The Formation of Customer Satisfaction in Social Media, the Role of Frequency, and Duration of Use

D. Anandya, Indarini, & A.T. Septiani
University of Surabaya, Surabaya, Indonesia

ABSTRACT: This study aims to determine the effect of frequency, duration, relevancy, and brand community on satisfaction in Instagram social media users in Surabaya. This study used a quantitative approach with SEM (Structural Equation Model) was used for data analyses and AMOS 22.0 program was used for data processing. The sampling technique used was a non-probability sampling with a sample of 150 respondents who are Instagram users aged 19 to 26 years, actively use Instagram in the past year, and accept the brand community in Surabaya. The results of this study indicated that frequency had a significant effect on relevance; relevance had a significant effect on the brand community, the brand community had a significant effect on the satisfaction of Instagram social media in Surabaya. Duration did not have a significant negative effect on the relevance of Instagram social media in Surabaya.

Keywords: Frequency, Duration, Relevance, Brand Community, Satisfaction

1. INTRODUCTION

The advancement of technology eases communication with the presence of novel and more advanced technology. An increase in internet penetration is supported by a diversity of applications and the development of social media. The terminology of social media is still unclear but refers to Boyd & Ellison (2007), the term originated from social networks or social network service. This definition continues to grow until Obar & Wildman (2015) added several unique features that social media should have today. These features are: (1) Social media is Web 2.0 Internet-based applications. (2) User-generated content (UGC) is the lifeblood of the social media organism. (3) Users create service-specific profiles for the site or app that are designed and maintained by the social media organization. (4) Social media facilitates the development of online social networks by connecting a user's profile with those of other individuals or groups.

Indonesia, as a developing country, has around 130 million internet users (December 2018), with a penetration rate of 63.5% of the population (www.internetworldstats.com). Approximately 60% of internet users in Indonesia use smartphones (www.goodnewsfromindonesia.com) and around 87.13% of internet users use it for accessing social media (Bohang, 2018). One of the most popular social media is Instagram. Instagram had just been launched in 2010, but currently Instagram users in Indonesia have reached 62 million and become the 4th most active social media platform in Indonesia (www.websindo.com).

Social media also aims to develop the brand community (Clark et al., 2017). It is essential to know why someone joins a brand community, especially on social media. Although there is some research on the brand community in social media have been conducted, conflicting results still occur.

Clark et al. (2017) found that duration did not affect relevance, whereas Amegbe et al. (2017) found different results. The duration was found to have a significant effect on relevance (Amegbe et al., 2017). This present study aims to examine the effect of duration on relevance and its impact on developing satisfaction in the brand community on social media.

In particular, this research was conducted on brand communities on Instagram with the Indonesian home base. The results of this study can contribute to the practice of developing brand communities both by
companies and individuals.

Frequency can be defined as a measure of the number of occurrences of a particular score in a given set of data (Salkind, 2010). In social media metrics, frequency is defined as how many times users have reached the same person with a specific piece of content (Kowalski, 2017). Thus, in the context of a brand community, the frequency is defined as how often a user accesses content that contains a specific brand within a specified period. In this study, frequency is defined as "how often individuals access a brand's social media" Unlike the offline point-to-point communication mode, social media minimizes geographical and temporal differences, and accelerating the frequency of interpersonal interactions (Algesheimer et al., 2005). Indicators of frequency measurement in this study are (a) Frequency member participation, (b) Frequency of visitation, and (c) frequent use of social media. Kabadayi & Price (2014) stated that customer involvement in social media could be manifested in many ways, including the frequency of visits, length of visits and "wishes", and commenting on various posts. The higher the frequency of members of the brand community interacts, the higher they feel relevant to the brand.

**H1: Frequency has a positive effect on the relevance of the social media site.**

The duration can be defined as the length of time of each individual in conducting exploration (Clark et al., 2017). In this study, each individual's time in exploring social media sites is a determinant of customer satisfaction. According to Clark et al. 2017, the duration is expressed in a specific time unit (minutes or hour). Duration indicators are (a) duration of each visit, (b) duration of time, and (c) duration of use. The length of time a customer accesses or explores a brand's social media site will have an impact on the level of interest or level of customer engagement with the brand. The longer the customer accesses a brand's social media site, the more the customer feels relevant to the brand (Clark et al., 2017).

**H2: Duration has a positive effect on the relevance of the social media site.**

"Relevance" in this study was approached from the definition of self-brand relevance. The definition of self brand relevance is the degree to which the brand plays a crucial role in consumers' choice process for a product in a given product category (Hammerschmidt et al, 2008) Individual activity in accessing social media will create a strong relationship with the community of a brand, thus creating a strong "relevance". Every interaction that occurs on the company's official page on social media will be in the form of an exchange of relevant and valid information related to a particular brand (Das & Mandal, 2016). This generally refers to the quality and relevance of information exchanged on social media forums (Stephen & Galak, 2012; De Vries et al., 2012). In this study, 8 relevant indicators were used to measure relevance, namely: I prefer to obtain information about this social media ... (a) through this social media site’s website, (b) through face-to-face communications, (c) In person, (d) through social media site (Instagram), (e) Online rather than offline, (f) through mobile devices rather than on my computer, (g) I prefer to share my opinion about this social media with others, and (h) The opinion of others regarding this social media is essential to me. Social media was developed around the concept of engagement because it utilizes two-way communication (Clark et al. 2017). Members of the brand community will have an interest in the same brand. The strong relevance of a brand attracts these members to join a community. The stronger the relevance of members to brand, the stronger the ties within the members of the brand community.

**H3: The relevance perceived by customers from social media sites has a positive effect on the brand community.**

A brand community is a unique form of community, not bound geographically, based on a series of structured social relations among admirers of a brand (Muniz & O ‘Guinn, 2001). This definition is in line with Kotler & Keller (2012), which defines the brand community as "a special community of identified customers or employees and their activities that focus on one particular brand". In this study, 8 indicators were used for brand community, namely: (a) I love this social media, (b) I admire this social media, (c) I would recommend this social media to my friends, (d) This social media is of the highest quality, (e) I have met wonderful people because of this social media, (f) I feel a sense of kinship with others in this social media, (g) This social media understands my needs, and (h) This social media cares to my opinion. Satisfaction is someone's pleasure or disappointment
feelings, which resulted from comparing a product’s perceived performance or results against his/her expectations (Kotler & Keller, 2012). Customer satisfaction can be seen as a measure of the quality of the relationship between customers and companies (De Wulf et al. 2001). Indicators of satisfaction are: in overall .. (a) I am very satisfied with brand image of this social media, (b) I am very satisfied with marketing communications if this social media, (c) I am delighted with marketing strategies of this social media employees, and (d) I am delighted with the relationship I have with others who also like this social media. Judson et al. (2012) found that when consumers integrate the brand community in social media, they have a higher perception of satisfaction with the brand image, marketing communication, marketing strategies, and brand relationships. The research model can be seen in Figure 1.

H4: The brand community has a positive effect on customer satisfaction.

2. RESEARCH METHODS

This research is basic research, with causal research type. The target population was students who have an Instagram account. The characteristics of the population were students in Surabaya aged 19-26 years, minimum education level of high school or equivalent, actively using Instagram social media in the past year, and joining a brand community on Instagram. This study used 150 students as respondents.

The frequency was measured by the number of visits to an Instagram account daily, while the duration was measured from the time interval using Instagram. Relevance and brand community were measured by 8 question items, while 4 question items measured satisfaction. All measurements were made with a 5-point Likert scale.

The analysis technique used in this study was structural equation modeling (SEM), with a two-stage approach. In the first stage, a measurement model was used to evaluate the validity and reliability, while the second stage used a structural model for testing hypotheses. The hypothesis is declared supported if the critical ratio (CR) value is above 1.96.

3. RESULTS AND DISCUSSION

The questionnaire was distributed in two phases. In the first phase, 30 questionnaires were distributed to test validity and reliability. Testing was done by looking at the correlation value and Cronbach alpha. The test showed that all questionnaire items met the validity and reliability standards.

Most respondents aged between 19-23 years (75.3%) while the rest aged 24-26 years. The most popular communities were fashion and cars, followed by motorcycle communities. The duration of Instagram access time per day is above 4 hours, while the average frequency is above 10 times per day.

The measurement model results showed that all questionnaire items had a loading factor above 0.5, and the AVE value ranges from 0.384 to 0.559, with a reliability above 0.8. Even though some constructs had AVE below 0.5, this model can still be continued to structural models because the standard loading value was still above 0.5. The GFI supply of the measurement model was 0.87, with an RMSEA value of 0.052, and a CMIN / DF of 1.403.

The structural model fit values showed good results (GFI: 0.855; RMSEA: 0.055; CMIN / DF: 1.446). Hypothesis test results indicated that Frequency significantly influenced relevance (CR: 2.455, H1 supported), while duration did not affect relevance (CR: 0.913, H2 is not supported). Relevancy influenced brand community (CR: 4.591, H3 is supported), and the brand community significantly increased satisfaction (CR: 7.118, H4 is supported).

Table 1. Hypothesis Testing

| Hypothesis | C.R. | Decision |
|------------|------|----------|
| H1 Freq ↔ Rel | 2.455 | Supported |
| H2 Dur ↔ Rel | 0.913 | Not Supported |
| H3 Rel ↔ B. Comm | 4.591 | Supported |
| H4 B. comm ↔ C. Sat | 7.118 | Supported |

In this study, the frequency had a positive effect on relevancy, so the more frequent access to social
media, the more users will feel the connection with the objects in the social media. These results confirm the findings of Clark et al. (2017), who have similar findings in his research.

The second hypothesis in this study is not supported, so the longer duration of the use of social media will not affect the perceived relevance of users. These results also confirm the findings of Clark et al., 2017 and contradict the results of Amegbe et al. 2017. This might happen because of the push notification system. On Instagram, if there is an update in the contents of a community, a notification will be sent; thus, users know and are interested in checking it. The higher the frequency of content updates, the higher the frequency of notifications, and the more often users check their community pages. This creates a strong attachment to the community. Conversely, if the content is rarely updated, although the duration of the user viewing the Instagram account is quite long, the user will not feel attached to the community.

Hypotheses 3 and 4 in this study were supported, so the results are in line with Clark et al. 2017. Strong attachment to a brand will encourage users to be increasingly involved in a brand community. If a brand community consists of people who have a strong attachment to the brand, then that community will get bigger and stronger. The better a brand community, the higher the satisfaction felt by members.

4. CONCLUSION

In this study, there are four hypotheses and the results show one hypothesis is not supported; thus, it can be concluded that frequency influenced relevance, while duration did not affect relevance. Relevance had a positive effect on the brand community and the brand community affected satisfaction.

This research gives theoretical implications about how a user can have a strong attachment to a brand. It turns out that frequency has a significant effect in building engagement with a brand and not the duration of access. Further research can explore deeper about other variables that might encourage engagement with a brand.

This research also shows that a strong brand community is built through a sense of attachment to an object/brand that is the same among members. The brand community account manager needs to think of some activities to increase the sense of attachment to the brand.

Practitioners also need to think about how to attract users to visit social media more often. The higher the frequency of visits, the stronger the attachment to the brand.

This study has limitations in terms of the number of respondents and also the scope of the study as the study was only conducted on one social media, namely Instagram, with 150 respondents and only limited to one city. Future research can expand the scope of studies on several social media with a more significant number of respondents.

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