.B., Wang, T.: A path analysis of greenwashing in a trust crisis among Chinese energy companies: the role of brand legitimacy and brand loyalty. *J. Bus. Ethics* **140**(3), 523–536 (2017)

- Hair Jr., J.F., Hult, G.T.M., Ringle, C., Sarstedt, M.: *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. Sage Publications, Thousand Oaks (2016)
- Hair, J.F., Hult, G.T.M., Ringle, C.M., Sarstedt, M.: *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. Sage, Thousand Oaks (2013)
- Hajli, N.: Social commerce constructs and consumer's intention to buy. *Int. J. Inf. Manage.* (2015). <https://doi.org/10.1016/j.ijinfomgt.2014.12.005>
- Henseler, J., Ringle, C.M., Sarstedt, M.: A new criterion for assessing discriminant validity in variance-based structural equation modeling. *J. Acad. Market. Sci.* **43**(1), 115–135 (2015)
- Herr, P.M., Kardes, F.R., Kim, J.: Effects of word-of-mouth and product-attribute information on persuasion: an accessibility-diagnostics perspective. *J. Consum. Res.* **17**(4), 454–462 (1991)
- Hoedeman, O.: Rio +10 and the greenwash of corporate globalization. *Development (Basingstoke)* (2002). <https://doi.org/10.1057/palgrave.development.1110376>
- Huete-Alcocer, N.: A literature review of word of mouth and electronic word of mouth: Implications for consumer behavior. *Front. Physiol.* (2017). <https://doi.org/10.3389/fpsyg.2017.01256>
- Islam, J., Rahman, Z.: The impact of online brand community characteristics on customer engagement: an application of stimulus-organism-response paradigm. *Telemat. Inf.* (2017). <https://doi.org/10.1016/j.tele.2017.01.004>
- Keller, E., Fay, B.: Word-of-mouth advocacy: a new key to advertising effectiveness. *J. Advert. Res.* **52**(4), 459–464 (2012)
- Laczniak, R.N., DeCarlo, T.E., Ramaswami, S.N.: Consumers' responses to negative word-of-mouth communication: an attribution theory perspective. *J. Consum. Psychol.* **11**(1), 57–73 (2001)
- Lee, B.K., Lee, W.N.: The effect of information overload on consumer choice quality in an on-line environment. *Psychol. Market.* (2004). <https://doi.org/10.1002/mar.20000>
- Leonidou, C.N., Skarmas, D.: Gray shades of green: causes and consequences of green skepticism. *J. Bus. Ethics* **144**(2), 401–415 (2017)
- Li, F., Larimo, J., Leonidou, L.C.: Social media marketing strategy: definition, conceptualization, taxonomy, validation, and future agenda. *J. Acad. Market. Sci.* **49**(1), 51–70 (2021)
- Luo, B., Sun, Y., Shen, J., Xia, L.: How does green advertising skepticism on social media affect consumer intention to purchase green products? *J. Consum. Behav.* **19**(4), 371–381 (2020). <https://doi.org/10.1002/cb.1818>
- Luo, C., Luo, X.R., Bose, R.: Information usefulness in online third party forums. *Comput. Human Behav.* **85**, 61–73 (2018)
- Lyon, T.P., Montgomery, A.W.: Tweetjacked: the impact of social media on corporate greenwash. *J. Bus. Ethics* (2013). <https://doi.org/10.1007/s10551-013-1958-x>
- Matthes, J., Wonneberger, A.: The skeptical green consumer revisited: testing the relationship between green consumerism and skepticism toward advertising. *J. Advertising* (2014). <https://doi.org/10.1080/00913367.2013.834804>
- Matzler, K., Stieger, D., Füller, J.: Consumer confusion in internet-based mass customization: testing a network of antecedents and consequences. *J. Consum. Policy* (2011). <https://doi.org/10.1007/s10603-011-9157-6>
- Minton, E., Lee, C., Orth, U., Kim, C.H., Kahle, L.: Sustainable marketing and social media: a cross-country analysis of motives for sustainable behaviours. *J. Advert.* **41**(4), 69–84 (2012)
- Mitchell, V.W., Papavassiliou, V.: Marketing causes and implications of consumer confusion. *J. Prod. Brand Manag.* (1999). <https://doi.org/10.1108/10610429910284300>
- Mitchell, V.W., Walsh, G., Yamin, M.: Towards a conceptual model of consumer confusion. *ACR North American Advances* (2005)
- Mohr, L.A., Eroğlu, D., Ellen, P.S.: The development and testing of a measure of skepticism toward environmental claims in marketers' communications. *J. Consum. Affairs* **32**(1), 30–55 (1998)

- Mukherjee, A., Onel, N.: Building green brands with social media: best practices from case studies. *J. Digit. Soc. Media Market.* **1**(3), 292–311 (2013)
- Nguyen, T.T.H., Yang, Z., Nguyen, N., Johnson, L.W., Cao, T.K.: Greenwash and green purchase intention: the mediating role of green skepticism. *Sustainability* **11**(9), 2653 (2019)
- Reilly, A.H., Hynan, K.A.: Corporate communication, sustainability, and social media: it's not easy (really) being green. *Bus. Horizons* **57**(6), 747–758 (2014)
- Rose, S., Clark, M., Samouel, P., Hair, N.: Online customer experience in e-retailing: an empirical model of antecedents and outcomes. *J. Retailing* (2012). <https://doi.org/10.1016/j.jretai.2012.03.001>
- Russell, J.A., Mehrabian, A.: Distinguishing anger and anxiety in terms of emotional response factors. *J. Consulting Clin. Psychol.* **42**(1), 79 (1974)
- Schmuck, D., Matthes, J., Naderer, B.: Misleading consumers with green advertising? An affect–reason–involvement account of greenwashing effects in environmental advertising. *J. Advertising* (2018). <https://doi.org/10.1080/00913367.2018.1452652>
- Schuitema, G., de Groot, J.I.M.: Green consumerism: the influence of product attributes and values on purchasing intentions. *J. Consum. Behav.* (2015). <https://doi.org/10.1002/cb.1501>
- Segev, S., Fernandes, J., Hong, C.: Is your product really green? A content analysis to reassess green advertising. *J. Advertising* (2016). <https://doi.org/10.1080/00913367.2015.1083918>
- Sekaran, U., Bougie, R.: *Research Methods for Business: A Skill Building Approach*. Wiley, New York (2016)
- Shahbaznezhad, H., Dolan, R., Rashidirad, M.: The role of social media content format and platform in users' engagement behavior. *J. Interact. Market.* **53**, 47–65 (2021)
- Siano, A., Vollero, A., Conte, F., Amabile, S.: “More than words”: expanding the taxonomy of greenwashing after the Volkswagen scandal. *J. Bus. Res.* **71**, 27–37 (2017)
- Sin, S.S., Nor, K.M., Al-Agaga, A.M.: Factors affecting Malaysian young consumers' online purchase intention in social media websites. *Procedia – Soc. Behav. Sci.* (2012). <https://doi.org/10.1016/j.sbspro.2012.03.195>
- Smith, V.L., Font, X.: Volunteer tourism, greenwashing and understanding responsible marketing using market signalling theory. *J. Sustain. Tour.* **22**(6), 942–963 (2014)
- Sohaib, O., Kang, K.: Individual level culture influence on online consumer iTrust aspects towards purchase intention across cultures: A S-O-R model. *Int. J. Electron. Bus.* (2015). <https://doi.org/10.1504/IJEB.2015.069104>
- Sun, Y., Wang, S., Gao, L., Li, J.: Unearthing the effects of personality traits on consumer's attitude and intention to buy green products. *Nat. Hazards* (2018). <https://doi.org/10.1007/s11069-018-3301-4>
- Tan, B.-C.: The roles of knowledge, threat, and PCE on green purchase behaviour. *Int. J. Bus. Manage.* (2011). <https://doi.org/10.5539/ijbm.v6n12p14>
- TerraChoice: *The Seven Sins of Greenwashing. Environmental Claims in Consumer Markets* (2009)
- Torelli, R., Balluchi, F., Lazzini, A.: Greenwashing and environmental communication: effects on stakeholders' perceptions. *Bus. Strategy Environ.* **29**(2), 407–421 (2020)
- Tseng, S.C., Hung, S.W.: A framework identifying the gaps between customers' expectations and their perceptions in green products. *J. Cleaner Prod.* (2013). <https://doi.org/10.1016/j.jclepro.2013.06.050>
- Vermeir, I., Verbeke, W.: Sustainable food consumption: exploring the consumer “attitude - behavioral intention” gap. *J. Agric. Environ. Ethics* (2006). <https://doi.org/10.1007/s10806-005-5485-3>
- Walsh, G., Mitchell, V.W.: The effect of consumer confusion proneness on word of mouth, trust, and customer satisfaction. *Euro. J. Market.* (2010). <https://doi.org/10.1108/03090561011032739>

- Wang, J., Wang, S., Xue, H., Wang, Y., Li, J.: Green image and consumers' word-of-mouth intention in the green hotel industry: the moderating effect of Millennials. *J. Cleaner Prod.* (2018). <https://doi.org/10.1016/j.jclepro.2018.01.250>
- Wei, C.F., Chiang, C.T., Kou, T.C., Lee, B.C.Y.: Toward sustainable livelihoods: investigating the drivers of purchase behavior for green products. *Bus. Strategy Environ.* (2017). <https://doi.org/10.1002/bse.1942>
- Weitzl, W., Hutzinger, C., Einwiller, S.: An empirical study on how webcare mitigates complainants' failure attributions and negative word-of-mouth. *Comput. Human Behav.* **89**, 316–327 (2018)
- Zhang, L., Li, D., Cao, C., Huang, S.: The influence of greenwashing perception on green purchasing intentions: the mediating role of green word-of-mouth and moderating role of green concern. *J. Cleaner Prod.* (2018). <https://doi.org/10.1016/j.jclepro.2018.03.201>
- Zhao, M., Xie, J.: Effects of social and temporal distance on consumers' responses to peer recommendations. *J. Marketing Res.* **48**(3), 486–496 (2011)
- Zhu, B.: The impact of green advertising on consumer purchase intention of green products. In: *Proceedings of World Business and Economics Research Conference*, October 2012



Package-Free Returns: A Trend in Green Ecommerce

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Abstract. Ecommerce packaging is a threat to ecological environment. Package-free return modes could be an implementable measure to reduce ecommerce packaging and create green value for the planet. Basically, online consumers can directly return online purchases in store without packaging them. This article introduces a package-free return mode and illustrates the value of offering the return service. By reviewing and comparing with relevant literature, this article reveals that package-free returns are an interesting research topic and merits further research.

Keywords: Ecommerce · Ecommerce returns · Package-free returns · Ecological environment · Green return mode

1 Introduction

The more items people purchase online, the more packages ecommerce will generate. Ecommerce packaging is useful for ensuring the delivery security, but it is troublesome to see such massive package waste (Chueamuangphan et al. 2020; Escursell et al. 2020). Conventional ecommerce packaging could use cardboard, envelopes, cartons, plastic bags, woven bags, tape, and fillers (Chueamuangphan et al. 2020). The estimated total value of the global retail ecommerce packaging market will reach \$68,388.1 million by 2030, rising from \$19,022.7 million in 2019, increasing at a 12.1% CAGR during 2020–2030 (Research and Markets 2021). The enormous packages are damaging ecological environment, generating more greenhouse emissions and consuming resources on the planet. Hence, it is imperative to take measures to avoid the negative influence of ecommerce packaging.

Using eco-friendly packages is commonplace in greening ecommerce packaging, but it is difficult to use them in current ecommerce practice. For example, Alibaba offered reusable corrugated cardboard boxes that do not need to be sealed with plastic tape, but such boxes cost twice as much as regular boxes (Bloomberg 2020). In fact, an effective way to reducing ecommerce packaging waste is not using packages. As for online shoppers, the speed of forward logistics is key to create a satisfactory shopping experience. Packages can protect shipped items in the forward logistics, and are beneficial

for businesses to retain consumers and reduce return rates (Research and Markets 2021). But the situation is different from reverse logistics, if consumers are refunded in time after returning purchases, they do not care much about the speed of shipping items back. This characteristic of reverse logistics makes package-free returns a possible option. Basically, package-free return modes allow consumers to return online purchases in stores without packaging them. This paper will discuss several issues related to package-free returns.

2 Package-Free Return: Concept and Value

Package-free return modes aim to reduce ecommerce packaging in the reverse logistics. Its usual process is: (1) a consumer brings items to a return point located in physical stores (e.g., department stores, brand stores, retail markets); (2) associates at the return point will examine and accept/reject returned items; (3) the ecommerce company makes the refund for the consumer; (4) returns are shipped in bulk to a return warehouse, or integrated into nearby store inventory.¹ It is noteworthy mentioning that different package-free return modes may have different processes. In practice, return management sectors even use reusable boxes to transship these returns in order to further reduce package waste in the reverse logistics. The characteristic of package-free return mode is salient in contrast to conventional mail return modes. Basically, a package-free return mode can process returns (e.g., remake returned items, restock items in nearby inventory, sell items off the shelf) in a timely manner by leveraging a massive return network, and transship processed returns to given places if needed. However, returned items have to be packaged in the mail return mode and directly shipped to ecommerce firms' inventory. Enterprises are deploying the package-free-returns network. Amazon offers over 5,800 locations for package-free returns of online purchases (Walk-Morris 2019). The return management service incorporation Happy Returns opens more than 2,000 return points for package-free returns and use reusable boxes to transship returns.

The green value of package-free returns is predictable. Ecommerce returns have been a burning issue for e-retail companies (Hjort et al. 2019). The total value of e-retail returns has been estimated at \$40 billion in the United States (Appriss Retail 2019). The return ratio is 8% for physical retail, whilst this ratio jumps to 25%–40% for e-retail (Paazl 2017). In the mail return mode, packages are needed for ensuring the delivery security; research even reveals that 40% of consumers bought new packages for ecommerce returns.² The mail return mode is a threat to our ecological environment (greenhouse gas emissions, forest resource depletion, package waste, etc.), while the package-free return mode can effectively reduce these negative effects. If one million ecommerce returns were switched to package-free returns, it can reduce 120,000 lb of greenhouse gas emissions (Mui 2018), avoid around 6600 trees being cut down (the estimation method can be seen at Packsize 2015), and save massive plastic bags, fillers, and tape. Apart from the green value, package-free returns can create other value. Consumers can get the refund sooner (Narvar 2017; Nagl 2018) because, once returned products being accepted at the return point, sellers can process returns and make the reimbursement

¹ Regarding the package-free return process of the company Happy Returns, please see: <https://retailers.happyreturns.com/resource/reduce-your-cardboard-footprint>.

² The relevant studies and references will be presented in the conference.

immediately. In contrast, in the mail return mode consumers usually wait for around 6 weeks (Bimschleger et al. 2019). On the firm's side, as the return management sector can transport returns in bulk in the package-free return mode, it can largely increase the efficiency of reverse logistics (Happy Returns 2020). Research reveals that ecommerce firms receive package-free returns can reduce return-related costs by around one-fifth (Happy Returns 2020). In a word, package-free returns cannot only reduce packages in the reverse logistics in ecommerce activities, but also create value for firms and consumers.

3 Key Issues Related to Package-Free Returns

Online consumers' adoption of package-free returns is slow. Research shows that only 10 percent of consumers return products in store (Ryan 2019; Wassel 2019). This statistic is not convincing at all given the fact that many brands (e.g., Old Navy, Zara, H&M) and ecommerce platforms (e.g., Amazon) have rolled out BORIS (Buy Online, Return In Store) service. The package-free return mode requires ecommerce firms to establish a massive return network, which involves considerable investments and strategic planning, so firms need to be prudent in making the decision. Therefore, it is necessary for firms to study why consumers are willing to use package-free return service. Firms can optimize their strategy in promoting package-free returns.

There are studies related to BORIS though, researching package-free returns does create value for ecommerce research. First, as package-free returns need to be made in store, BORIS is highly relevant to package-free returns, but they are different concepts: package-free returns stress the green value (packages reduction) of making ecommerce returns in store; some retail stores in the BORIS mode are merely drop-off stations for collecting and shipping returned items back to sellers, neither having a liability to examine returns in store nor accepting unpackaged items. To the best of our knowledge, we did not see research delved into the green value of in-store returns. Meanwhile, ecommerce experts and scholars are concerned about ecommerce packaging issues (see Chueamuangphan et al. 2020; Escursell et al. 2020). Second, based on reviewing current research, we found that prior researchers have attempted to resolve initial issues related to in-store returns. Existing research mostly focused on explaining *why* firms need to offer in-store return service for ecommerce returns (see footnote 2). Research profoundly illustrating *how* firms can extract maximum value from package-free returns was still scarce. Third, existing studies related to the *how* issue have discussed accessibility of return points (Bernon et al. 2016), ease of return and financial burdens (Bernon et al. 2016), the number of stores and store size (Gao et al. 2018), pricing policies (Radhi and Zhang 2018), return costs and cross-channel return behaviors (Wollenburg et al. 2018; Nageswaran et al. 2020), the optimal ordering amount (Radhi and Zhang 2019), and product transshipment policy in reverse logistics (Dijkstra et al. 2019). These publications mainly offer a solution from an operation management perspective. Most of them are published in operation-related journals. Package-free-returns researchers should not only focus on increasing operation efficiency and outcomes, but also recognize the "selling point" of the green return service and promote the service for more people to use it. If the latter cannot be properly solved, when firms find that basically

no consumers would use the service after investing resources and deploying return networks, the investment and the efforts could be in vain. Last, Wollenburg et al. (2018) and Nageswaran et al. (2020) primarily discussed consumers' cross-channel return behavior and asserted that firms can impose return costs (e.g., shipping fees, restocking fees) on mail returns in order to push consumers to return online purchases in store. However, consumer behavior is not only affected by economic factors (e.g., return costs), but also affected by experiential or ecological-related factors (Hartmann and Apaolaza-Ibáñez 2012).

To summarize, current research overlooked the green value of package-free returns. Apart from the *why* issue, the *how* issue is to be further researched. In particular, how experiential or ecological-related factors affect online consumers' green return behavior and how ecommerce firms extract maximum value from package-free returns are two major research questions to be solved.

4 Conclusion

This article highlights the value of package-free returns. Package-free returns allow online consumers to directly return online purchases in store without packaging them. It is a key measure to green ecommerce activities and reduce ecommerce packaging waste. By reviewing relevant studies, we found that future researchers should focus on recognizing experiential or ecological-related factors driving consumers to use the service and how ecommerce firms can extract maximum value from offering the service.

References

- Appriss Retail: Consumer returns in the retail industry 2019 (2019). <https://appriss.com/retail/wp-content/uploads/sites/4/2020/01/AR3019-2019-Customer>Returns-in-the-Retail-Industry.pdf>
- Bernon, M., Cullen, J., Gorst, J.: Online retail returns management: integration within an omnichannel distribution context. *Int. J. Phys. Distrib. Logistics Manage.* **46**(6/7), 584–605 (2016)
- Bimschleger, C., Patel, K., Leddy, M.: Bringing it back: retailers need a synchronized reverse logistics strategy (2019). <https://www2.deloitte.com/content/dam/Deloitte/us/Documents/process-and-operations/us-bringing-it-back.pdf>
- Bloomberg: China's online shopping addiction is killing its green packaging drive (2020). <https://indianexpress.com/article/world/chinas-online-shopping-addiction-is-killing-its-green-packaging-drive-7113137/#:~:text=China's online shopping addiction is killing its green, the waste produced by Japan in a year>
- Chueamuangphan, K., Kashyap, P., Visvanathan, C.: Packaging waste from E-commerce: consumers' awareness and concern. In: *Sustainable Waste Management: Policies and Case Studies*, pp. 27–41. Singapore. Springer (2020)
- Dijkstra, A.S., Van der Heide, G., Roodbergen, K.J.: Transshipments of cross-channel returned products. *Int. J. Prod. Econ.* **209**, 70–77 (2019)
- Escursell, S., Llorach, P., Roncero, M.B.: Sustainability in e-commerce packaging: a review. *J. Cleaner Prod.* **280**, 124314 (2020)
- Gao, F., Cui, S., Agrawal, V.: The effect of multi-channel and omni-channel retailing on physical stores. Georgia Tech Scheller College of Business Research Paper, pp. 18–28 (2018)

- Happy Returns: How happy returns' customers save 21% on returns costs: the business value of aggregating items with in-person returns and online software (2020). <https://happyreturns.com/blog/report-shows-happy-returns-customers-average-savings>
- Hartmann, P., Apaolaza-Ibáñez, V.: Consumer attitude and purchase intention toward green energy brands: the roles of psychological benefits and environmental concern. *J. Bus. Res.* **65**(9), 1254–1263 (2012)
- Hjort, K., Hellström, D., Karlsson, S., Oghazi, P.: Typology of practices for managing consumer returns in internet retailing. *Int. J. Phys. Distrib. Logistics Manage.* **49**(7), 767–790 (2019)
- Mui, W.: Reducing greenhouse gas emissions through consolidated returns shipments: a retail study. Yorke Engineering LLC (2018)
- Nageswaran, L., Cho, S.H., Scheller-Wolf, A.: Consumer return policies in omnichannel operations. *Manage. Sci.* **66**(12), 5485–6064 (2020)
- Nagl, K.: New service at Somerset Collection takes hassle out of online returns (2018). <https://happyreturns.com/press/new-service-at-somerset-collection-takes-hassle-out-of-online-returns>
- Narvar: Narvar study shows ecommerce returns experience now critical to shopping journey, driven by millennials and affluent shoppers (2017). <https://www.prnewswire.com/news-releases/narvar-study-shows-ecommerce-returns-experience-now-critical-to-shopping-journey-driven-by-millennials-and-affluent-shoppers-300469259.html>
- Paazl: E-commerce returns rates – how much is coming back? (2017). <https://www.paazl.com/blog/e-commerce-returns-in-europe/>
- Packsize: How many cardboard boxes can you get out of one tree? (2015). <https://www.packsize.com/blog/sustainability/how-many-boxes-can-you-get-out-of-one-tree/>
- Radhi, M., Zhang, G.: Pricing policies for a dual-channel retailer with cross-channel returns. *Comput. Ind. Eng.* **119**, 63–75 (2018)
- Radhi, M., Zhang, G.: Optimal cross-channel return policy in dual-channel retailing systems. *Int. J. Prod. Econ.* **210**, 184–198 (2019)
- Research and Markets: Global Retail E-Commerce Packaging Market Report 2020: Investment by Companies to Embrace Circular Economy - Forecast to 2030 (2021). <https://www.prnewswire.com/news-releases/global-retail-e-commerce-packaging-market-report-2020-investment-by-companies-to-embrace-circular-economy---forecast-to-2030-301219983.html>
- Ryan, T.: What makes consumers grumble most about returning online orders? (2019) <https://retailwire.com/discussion/why-makes-consumers-grumble-most-about-returning-online-orders/>
- Walk-Morris, T.: Amazon expands its free return policy (2019). <https://www.retaildive.com/news/amazon-expands-its-free-return-policy/569414/>
- Wassel, B.: Study: why the best return processes start on the product detail page (2019). <https://retailtouchpoints.com/topics/digital-commerce/study-why-the-best-return-processes-start-on-the-product-detail-page>
- Wollenburg, J., Holzapfel, A., Hübner, A., Kuhn, H.: Configuring retail fulfillment processes for omni-channel customer steering. *Int. J. Electron. Commer.* **22**(4), 540–575 (2018)

Author Index

A

Aslam, Wajeeha, 313

B

Beyers, Tobias, 291

Brengman, Malaika, 95

C

Caridà, Angela, 192

Casais, Beatriz, 236

Ceccotti, Federica, 225

Codignola, Federica, 255

Colurcio, Maria, 192

D

D'Arco, Mario, 104

de Luna, Iviane Ramos, 313

Dias, Ricardo, 121

du Plessis, C., 16

F

Farhat, Kashif, 313

Farivar, Samira, 201

Fedorko, Richard, 74, 83

Feng, Changyuan, 330

Fondevila-Gascón, Joan-Francesc, 43

G

Grcarov, Mile, 1

H

Harrigan, Paul, 153

Hellemans, Johan, 95

Hemachandra, Sankhani, 50

Henama, Unathi Sonwabile, 280

Hernández, Eva Maria González, 129

Hu, Lala, 112

Human-Van Eck, Debbie, 291

I

Isawasan, Pradeep, 209

J

John, Surej P., 184

Johnstone, Leanne, 161

K

Kráľ, Štefan, 83

L

Li, Weiqing, 243

Li, Yangchun, 330

Lindh, Cecilia, 161

Liu, Huaming, 330

Lyngdoh, Teidorlang, 277

M

Marino, Vittoria, 104

Martinez, Luis F., 121

Martinez, Luisa M., 121

Meyer, Jan-Hinrich, 129

Mir-Bernal, Pedro, 43

Mustafa, Hasrina, 209

N

Nastišin, L'udovít, 74

Ndiaye, Thioro, 305

Nguyen, Diep Ngoc, 62

O

Olivieri, Mirko, [112](#)

P

Pacheco, Barney G., [251](#)

Paesbrugge, Bert, [277](#)

Paniculangara, Joseph, [251](#)

Pastore, Alberto, [24](#), [192](#)

Patrizi, Michela, [24](#)

Pentz, Chris, [291](#)

Pentz, Chris D., [263](#)

Perelló-Sobrepere, Marc, [43](#)

Peter, Marc K., [137](#), [144](#)

Polo-López, Marc, [43](#)

R

Rach, Markus, [35](#), [137](#)

Rangarajan, Deva, [277](#)

Ryke, Lieze, [263](#)

S

Shamugam, Lalitha, [209](#)

Sharkasi, Nora, [50](#), [62](#), [305](#)

Sharma, Arun, [277](#)

Smaldone, Francesco, [104](#)

T

Terra, Letícia, [236](#)

Trujillo, Andrea, [129](#)

V

Vernuccio, Maria, [24](#), [225](#)

W

Walford, Richard, [184](#)

Wang, Fang, [201](#)

Weismueller, Jason, [153](#)

Willems, Kim, [95](#)

X

Xu, Bugao, [243](#)

Y

Yfantidou, Ioanna, [1](#)

Z

Zachlod, Cécile, [144](#)

Zolkepli, Izzal Asnira, [209](#)