






Fairness Issues in Algorithmic Digital Marketing: Marketers' Perceptions

Veronika Pavlidou¹ , Jahna Otterbacher^{1,2} , and Styliani Kleanthous^{1,2} 

¹ Open University of Cyprus, Latsia, Cyprus
design@caliber.com.cy

² CYENS Centre of Excellence, Nicosia, Cyprus

Abstract. Data-driven algorithms are becoming more prevalent in our everyday lives, automating various decisions that can impact access to opportunities and resources. For this reason, much research concerns the ethical and social consequences of algorithms. Algorithmic *digital marketing* represents a key means by which people encounter and/or are affected by algorithms in daily life. While previous work has considered the perceptions of consumers in this realm, little work to date has considered those of marketing professionals. The current work presents an exploratory study of marketers, aiming to uncover their general views on the use of algorithmic marketing, as well as their own practices and if/how they address the ethical concerns surrounding algorithmic marketing. The findings underscore the need for ethical regulations and guidelines to be defined for fair practices in the context of algorithmic digital marketing.

Keywords: digital marketing · marketers' perceptions · fairness in algorithmic processes · micro-targeting · ethics in digital marketing

1 Introduction

The field of artificial intelligence (AI) has significantly expanded in recent years; from 2010 to 2021, the total number of AI publications doubled (AI Index Report, 2022) and new applications of AI are transforming the way we work and live. Likewise, they are evolving in almost every business sector. The great benefit of AI for business is the possibility of processing a huge volume of data and interpreting it in real-time, to save time and increase revenue. Businesses in general, are increasingly looking for ways to put AI technologies to work to improve their productivity, profitability and business results. Lately, industry and researchers have adopted the term “cognitive technologies” when referring to narrow AI, implying that the technologies take the automation to a new level of “human-like” thought.

There has been a progression of AI from Cognitive Assistance such as automation of repeatable tasks or process automation (e.g., email automation, calendar and scheduling assistant, auto-responsive, etc.) to Cognitive Insights, highly data-dependent applications of AI for predicting behaviour (e.g., customer buying patterns), and finally, to Cognitive Engagement. This newest form of application involves companies' engagement with

people inside and outside of business (e.g., digital customer support agents like Amelia, which is recognized as the Most Human AI™) (Mussomeli, Neier, Takayama, Sniderman, & Holdowsky, 2019). One of the branches of narrow AI consists of algorithms based on machine learning (ML) that have had great influence on marketing practices. In particular, algorithmic marketing is a process that is automated to such a degree that it can be steered by setting a business objective in a marketing software system (Katsov, 2001). Moreover, those new applications have biases, intentional or otherwise, and these shape and constrain individuals' lives (Winter, 2014).

Today, most consumers conduct online research before making a purchase, and this fundamental change in buying behaviour forces marketers to adapt their business marketing strategies for the digital age. Marketers (i.e., advertisers) always try to reach their target audience based on demographics (e.g., gender, age, race, ethnicity), preferences, and by using cognitive biases (e.g., authority bias, scarcity bias, etc.), which influence potential consumer behaviour and decisions in order to increase sales. Marketers are aware that people tend to run from commercial ads, knowing very well that the number of users who adopt ad-blocking is increasing rapidly all over the world (Tudoran, 2019). Thus, they try to find more creative ways to get customers' attention e.g., by using cognitive biases. As (Nadler, 2017) states, marketers identify consumers' cognitive and affective biases and target their vulnerabilities. Here, there is the risk to cross the line from ethical to unethical practices.

Thus, it is important to understand what impact the interactions among the stakeholders or users (customers/consumers and marketers) have in all stages of algorithmic digital marketing and their perceptions of algorithmic processes since user perception and belief are created, amplified, or reinforced by algorithms and vice versa. Additionally, from a user's perspective, the algorithm is a "black box," and it is not possible for the user to know how the computation is completed. At the same time, algorithms themselves do not have the affordances that would allow users to understand them or how best to utilize them to achieve their goals (Shin & Park, 2019).

The marketing system should always be of service to people (Murphy, Laczniak, & Harris, 2016), and this statement makes it obvious that marketers should always behave ethically. Companies and marketers must adjust to the constantly challenging digital economy, and those that desire to enter global competition should pay attention to customer benefits and business fairness in order to achieve sustainability (Anggadwita & Martini, 2020). Fairness in organizational practices can foster various sources competitive advantage and hence improve organizational performance (Yeolman & Mueller Santow, 2016).

However, as a first step, we need to better understand marketers' perceptions of fair, ethical decisions in digital marketing practices and how they relate to the usual moral approaches used by marketers today. To this end, our research addresses these issues by using qualitative methods to understand the impact of digital marketing on people's lives. Understanding this impact is important because moral awareness gives the ability to people to identify the ethical aspects of their decisions, and helps to shape marketers' attitudes toward their practices. This article aims to contribute to the debate about the impact of digital marketing on people's lives and to encourage digital marketers to actively apply and pursue algorithmic fairness that will undoubtedly help to build a

trust relationship and therefore effective communication between the stakeholders (e.g. consumer-brand) in digital marketing processes.

2 Related Work

2.1 Interactions Between Stakeholders in Algorithmic DM

To ground our study of marketers' perceptions of ethical issues in algorithmic digital marketing, we first consider the stakeholders involved in the marketing process, i.e., consumers, brands, marketers, and the relationship between them. Moreover, we consider the perceptions they have of digital marketing practices (i.e., data-driven algorithms, microtargeting, cognitive marketing) that have impacted traditional marketing, businesses, the tourism sector, and consumers, as well as their moral approaches to these practices.

Consumer-brand relationship quality is a comprehensive concept that reflects the intensity, depth, continuity, and effect of the relationship between a consumer and brand (Lee & Jin, 2019). Today, consumers often have concerns regarding privacy or ethical issues, and they often feel violated when they sense they have no control over the algorithmic processes that involve their personal data during their browsing (Pavlidou, et al., 2021). As (Korolova, 2011) states, one of the big concerns users have when they share personal information on social networking sites is that the service does not "sell" their personal information to advertisers. Moreover, previous research (Pavlidou, et al., 2021) that examined users' perceptions regarding their online activities and fairness in algorithmic targeted marketing, revealed that users have ethical concerns regarding the microtargeting or detailed targeting such as FB Lookalike or Special Ad Audiences tools. In other words, users often believe that they are being tracked and monitored without their consent and also that marketers manipulate them by creating a sense of scarcity intentionally. Additionally, the study of (Herder, E., & Dirks, S., 2022) that examined similar variables such as privacy concerns, trust and vulnerability showed that many people report concerns of privacy and consider commercially targeted advertising to be unethical, as they exploit people's vulnerabilities. Furthermore, the authors cited the danger of filter bubbles that bear several risks, such as the manipulation of people's decision-making, when they have access only to algorithmically selected advertisements.

According to (Dwork et al., 2012), fairness issues were detected in machine learning (ML) known as group fairness or individual fairness; for example, Lookalike and Special Ad Audiences tools can create similarly biased target audiences from the same source audiences (AIES, 2022). It is known that microtargeting audience selection practice is one of the more opaque processes where criteria selection relies on inputs resulting from machine learning (ML) workings of proprietary software. Thus, it holds potential risks of stereotyping and discrimination. As (Birner, N., Hod, S., Kettemann, M. C., Pirang, &., Stock, F., 2021) state, there is a fairness issue in ad delivery where a lack of privacy and user self-determination can be detected, and in general, personalization becomes problematic when the incentives of the consumer and the firm are not aligned (Calo, 2013).

Moreover, consumers have concerns regarding different persuasive techniques that marketers use to promote their products/services. These persuasive techniques used by marketers to convince consumers to buy are based on cognitive biases such as Scarcity (Pavlidou, et al., 2021), Authority or Consensus biases. The presence of unyielding cognitive biases makes individual decision-makers susceptible to manipulation by those able to influence the context in which decisions are made (Hanson & Kysar, 1999). As (Calo, 2013) states, consumers differ in their susceptibility to various forms of persuasion. Some consumers, for instance, respond to consensus bias that causes people to see their own behavioral choices and judgments as relatively common and appropriate to existing circumstance, while viewing alternative responses as uncommon, deviant (Ross, 1976). Others bristle at following the herd but instead find themselves reacting to scarcity or another frame. But in any case, these cognitive biases affect us all with uncanny consistency and unflappable persistence (Hanson & Kysar, 1999).

In a social exchange relationship, both parties must feel they are being respected by the other in order for future social contracting to take place (Wasioleski & Gal-Or, 2008). Creating fairer approaches to marketing and being perceived as fair is necessary for developing good customer relationships and increased loyalty (Nguyen, 2016). That means representing products in a clear way in advertising and to reject manipulations and sales tactics that harm customer trust (Sheth & Naresh, 2010). However, since marketing practices continue to use different sales tactics or cognitive biases many questions come up about how fair these campaigns and practices are. For instance, by creating a temporary product scarcity – either unintentionally or deliberately – a product provider can increase overall demand and stimulate customer enthusiasm over a specific period, leading to improved overall market performance (Shi, Li, & Chumnumpan, 2020).

However, based on research on user perceptions (Pavlidou, et al., 2021) people believe that it is not fair to use scarcity to convince them to purchase the product and people who feel that marketers intentionally created scarcity seem to do not trust the online ads with offers messages. Moreover, people who believe that marketers create misleading scarcity seem to do not trust the online ads with offers or scarcity effect. Many times, to attract the consumer's attention, marketers may resort to use different types of scarcity that could be not fair to their customers, especially, when it concerns online advertising since technology has no inherent morality and the way in which it is utilized is what really matters (Bergman, 1997). Moreover, the consumer of the future will be increasingly mediated, and the firm (marketers) of the future increasingly empowered to capitalize on that mediation in ways that are both fair and suspect (Calo, 2013). Unfortunately, there is to date little literature on these issues, especially on digital marketers' perceptions of fairness in digital marketing processes. Therefore, the purpose of this research is to fill this gap, enriching the literature regarding marketers' views on the ethics of digital marketing practices.

2.2 Ethical Concerns in AI and DM

As (Giovanola and Tiribelli, 2022a) argue, fairness as an ethical value is articulated in a distributive and socio-relational dimension. It comprises three main components. *Fair equality of opportunity* holds that all individuals should own the same amount of

material resources (Ali, 2022) or information. *Equal right to justification* calls for non-discrimination against individuals and social groups. Finally, *fair equality of relationship* means that there is a mutual respect of each person's interests and desires (Giovannola & Tiribelli, 2022a).

In the Fair Machine Learning literature, the goal is to develop models that are built to make unbiased decisions (e.g., classifications) or predictions (Wing, 2018). According to (Binns, 2018), fairness as used in the fair machine learning community is best understood as a placeholder term for a variety of normative egalitarian considerations that all come back to the concept of equal treatment of all in society. In any case, the development of methods to define, measure and ensure fairness in predictive models is an active area of research, and represents a promising direction for more ethical automated decision making (Tubella, 2022).

In the marketing literature, fairness may be considered as an important element to Ethical Marketing. Specifically, Ethical Marketing is the application of ethics into the marketing process where marketing practices emphasize transparent, trustworthy, and responsible personal and/or organizational marketing policies and actions that exhibit integrity as well as fairness to consumers and other stakeholders (Murphy, Laczniak, & Harris, 2016). According to the research of (Shin & Park, 2019), in which the authors investigated how trust is related to fairness, transparency, and accountability in algorithm-based services people unanimously agreed that fairness is critical factor in algorithms. In this study (Shin & Park, 2019) utilized a triangulated mixed method design and showed that while personalized results have great benefits to certain users, other users may find the results unfair, depending on what characteristics are perceived in personalized experiences.

Hence, fairness is an ethical principle that speaks to how we treat one another in our social and economic interactions (Yeolman & Mueller Santow, 2016). As one of the core values of ethical marketing, it is important in building relationships and enhancing consumer confidence in the integrity of marketing (Murphy, Laczniak, & Harris, 2016). Specifically, fairness in Digital Social Marketing should be associated with morality, impartiality and uprightness (Nguyen, Steve Chen, Sharon Wu, & Melewar, 2015). Moreover, fairness, privacy, autonomous choices may be important rights or entitlements of individual consumers/citizens, but they are also the quintessential building blocks of a free digital society (Helberger, 2016).

It is well accepted that marketing practices should aim to be fair and ethical; therefore, digital marketers should focus not only on their benefits, but also how they benefit consumers or other stakeholders and, hence, the society as a whole. Unfortunately, there are few such guidelines for digital marketers. Towards this effort, we need to understand how today's digital marketers perceive fairness issues in their digital marketing practices, and what are their ethical principles or moral approaches.

2.3 Digital Marketing Practices and Concerns of Marketers

For some marketers, it is natural to operate ethically according to their personal principles. But for others, the principals of ethics such as honesty, integrity, loyalty, and fairness are not so important as compared to profit. According to (Murphy, Laczniak, & Harris, 2016), unethical marketers abuse and exploit their customers by regularly extracting

valuable personal information from their clients and not protecting the data files adequately or by selling it. Most of the information gathered by online marketers ends up in the hands of data aggregators, who create enhanced consumer profiles available for additional re-sale (Murphy, Laczniak, & Harris, 2016).

In general terms, the marketers use digital marketing practices, such as search engine marketing (SEM), content marketing, influencer marketing, content automation, e-commerce marketing, campaign marketing, and social media marketing, social media optimization, e-mail direct marketing, etc. that have in common the using of micro-targeting or detailed targeted advertising and persuasive techniques (Bala et al., 2018). Targeted advertising is the practice of monitoring people's online behavior and using the collected information to show people individually targeted advertisements (Herder & Dirks, 2022). These two techniques based on findings of previous research have fairness issues such as privacy, distrust, misleading, and manipulation (Pavlidou, et al., 2021). Specifically, the microtargeting technique or detailed targeted advertising can serve as an effective way to deliver relevant information to citizens. But it can also be used as a persuasive tool and impact people's intentions (Zarouali & Dobber, 2020). Influencer Marketing or Digital influencer marketing practices have the fake follower problem since machine learning algorithms cannot detect all the fake accounts, and where influencers try to boost their own follower counts via unethical means like buying fake followers (Anand, et al., 2022). In general, Influencer Marketing considered as dispersed, nonlinear, and sometimes ephemeral advertising formats (Asquith Fraser, 2020) where digital influencers do not adequately disclose whether their review or endorsement has been paid for or if they have a financial relationship with an advertiser. This creates a lack of transparency and ability for the consumer to recognise content that is in fact paid for. As (Einstein, 2016) characteristically says in his book, "a world where there is no real content: everything we experience is some form of sales pitch".

Moreover, according to (Hanson & Kysar, 1999) there is a serious problem of 'market manipulation' defined as the utilization of cognitive biases to influence peoples' perceptions. Cognitive biases such as scarcity, Consensus or Authority biases - social influence (e.g., 'social proof'—informing users of others' behaviour—and shopping with others) (Browne & Swarbrick, 2017). These cognitive biases might harm consumers' trust, decrease loyalty and sense of fairness. Based on the research of (Mathur, et al., 2019), 'Scarcity' refers to the category of dark patterns that signal the limited availability or high demand of a product, thus increasing its perceived value and desirability. Digital market manipulation recognizes that vulnerability is contextual and a matter of degree and specifically aims to render all consumers as vulnerable as possible at the time of purchase (Calo, 2013). While the Digital Marketing is crucial to every business there are concerns regarding consumer's privacy, unethical marketing practices, and manipulation.

2.4 Current Work

All these issues could be avoided if marketers use ethical marketing practices.

If they would recognize that they have a natural duty to treat others fairly (G. Graaf, 2006). Ethical marketing practices (product-, pricing-, place-, and promotion-related ethics) affect brand loyalty through the mediators of the consumer-brand relationship and perceived product quality (Lee & Jin, 2019) and most marketing decisions have

ethical ramifications whether business executives realize it or not (Lacznia & Murphy, 1991). Considering previous business ethics research, consumers continue to demand more high-quality products, and they display a preference for brands that are socially reputable even at higher prices when evaluating similar products. However, it is not that simple since there is a very fine line between informing, nudging and outright manipulation (Zarouali & Dobber, 2020).

To this end, it is important to study not only consumer perceptions that help a better understanding of what motivates consumers to engage with brands/companies (Pavlidou et al., 2021), but also those of marketers to provide insight into digital marketing stakeholders' perceptions regarding fairness in Algorithmic Digital Marketing, and moreover, to enrich the literature regarding digital marketers' perceptions on DM practices and ethical issues such as fairness.

Specifically, the current research questions are:

RQ1. How do marketers perceive the impact of algorithmic digital marketing?

RQ2. How are marketers making fair/ethical decisions in marketing practices? Specifically, what factors do they consider or assess regarding their particular marketing practices?

Table 1. Demographic characteristics of participants.

Gender	Percent
Male	75
Female	25
Occupation	Percent
Digital Marketing Employee	56
Agency Owners	25
Freelance Marketers	19
Age	Percent
30 plus	75
24–29	25

3 Design/Methodology/Approach

To explore the above research questions, a grounded theory approach was considered as appropriate, and it was used in the data analysis, facilitated by the NVivo software. According to (Charmaz, 2006) grounded theory methods consist of systematic, yet flexible guidelines for collecting and analyzing qualitative data, with the goal of constructing theories 'grounded' in the data themselves. Our research approach involved the conduct of in-depth interviews. Thus, we recruited marketing specialists by means of our personal and business network from different business sectors in Cyprus with an average of

10 years' work experience. Sixteen semi-structured interviews were carried out (Fig. 1). The interviews, which had an average duration of 1 h, were recorded and transcribed.

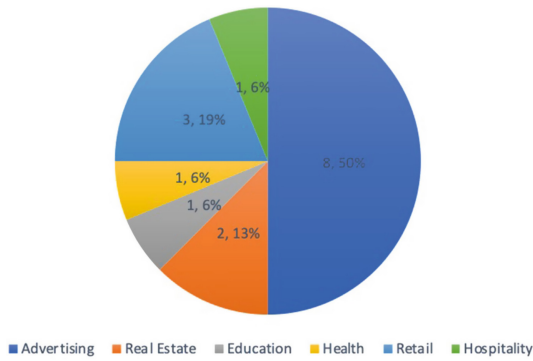


Fig. 1. Industry in which participants work.

Cyprus, a growing international hub due to its strategic location, was chosen as a case study. Many individuals and companies are attracted to Cyprus given its competitive income tax rate and personal tax incentives. Cyprus represents a constantly growing tech hub within the European Union with 64 percent of core innovation service enterprises (Eurostat, 2022) It is center of many international IT companies that use Cyprus as a hub for software development and digital marketing, such as Microsoft, Oracle, SAP, IBM and lately, global companies such as NCR, Kardex, and Wargaming, to name a few. Since we live in digital era where rapidly accelerating e-commerce transactions is our everyday reality, it is important to explore the perceptions of marketing practitioners regarding fairness in algorithmic digital marketing.

Initially, an interview guide was prepared, as a key part of the semi-structure interview protocol. Its goal was to ensure each interview covered, with the participants, topics related to fairness in algorithmic digital marketing. After piloting, the final set of questions was developed (Table 2). The aim of these unstructured questions was to allow the interviewees to guide the conversation and discuss topics important to them, at the same time scoping the discussion in line with the purpose of the current research. During the online interview registration, the participants (Table 1) were asked at first to provide their informed consent to participate in the study, answer demographic questions, and then to select their preferable date and time for the interview. A follow-up phone call was made to ensure that a link for the online interview was received by the participants and that all details, such as the permission to voice record, using of camera, interview duration, etc. were clarified.

Table 2. Open-ended questions used in the semi-structured interviews.

How would you describe today's consumer?
How would you describe today's marketer?
Do consumers want relationships with brands?
Do you follow steps in marketing campaigns?
Who decides in your company what is wrong or right in a marketing campaign or advertisement?
What marketing strategies do you use usually? (e.g., social networks, paid media advertising, email marketing, influencers) Do you use persuasive techniques?
Do you believe that scarcity effect (e.g., limited product/time/quantity) is always fair to be used?
Do you use data collection techniques?
Do you use microtargeting?
Do you like how the Facebook algorithm works?
How do you create target audience?
How would you order hierarchically (*the best interest of your client, the best interest of a consumer or *the best interest of the company you work for)

4 Data Analysis

Each participant transcript was read, and open coding was begun upon a second reading. The first stage of the grounded theory approach involved coding as many categories as possible from the data. Next, a codebook was created, which included a comprehensive list of all codes, properties of each code, and emic phrases. A node is a collection of references about a specific theme, place, person, or other area of interest (Bazeley, 2007). The next step, axial coding (integration and dimensionalization), was used to make connections by comprehensively examining codes to identify relationships among the open codes (Lindlof and Taylor, 2002). In other words, thematic analysis was applied by using an inductive approach to describe the different perceptions regarding fair/ethical decisions in marketing practices. The final step involved selective coding, which began with the identification of a core variable that encompasses the data. After the core variable was identified (i.e., marketer perceptions on fair-ethical decisions in marketing practices), selective coding was used by rereading the transcripts and selectively coding any data that pertained to the core variable.

The main themes identified in the data were visualized by using the feature of NVivo Explore Diagram. This feature was used to get sense of the important items connected to main findings such as: the perceptions of DM impact (Sect. 4.1), Digital Marketing usual online strategies (Sect. 4.2) and moral approaches to DM practices (Sect. 4.3).

4.1 The Perceptions of DM Impact

In the data concerning the first theme, participants explained the role of IT in Digital Marketing, and specifically, the transition from traditional marketing to digital. They also commented on its impact on people's lives, particularly in the tourism sector, since it is a vital economic sector of Cyprus, business and related issues e.g., brands awareness, consumers behaviour and communication. Moreover, the new forms of marketing such as a sensory marketing and collaborative marketing were mentioned. Digital Marketing usual online strategies were named and briefly explained. Nonetheless, topics such as Cognitive Marketing through its tools (microtargeting, data-driven algorithms, persuasive technique (scarcity), influencer marketing) along the fairness issues were emphasized and explained in detail (Fig. 2).

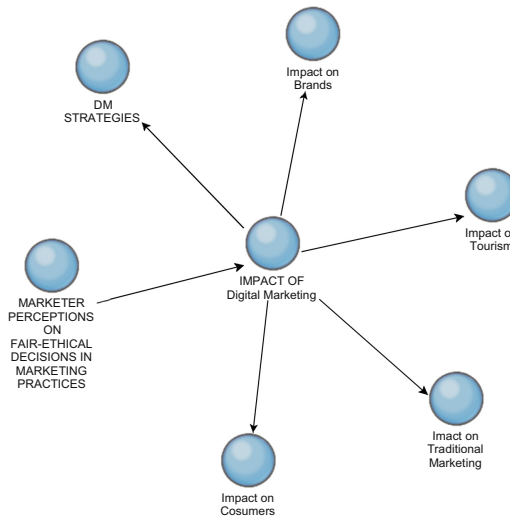


Fig. 2. Impact of Digital Marketing.

Impact on Traditional Marketing. The transition from traditional to digital/electronic marketing is not easy. As marketing becomes more online and ever more automated IT comes to play a major role in digital marketing. So, today's marketers must be 'multifunctional' (i.e., multi-skilled) and need to have technical background since all digital marketing activities are based on collected data. All interviewees noted that traditional marketing is 'a dead end' and marketers have to upgrade their technological knowledge to be able to move on to digital. Several participants pointed out that digital marketers analyze numbers and not people's moods as traditional marketers used to do. But, perhaps the biggest impact comes from the fact that "the traditional marketer had to come forward while a digital one may not even be recognizable because they are behind a computer and sells a service and so it is much safer. A digital marketer can play the smart one once the results are not so visible and customers may have some technological

barrier to understand. So, they can easily cheat”, as described by participant (P1). Traditional or digital marketers’ mindset is focused on the consumer, and the aim is to sell and grow the business by keeping customers satisfied and happy. But an app/web developer involved in digital marketing practices is focused around the impersonal end-user and have different mindset, “more mathematical or algorithmic logic, they do not talk about ethics or anything related to morality in their practices,” as participant (P8) said.

Impact on Tourism. It is generally accepted that IT helped Tourism to improve services, enhance efficiency, and reduce costs. Data-driven insights probably help managers to have greater confidence in their decisions or to have more accurate predictions. However, according to participants the customer loyalty, which was a big and very important part for the tourism sector in Cyprus has disappeared since repeaters (travellers who prefer to return to familiar travel destinations) are not exist anymore. As participant (P16) said: “We have destroyed an important part of ourselves...of our country. There is no tourism without a tour operator, today traveller must do everything by himself, and slick persons often take advantage of it and there is nobody to complain... Nowhere. Is this the “evolution” of hotel marketing that we need?”. Moreover, there is an ‘illusion of control’ created by changing the business model from B2B to B2C of hotel services. Hotel owners think that by this way they can increase revenue and they will control the market game themselves. P16 noted: “The big tour operators control us; the big booking providers control us. This is where the end of traditional tourism begins. Instead of tour operators, booking providers have the control.”

Impact on Brands. Today, IT is considered as the backbone of many businesses since consumers have moved dramatically toward online channels, and companies/brands have responded in turn. Thus, they had to invest a lot of money by employing digital marketers or by paying for digital marketing services. Unfortunately, no one was prepared for this challenge. According to participants. There is a lack of technological knowledge such as data management, and experience in entrepreneurs as well as in digital marketers. Many of new digital marketers are not qualified therefore they offer superficial and unprofessional services to brands. As a participant (P2) characteristically said: “In the land of the blind, the one-eyed man is king. This is the impression I have.” Therefore, both external and internal communication of company have many issues (i.e. conflicts, unclear directions, misunderstandings etc.). Moreover, those digital marketers who work with commission don’t have a moral sense, “money talks... That’s all I got to say”, said P2. Therefore, the issue of brand trust is one that comes up today. It seems that nowadays the product name overcomes the brand name.

Impact on the Consumer. All participants believe that although IT empowers consumers, and algorithms are able to make recommendations, at the same time, it reshapes and makes it harder for consumers to determine their course. There is an abundance of choices, thus today’s consumer has become confused, demanding, and with little brand loyalty. “To fill this gap marketers constantly need to provide information about products and adapt more to the consumer’s needs and marketers’ work became harder”, stated participant (P11). Lately, the consumer’s behaviour changed, he or she is more vulnerable, worried, much more sensitive and reacts immediately to any changes in the environment

(e.g., TV news, government announcements, etc.). Also, by shopping online, consumers became suspicious, careful, and sceptical, demanding to see value for money. “Especially millennium consumers are very difficult to predict”, said P10. Regarding the new tendency on plain and minimal websites and e-shops design, two participants explained “today’s consumer gets tired of graphics and ads” (P12). “Consumers are not smart, so to convert them into buyers we need to simplify everything” (P2). Moreover, some participants believe that the motto ‘the customer is always right’ does not apply online. The company’s policy and new regulations have priority today. Participants acknowledged that lately there is an issue with a customer loyalty. However, DM Agency owners are not concerned much about it comparing to digital marketing employees or marketing consultants. They believe that the successful data-driven campaign results are more important.

4.2 Digital Marketing Usual Online Strategies

As mentioned, marketers use different digital marketing practices that have in common the use of microtargeting and persuasive techniques or cognitive marketing. Their perceptions on these issues are explored below.

Perceptions of Data Driven Algorithms in Market Research. Marketers greatly benefit from using AI in market research since it lets them exploit their data for effective business decisions. All participants agreed that it is great to have immediate insights and build a marketing strategy quicker by using data from Meta, Google analysis, Google data studio etc.). Although the benefits of algorithms and the way how they work are known and familiar to marketers, many participants expressed their concerns about the tracking, censorship, opaqueness (results numbers), its complexity and vagueness, and its constantly changes. As participant (P12) said: “FB algorithm sometimes scares me a bit both as a consumer (more) and as a marketer. On the one hand, it is useful for easy targeting. On the other hand, it is scary since it monitors every movement of mine.” It is known that data driven algorithms help marketers to improve the relevance of their audience by demographics and previous behaviour to make tailor-made offers and deliver them, often in real time. However, marketers mentioned that for better performance of their ads they need to engage and interact constantly as profile accounts as well. Participant (P7) said: “I feel that it is unfair that we need to do non-stop feeding of algorithms by payments and engagements, just to make our posts to be seen”. The social networks algorithms prioritize which content a user sees in their feed based on relevancy and there is phenomenon that most of users do not have the ads’ function turned off so they get too many ads and can not control them. Participant (P16) suggests: “It would be more ethical and fairer to pay a small fee in using social media platforms than to continue to live in madness of advertisements while all these platforms gain billions”. It is known that algorithm outputs are opaque probably because of technical and social reasons. Many of participants mentioned that unfortunately, social media platforms (for example FB) give only few variables and instructions nothing more, “it is just a black box”, they said. Participant (P13): “It does not bother me as long as I know that it is none of marketers knows how it works” (Fig. 3).

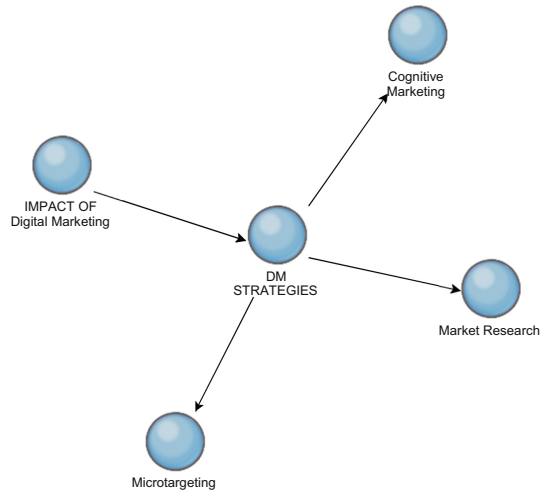


Fig. 3. Perceptions of DM online strategies.

Perceptions of Microtargeting. Concern about lack of transparency on algorithmic microtargeting (e.g., paid ads analysis), arose as well, as several participants mentioned that they worried about the lack of understanding of how an algorithm works and hence, they worry about results validity. And, since there is nothing can be done in this direction from their side, they have no choice, but to trust the systems. All of participants believe that microtargeting is essential marketing strategy used for target ads at lower cost by several audience exclusions. They say that they would prefer to go broadly and do not exclude audience by preferences in their marketing campaigns, but the cost would be too high. Participant (P16) said: “Marketing Science says ‘yes’ to microtargeting, but ethics say ‘no’”. All of participants mentioned that microtargeting has to be combined with any of persuasive techniques (e.g. scarcity) for better results, but as they stated it cannot be used in all products since it can become dangerous. “It is excellent tool to promote coffee but not to be used in political arena, there it will be unethical”, Participant (P8), “that is why FB does not allow political advertising and use a content filtering for it (Fig. 4).”

Perceptions of Cognitive Marketing. For marketers the term ‘Cognitive Marketing’ generally means making people think positively about the brands they promote; thus, they try to create meaningful, and at the same time effective, ads by using cognitive biases such as Authority bias or Scarcity bias. Authority bias used in influencer marketing, where someone who people trust, influences people’s purchasing decisions. Most of the participants believe that Influencer marketing it is just a temporary trend, and that influencer industry now is over-saturated and more competitive. Some of the participants believe that this kind of marketing is not suitable for expensive products and as a tool is not effective in all countries because of different culture in each location. However, all of the participants believe that there is always a risk to lose the customer’s trust because influencers tend to promote similar products of different brands at the same time, therefore choosing the right influencer for the campaign is a difficult and time-consuming task. Moreover, some of the participants believe that an influencer could be a danger

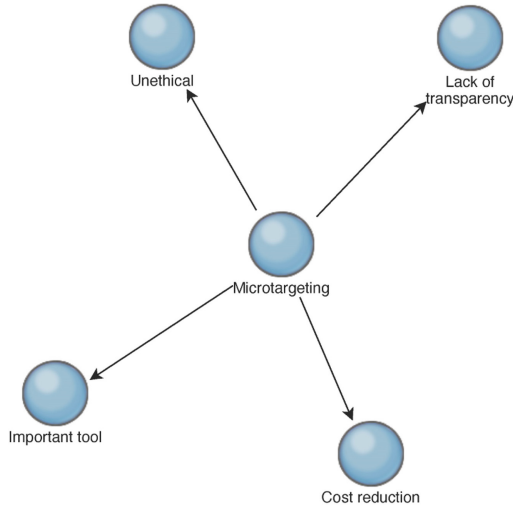


Fig. 4. Perceptions of microtargeting.

in case they do not follow the provided instructions and guidelines. All participants mentioned that people today look for authenticity and quality of product/service to be convinced.

Regarding scarcity bias several participants believe that it is unfair to use scarcity effect in online marketing practices constantly because it makes people psychologically stressed. On the other hand, “people need a push to move forward, so scarcity effect should be used rationally and with conscience while a non-aggressive ad can be used all year round”, stated participant (P9). Participant (P1) said: “The scarcity is fair when it falls into the context of marketing...it is an essential part of usual marketing practices”. However, Participant (P8) pointed out that sometimes scarcity used, in a total unethical way, e.g., ‘Happy Hour’ event in different video games where marketers attract customers by offering them something extra at certain times of the day or at the middle of night by keeping young people and kids awake.

On the one hand, participants acknowledged that scarcity an absolute ‘must’ especially if there is a need for immediate sale (for example during the sales period or obsolete inventory), moreover ad with scarcity performs much better than a plain one. On the other hand, Participant (P8) explained: “Scarcity helps with sales but not with communication with customers and it does not help to build a brand trust. People don’t embrace this technique because if they use the offer ones, they will always expect discounts afterwards”. All interviewees mentioned that scarcity is good to be used in online marketing practices only in case of low-cost products, products in stock for immediate selling since it may have negatively impacts on the brand image.

4.3 Moral Approaches to DM Practices

It is known that ethical actions are those that bring out the best in ourselves and others, and by this way benefit all members of the society. And since societies are those

that determine what is right and acceptable, ethical/moral actions could be considered as actions that follow societal values. So, in this part of data, participants explained their moral approaches and values regarding information technology in digital marketing practices in the society. Specifically, the ethical principles such as honesty, caring, professionalism, policy following etc. Moreover, the participants explain how they realize what is the best interest of the customer, client and employer. Although to trust technology people need to feel confident that their activities online are safe, secure, and the technology is not opaque or complex in its implementation, participants mentioned that they trust technology, and specifically algorithmic content filtering system for its accuracy (Fig. 5).

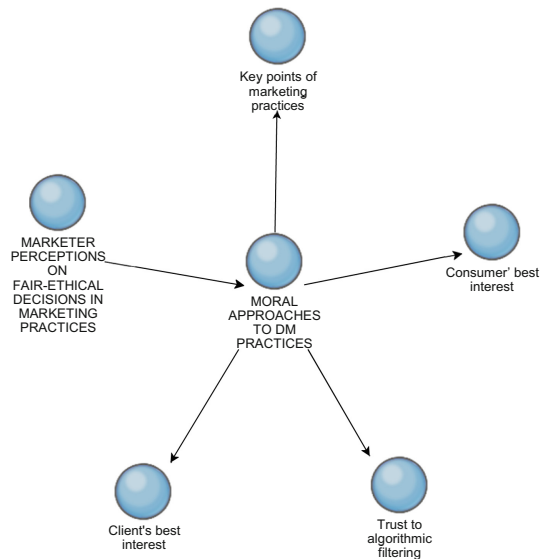


Fig. 5. Moral approaches to DM practices.

Consumers' Best Interests. In digital marketing, marketers play the role of mediators between their clients and consumers, and in ethical marketing, marketers try to achieve the well-being of everyone involved. However, it was observed that the participants as digital marketers do not act in the best interests of the consumer. They mostly focus on insight analysis that help them to create a data-driven marketing strategy quickly. In other words, they do not see consumers as persons, so they don't matter to them. However, they pay close attention to general consumers' satisfaction level by analyzing consumers' feedback and reviews through machine learning tools such as sentiment analysis.

Client's Best Interests. All the participants said that acting in the best interests of the client is important. Effective communication by having win-win relationship is also important. According to the participants a satisfied client will always bring another client.

Key Points of Marketing Practices. Most of the participants mentioned that during the online marketing practices they usually do not refer to the specific policy or ethical code but they follow their own personal ethical principles and they consider general factors such as (Fig. 6):

- Being environmentally conscious (by ensuring sustainable development and meet environmental standards).
- Being ethical in a personal sense but the ethical/moral responsibility should weigh on brand or marketing department managers.
- Using persuasive techniques such as scarcity or authority in moderation.
- Being honest with consumers or customers.
- Using non-deceptive practices by avoiding false and/or misleading information or by putting terms and conditions in case.
- Having personal contact with consumers.
- Following policy only in specific cases such as pharmaceutical products or tobacco.
- Professionalism by finding a way to be productive and at the same time effective in communication. As one participant said “We take care of two kinds of customers: the customer and his clients”.
- Managing reputation by monitoring consumers’ reviews. All the participants believe that reviews are a good tool for quality measure so the specific machine learning tools employed by many companies.
- Idea validation by getting second opinions and doing online experiments to see what does / does not work.
- Trustworthiness by keeping promises to clients and “treat the clients with kid gloves” (P1).

Trust in Algorithmic Filtering. All the participants mentioned that they have partial trust in algorithmic filtering systems of different platforms and they believe that algorithms work well. As one of participant mentioned: “We let the the platform to control and decide about the ad content ethically, for example when it detects alcohol, it makes an error to put the age over 21 to run”. However, marketers feel that they have no control on algorithms “we are actually in the hands of the algorithm”. On the one hand marketers see algorithms as “insurance valve” and “the only tool that can handle all these countless online transactions”. On the other hand, the censorship and lack of transparency worry them.

5 Discussion

Machine learning, algorithms, and AI have impacted many applications relying on all sorts of data, and these applications are used as communication tools in Digital Marketing to increase personalization, create content, improve automation, analyze data sets, utilize chatbots etc. Thus, the question arises as to what happens to the relationship of trust between marketer and consumer. The traditional marketing approach was more personal; typically, marketers were reaching out not globally, but to local consumers

and it was easy to have person-to-person relationships. The transition to digital marketing had undoubtedly increased the distance between the marketer and consumer, since the relationship between them nowadays is based on online impersonal communication. Taken together, the results of the current study indicate that there is a kind of negative impact of Digital Marketing on Tourism, on Brand Trust, and on Consumer Loyalty.



Fig. 6. Key Points of marketing practices

One of the reasons of this negative impact is related to the fact that consumers believe that not all marketers behave fair and ethically (Pavlidou, et al., 2021).

In summary, the results show that digital marketers seem to be largely indifferent to the issues of algorithmic fairness such as privacy, tracking, manipulations (persuasive techniques by using cognitive biases). They care mostly about the real time results, highest possible number of views and sales even if the results seem to them complex and vague. Therefore, any digital marketing technique e.g., Microtargeting or Cognitive biases – Influencers, Scarcity, Authority etc. marketers going to apply is considered from the profit side, but not from the ethical one. In other words, digital marketers seem to not act in the best interests of the consumer since they do not refer to any specific policy or ethical code, and just follow their own personal ethical principles along the trust in algorithmic filtering.

Like any empirical study, there are a number of limitations associated with our research. First, the sample is small, as we recruited individuals with significant experience in the industry. Secondly, we used a case study approach, with participants all being based in Cyprus. It is obvious in their responses that the region has particular characteristics, e.g., emphasis on the tourism sector. Nonetheless, it provided an opportunity to examine the impact of digital marketing on more traditional practices, and how the marketers themselves view this.

6 Conclusion

This study examined marketers' perceptions about fairness issues in algorithmic digital marketing. The analysis revealed a number of concerns regarding Digital Marketing impacts on the traditional way of marketing and moral approaches to Digital Marketing practices. Lack of transparency on algorithmic microtargeting also raised concerns, as all interviewees noted the issue with its complexity and vagueness. Factors contributing to the overall lack of algorithmic transparency include the cognitive impossibility for humans to interpret massive algorithmic models and datasets and a lack of appropriate tools to visualise and track large volumes of code and data (Tsamados, 2021).

It is known that the way to make social change is to recognize that algorithmic digital marketing must consider the requirements and preferences of all stakeholders (marketers and consumers) at the same time. However, it was observed that participants (marketers), by using microtargeting strategy, target customers (based on profession, region, income, age, gender, etc.) without regards to the interests of prospective customers. Good business ethics are important for companies, and can even lead to them achieving higher sales. Despite this, most of our participants seem to be unfamiliar with terms like fairness, ethical judgement, or ethical responsibility. They primarily aim to avoid trickiness and dishonesty due to the fear of negative self-image or bad reputation in their own community, and just let the filtering systems of different platforms to decide what is ethical or not in their marketing practices.

Although all of the participants indicated that persuasive practices of cognitive marketing such as scarcity or authority bias should not be false or misleading, they did not report taking any responsibility as marketers for the ads content, target audience or persuasive practices used in Digital Marketing. The aim of this work is to emphasize the importance of marketers' ethical decisions, their impacts on our everyday life, and to prevent uncertainty about responsibility. Having in mind that the future of personalization is where advertisers will develop ever more powerful and reality-bending ways to make sure their products are seen (Pariser, 2011) governments have a powerful regulatory role to play. There is a need for a broader discussion on what *fair marketing practices* are in the context of microtargeting, and more generally, the use of algorithms in cognitive marketing (persuasive practices). Furthermore, frameworks are needed to guide design choices, to regulate the reaches of algorithmic systems, and to ensure proper data stewardship (Dignum, 2018). As demonstrated by the findings of our study, it seems unlikely that digital marketers will actively pursue means to enforce ethical and fair algorithmic digital marketing themselves, thus, frameworks/guidelines and regulation will need to be made easy to understand and apply and/or enforce.

References

- Aler Tubella, A., Barsotti, F., Kocer, R.G., et al.: Ethical implications of fairness interventions: what might be hidden behind engineering choices? *Ethics Inf. Technol.* **24**, 12 (2022). <https://doi.org/10.1007/s10676-022-09636-z>
- Ali, N.: Fair equality of opportunity and the place for individual merit in a liberal democratic society. *Braz. Polit. Sci. Rev.* **16**(1), e0003 (2022). <https://doi.org/10.1590/1981-382120220010002>

- Anand, A., Dutta, S., Mukherjee, P.: Influencer Marketing with Fake Followers (March 16, 2022). IIM Bangalore Research Paper No. 580. SSRN: <https://ssrn.com/abstract=3306088> or <https://doi.org/10.2139/ssrn.3306088>
- Nadler, A., McGuigan, L.: An impulse to exploit: the behavioral turn in data-driven marketing. *Crit. Stud. Media Commun.* **35**(2), 151–165 (2018). <https://doi.org/10.1080/15295036.2017.1387279>
- Anggadwita, G., Martini, E. (Eds.): Digital economy for customer benefit and business fairness. In: Proceedings of the International Conference on Sustainable Collaboration in Business, Information and Innovation (SCBTII 2019), Bandung, Indonesia, 9–10 October 2019 (1st ed.). Routledge (2020)
- Asquith, K., Fraser, E.M.: A critical analysis of attempts to regulate native advertising and influencer marketing. *Int. J. Commun.* **14**, 5729–5749 (2020)
- Bazeley, P.: *Qualitative Data Analysis with NVivo*. Sage Publications, London (2007)
- Bala, Madhu and Verma, Deepak, A Critical Review of Digital Marketing (October 1, 2018). M. Bala, D. Verma (2018). A Critical Review of Digital Marketing. *International Journal of Management, IT & Engineering*, 8(10), 321–339., Available at SSRN: <https://ssrn.com/abstract=3545505>
- Bergman, A.: *Ethique et gestion*. In: *Encyclopédie de Gestion, Economica Paris* (1997)
- Birner, N., Hod, S., Kettemann, M.C., Pirang, A., Stock, F. (Eds.): Increasing fairness in targeted advertising [The Ethics of Digitalisation Clinics Report, 1]. Alexander von Humboldt Institute for Internet and Society (2021). <https://graphite.page/fair-targeted-ads>
- Calo, R.: Digital market manipulation. *SSRN Electron. J.* **82**(4) (2013)
- Charmaz, K.: *Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis*, 2 edn. Sage, Thousand Oaks, CA, Taylor Francis, 2016 (2006). ISBN 1317235657, 9781317235651
- Dwork, C., Hardt, M., Pitassi, T., Reingold, O., Zemel, R.: Fairness through awareness. In: Proceedings of the 3rd Innovations in Theoretical Computer Science Conference - ITCS 2012 (2012). <https://doi.org/10.1145/2090236.2090255>
- Einstein, M.: *Black ops advertising: Native ads, content marketing, and the covert world of the digital sell*, p. 8. OR Books, New York, NY (2016)
- Giovanola, B., Tiribelli, S.: Weapons of moral construction? On the value of fairness in algorithmic decision-making. *Ethics Inf. Technol.* **24**(1), 1–13 (2022a). <https://doi.org/10.1007/s10676-022-09622-5>
- Glaser, B., Strauss, A.: *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Aldine, Chicago (1967)
- Graaf, G.: The autonomy of the contracting partners: an argument for heuristic contractarian business ethics. *J. Bus. Ethics*, **68**, 347–361 (2006)
- Infocredit Group. (2022). *Cyprus Business Landscape Overview 2016–2021: A Statistical Analysis Report*
- Hanson, J.D., Kysar, D.A.: *Taking Behavioralism Seriously: The Problem of Market Manipulation*. Harvard Law School (1999)
- Herder, E., Dirks, S.: User attitudes towards commercial versus political microtargeting. In: Adjunct Proceedings of the 30th ACM Conference on User Modeling, Adaptation and Personalization, pp. 266–273, July 2022
- Helberger, N.: Profiling and targeting consumers in the Internet of Things—A new challenge for consumer law (2016). SSRN 2728717
- Lee, J.Y., Jin, C.H.: The role of ethical marketing issues in consumer-brand relationship. *Sustainability MDPI* **11**(23), 1–21 (2019)
- Korolova, A.: Privacy violations using microtargeted ads: a case study. *J. Priv. Confid.* **3**(1) (2011). <https://doi.org/10.29012/jpc.v3i1.594>

- Laczniak, G.R., Murphy, P.E.: Fostering ethical marketing decisions. *J. Bus. Ethics* **10**, 259–271 (1991). <https://doi.org/10.1007/BF00382965>
- Lee, J.-Y., Jin, C.-H.: The role of ethical marketing issues in consumer-brand relationship. *Sustainability* **11**, 6536 (2019). <https://doi.org/10.3390/su1123653>
- Mathur, A., Acar, G., Friedman, M.J., Lucherini, E., Mayer, J., Chetty, M., Narayanan, A.: Dark patterns at scale: findings from a crawl of 11 K shopping websites. *Proc. ACM on Hum. Comput. Interact.* **3**(CSCW), 1–32 (2019)
- Murphy, P.E., Laczniak, G.R., Harris, F.: Ethics in Marketing: International cases and perspectives. Nguyen, B., Steve Chen, C.-H., Sharon Wu, M.-S., Melewar, T.C.: Ethical marketing. *Ethical Soc. Mark. Asia* 55–79 (2015)
- Proceedings of the 2022 AAAI/ACM Conference on AI, Ethics, and Society. Association for Computing Machinery, New York, NY, USA
- Perrault, R., et al.: “The AI Index 2019 Annual Report”, AI Index Steering Committee, Human-Centered AI Institute, Stanford University, Stanford, CA, December 2019. (c) 2019 by Stanford University, “The AI Index 2019 Annual Report” is made available under a Creative Commons Attribution- NoDerivatives 4.0 License (International). <https://creativecommons.org/licenses/by-nd/4.0/legalcode>
- Riefa, C., Clausen, L.: Towards Fairness in Digital Influencers’ Marketing Practices. *J. Eur. Consum. Mark. Law (EuCML)*(April 12, 2019). 8 (2019). SSRN: <https://ssrn.com/abstract=3364251>
- Ross, L., Greene, D., House, P.: The false consensus effect: an egocentric bias in social perception and attribution processes. *J. Exp. Soc. Psychol.* **13**(3), 279–301 (1977). [https://doi.org/10.1016/0022-1031\(77\)90049-X](https://doi.org/10.1016/0022-1031(77)90049-X)
- Sheth, Jagdish; Malhotra, Naresh (2010). Wiley International Encyclopedia of Marketing — Ethical Marketing and Marketing Strategy
- Shi, X., Li, F., Chumnumpan, P.: The use of product scarcity in marketing. *Eur. J. Mark.* **54**(2), 380–418 (2020)
- Strauss, A., Corbin, J.: *Basics of Qualitative Research: Grounded Theory Procedures and Techniques*. Sage Publications, Beverly Hills, CA (1990)
- The AI Index 2022 Annual Report by Stanford University is licensed under Attribution- NoDerivatives 4.0 International. To view a copy of this license. <http://creativecommons.org/licenses/by-nd/4.0/>
- Tsamados, A., Aggarwal, N., Cows, J., et al.: The ethics of algorithms: key problems and solutions. *AI Soc.* **37**, 215–230 (2022). <https://doi.org/10.1007/s00146-02101154-8>
- Tudoran, A.A.: Why do internet consumers block ads? New evidence from consumer opinion mining and sentiment analysis. *Internet Res.* **29**(1), 144–166 (2019). <https://doi.org/10.1108/IntR-06-2017-0221>
- Will Browne and Mike Swarbrick Jones. (2017). What works in e-commerce - ameta-analysis of 6700 online experiments. Qubit Digital Ltd.
- Wasieleski, D.M., Gal-Or, M.: An enquiry into the ethical efficacy of the use of radio frequency identification technology. *Ethics Inf. Technol.* **10**(1), 27–40 (2008). <https://doi.org/10.1007/s10676-008-9152-z>
- Winter, J.S.: Surveillance in ubiquitous network societies: normative conflicts related to the consumer in-store supermarket experience in the context of the Internet of Things. *Ethics Inf. Technol.* **16**, 27–41 (2014). <https://doi.org/10.1007/s10676-0139332-3>
- Zarouali, B., Dobber, T., De Pauw, G., de Vreese, C.: Using a Personality Profiling Algorithm to Investigate Political Micro-targeting: Assessing the Persuasion Effects of Personality-Tailored Ads on Social Media. *Communication Research* (2020)