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What makes people react to the posts on the brand pages of mobile social network games?

Hyesun Jeon Hyung Jun Ahn Gun Jea Yu

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Hyesun Jeon
Department of Culture and Art Management, Hongik University, Seoul, Korea, and
Hyung Jun Ahn and Gun Jea Yu
College of Business Administration, Hongik University, Seoul, Korea

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Abstract

Purpose – Mobile social network games (mSNGs) are gaining increasing popularity recently. Many of the games are marketed using the brand pages on social network services including Facebook. The purpose of this paper is to identify the characteristics of the posts on the brand pages that affect the reaction of users.

Design/methodology/approach – Four independent variables were tested for their influence on user reaction: informativeness, structure, call for action, and the type of reward. In total, 439 posts on the brand pages of two mobile game companies on Facebook were manually collected. The hypotheses were tested using multiple regression analysis.

Findings – The characteristics of the brand pages appeared to have significant impact on the users' reaction. Overall, being informative, calling for action, and providing content-related (game-related) rewards have significant and positive impact on the reaction of users. Using only texts or embedding videos or hyperlinks in the posts has either negative or no significant impact on the reaction of users.

Originality/value – The literature review shows that not many empirical studies have been conducted so far about the brand pages of mSNGs. Therefore, this study contributes to the understanding of users' reaction on the brand pages for mSNGs, and how companies should manage their communication effort on the pages.

Keywords E-commerce, Brand pages, Mobile social network games, Social network services

Paper type Research paper

1. Introduction

Consumer interaction in an online context has dramatically changed since the introduction of social network services (SNSs) based on the concept of Web 2.0. Many users now connect to the internet using SNSs and smart phones, which enable them to have a much richer interaction with brands or other online users. This has also led many companies to adopt SNSs as a new marketing channel (Cvijikj *et al.*, 2013; Malthouse *et al.*, 2013; Rauschnabel *et al.*, 2012; Yadav *et al.*, 2013).

Companies' engagement with SNSs often takes the form of brand pages or brand communities. A brand page is a special account on a SNS such as Facebook, operated by the brand in order to conduct various marketing activities, such as promotion, advertisement, and customer-relationship management (Cvijikj and Michahelles, 2013; Goh *et al.*, 2013; Stevens, 2012; Luarn *et al.*, 2015; Ruiz-Mafe *et al.*, 2014). By participating in a brand page of interest to them, users can acquire the most up-to-date information, take part in promotions or events, ask questions, or have interactions with other similar users sharing their experience. For this reason, brand pages are now regarded by many companies as one of the major tools of online marketing.

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Having given this background, we can note that there has been increasing recent interest in research into brand pages. Specifically, this study aims to analyze the brand pages of mobile social network games (mSNGs) in regard to a relatively small amount of research that has been conducted so far.

mSNGs are serviced via mobile devices; different from other mobile services, the level of involvement by users is known to be very high (Shin and Shin, 2011; Simon and Apt, 2013; Wohn *et al.*, 2011). mSNGs provide various social features by which users can engage with their peers in either a competitive or collaborative manner. For these reasons, the interaction by mSNG users on a SNS is often regarded as extended game-playing, which makes it reasonable to argue that brand pages can be more important for the marketing of mSNGs compared with other products.

This study analyzed two of the most popular local mobile game companies in Korea that are operating brand pages on Facebook actively. Based on a review of related literature, hypotheses were constructed regarding the characteristics of brand pages, such as informativeness, structure, call for action, and the type of reward. Data were manually collected for 439 posts in total from the two brand pages. Multiple regression analysis was conducted to test the hypotheses, which revealed the significant impacts of informativeness, structure, call for action, and type of reward on the reaction of users.

This paper is organized as follows. The Section 2 briefly reviews-related literature and presents hypotheses. The Section 3 explains the data collection and research methods. The Section 4 presents the results of our analysis. The last section follows with a discussion and finishes with conclusions.

2. Research background

This section presents the background of research. First, previous studies about brand pages are summarized to provide general introduction, and to show why they are important for companies which conduct marketing on social media. Second, mSNGs are discussed to illustrate the recent trends in mobile gaming, and to suggest the importance of brand pages for mSNGs.

2.1 Brand pages

A brand page can be understood as a form of brand community. A brand community is a social space where information and experiences about a specific brand are shared between users, or between users and the brand. According to this definition, brand communities already existed as offline organizations even before the advent of internet; one of the best examples of which is the Harley Owners Group. Now, most brand communities are built and operated online with the help of internet tools and, more recently, SNSs (Madupu and Cooley, 2010).

More specifically, a brand page is usually based within a SNS, such as Facebook. Whereas a conventional account of a SNS involves a person, brand pages are accounts held by specific brands of commercial organizations. Users can be a member of such brand pages by taking certain actions. They can "follow", "like", or "subscribe", depending on the functionalities offered by each SNS. Having joined a brand page, users can receive information from the page or engage in interaction with the brand or other users.

According to previous studies, brand pages can be classified according to their scope, media and governance (Aksoy *et al.*, 2013). That is, a brand page can serve for a

single brand, a single product, or multiple brands of a similar type; a brand page can be opened on a web page or a SNS, and can be governed either by a brand or an individual. The target brand pages of this study are for single brands on Facebook, with the pages managed by the brands themselves.

Some studies have identified the reasons why users participate in brand pages. It is frequently found that users seek information, or try to reduce uncertainty through participation (Madupu and Cooley, 2010; Zaglia, 2013; Gummerus *et al.*, 2012; Shin *et al.*, 2014). They also frequently pursue social benefits such as social integration or social enhancement through various interactions on brand pages (Madupu and Cooley, 2010; Habibi *et al.*, 2014). Some studies have also identified entertainment motives for participation (Rauschnabel *et al.*, 2012; Madupu and Cooley, 2010).

On the other hand, companies can improve the efficiency and effectiveness of their marketing through brand pages. Because most of the users of a brand page are either customers or potential customers of the brand, targeting them is much more effective compared with targeting any random user on a SNS. Segmenting customers is also made easy by accessing their social profile on the SNS. In addition, it is known to be technically simpler and more cost-effective to create and operate a brand page, compared with traditional websites or other online channels (Habibi *et al.*, 2014). Moreover, brand pages can be very powerful in terms of creating an online word-of-mouth and viral impact, one based on such functionalities such as "like", "share", "retweet", or other similar ones that have been designed for enabling a snowball effect by the retransmission of information through peers or peers of peers, and so on (Malthouse *et al.*, 2013).

2.2 mSNGs

A social network game (SNG) is a new type of computer game that has emerged with the development of SNSs and smart phones. SNGs are distinguished from other games insofar as they have social features and are usually associated with one or more SNSs. Users play SNGs with each other in competitive and/or collaborative ways. Users often invoke various interactions with other users within the game, many of whom may be registered as their friends on certain SNSs. Users can also invite or send gifts to other users, while social rankings are provided in various ways so users can compare their performance with that of their friends on SNSs.

SNGs are now the most popular form of gaming on mobile platforms, which is why this study is targeting the companies that develop and service such SNGs. The SNGs that are serviced on mobile platforms can be called mobile SNGs or mSNGs. Since mobile devices are basically used as tools for communication, they are usually equipped with one or more SNSs or with messengers such as Facebook, Twitter, WhatsApp, LINE, etc. Furthermore, the address book of mobile phones containing phone numbers can be used for creating social links in mSNGs. This is why mobile phones are naturally the most suitable and popular platform for SNGs. In view of the many other advantages of SNGs, it is no exaggeration to say that most mobile games nowadays have at least a certain number of social features (Pei-Shan and Hsi-Peng, 2014; Park *et al.*, 2014).

It has been found that, compared with individually played games, SNGs provide additional enjoyment to players through competition and collaboration. The games provide further utility to users by enabling and facilitating their social presence during game-play (Shin and Shin, 2011; Pei-Shan and Hsi-Peng, 2014). Moreover, because of their inherently social features, mSNGs can be effectively marketed through the social

networks of users. The more friends you have in the game, the more fun you will have. Thus, users are naturally motivated to draw other users into their games (Pei-Shan and Hsi-Peng, 2014).

Alongside the growing interests in mSNGs, a few academic studies have recently been conducted. For example, the studies of Shin and Shin (2011) and Park *et al.* (2014) have utilized the traditional Technology Acceptance Model in the information systems field in order to explain why people play SNGs (Shin and Shin, 2011; Park *et al.*, 2014). These studies focus on some device-specific features of mobile phones, or security requirements in exchanging the social information for extending and applying the TAM model. Another study by Lee *et al.* (2012) suggested the following motives of users playing mSNGs: social interaction, self-presentation, fantasy/role playing, passing time/escapism, entertainment, and challenge/competition (Lee *et al.*, 2012).

3. Hypotheses development

As discussed in the previous section, mSNGs can be effectively marketed using brand pages of social media because of their inherent social nature different from traditional computer games. This study aimed to identify the factors that affect the user reaction to the posts on brand pages. In this section, we first introduce the user reaction on brand pages as the dependent variable, followed by the hypotheses about four independent variables: informativeness, structure, call for action, and type of reward. Figure 1 illustrates the overall research model.

3.1 User reaction on SNSs

For the following reasons, this study has employed the count of "likes" and replies to the posts as our measure of user reaction. First, the action of pressing the "like" button or leaving a reply represents well users' attention to a post. Being that attention is necessary for developing interest and purchase intention toward a product, it is often regarded as the most important measure of success in advertisements (Rauschnabel *et al.*, 2012). Therefore, it can be argued that using a count of "likes" and replies as the measure of reaction is both meaningful and practical.

Second, the "likes" and replies can also be regarded as reflecting the popularity votes of users for each post (Sabate *et al.*, 2014; de Vries *et al.*, 2012). By being popular, a post becomes much more likely to be exposed to a wider audience, one that includes, in regard to the users who initially pressed the "like" button or left replies, not only friends, but the friends of friends, and so on. This can often lead to a further, strong viral effect. Thus, we may again argue that it serves as a good measure of reaction

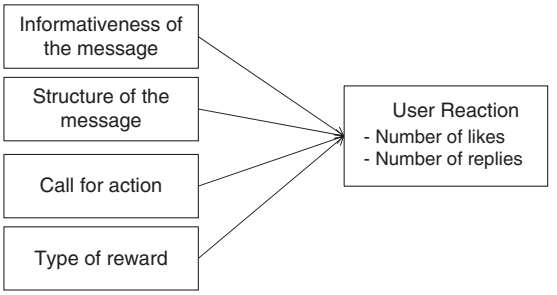

Figure 1.
Research model

which may be helpful in guiding marketing strategies on brand pages. We can also see that these measures have already been used by some previous studies (Cvijikj and Michahelles, 2013; Labrecque and Milne, 2012).

3.2 Informativeness

One of the main motivations for using a SNS is the usefulness of the information that is available on it. By participating in the brand pages, users can access a variety of information including promotions, services, recent updates and offers, or new items available from the mSNG. The timeline functions, such as the one provided by Facebook, are very useful for users in terms of their ability to receive a very well-organized stream of up-to-date news.

Previous studies have provided evidence of the information motive behind the use of SNSs. According to Madupu and Cooley (2010), users fulfill their information motive by receiving and sharing information on the brand pages of a SNS (Madupu and Cooley, 2010). They can also browse through the archives of information that has been accumulated over time, or try to solve their problems through brand pages. According to the study of Gummerus *et al.* (2012), users can acquire more knowledge about brands and products by participating in brand pages, leading to tangible economic benefits (Gummerus *et al.*, 2012). Other studies have also shown that users can similarly learn and improve their skills through utilizing the information on brand pages, which in turn leads to more effective decision making (Zaglia, 2013; Malmivaara, 2011). In the study by Shin *et al.* (2014), it is also observed that the motivation of users to reduce uncertainty affects the continuous use of SNSs (Shin *et al.*, 2014).

Considering these facts, it is expected that users of mSNGs will also participate in the brand pages seeking information that is beneficial for playing games. Users may seek useful gaming tips, update information, or take advantage of new promotions of discounted game items that might help them play the games better. Therefore, the following is posited:

H1. The informativeness of a post on the brand pages of mSNG has a positive impact on the reaction of users.

3.3 Post structure

The majority of the posts on the brand pages usually contain images or photos. This makes their posts more vivid and visible, helping users understand the message of the posts intuitively (Lakkaraju and Ajmera, 2011). In the same vein, many of the posts contain video clips or hyperlinks to other online sources. The structure of the posts can affect users' response to the posts for the reasons outlined in the following paragraph.

First, providing additional information this way can help make the information richer. According to the media richness theory, each medium, or the way a message is transferred, may differ in its equivocality, where a richer medium is the one that allows users to transfer information with less equivocality (Kaplan and Haenlein, 2010). In this respect, being that video clips or links can provide more information helpful to playing games than merely providing a static two-dimensional image, a post containing them can be regarded as richer. Video clips can show new demos or playing instructions that are hard to express in terms of merely static texts or images (Rauschnabel *et al.*, 2012). Links to other internet sources can guide users to more detailed gaming information that cannot be provided compactly in a single post on a SNS. Second, many are aware that another major motivation for using brand pages is for entertainment (Madupu and

Cooley, 2010). When they visit brand pages, users tend to pursue the components that are enjoyable and fun (de Vries *et al.*, 2012). Many of the dynamic video clips provided by the brand pages of mSNGs can satisfy such an interest in entertainment. Following the same vein of logic, posts that only provide text can similarly appear less attractive to users.

Therefore, the following are posited:

H2a. The addition of videos or hyperlinks in a post on the brand pages of mSNG has a positive impact on the reaction of users.

H2b. Using text alone in a post on the brand pages of mSNG has a negative impact on users' reactions.

3.4 Call for action

The correct way to frame messages has long been the subject of research among marketing researchers aiming to achieve effective advertisement and brand communication (Cheng *et al.*, 2011; Pentina and Taylor, 2013). Messages with the same content are known to have a very different influence depending on how they are framed. This study focusses specifically on framing the messages in a post as calling for some action.

Previous studies have shown the effect of such framing. Teevan *et al.* (2011) show that having a question mark and explicit targeting in a sentence can increase user reaction. Similarly, Stevens (2012) shows that humanizing a brand page, or impersonating, can improve the asset value of a brand page (Stevens, 2012). By framing messages in such ways, instead of being one-directional, the relationship between the brand and users becomes more mutual and interactive which helps users build stronger social identity within the brand pages (Habibi *et al.*, 2014).

In the brand pages of mSNGs, players who are asked to perform such reactions as pressing "like", or leaving a reply to a post, can find themselves having a more interactive relationship on the brand pages, so building a stronger social bond with the brand. With enhanced social identity, users can become more responsive to the posts, helping the messages of the posts to be better spread through SNSs. Thus, we can hypothesize that calling for action can influence user reaction to the posts:

H3. Calling for action in a post on the brand pages of mSNG has a positive impact on users' reaction.

3.5 Type of reward

The brand pages of mSNGs usually offer many events or promotions accompanied by various rewards. The rewards are often ones related to game-play, such as game items or game money. Sometimes the rewards can be something not related to a game, such as coupons or vouchers that can be used elsewhere, for example, for books or a cup of coffee. This study assumes that the type of reward can also have an impact on user reaction.

This paper specifically focusses on the fact that the users of mSNGs are more goal-oriented than general users of SNSs; hence, they often regard the brand pages as extended game play (Barnes and Pressey, 2014). This high level of engagement on the brand pages can make users pay more attention to the game-related rewards than the others, resulting in a greater level of reaction to such posts. Similar results have been found in the fields of marketing and advertising. For instance, a study by

Heinz *et al.* (2013) shows that the match between the advertisement on a website and its content, or "ad congruence" has a positive impact on the recognition of the advertisement (Heinz *et al.*, 2013). Therefore, the following is posited:

H4. Compared with non-relevant rewards, content-related rewards in a post on the brand pages of mSNG have a stronger impact on user reaction.

4. Research method

The brand pages of two very prominent mSNG companies in Korea were selected for testing the hypotheses. This section describes independent and dependent variables in detail, and explains the control variables as well.

4.1 Target brands and operational definition

Two Korean mSNG brands, Com2uS and WeMade, were selected for the following reasons. First, they were ranked within the top ten game companies in Korea at the time of data collection, reporting the revenues of more than USD70 and 110 million, respectively in the year. Second, the two actively operated their brand pages of mSNG and engaged their users on Facebook although there were some higher-ranked companies. We took as the unit of analysis each post on their brand pages, with the reactions to each post serving as dependent variables. The following table shows the list of the variables along with their operationalization (Table I).

4.2 Control variables

Two control variables have also been included in the analysis. The first one was a proxy for revenue. Being that revenue directly reflects the popularity of a game, games with a higher estimated revenue can provoke a stronger reaction from users. Specifically, we used appfigures.com to collect the rankings of each game on the very date when the post was written. Similar to previous studies, we used the log values of the ranking as the proxy, in order to reflect the non-linearity and the "super-star effect" in the rankings, which is well known in the cultural and creative industries (McKenzie, 2013). Second, we also used a dummy variable indicating whether a post

Variable	Types	Operational definition
Informativeness		The post contains game-related information
Structure	Image (basic)	The post mainly consists of an image plus some text
	Contains links	The post contains a hyperlink to an external URL(s)
	Text only	The post consists of only text
	Contains a video clip	The post contains a video clip
Call for action	Call for "likes"	The post is asking for pressing "like"
	Call for replies	The post is asking for leaving replies
	Call for "shares"	The post is asking for pressing "share"
Type of reward	Game-related	The post presents some information about game-related rewards
	Others	The post presents some information about non-game-related rewards
	No reward	The post presents no information about any reward
Dependent variable (user reaction)	Number of "likes"	Number of like's pressed on the date of data collection
	Number of replies	Number of replies on the date of data collection

Table I. Operational definition of the variables

includes any celebrity, such as a movie or sports star. Studies have shown that stars can make people pay attention to advertisements (Karniouchina, 2011) and, therefore, their impact on the posts of each brand page was also controlled. Third, we used a dummy to account for the effect of the two brands of the study.

5. Data and analysis

Data about 439 posts in total were collected from the two brands. Similar to previous studies (Cvijikj and Michahelles, 2013; Sabate *et al.*, 2014; de Vries *et al.*, 2012), multiple regression was used to test the hypotheses about the characteristics of the posts while controlling for the effects of other variables. This section describes the data and presents the result of the analyses.

5.1 Data

Data were collected manually for six months in 2013. In total, 295 posts were collected from the brand page of Com2uS, and 144 from that of WeMade, resulting in 439 in total. Of the 439 posts 283 were related to a specific game (type 1), while the remaining 156 posts (type 2) were not. The latter contained messages to promote the brand image of a firm or manage customer relationships, rather than to offer information about game play. We only collected data for the posts created more than at least two weeks before the time of the data collection because some changes in the number of "likes" or replies were still expected for the posts created very recently.

5.1.1 Posts of specific games (type 1). Among all the type 1 posts, 113 posts or 39.9 percent of them contained some helpful information for playing specific games. These posts contained information such as updates, release of new content, promotion of discounted items, or maintenance. In terms of structure, 81.6 percent of the 283 posts contained an image with or without text, which is the most typical format in the posts. 155 posts contained hyperlinks to external websites. In total, 30 posts had only text, and 15 posts had video clips embedded.

In terms of call for action, 33 posts (11.7 percent) asked for replies. In total, 19 and 17 posts called for pressing "like" and "share", respectively. About half of the posts (155) provided rewards associated with the games, such as items or virtual cash usable in the game. In total, 47 posts provided rewards unrelated to any game, such as gift vouchers used in an offline store. In total, 81 posts (28.6 percent) did not provide any reward (Table II).

5.1.2 Posts not concerned with any specific game (type 2). In total, 122 of the 156 posts (78.2 percent) had images with or without text. In total, 30 posts asked for leaving replies, 18 posts asked for pressing the "like" button, and ten posts asked for the "share" button (Table III).

5.2 Analysis results

Tables IV and V show the results of the analysis of the type 1 and 2 posts, respectively. Note that the dependent variable "share" was excluded from the results because the number of "shares" was very small for almost all the posts, and hence, a significant relationship could not be observed.

Game-related information appeared to be significantly and positively associated with the number of "likes" in the type 1 ($\beta = 1.737$, $p < 0.1$) data. However, it was not significantly associated with the number of replies. Therefore, *H1* was partly supported.

With regard to the structure of posts, videos, and links were not significantly associated with the number of "likes" in the type 1 posts. However, the two types of structure were significantly and negatively related to the number of replies in the type

Variable	Types	Frequency	%
Informativeness	Informative contents	113	39.3
Structure	Image (basic)	231	81.6
	Contains links	155	54.8
	Text only	30	10.6
	Contains a video clip	15	5.3
Call for action	Call for "likes"	19	6.7
	Call for replies	33	11.7
	Call for "shares"	17	6.0
Type of reward	Game-related	155	54.8
	Others	47	16.6
	No reward	81	28.6
Brands	Brand – A	185	65.4
	Brand – B	98	34.6

Table II. Descriptive statistics (type 1)

Variable	Types	Frequency	%
Structure	Image (basic)	122	78.20
	Contains links	18	11.50
	Text only	33	21.20
	Contains a video clip	16	10.30
Call for action	Call for "likes"	18	11.50
	Call for replies	30	19.20
	Call for "shares"	10	6.40
Brands	Brand (Com2uS)	110	70.50
	Brand (WeMade)	46	29.50

Table III. Descriptive statistics (type 2)

Dependent variables	Model 1 Likes	Model 2 Replies
Informativeness	1.737 (0.084)*	0.748 (0.455)
Structure		
Videos	−1.292 (0.197)	−2.279 (0.023)**
Text only	1.102 (0.271)	0.954 (0.341)
Links	−0.651 (0.516)	−2.003 (0.046)**
Call for action		
Call for likes	4.887 (0.000)***	2.792 (0.006)***
Call for replies	−0.295 (0.769)	3.504 (0.001)***
Call for shares	1.770 (0.078)*	2.855 (0.005)***
Type of reward		
Game-related	2.507 (0.013)**	2.688 (0.008)***
Others	−1.492 (0.137)*	−1.431 (0.154)
Controls		
Celebrity	0.590 (0.556)	1.450 (0.148)
Revenue (reverse)	−8.291 (0.000)***	−10.350 (0.000)***
Brand	−8.119 (0.000)***	−8.097 (0.000)***
R^2	0.531	0.607
F-value	27.652***	37.362***

Notes: Standard errors are in parentheses. *$p < 0.1$; **$p < 0.05$; ***$p < 0.01$

Table IV. Results of the multiple regression for Type 1 posts

Dependent variables	Model 3 Likes	Model 4 Replies
Structure		
Videos	−1.910 (0.058)*	−0.679 (0.498)
Text only	−3.229 (0.002)***	0.515 (0.607)
Links	0.004 (0.997)	−0.524 (0.601)
Call for action		
Call for likes	6.108 (0.000)***	3.107 (0.002)***
Call for replies	0.708 (0.480)	5.052 (0.000)***
Call for shares	−0.555 (0.580)	−0.531 (0.596)
Controls		
Brand	−10.074 (0.000)***	−8.235 (0.000)***
R^2	0.476	0.403
F-value	19.177***	15.919***

Table V. Result of the multiple regression for type 2 posts

Notes: Standard errors are in parentheses. *$p < 0.1$; **$p < 0.05$; ***$p < 0.01$

1 posts (video: $\beta = -2.279$, $p < 0.05$; links: $\beta = -2.003$, $p < 0.05$). In the type 2 posts, having a video clip was significantly and negatively associated with the number of "likes" ($\beta = -1.91$, $p < 0.1$), implying that *H*2a was not supported. Using text alone has a negative impact on the number of "likes" in the type 2 posts ($\beta = -3.229$, $p < 0.01$), partially supporting *H*2b. One possible reason why *H*2a was not supported may be that users prefer posts without videos or links, being that it takes additional effort for users to follow the links or to watch the video clips.

Call for "likes" is positively associated with both the number of "likes" (type 1: $\beta = 4.887$, $p < 0.001$; type 2: $\beta = 6.108$, $p < 0.001$) and replies (type 1: $\beta = 2.792$, $p < 0.001$; type 2: $\beta = 3.107$, $p < 0.001$) in both type 1 and 2 data. Call for replies is positively associated with only the number of replies (type 1: $\beta = 3.504$, $p < 0.001$; type 2: $\beta = 5.502$, $p < 0.001$) in both type 1 and 2 data. These results were regarded as supporting *H3*.

With regard to the type of reward, game-related rewards (content-related rewards) have a positive impact on the number of "likes" ($\beta = 2.507$, $p < 0.05$) and replies ($\beta = -2.688$, $p < 0.01$), whereas the other types of reward were not significantly associated with the number of "likes" or replies. These results support *H4*.

Table VI summarizes the results for each hypothesis. Overall, many of the hypotheses were confirmed to be significant. It can be observed that the

Dependent variable	Hypothesis	Independent variable	Type 1	Type 2
Likes	*H1*	Informativeness	Supported (+)	n/a
	H2a	Videos and links	Not supported	Not supported
	H2b	Text only	Not supported	Supported (−)
	H3	Calling for action	Supported (+)	Supported (+)
	H4	Game-related reward	Supported (+)	n/a
Replies	*H1*	Informativeness	Not supported	n/a
	H2a	Videos and links	Not supported	Not supported
	H2b	Text only	Not supported	Not supported
	H3	Calling for action	Supported (+)	Supported (+)
	H4	Game-related reward	Supported (+)	n/a

Table VI. Summary of the Hypotheses Test

relationships are more evident for the number of "likes" compared with replies. Support for *H2a-H2b* appeared to be limited, only confirming *H2b* for the type 2 data.

6. Discussion and conclusion

6.1 Summary and discussion

This study has analyzed the impact of certain characteristics of brand page posts on user reactions, focussing on the pages of mSNGs in Facebook. Two major Korean mobile game companies were chosen as the target of this analysis, and the posts on their Facebook brand pages were analyzed. The characteristics of each post – such as informativeness, structure, call for action, and the type of rewards – were coded for multiple regression analysis. The influence of the factors was analyzed using the user reaction metrics as the dependent variables that include clicks on the "like" button or the number of replies for each post. The analysis results confirmed the significant influence of these characteristics on user reaction.

The academic contribution of this study can be summarized as follows. First, despite its importance, not much attention has been paid to the study of the brand pages of mSNGs. In this regard, this study made a contribution by identifying and testing the factors that determine the success of marketing mSNGs on brand pages. Second, this study showed that a content-specific approach is important for drawing users' reaction to the marketing. That is, providing information or rewards that are related to the contents appears to have positive impact. Considering the high frequency of promotions or events on the brand pages of mSNGs, this finding constitutes an important insight for understanding the motivations of the users who visit brand pages. Third, this study provides empirical evidence for the importance of framing messages when conducting marketing on the brand pages of SNSs. We have shown that providing videos or links can have negative impact, despite being able to offer richer information. We have also shown that calling for specific actions does have a positive impact on users' reaction.

This paper has been able to demonstrate some practical implications for the companies conducting marketing on brand pages. First, it has clearly been shown that both the format and the content of the posts make significant difference. The implication of these results is that companies should pay close attention to the details of the posts in order to achieve the greatest outcome from their investments in brand pages. In the light of the huge power of SNSs in terms of their capacity to spread messages quickly and virally using such functionalities as "like" or retweets, we cannot over-emphasize the importance of these points. Second, our analysis has demonstrated clear differences between the types of rewards provided to users. The implication is that it might be possible for companies to choose some rewards that are more cost-effective to users under budget constraints. Since this study has focussed only on the degree to which each reward relates to the relevant game, various other aspects of rewards need to be explored further for effective marketing.

6.2 Limitations and further research issues

This paper has some limitations which call for future research. First, our study has only targeted two mobile game brands in Korea. Care needs to be taken when attempting to generalize the results of this study in view of the differences in cultural and economic environments. Future research also needs to be conducted into global brands, or to compare game brands in different cultural settings.

Second, this study coded each post on the brand pages quantitatively. Hence, it could not reflect other qualitative characteristics, such as the linguistic features of the text in the posts. However, recent development in the text mining field can be applied in a future study in order that these aspects are also taken into account for analysis. Third, since the unit of analysis of this study was the post on brand pages, the results encounter limitations in terms of explaining the issue from the users' perspective, or in analyzing possible differences that might result from user characteristics. Therefore, a future study is needed to address this gap incorporating, for example, the findings from the research about personalization (Ahn and Park, 2012; Ahn, 2010), which can enable us to develop a deeper understanding of the topic.

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About the authors

Hyesun Jeon received her Master's Degree in Arts and Cultural Management from the Hongik University. Her interests include comics, animation, mobile games, and the content industry.

Hyung Jun Ahn is an Associate Professor of Information Systems at the Hongik University. He received his PhD from the KAIST in 2004. His current research interests include social networks, text mining, and e-commerce. Hyung Jun Ahn is the corresponding author and can be contacted at: hjahn@hongik.ac.kr

Gun Jea Yu has a PhD in Industrial Labor and Relations from the Cornell University and is now an Assistant Professor at the College of Business Administration in Hongik University. His current research is focussed on strategic management and innovation.

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