The Effects of Interaction Experience and Product Involvement on Decision Making of Purchase: The Corporate Facebook Page

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ABSTRACT

Recently, with the development of technology, social network service (SNS) has become a hot topic. Lots of companies are now making online marketing strategy to promote their products and brand identities using SNS. Through these strategies, companies can produce more profit as well as make better brand images by performing online public relations. Among the SNSs, Facebook has a lot of users, it has been regarded by companies as a suitable platform with respect to online marketing for latent customers. The companies of today typically have at least one account and a Facebook page, and constantly make relationships with customers. However, companies have been thoughtless in this process, and usually provide information to customers through one-way communication. Based on this phenomenon, a study was conducted herein on how to use Facebook pages for promoting products and brand identities, keeping good relationships between companies and customers. This study assumed that the types of interaction on Facebook pages and user involvement are the key factors affecting decision making of purchase. Four types of Facebook pages which were made virtually were used in analysis with 56 participants who were selected for the experiment. The results indicated partial verification of the hypothesis. Particularly, product involvement had an effect on decision making of purchase in all conditions. According to these results, it can be explained that there are close relationships between the psychological status of online behaviors and Facebook corporate pages. In addition, through linear tendency of this phenomenon, this can infer how to set-up a positive relationship with latent customers and make improve brand images of products.

Key words: Interaction Experience, Product Involvement, Decision Making of Purchase, Facebook Page, Relationship Marketing.

1. INTRODUCTION

A lot of people communicate with others exchanging messages in real-time in the computer mediated communication. With the advent of new-media, not only One-way communication which is the situation of the old media but also two-way communication that able to communicate with each other organically and share opinions is becoming common. Social Network Service (SNS) getting in the center of attention is the service based on the web sharing the information in real time and establishing a relationship with other users. SNS as a service based on the web can be defined by three characteristics. First, it can make its own profile to publicize to the public. Second, it can share its own thought with others through the connection. Lastly, it is the system that people can also see and feel [1]. Thus, SNS is the system not only providing things to make an relationship with others through continuous communication but making an effort to allow users to experience better service [2].

As a classic example of SNS, Twitter and Facebook have the greatest number of users. Especially, as of June 2013, around 1 billion and 150 million people in the world use the Facebook [3]. Around half of Internet users have Facebook accounts and share the information with other Facebook users based on the fact that there are around 2.4 billion Internet users in the world. Thus, Facebook is known rapidly to many people and around 4.5 million people in Korea also have their Facebook accounts and maintain the relationship consistently with others [4].

Recently, various companies use SNS as their marketing tool based on the steady growth of SNS [5]. They are trying to communicate with customers not only promoting their new products but bringing up ongoing marketing campaigns or simple daily stories. The reason of marketing turned from offline to online is that the importance of online community is strengthened. Online community is important because the marketing strategies in that community lead to actual orders [6].

Online marketing is an important part of marketing strategies for pursuing companies’ profits. So, the study that how to design and organizing the online marketing with what kind of strategies is needed. The precedent studies indicates that not only there was a study of the reason people click ‘Like’ on Facebook page of companies that look factors from various
angles like vividness, interactivity, informational content, entertaining content, position and valance of comments [7] but subdivide the interaction experiences into pragmatic interaction, sociability interaction, usability interaction and hedonic interaction [8]. People are facing products through these various interaction factors and it can be considered as a strong decision making factor that lead to product loyalty and purchase [9].

Not only the interaction factor but the involvement also works as an important variable in the use of products. Reference [10] announced that there is a linear relation with involvement of customers and replacement cycle of products. In other words, it means that a product involvement of customer is higher; a distance of time to replace products is longer. Also, it is found that a product with high involvement is more likely to make a strong and careful decision in purchase [11]. It is divided into high involvement or low involvement according to how much time and effort on product customers put in. Ultimately, involvement is not only a factor needed in the progress of product purchase but has to be considered what kind of marketing strategy we have to draw up according to features of products in online marketing.

The study is needed that which experiences of interaction can inculcate good images and positive psychological factors based on the thing that feeling of customer using corporate Facebook page of companies can be changed by various factors. According to this phenomenon, this study focused on whether interaction experiences and involvement of users that considered as important factors to do online marketing through corporate Facebook page can effect on product purchase or not. Also, we wanted to know that Facebook users and pages were communicating each other in what kind of interaction circumstances and whether corporate Facebook page has a close relationship with product involvement level or not. This study was conducted to find out which level is the most rational and proper marketing strategy to potential customers exposed to online marketing of Facebook page to make a purchase decision.

2. COMPUTER-MEDIATED COMMUNICATION (CMC)

People live in the reality communicating with others exchanging constantly. Restriction of communication is getting diminishing and easy by rapid advances in technology, and the computer performs well that role. Reference [12] argues that various interaction experiences are occurred in many communication forms by computers. Interactions are classified into impersonal interaction, interpersonal interaction and hyper-personal interaction. The basis it can be divided in these classifications is found from earlier study of CMC. CMC in a media richness theory is a channel that takes a role of simple information delivery and it realizes the communication of text-oriented [13]. Thus, the earlier characteristic of CMC is considered as an impersonal communication because the technical realization is just consisted of text and simple information transmission.

However interpersonal communication of CMC had been done from a follow-up study. Exposing the limit of existing impersonal character of CMC [14], interpersonal communication showed the tendency to more efficient than face to face communication. The expression of message sender has been mentioned as an important factor in interpersonal communication [15] and considered as an important clue to form the social relationship in CMC circumstance. Although emotion expression in communication by computer through the social identity and de-individuation theory has no verbal cues, it plays an important role to form the social connection network than expression cue [16]. It can be associated with self-disclosure in online and [17] suggests that people has a high level in a behavior of exposing and expressing themselves in circumstances by computers. Interacting with computer and human, users do not hide their identity in online, but considered it as a mean of self-presentation by interaction. Hyper-personal communication in online is affected by more factors than mentioned earlier. Interaction in hyper-personal communication is done by education, atmosphere, leadership and many set-up situation of group [18], [19]. There is an earlier study that the behavior of exposing information selectively in online is considered as an important factor has an effect on self-image and impression and it lea to the raising the self confidence level by individual psychological states [12]. Also, the level of exchanging emotional and sentimental messages is higher than face to face communication in an entertainment communication situation [20]. Thus hyper-personal communication can be explained that it is a special communication style over the purpose of formation of interpersonal relationship and surpass various environments between individuals.

Communication studies have been done in various points of view with the environment that able to communicate in real time by computer. Especially, Communication in CMC environment is similar with the stream of the common communication style, but it can be explained that it is much more influenced by users’ psychological aspect, variety of methods of expression and environment factors.

3. INTERACTION EXPERIENCE WITH FACEBOOK

People enter into a connection constantly with others in online. People use the service that they can inform their conditions and share with others anytime and anywhere in real time because of rapid spread of SNS. Even SNS exposed a lot in real life like Facebook and Twitter has many users in Korea. So, companies use SNS as a marketing tool to pull potential customers with these platforms [21], [22].

Recently, Facebook came to be able to make an account with brand of company on a Facebook page beyond the limit that Facebook only could make an account of ordinary people [23]. Corporate is carrying forward an online marketing based on this circumstance and it is verified online marketing has clear merit of forming relationship through SNS and carrying the community [24]. Facebook need some important factors to interact with customers and causing the user’s motivation is the most important among them [25]. Lin and his co-worker mentioned that factors causing user’s motivation is important to make them use the Facebook page constantly. Also social interaction, shared value and confidence are the most important
among them. Another study emphasizes it has to maintain intimacy with customer constantly and communicate with customers mentioning eight factors Facebook page to succeed [26]. There is a gap by age and according to this, there is a study result that young SNS users are greatly influenced by their friends [27].

From a different viewpoint, users click ‘Likes’ and make articles being seen on their ‘Newsfeed’ to interact constantly with Facebook page. It can be considered as an important factor that the behavior of clicking ‘Likes’, because that behavior plays a role in communicating information and sharing it to intimate friends being having a relationship [28]. Also, it means that users want to maintaining the relationship with that page, share opinions constantly and communicate [29]. Most users of these Facebook pages show online actions that form an intimate relationship by clicking ‘Likes’ on pages of company products and celebrities they into and volunteering being fans.

Studies have shown that how to make a positive interaction between Facebook page of company and customers using SNS in online marketing. Also, psychological aspect in online was studied subdividing the interaction by various perspective based on the contact of interaction between customers and pages. A study was conducted trying to study the experiences quantitatively subdividing customer’s interaction experiences in internet-based virtual customer environment into various perspectives and processing study of interactivity [30]. As mentioned introduction, a study was processed actively to quantify the user’s experiences by four aspects: pragmatic interaction, sociability interaction, usability interaction and hedonic interaction.

The importance of interactivity of media and channel has been expressed constantly with the arrival of new-media as like SNS. Interactivity has become a main factor in new-media era as many technologies were converged [31]. Thus, making a standard to subjects that exchanging effects directly on interactivity was needed. Subjects are subdivided into user, content and system and classified with user to user, user to content and user to system according to interactivity among subjects [32], [33]. According to earlier studies of interactivity, there were a lot of studies from the perspective of user to content or user to system. But the studies of dealing with shared value between user to user on SNS are insufficient. Especially, the need of study of interactivity of user to user on SNS concentrating main factors that relationship, participation and share is needed.

4. PRODUCT INVOLVEMENT

Involvement is defined in many ways. Generally involvement is defined as perceived personal relevance or perceived personal importance in certain situations [34]. It is also subdivided into continuous involvement which is related to general involvement and situational involvement that oneself have an interest to a certain degree in various situations. Especially, products can be divided into high involvement and low involvement by importance individual has. It also can be divided by customer’s level of involvement [6]. Involvement has been studied for a long time dividing into two main parts and it is divided into product involvement and involvement of purchase decision of product [35]. For example, one customer did not show high interest continuously on dishwasher but involvement on purchase decision can be existed. The term ‘involvement’ can be defined by several contexts, perceived involvement from importance of service and product individual has and product involvement related to purchase and so on.

Relationship Marketing can be an important factor on measuring level of individual involvement from online platform like SNS. Relationship Marketing is a process of obtaining profits mutually establishing, maintaining and reinforcing one’s identity between customers and stakeholder [36]. Especially, in terms of getting attention of companies and customer, relationship Marketing is an important strategy because maintaining continuous relationship with customers is emphasized these days [37], [38]. Similarly, online activity that Facebook page and customer interact together is an example of relationship marketing. Not only companies promote their products but communicate with customers establishing positive relationship through Facebook pages. Through this, well-made relationship can make a great result compared to the past issue that was insufficient based on the relationship with customer before [39] and can be an important factor in the aspect of improving product quality [40].

Eventually, in the process of getting relationship with Facebook pages and potential customers, relation status by involvement can be realized and it can lead to purchase activity of customers. As the preceding study, involvement in online communication can measure the effect of message and also there is a research result that it affects a significant influence in web advertisement with interactivity [41]. The frequency of clicking the center-based information on the web was high in case of high involvement and clicking surrounding information far from center was high in case of low involvement [42]. Overall, involvement of customer is considered as an important factor in the relation marketing through corporate Facebook pages and people who have higher involvement can allow themselves to have more potential purchasing power and create positive image of its brand.

5. DECISION MAKING OF PURCHASE

Online transactions are developing rapidly these days, the circumstances that not purchasing products in person but on online easily are promoted. Because of this circumstance, not only shopping malls that show information as like as displaying products but marketing activities that promote products in advance and guide induce people to purchase through SNS are ongoing briskly. Not the one-dimensional economic activity is performed, but companies push forward economic activities in many ways planning integrated marketing communication [43], [44].

In this circumstance, the role of new media is not just a product promotion, but it can be a marketing tool to create potential customers. Many factors can affect before purchasing certain product and product brand is considered as a fundamental factor on deciding of purchase among them [45]. Smith and his co-worker researched on the subject of Shopbot
which is a web site related to price comparison and they found that price and brand factors deciding purchase and brand during delivery are a big part of this web site. Also according to another research, the form of delivering too many information unilaterally give indication of negative opportunity to potential customers can make them find the better products [46] so, building trust and image of brand are more efficient in this situation. In online circumstance, building relationship with customers and companies in purchase and making brand image through this can also is valid. Customer’s perception of brand is an important factor to build the heuristic direction for purchase decision [47], [48]. Thus, it suggests that the relationship with effective purchase of customers and brand is set closely. In the long run, these can be a marketing method to create purchase through a way of information transmission in the online circumstance like Facebook page and interaction experiences of customers. With these theoretical background, this study place emphasis on researching interaction between users scientifically in a variety of situations promoting products using corporate Facebook page. Also, this research is performed to know comprehensively that involvement of users on each promoting products affect what kind of influence on purchase.

With these theoretical background, this study place emphasis on researching interaction between users scientifically in a variety of situations promoting products using corporate Facebook page. Also, this research is performed to know comprehensively that involvement of users on each promoting products affect what kind of influence on purchase.

**6. METHODS**

- **Stimulus**

To perform this study, four home shopping companies taking the largest part of home shopping field - CJ O shopping, GS shop, LOTTE home shopping and NS home shopping are selected. Also, to choose the Facebook page for this study, same type of articles in each account-food publicity is selected. Food products which can meet the basic needs of human are selected as experiment stimulation because in case of clothes and other products that likes and dislikes are clear can occur an external contamination factor. Also, to make various circumstances, total four articles are selected in the light of diversity of the number of comments and ‘Likes.’ And imaginary home shopping - Dream Shopping or from four collected articles was made using Adobe Photoshop and CS5 Software. If there is a home shopping company that user likes, it can cause the by-effects. So it was controlled by imaginary home shopping brand. Also, logo and account ID of the product are changed. Each of four experiment stimulations is arranged in a different order and exposed as a slide method by Microsoft Office Powerpoint 2007. Orders are arranged randomly to eliminating order effect between stimulate things and around 30sec of break time after exposing each stimulate thing was given to erase the rest image remaining in mind.

- **Scales**

To measure thought and attitude of experiment participants after looking the experiment stimulation proposed above, survey questions which are able to research the interaction experiences of users [49] and involvement [50], [51] are cited. Survey for measuring interaction experiments are composed of total 13 questions and measured from the perspective of participation, sharing, relation and response. Precision of answer of experiment participants was raised by seven-point Likert scale. Questions measuring product involvement are composed of 12 questions and designed to bring the image and attitude of products on mind by semantic scale. Lastly, to searching whether they purchase imaginary products or not through the Facebook page, survey questions [52] are cited to measure the image of brand and purchase decision comprehensively.

- **Participants**

A notice is posted on the recruitment board of Sungkyunkwan University to recruit experiment participants. Circumstance was set that after looking at that notice, volunteers who want to participate can put their name freely on the study timetable in real time following the URL made by google drive spreadsheet. Also, the group was composed with people using Facebook regularly to make them don’t feel any sense of difference or distance of the Facebook page. Experiment went off for four days from Tue May 27 to Fri May 30. Final 56 participants were selected among 71 who wanted to participate at first. Fifteen respondents were excluded as they did not show up without prior notice.

**7. FINDINGS**

- **Descriptive statistics**

Women participants were a bit more than men 37 to 19 among total 56 subjects of analysis. The average age was 22.27 years and the number of friends of each person was 229.82. But there was a big difference between average and standard deviation because standard deviation of the number of friends was 132.78, so it could be explained that the number of friends of each person was various. Also the research suggests that average time of using Facebook was 44.87min and all of them still use Facebook actively.

For the additional questions, the average was 9.48 on the question that how many Facebook pages of companies they read and all 56 participants had experiences on the question of...
purchasing products on online. Thus, participants are suitable for measuring their purchase activity on online with this result. 62.5% of participants which was the highest percentage chose Fashion & Beauty products on a question that what kind of products people usually purchase and 23.2% of them which was the next highest chose library products.

-Reliability test
The measuring reliability result of 13 questions of interaction experiences, 12 questions of product involvement and 6 questions of purchase decision are as follows. After measuring the reliability of three factors from each four stimulations, all of them had high level of reliability. Through this, survey questions are the scale measured consistently and correctly from each factor.

Table 1. The result of measured questions reliability of each page proposed

<table>
<thead>
<tr>
<th>Experiment Stimulation</th>
<th>Variables</th>
<th>The number of questions</th>
<th>Cronbach’s alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ice cream page (Condition 1)</td>
<td>IE</td>
<td>13</td>
<td>.942</td>
</tr>
<tr>
<td></td>
<td>PI</td>
<td>12</td>
<td>.924</td>
</tr>
<tr>
<td></td>
<td>DMoP</td>
<td>6</td>
<td>.920</td>
</tr>
<tr>
<td>Fruit page (Condition 2)</td>
<td>IE</td>
<td>13</td>
<td>.914</td>
</tr>
<tr>
<td></td>
<td>PI</td>
<td>12</td>
<td>.949</td>
</tr>
<tr>
<td></td>
<td>DMoP</td>
<td>6</td>
<td>.876</td>
</tr>
<tr>
<td>Taffy page (Condition 3)</td>
<td>IE</td>
<td>13</td>
<td>.924</td>
</tr>
<tr>
<td></td>
<td>PI</td>
<td>12</td>
<td>.941</td>
</tr>
<tr>
<td></td>
<td>DMoP</td>
<td>6</td>
<td>.922</td>
</tr>
<tr>
<td>Jam page (Condition 4)</td>
<td>IE</td>
<td>13</td>
<td>.875</td>
</tr>
<tr>
<td></td>
<td>PI</td>
<td>12</td>
<td>.944</td>
</tr>
<tr>
<td></td>
<td>DMoP</td>
<td>6</td>
<td>.901</td>
</tr>
</tbody>
</table>

-Multiple regression analysis
To verify a hypothesis, multiple regression analysis was conducted using variables to each of four stimulations. Multiple regression analysis is selected to find out the tendency with collected quantitative data that what has been the impact on the attitude of purchase decision according to interaction experiences of Facebook users and involvement of products which are the hypothesis of this study.

Table 2. The result of suitability validation of regression model in condition 1

<table>
<thead>
<tr>
<th>Model</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>47.473</td>
<td>2</td>
<td>23.737</td>
<td>45.201</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>27.832</td>
<td>53</td>
<td>.525</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>75.305</td>
<td>55</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Ice cream page (Condition 1)

The result of regression analysis to stimulate things of Facebook page promoting their page using ice cream product suggested that explanation power of model indicates high level ($R^2 = .616$) and suitability of model is significant ($F=45.201, p < .000$). It allows various variable measurements of experiment participants which were analyzed with above stimulation are possible.

Table 3. The result of hypothesis validation in condition 1

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constants)</td>
<td>.087</td>
<td>.393</td>
<td>.221</td>
<td>.826</td>
</tr>
<tr>
<td>Interaction Experience (IE)</td>
<td>.027</td>
<td>.119</td>
<td>.024</td>
<td>.225</td>
</tr>
<tr>
<td>Product Involvement (PI)</td>
<td>.878</td>
<td>.119</td>
<td>.779</td>
<td>7.375</td>
</tr>
</tbody>
</table>

Dependent Variable: Decision Making of Purchase

The result of regression analysis to find out how independent variable - interaction experiment and product involvement affect on decision making of purchase suggested that interaction experiment variable is not significant on decision making of purchase ($F=.225, p > .05$). But product involvement variable is significant ($F=7.375, p < .000$) so, it worked as a variable that can explain the decision making of purchase. It allowed the research result that the high involvement of ice cream products, the more attitude of purchase decision of those products can be formed.

Table 4. The result of suitability validation of model in condition 2

<table>
<thead>
<tr>
<th>Model</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>26.790</td>
<td>2</td>
<td>13.395</td>
<td>30.087</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>23.597</td>
<td>53</td>
<td>.445</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>50.387</td>
<td>55</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Fruit page (Condition 2)

The result of regression analysis to stimulate things of Facebook page promoting their page using fruits suggested that explanation power of model indicates high level ($R^2 = .532$) and suitability of model is significant ($F=30.087, p < .05$).

Table 5. The result of hypothesis validation in condition 2

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constants)</td>
<td>.990</td>
<td>.497</td>
<td>1.992</td>
<td>.052</td>
</tr>
<tr>
<td>Interaction Experience (IE)</td>
<td>.282</td>
<td>.104</td>
<td>.279</td>
<td>2.715</td>
</tr>
<tr>
<td>Product Involvement (PI)</td>
<td>.514</td>
<td>.092</td>
<td>.571</td>
<td>5.567</td>
</tr>
</tbody>
</table>

Dependent Variable: Decision Making of Purchase

The result of the regression analysis to find out how interaction experiences and product involvement affect on the decision making of purchase in Facebook pages about fruits suggested that interaction experience variable is significant on decision making of purchase \((F=2.715, p<.05)\). Also, product involvement variable is significant on decision making of purchase \((F=5.567, p<.05)\). In above stimulation circumstances, both interaction experience of study participants and product involvement variable affected on decision making of purchase significantly. Therefore, after finding standardization residual of through the regression diagnosis, it is analyzed whether it assumes independence, normality and homoscedasticity of each case or not.

![Fig. 3. The result of regression diagnosis validation in condition 2](image)

The analysis result of regression diagnosis suggested that it follows normal distribution because all 56 cases of the absolute value of Durbin-Watson statistics are less than 3. Also, normality can be confirmed because a case on the P-P plot is gathered in a 45 degree angle of straight line. Also, it is able to assume the homoscedasticity because a case ranges evenly with 0 as a center in the standardization scatter diagram of right side. Thus, the result of regression analysis of stimulation of fruits can be meaningful.

**Table 6. The result of suitability validation of model in condition 3**

<table>
<thead>
<tr>
<th>Model</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>35.533</td>
<td>2</td>
<td>17.766</td>
<td>19.576</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>48.102</td>
<td>53</td>
<td>.908</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>83.634</td>
<td>55</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. Taffy page (Condition 3)*

The result of regression analysis to stimulate things of Facebook page promoting taffy suggested the explanation power of model indicates moderate level \((R^2=.403)\) suitability of model is significant \((F=19.576, p<.05)\).  

**Table 7. The result of hypothesis validation in condition 3**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constants)</td>
<td>.154</td>
<td>.592</td>
<td>.261</td>
<td>.795</td>
</tr>
<tr>
<td>Interaction Experience (IE)</td>
<td>.390</td>
<td>.149</td>
<td>.335</td>
<td>2.620</td>
</tr>
<tr>
<td>Product Involvement (PI)</td>
<td>.422</td>
<td>.136</td>
<td>.397</td>
<td>3.107</td>
</tr>
</tbody>
</table>

Dependent Variable: Decision Making of Purchase

The result of regression analysis to find out how interaction experiences and products involvement of Facebook pages of taffy products suggested interaction experience variable is significant on decision making of purchase \((F=2.620, p<.05)\). Also in above stimulation circumstances, both interaction experiences of experiment participants and product involvement affected on decision making of purchase significantly because product involvement variable was analyzed as a significant explanation variable \((F=3.107, p<.05)\).

![Fig. 4. The result of regression diagnosis validation in condition 3](image)

The analysis result of regression diagnosis suggested it follows normal distribution because all 56 cases of the absolute value of Durbin-Watson statistics are all less than 3. Also, normality can be confirmed because a case on the P-P plot is gathered in a 45 degree angle of straight line. Also, it is able to assume the homoscedasticity because a case ranges evenly with 0 as a center in the standardization scatter diagram of right side. So, the result of regression analysis of stimulation of taffy can be meaningful.
Dependent Variable: Decision Making of Purchase

significant explanation variable (F=7.079, because product involvement variable was analyzed as a variable that can explain the decision making of purchase

In above stimulation circumstance, only product involvement is significant on decision making of purchase (F=-.233, pages - ice creams, fruit, taffy and jam affected significant or not.

Whether interaction experience of Facebook page users and involvement of products affect on decision making of purchase or not.

Only two cases among four kin of imaginary Facebook pages - ice creams, fruit, taffy and jam affected significant influence on interaction experiences - independent variable and decision making of purchase that product involvement is dependent variable comprehensively. The regression equation corresponding two kind experiment stimulations with verified hypothesis is as in the following.

\[ DM = (0.282 \times IE) + (0.514 \times PI) + 0.99 \]
\[ DM = (0.39 \times IE) + (0.422 \times PI) + 0.154 \]

The number of ‘Likes’ and comments of D shop pages were too many or too small in condition 1 and condition 4 that results were not significant on this study. Superficially, it seemed like experiment participants were influenced by two external factors. The survey response result shows a stark difference that each of average values in condition 1 and condition 4 are 5.28 and 2.98 in the question of interaction experience. Eventually, the possibility of insignificant regression analysis result cannot be excluded because measurement value of interaction experience attitude was the highest or lowest in condition 1 and 4. Thus, in condition 2 and 3, the reliability of result is high because responses of experiment participants were distributed evenly and the result was meaningful. Furthermore, it is able to get a power of verification of hypothesis.

Also, overall, product involvement factor shows significant result in all conditions. This suggests that a hypothesis is partly verified which this study wanted to verify. As mentioned another study, the factor - product involvement which shows the psychological distance and interest in product can be the strongest motivation in decision making of purchase. Again, the most important part in marketing strategy that company has to pursue is the product involvement. Furthermore, they have to draw up strategy with the product they want as a center as a method of attracting potential customers in online marketing using Facebook page.

9. LIMITATIONS AND FUTURE STUDIES

While this study has insightful and valid implications, the results of this study should be interpreted with caution for several reasons. First and foremost, the sampling numbers are insufficient. It was a study proceeded with samples of 56 random people but, it might be considered as a case of certain group in interpreting the result because of insufficient sampling in age. Also, there is a possibility of partiality of gender
because percentage of women was higher than men in this study. It has to be proceeded based on securing the representativeness of group by gathering more various samples for further research.

Also, it might be limited of choosing Facebook pages. For the effect related with decision making of purchase, only accounts which are able to cause purchase directly among Facebook pages like home shopping are selected and used in this study. It means, there is a possibility that verified hypothesis is only effective in home shopping Facebook page. Gathering various stimulations and exposing them can be a part to empower to the hypothesis on not only a type of Facebook page but in terms of quantitative side.

Lastly, behavior of experiment participants was measured by limited method - survey in this study. There is a comment about survey method that it has a limit in a measurable part. There is also a comment that behaviors of human cannot be perfectly measured through listed questions. For more scientific and exploratory measurement, systematic approach is needed using an assistant system because this study was just based on understanding tendency between Facebook pages and users through survey. If it is reviewed and studied on the basis of this limit, it can be the basis to go deep into the study about interaction between users related with further Facebook page marketing.

In pursing this line of topics, future studies may consider drawing out a more scientific approach to the research issue by classifying and systematizing the concepts. Although the present study explained theoretical and conceptual discussions, it has a limitation to link and closely tie to the existing studies due to lack of studies have been done in the similar line of topics.

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Dong-Hee Shin: The Effects of Interaction Experience and Product Involvement on Decision Making of Purchase: The Corporate Facebook Page

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