



How Marketers Can Induce Consumer Awareness and Interactions in Facebook Brand Pages? - Drivers and Outcomes

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Abstract. Marketer-generated content influence the fans' responses to social media. Provide the right content to the right target audiences at the right time could increase online engagement. Brands existing in online social media could attain brand awareness and engagement. Therefore, this paper aims to analyze the factors determining consumer awareness and interactions with the brand-posted content and consequences of this awareness and interactions, by collecting the objective measures from the secondary sources. Data such as posts per day, engagement rate, PTAT are collected from almost 300 famous national and international brand fan pages from 9 industries in Thailand. An empirical analysis using simple and multiple linear regression is conducted to test the proposed hypotheses. The results show the insights of social media strategies among 9 brand categories. Pictures and videos are popularly used as the content strategies. However, the percentage of the picture and video posts do not directly affect the engagement rate. Total fans significantly determine the consumer awareness and interactions (PTAT), which later drive more of the new likes. This study contributes to the existing literature in terms of using objective measures and widely exploring brands in various categories, filling the research gaps with interesting results and guiding what should be added for brands in each category.

Keywords: Facebook fan pages · Social interactions · PTAT
Online engagement · Marketer-generated content

1 Introduction

Social media, particularly social networking sites, provide firms opportunities to communicate with prospect consumers and enable the consumers to online engage with brands [1]. They are also alternative channels offering cost advantages with personal and social nature over traditional media channels [2, 3]. If applied them correctly, positive economic effects could be happened to brands and companies [4]. Facebook is a leading social networking site, which had 1.09 billion daily active users on average for March 2016. More than eighty percent of active users were outside the US and Canada [5].

Social interactions on a social networking site reflect insights for each brand [6]. Successful online brand communities such as a Facebook fan page needs fans' engagement and interactions [7, 8]. In addition, online brand community participation

affects community consequences of participation, which later impacts brand consequences of participation [9]. However, in Facebook brand pages, consumers generally act in lurking behaviour than posting behaviour [1, 10]. Therefore, social media management such as monitoring social interactions (user posts and corresponding likes, comments, or shares) is required to enable suitable reaction strategies for negative social interactions [6]. The strategies regarding number of posts, relevant and popular content, high information quality, advantageous campaigns, etc. should completely engage, integrate, and immerse fans into the vivid and interactive brand community [8, 11–15].

Some studies explore the engagement and interactions of consumer in social media. Coursaris, Van Osch and Balogh [2] conduct a longitudinal study on brand posts of big three firms in Fortune 110 companies, to offer a set of topology regarding Facebook page marketing messages. The proposed topology consists of seven post categories: brand awareness, corporate social responsibility, customer service, engagement, product awareness, and promotional, seasonal, and 23 sub-categories. Rohm, Kaltcheva and Milne [16] examine the role of social media among digital natives. Results indicate that brand engagement are driven by five consumer motivations: entertainment, connection to the brand, timeliness of information and service responses, product information, promotions and incentives. Saji, Chauhan and Pillai [17] examine the impact of content strategy consisting of content types, posting agility, posting day, and the context of content on customer engagement regarding the number of likes and comments. The content type and content agility have significant influence on engaging customers in brand communities created on social media. Hutter, Hautz, Dennhardt and Füller [4] analyse how activities in a car manufacturer's Facebook page and fan interactions affects consumers' brand awareness, word of mouth (WOM) actions, and purchase decision.

Kim, Sung and Kang [18] investigate the effect of consumers' relationships with brands on consumers' engagement in retweeting Twitter messages about brands. Habibi, Laroche and Richard [19] explore how consumers' relationship elements such as brand, product, company, and other consumers affect brand trust. Findings sum that three of four factors positively drive brand trust. Chan, Zheng, Cheung, Lee and Lee [20] test the influence of system support, community value, freedom of expression, and rewards and recognition on customer engagement and the effect of customer engagement on repurchase intention and word-of-mouth intention. Angela Hausman, Kabadayi and Price [21] study factors influencing likes and comments on Facebook brand pages and the mediating effect of modes of interaction on the relationship between personal traits and consumers' liking and commenting behavior. Sabate, Berbegal-Mirabent, Cañabate and Lebherz [13] empirically test a conceptual model regarding the impact of content richness and timeframe on the number of likes and comments. Stavros, Meng, Westberg and Farrelly [22] reveal four motivations underpinning fans' desires to engage Facebook sites of National Basketball Association teams, which are passion, hope, esteem, and camaraderie.

Kim and Hettche [23] conduct a content analysis of posts on corporate Facebook pages to examine the social media marketing practices of those global brands in terms of their media types, content orientation, and the number and type of users responding to the content. Chua and Banerjee [24] investigate the association of brand posts' incentives, vividness and interactivity and users' attention (likes, comments, and shares of brand posts). Touchette, Schanski and Lee [25] explore the social media strategy of

apparel brands' Facebook pages. Photos and advertisements are applied to promote products and sales without utilizing a specific play theme such as play as frivolity. Hsu, Wang, Chih and Lin [26] analyse a proposed model integrating the use and gratification theory with the dual mediation hypothesis. Findings reveal that both perceived news' entertainment and informativeness positively affect the interests of attitude toward the news, which later influence the hedonic and utilitarian dimensions of attitude toward Facebook fan pages.

Schultz [6] explores consumer social interactions on social networking sites of six apparel retail brands, by analysing the fan number, brand posts, and response behaviour, and consumer activities such as liking and sharing. Zoha, Hasmah, Kumaran, Sedigheh and Mohd Hairul Nizam [27] explore the impact of the most frequently posted contents of 14 international brands of electronics firms on the brand fan pages' People Talking About This (PTAT) metric. De Veirman, Cauberghe and Hudders [1] investigate consumers' motivations differing the level of activeness and public visibility on Facebook brand pages. Results show that both lurking and posting behaviours are driven by social interaction desires. Lurking behaviour is also impacted by entertainment motives and posting behaviour is affected by empowerment motives. Schultz [28] explains brand post interactions by post vividness, interactivity, and content. Vividness and content types positively and negatively affect the brand post interactions. Interactive characteristics have a positive influence on users' social interactions.

Even though the existing literature investigates social interactions in brand communities, social marketing and social media engagement strategies are still at the early stage and are quite limited such as the unknown about how social media channels are being used, what their potentials are, and how consumers interact [1, 16, 21, 29, 30]. The literature also generally focuses on a specific brand category or message category [2]. Factors driving consumers to contribute in online social pages are yet to be thoroughly explored [10]. Also, only few researches explore the effects of brand activities (marketer-generated content) on consumers' social awareness and interactions. The goals of this paper are thus (1) to evaluate the effect of marketers' activities in the Facebook brand pages together with the fan bases on consumer awareness and interactions represented by the PTAT metric, (2) to examine the consequence of the PTAT, (3) to understand the effects of different content formats on the engagement rate (PTAT/total likes) and (4) to compare different strategies applied by nine brand categories in terms of the post frequency, the popularity of posts, media types, hashtags, and average response time.

2 Related Literature

2.1 Facebook Brand Pages

Brand communities are another form of consumer communities representing social networks of consumer knowledge and companionship. Social networking sites and brand communities have the same basic property in terms of their members interacting with each other [31]. Social media-based brand communities encompass five unique dimensions: social context (members can obtain a great deal of information about other

members), structure (no explicit or implicit structure), scale (brand communities can reach millions of members), storytelling (more interactive from using video and photos accompanied by texts), and numerous affiliated brand communities (the cost of creating a brand community is close to zero) [19]. Brand communities can influence consumers to feel favorable toward brands. Some studies confirm that brand communities affect consumers' satisfactions that eventually enhance brand loyalty. Good relationship in a brand community also has a positive impact on purchase intentions, increasing sales. Consumers' relationships with brands, products, or companies positively affect brand trust. Those relationships are stronger for highly-engaged customers more than lower engaged customers [8, 19, 26, 29]. Social media-based brand communities also enable brand owners the ability to increase value, brand trust, and brand loyalty [32].

Facebook, the dominant social networking site, provides five tools for firms to use the platform for marketing purposes, including Facebook ads, Facebook brand pages, social plugins, Facebook applications and sponsored stories [3, 29]. Facebook fan page, emerged in 2007, is an open platform that can help enterprises to initiate a brand community for direct interaction with consumers such as customer service, sharing news, or offering product information to their consumers [29, 32–34]. Fan pages can be used for presenting business advertisements, commercial marketing, or professional knowledge [33]. Companies use Facebook fan pages because of increasing trustworthiness and goodwill, lead generation, ability to engage with consumers, accessing to customer's feedback, and cheaper form of advertising [10]. A company can generate interactions with consumers by writing on a company's wall or creating posts. Companies are flexible to choose media types such as status, link, photos, or app in order to spread information in their ways [27, 35]. The news feed linked to a brand page is sent to members connecting to the page and their online friends through a ticker, enhancing word-of-mouth effects and enabling push-based customer relationship management [33, 36–38]. Nowadays, almost every major brands have Facebook fan pages [12].

Ongoing interactions are crucial for social networks, whereas social relationships are important for brand communities [31]. The Facebook fan pages or brand pages are prominent due to their rapid membership growth [33]. Facebook fan pages could be used as an explicit brand communication and interaction channel, to be first of all a connection between consumers and the brand [8]. Fans can engage or interact with a company, improving their brand experience, by posting content on the wall, commenting on existing posts, giving likes, sharing posts on their profile, and so on. These actions represent a form of word-of-mouth communication, which significantly increases brand commitment, purchase decision making, and sales [21, 27, 29, 35, 39].

2.2 Posted Content and Customer Engagement

Customer engagement starts from initializing a relationship with fans to generating brand activities (posts or user posts) and supporting consumer activities (likes, comments, and shares) [6]. Customer engagement in online brand community is positively related to repurchase intention and WOM intention. It is the strategy for establishing and retaining competitive advantages [20]. However, generally only 1 percent of fans contributing a lot by posting messages, responding to other members' questions, joining brand contests, and share their experiences about the brand with other members [9].

Although Facebook users tend to follow many brand pages, not all brand posts are popular, attracting significant likes, comments, or shares [11]. Valuable content, both hedonic and functional, are thus crucial for attracting consumers to brand fan pages. In addition, delivering interesting, entertaining, and innovative content to fan page users are important [8]. Online-passing behaviour occurs in social networking sites when consumers pass along content such as information about products or brands by liking, commenting, or sharing the posted content [18]. Popularity of brand posts is shown by receiving the number of likes, comments, and shares [11]. Facebook brand pages implement the algorithm containing factors such as post popularity (likes and comments), content types (photos, videos, status updates) to select the relevant content among a lot of content to push to the fans' news feeds [37]. Facebook posts also have a positive effect on sales because customers immediately react to posts by visiting the brand store [3]. Therefore, good and persuasive content could create the ripple effect on Facebook brand pages.

3 Research Framework and Hypotheses

3.1 Marketer-Generated Content: Posts per Day, Post Timing, Average Length of Posts, Curiosity, Hashtags, and Enabling Fan Posts

Good content strategy increases consumers' interactions [17, 29, 35, 40, 41]. Consumer-brand relationships and post content are crucial factors motivating fans to participate and contribute to online brand communities [7]. If companies provide entertainment, brand-related information, and remuneration, engagement motivations of fans will be met, increasing the number of likes and comments and gaining more interaction duration [29]. Informational supports also positively impact brand community commitment [42]. Generating more brand-related information drives the number of likes, comments, and interaction duration on brand fan pages [29, 35]. De Vries, Gensler and Leeftang [35] proposes that posting informational and entertain content may increase the brand post popularity in terms of the volume of likes and comments.

Online engagement depends on the various content of posts [38]. Posting and response behaviour is shown by the average posts per day and the average response rate per day orderly [6]. Posting daily challenges could enhance the learning experience of fan members [31]. Brand post vividness, interactivity, and content type are expected to have a significant impact on post interactions [28]. Different types of posts have different impact on PTAT, especially image posts with details and feature videos [27]. Content types, media types, and posting times tend to relate to online engagement [28, 29].

Schultz [28] proposes that the publication day of post would significantly impact post interactions. Posts created on weekdays and during business hours may receive higher post popularity [13]. Posting day of the week is a relevant factor for choosing the appropriate time for posts [43]. It is possible that users would visit brand fan pages during the weekends than on weekdays, resulting in higher post popularity [35]. Posting content on weekdays is important for the user engagement in terms of likes and comments because people are possibly willing to spend this time on the workdays [29].

Schultz [28] proposes that the longer a brand post placed at the top of page generates the higher post interactions. Lengths of messages may impact click-through rates of advertisements [35]. Posts with a proper amount of texts are may gained higher popularity than posts with no or a lot of texts [37]. If posting content is favourable, brand owners should listen to their fans and response to their questions and suggestions. Brand pages may be applied as crowdsourcing channels, by asking consumers' opinions [1]. Brand post topics such as questions have a significant influence on the number of likes and comments [28]. The marketing strategy of a well-known company such as Starbucks is using the hashtag to advise customers to create, order, and modify their own drinks, for instance, #protip [44]. Social media enable customers to be the active content creators online [45]. Creating a positive word of mouth from those customers makes brands gain brand awareness [46].

Hence, hypotheses are proposed as follows:

H1: Posts per day on an online brand community have an impact on consumer awareness and interactions (PTAT).

H2: Post timing on an online brand community have an impact on consumer awareness and interactions (PTAT).

H3: Average length of posts on an online brand community has an impact on consumer awareness and interactions (PTAT).

H4: Curiosity (amount of posting questions) on an online brand community have an impact on consumer awareness and interactions (PTAT).

H5: Hashtags on an online brand community have an impact on consumer awareness and interactions (PTAT).

H6: Enabling posts from fans (everyone can post) have an impact on consumer awareness and interactions (PTAT).

3.2 Number of Fans (Total Likes)

A Facebook fan page's popularity is important since the fan page should have as many users as possible to view the brand's posts [37]. The engagement rating relates to the number of fans [47]. Total fans show the market developments, for instance, expansion strategies. Decrease of fan numbers reflect some problems in the consumer-brand relationship [6]. The like button on a fan page is a straightforward tool to engage fans into brand communications and co-creations [48]. Total likes are the multiplier of possible reach. So, they affect a brand's social media strategy. The number of fans shows the ability to influence users' friends and the potential to provide insights about sales or brand value [6]. Facebook points that people who liked Facebook fan pages are more engaged, active, and connected than others. Total likes are also the measure of the return on investment in social media [48]. Likes on Facebook fan pages enable firms to increase their brand awareness and engagement, which later contributes to companies' return on investment [21].

There is a positive relationship of the number of followers over customer engagement regarding the number of likes and comments [13]. The total fans on the publication date of the brand post negatively affect the post popularity in terms of shares [28]. In a virtual community, users' normative influence and informative

influence have positive effects on the eWOM review's credibility and adoption [33]. The number of pages that users followed or liked could drive overall consumer engagement and consuming level [38]. The intensity of a brand fan page usage significantly increases the fan-page engagement and brand loyalty [8].

Hence, a hypothesis is proposed as follows:

H7: The number of fans on an online brand community have an impact on consumer awareness and interactions (PTAT).

3.3 People Talking About This

PTAT metric reflects a Facebook fan page's awareness and interaction over time [49]. It integrates stories, for instance, liking/commenting/sharing posts, answering questions, responding to events, or claiming offers [50]. Likes, comments, and shares provide a method to measure consumer-brand interactions [23]. Liking posts are in turn spreading content for their personal networks [41]. A single like can refer a post to hundreds of friends and to other friends' networks who liked the post, generating social contagion effects [40]. More likes a post received, the probability that the post is sent to more fans' news feed [37]. Higher social interaction and brand interaction significantly bring more fan engagement [8]. Higher levels of brand awareness also significantly lead to higher WOM activities and purchase intentions [4]. Social interaction is a common motivation for engaging activities in online brand communities such as Facebook fan page [1]. Strong consumer participation can drive a brand forward, creating reaches for each post [49].

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Hence, hypotheses are proposed as follows:

H8a: Consumer awareness and interactions (PTAT) positively affect fan growth by day.

H8b: Consumer awareness and interactions (PTAT) positively affect fan growth by week.

H8c: Consumer awareness and interactions (PTAT) positively affect fan growth by month.

3.4 Content Types: Images and Videos

Consumers are engaged in brand-related activities differently. For example, some consumers consume brand-related media such as pictures or movies. Some consumers comment on posts or like content, turning them from being observers to media contributors. Sometimes they also upload pictures or videos on Facebook, being the creators of brand-related content [51]. Consumer engagement and contributing of consumers are sharing companies' posts on their social networking systems such as videos, audios, pictures, or texts, or uploading product-related videos, audios, images, and so on [52].

Image and video post formats are statistically relevant factors driving more likes. Post formats are the significant factors defining comments, particularly for posts with plain texts or images. They significantly increase the number of shares [53]. The richness of content including images and videos have an influence on the number of likes. Posting images in the proper-time publication significantly increases the number of comments. Posts using images also significantly generate more likes and shares [13]. Many scholars support that pictures are the most effective content type [44]. Pictures create more likes than posts with plain texts [53]. Funny images with animals are popular for the drugstore chain's Facebook pages, gained a high level of engagement from fans such as likes or shares the posts [54]. In terms of information sharing, many respondents like to post updates and share images on social media [55].

Posts using videos are significantly received higher levels of brand post popularity in terms of likes [13]. Games or videos generated by brands positively drive consumers to interact with brands on social media [56]. Entertainment such as watching videos is the reason why respondents use social media platforms [55]. Content in a video format is shared more frequently than a link or a plain text [53]. The number of comments received on a YouTube video in the first 15 days has a statistically positive influence on total views on that video after 60 days passed [57].

Hence, hypotheses are proposed as follows:

H9a: The percentage of picture posts have an influence on the engagement rate of a brand page.

H9b: The percentage of video posts have an influence on the engagement rate of a brand page.

4 Methodology: Data Sample and Data Collection

To choose the best players on social networking platforms, top one-hundred Facebook fan pages, ranked based on the number of fans, listed on Socialbakers.com [58] were applied to identify brand pages and to select studied samples. Other brand pages in the same categories were collected more with the same proportion as top one-hundred Facebook pages (to make sure about the active pages with high engagement rates) to complete the samples, under criteria that brands had concrete products or services and they were top brands in each category. The list consisted of various brand categories including Fast-Moving Consumer Goods (FMCG), e-commerce, retail foods, telecommunications, electronics, fashion, finance, jewellery & watches, and retail.

The unit of analysis was per brand page. The Facebook fan pages of 328 brands were analysed from the page themselves, free statistics from [Socialbakers.com](#), and free statistics from [Likealyzer.com](#), using one-month period. Free statistics from various sources because of their objective measures. Focusing on marketer-generated content on each brand page, collected information for this study comprised of fans growth (by day/by week/by month) from [Socialbakers.com](#), likes, PTAT, engagement rate, posts per day, likes, comments and shares per post, posts per type (picture/video/message/Pinterest), timing, length of posts, curiosity, enabling post by fans, hashtags, response time, and response rate from [Likealyzer.com](#). Engagement rate is calculated from the total PTAT divided by the total likes. Curiosity is how frequent is a brand page poses questions to its fans. Way off, slightly off, and perfect of timing were turned to 1 to 3 respectively. Way off means “You publish many posts between 00-03 (GMT). But posts published between 15–18 (GMT) engage more users”. Slightly off means “So close! You publish many posts between 15–18 (GMT). But posts published between 18–21 (GMT) engage more users.”. Perfect means “You publish the majority of your posts between 15–18 (GMT). At this time, your followers seem to be most active.” [59]. Length of posts were converted “less than 100 characters” to 1, “100–500 characters” to 2, “more than 500 characters” to 3, and “more than 500 words” to 4. Curiosity, enabling post by fans, and hashtags were coded as dummy variables. There are missing data of some variables (posts by fans, response rate, and response times) since the [Likealyzer.com](#) cannot fetch the data from some Facebook pages, leading to the total percentage less than 100 in Table 3.

After data collection by the research assistant was completed, 31 brands were excluded from data analysis due to too much lack of data about brand pages. Final dataset encompassed 297 fan pages in Thailand (both local and international brands) from 9 brand categories.

5 Results

5.1 Descriptive Statistics

Of 297 brand fan pages, there are 82 pages from Fast-Moving Consumer Goods (FMCG), 44 pages from e-commerce, 33 pages from retail foods, 8 pages from telecommunications, 30 pages from electronics, 41 pages from fashion, 34 pages from finance, 4 pages from jewellery & watches, and 21 pages from retails. According to the statistics from the public Facebook pages, 160 pages, 116 pages, 19 pages, 1 page and 1 page have fans in the age groups 18 to 24 years old, 25 to 34 years old, 18 to 34 years old, 13 to 17 years old, and 13 to 24 years old, accounting for 53.87%, 39.06%, 6.40%, 0.3%, and 0.3% of all pages, respectively.

From highest to lowest average fans per page, the brand categories are as follows: (1) electronics, (2) FMCG, (3) fashion, (4) retail foods, (5) jewellery & watches, (6) telecommunications, (7) finance, (8) e-commerce, and (9) retail, as shown in Table 1. Posts from FMCG, telecommunications, and electronics receive a high engagement in terms of average likes, comments, and shares per post. However, telecommunication brands are the most outstanding brands in terms of average fans

growth by day, average fans growth by week, average fans growth by month, and average engagement rate. They are also the fastest brands replying to the users' posts on their pages, showing by the lowest average response time. Although fashion and jewellery & watches brands have a number of fans, they are the lowest two brands that have low fan growth rates and low engagement rates, as shown in Table 1.

Table 1. Information about fan pages, classified by brand categories [61].

Brand category	Avg. fans	Avg. fan growth by day	Avg. fan growth by week	Avg. fan growth by month	Avg. likes, comments & shares per post	Avg. engagement rate (%)	Avg. response time (mins)
FMCG	2,121,549	332	2,310	11,525	2,317	5.2	3,681
E-commerce	596,581	648	5,193	22,410	649	4.3	1,915
Retail Foods	1,767,610	311	2,178	9,228	796	4.4	1,168
Telecommunications	863,106	1,589	6,571	29,427	1,215	7.9	86
Electronics	2,375,338	897	6,415	31,145	1,143	5.8	1,166
Fashion	1,774,408	188	1,352	5,786	446	3.0	1,836
Finance	926,074	457	3,087	11,644	648	3.9	1,059
Jewellery & watches	1,049,355	87	654	3,232	699	3.6	696
Retail	389,973	340	2,494	12,755	481	7.0	993

Table 2. Information about the frequency of posting and posted content.

Brand category	Avg. posts/day	Avg. picture posts (%)	Avg. video posts (%)	Avg. message posts (%)	Avg. Pinterest posts (%)
FMCG	3.3	91.95	4.11	1.66	2.29
E-commerce	10.8	76.85	2.60	5.66	14.90
Retail Foods	1.9	93.29	1.77	1.89	3.05
Telecommunications	6.0	79.16	6.78	5.73	8.33
Electronics	2.6	84.22	5.70	1.81	8.61
Fashion	3.2	91.19	3.81	2.03	2.98
Finance	2.9	82.86	3.59	6.06	7.50
Jewellery & watches	3.2	96.85	0.00	1.05	2.10
Retail	17.2	94.84	2.58	1.39	1.20

Retail and e-commerce brands are quite active in daily communicating messages as shown in Table 2. Considering posted content, fan pages in every brand category heavily pay attention to picture posting, especially FMCG, retail foods, fashion, jewellery & watches, and retail brands. Comparing to others, telecommunications, electronics brand pages utilize videos more than brands in other categories. Posts including images and videos are significantly popular than posts without them [37]. Image posts significantly receive more likes and comments [27]. Photos, videos, and status updates also are top three post types that receive a high volume of likes and comments [60]. Therefore, the post strategy of those brands may move in the right direction. E-commerce, telecommunications, and finance pages sometimes apply texts to convey marketing messages to consumers. E-commerce brands show the remarkable use of Pinterest posts.

Table 3. Other details about fan pages, classified by brand categories.

Topic	G1	G2	G3	G4	G5	G6	G7	G8	G9
<i>Posted timing</i>									
(1) Way off	35 (42.7%)	17 (38.6%)	15 (45.5%)	4 (50%)	14 (46.7%)	14 (34.1%)	18 (52.9%)	2 (50%)	9 (42.9%)
(2) Slightly off	24 (29.3%)	16 (36.4%)	10 (30.3%)	1 (12.5%)	9 (30.0%)	16 (39.0%)	11 (32.4%)	1 (25%)	6 (28.6%)
(3) Perfect	23 (28%)	11 (25%)	8 (24.2%)	3 (37.5%)	7 (23.3%)	11 (26.8%)	5 (14.7%)	1 (25%)	6 (28.6%)
<i>Length of posts</i>									
(1) <100 characters	29 (35.4%)	10 (22.7%)	15 (45.5%)	4 (50%)	10 (33.3%)	11 (26.8%)	9 (26.5%)	0 (0.0%)	4 (19%)
(2) 100–500 characters	51 (62.2%)	33 (75%)	18 (54.5%)	4 (50%)	19 (63.3%)	26 (63.4%)	22 (64.7%)	3 (75%)	15 (71%)
(3) >500 characters	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	4 (9.8%)	3 (8.8%)	0 (0.0%)	0 (0.0%)
(4) >500 words	2 (2.4%)	1 (2.3%)	0 (0.0%)	0 (0.0%)	1 (3.3%)	0 (0.0%)	0 (0.0%)	1 (25%)	2 (9.5%)
<i>Curiosity (posted questions)</i>									
(1) You should ask more questions	81 (98.8%)	43 (97.7%)	30 (90.9%)	8 (100%)	30 (100%)	39 (95.1%)	33 (97.1%)	4 (100%)	20 (95.2%)
(2) A good amount of questions	1 (1.2%)	1 (2.3%)	3 (9.1%)	0 (0.0%)	0 (0.0%)	2 (4.9%)	1 (2.9%)	0 (0.0%)	1 (4.8%)
<i>Hashtags</i>									
(1) Not using	32 (39.0%)	18 (40.9%)	17 (51.5%)	5 (62.5%)	7 (23.3%)	22 (53.7%)	23 (67.6%)	3 (75%)	10 (47.6%)
(2) Using	50 (61.0%)	26 (59.1%)	16 (48.5%)	3 (37.5%)	23 (76.7%)	19 (46.3%)	11 (32.4%)	1 (25%)	11 (52.4%)
<i>Everyone Can Post</i>									
(1) No	9 (11.0%)	6 (13.6%)	6 (18.2%)	0 (0.0%)	4 (13.3%)	1 (2.4%)	6 (17.6%)	0 (0.0%)	5 (23.8%)
(2) Yes	73 (89.0%)	38 (86.4%)	27 (81.8%)	8 (100%)	26 (86.7%)	40 (97.6%)	28 (82.4%)	4 (100%)	16 (76.2%)
<i>Posts by fans</i>									
(1) Very rarely	4 (4.9%)	4 (9.1%)	4 (12.1%)	0 (0.0%)	2 (6.7%)	1 (2.4%)	2 (5.9%)	1 (25.0%)	1 (4.8%)
(2) Once or twice a week	12 (14.6%)	7 (15.9%)	4 (12.1%)	1 (12.5%)	6 (20.0%)	12 (29.3%)	8 (23.5%)	0 (0.0%)	2 (9.5%)
(3) Happens on a daily basis	45 (54.9%)	18 (40.9%)	18 (54.5%)	3 (37.5%)	14 (46.7%)	15 (36.6%)	14 (41.2%)	2 (50.0%)	12 (57.1%)
<i>Response rate</i>									
(1) Catastrophic	17 (20.7%)	9 (20.5%)	11 (33.3%)	0 (0.0%)	5 (16.7%)	9 (22.0%)	8 (23.5%)	0 (0.0%)	0 (0.0%)
(2) Bad	13 (15.9%)	5 (11.4%)	2 (6.1%)	1 (12.5%)	4 (13.3%)	5 (12.2%)	4 (11.8%)	1 (25.0%)	2 (9.5%)
(3) Poor	17 (20.7%)	12 (27.3%)	6 (18.2%)	1 (12.5%)	9 (30.0%)	8 (19.5%)	10 (29.4%)	0 (0.0%)	3 (14.3%)
(4) Good	10 (12.2%)	7 (15.9%)	4 (12.1%)	2 (25.0%)	6 (20.0%)	5 (12.2%)	4 (11.8%)	1 (25.0%)	5 (23.8%)
(5) Perfect	2 (2.4%)	1 (2.3%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (25.0%)	1 (4.8%)

Note: G1 = FMCG, G2 = E-Commerce, G3 = Retail Foods, G4 = Telecommunications, G5 = Electronics, G6 = Fashion, G7 = Finance, G8 = Jewellery & Watches, and G9 = Retail

Table 3 summarizes the additional aspects of brands in each category from Likealyzer.com. Proper timing of posts significantly affects the number of comments [13], but post timing of all brand categories is generally way off the suitable time. In terms of the length of posts, most of brands normally generate a post with 100–500 characters. Almost all brands rarely ask questions. FMCG, e-commerce, electronics, and retail brands commonly use hashtags, whereas retail foods, telecommunications, fashion, finance, and jewellery & watches brands do not use hashtags. Brands in all categories are open to posts from fans on their brand fan pages, which happen on a daily basis. Only the response rate of the brands in telecommunications, jewellery & watches, and retail are good.

5.2 Data Analysis

Multiple regression and simple linear regression are applied to verify the proposed framework. As shown in Table 4, only the number of fans significantly has a positive impact on consumer awareness and interactions. Therefore, *H1–H6* are rejected, whereas *H7* are confirmed. It was found that PTAT level explains a significant amount of the variance in the value of fans growth by day ($F(1, 295) = 58.416, p < .01, R^2 = .165, R^2_{Adjusted} = .162$). The analysis shows that PTAT level significantly predict fans growth by day ($Beta = .407, t(295) = 7.643, p = .000$). When fans growth by week was predicted, it was found that PTAT level ($Beta = .405, p < .01$) was a significant predictor. The overall model fit was $R^2 = .164$. The result of the simple linear regression also indicated that PTAT explained 20.8% of the variance ($R^2 = .208, F(1,295) = 77.355, p < .01$). The PTAT positively increase fans growth by week ($Beta = .456, p < .01$). Therefore, *H8a–H8c* are accepted.

Table 4. Summary of multiple regression analysis of variables on PTAT (N = 297).

Variable	<i>B</i>	<i>SE B</i>	<i>Beta</i>
Posts per day	282.644	245.231	.054
Timing	2276.174	4170.967	.025
Length of posts	-5571.702	5546.984	-.046
No. of fans (Likes)	.010	.001	.627**
Curiosity	-8494.000	19698.333	-.020
Hashtags	-1782.525	6795.443	-.012
Posts by fans	-2635.633	10558.226	-.012
R^2		.411	
F for change in R^2		28.774***	

* $p < .05$. ** $p < .01$.

Multiple regression analysis is also applied to examine the relationship between different post types and the engagement rate. The engagement rate is total PTAT divided by total likes. Both the ratio of image and video posts has no significant impact on the engagement rate, as shown in Table 5. Thus, *H9a* and *H9b* are rejected. The rejection of hypotheses is explained by the unclear difference between the effects of content types such as videos and other content types on comments or shares [53].

Table 5. Summary of multiple regression analysis of content types on the engagement rate (N = 297).

Variable	<i>B</i>	<i>SE B</i>	<i>Beta</i>
The percentage of picture posts	-.009	.026	-.021
The percentage of video posts	-.002	.074	-.002
R^2		.000	
<i>F</i> for change in R^2		.063	

* $p < .05$. ** $p < .01$.

6 Discussion and Implications

Testing hypotheses support literature research. For instance, fans' impressions drive fan pages' engagement [60]. The effects of day and time on likes per post are not supported [13]. A post published on weekdays or weekends has no impact on social interactions. Longer posts decrease the number of likes, comments, and shares [28]. Posts with a moderate amount of texts are more accepted than posts with too few or too many texts [37]. Posts created in the peak hours have no influence on the engagement level [29]. Electronic WOM is transmitted in an exponentially growing nature through social media [62].

However, this study yields some different results from the past studies. For example, in sport context, 72% of posts from the health coach received social interactions at least once, showing the importance of average posts per day [63]. Saji, Chauhan and Pillai [17] confirms that content agility significant affects the number of likes and comments. Content agility is the timing of the day during which the post is made. They divided total hours of a day into 6 slots, 4 h each. Total fans have a negative influence on sharing behaviour [28]. A report from [Socialbakers.com](#) points that in general more fans decrease engagement rates. However, a study of Laurens [47] indicates that the number of fans has no significant influence on the engagement rates, but the friends among fans have a positive effect on the engagement rate of brand pages [47]. There is no significant effect of like ratios on interaction duration. Posted days significantly affect the comments [43].

In sum, this study support that the number of fans affects consumer awareness and interactions, but in the positive way. The consumer awareness and interactions in terms of PTAT later significantly increase more fans daily, weekly, and monthly. Giving different results from the literature research, marketer-generated content in terms of average posts per day, post timing, average length of posts, and average posted questions insignificantly affect social interactions.

This study extends the framework in the literature studies by adding the aspect of strategies applied by marketers in terms of posts per day, post timing, average length of posts, and curiosity. To my best knowledge, there are few studies analysing the effects of marketer-generated content on consumer interactions, using objective measures. For practical implications, this study confirms the importance of fan bases on consumer awareness and interactions, which finally affect future fans. The quantity of marketer-generated content is not much important as the quality or the variety of posting content. There are still more rooms for brands in various brand categories to promote their brand

pages to increase the number of fans. Although the pictures and videos do not directly attract more consumers to engage with the posts, various content types should be added as the experiment for the appropriate content types to increase PTAT of each brand. Brands in all categories can also ask questions more to drive consumers' participation and PTAT. PTAT is important to involve more non-fans to become fans and to participate in quality posts of brands in the future, creating a ripple effect. In addition, brands should not neglect to quickly respond to their fans because brands in many categories still have poor response rates and bad response times.

7 Conclusion, Limitations and Future Works

This paper collects the secondary data of objective measures from leading Facebook brand fan pages in Thailand, from 9 brand industries, to understand how the owners of fan pages communicate with their fans and how content generated by brands affect the consumer awareness and interactions. Marketer-generated content are collected in various aspects that are posts per day, post timing, average length of posts, curiosity, hashtag, and enabling fan posts. These data together with the fan growth by day, the fan growth by week, and the fan growth by month are compared across all brand categories. The effectiveness of post types (images and videos) on the engagement rate is also examined. The results indicate the importance of content quality rather than the content quantity. In addition, findings point the significance of fan bases on fans' awareness and interactions, that subsequently affect future fan bases. Images are a dominant content type used by all brand categories. However, all brands should conduct some experiments with various combinations of content types to select the proper content type for their brands since the percentage of image and video posts does not directly influence the engagement rate. Content strategy from the successful brand industry that are telecommunications, FMCG, and electronics such as faster response times could be applied to brands in other industries. Post timing, response rate, and response time of brands in many brand categories should be adjusted.

Limitations of this study are relying on a social networking system, Facebook brand pages, and collecting inequality numbers of fan pages in each category because of the widespread acceptance of some page categories. Nevertheless, this study significantly contributes to the literature since most studies are conducted in the Western environments and Thailand is topmost three countries with the highest Facebook users [64]. To my knowledge, the results from Facebook fan pages in 9 brand categories are presented for the very first time. Further studies should replicate this research to other social media. More pages in some categories should be collected to compare the same proportion of fan pages from different industries. Other factors such as specific content types or formats affecting the awareness and interaction of pages should be explored by brand categories. The comparative study among the Southeast Asian countries should be conducted.

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