

Testing Marketplace Brand Post Categorization Using Quantitative Content Analysis and Holsti Formula

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Abstract: *Customer engagement is an important first step to building brand awareness in marketing through social media. Marketplace in Indonesia is facing intense competition in retaining its customers due to the high level of customer movement to other marketplaces and the disloyalty of customers to a marketplace. Marketplace in Indonesia is already active in managing social media, but it is not yet known whether the content that has been shared has a relationship with the formation of customer engagement. This study aims to find out if the brand experience dimension can be used in measuring brand page categorization and consumer engagement in social media. This research was conducted using quantitative content analysis method. Data categorized by manual coding referred to brand experience and customer engagement categorization. The validity for categorization using intercoder agreement with Holsti formulation. The results show that the brand experience dimension was greater than the minimum 0.7 or 70% so the categorization was valid.*

Keywords: Facebook, Social Media, Content Analysis, Customer Engagement, Holsti Formula

1. Introduction

Internet users in the world have increased. Based on We Are Social and Hootsuite data in January 2020, the total internet users in the world reached 4.54 billion people or 59% of the world's population with an average usage of 6 hours 43 minutes / day. The number of internet users in January 2020 has reached 59% of the world's total population, which means that more than half of the world's population has used the internet.

An increase in the number of internet users has also occurred in countries in the Southeast Asia region, particularly in Indonesia. The results of the We Are Social and Hootsuite research in January 2020, showed that the total internet users in Indonesia reached 175.4 million people or 64% of the Indonesian population with an average usage of 7 hours 59 minutes / day [1]. This means that in January 2020, more than half of Indonesia's population has used the internet.

The most popular social media in the world and in Indonesia is Facebook. Based on We Are Social and Hootsuite research in January 2020, it shows that the total Indonesian Facebook users have reached 143.8 million people or 82% of the total internet users in Indonesia. Facebook as a social media has communication features that are not limited by the geographical location of any country and users can share their life activities connected to everyone. Judging from the business side, Facebook is a means for companies to maximize promotional activities through brand pages. This encourages the emergence of new interaction channels, namely social media and the growing popularity of the internet, which allows companies to interact more intensively with their customers [14].

The E-commerce industry is one of the industries that is growing with the increasing number of internet users currently occurring. The penetration of the number of

internet users has reached the Indonesian population which can be used by business actors, especially in improving the economy through the e-commerce industry [13]. Based on the phenomenon of internet users and social media in Indonesia, it has an impact on the behavior of Indonesian people in shopping for necessities through e-commerce. E-commerce can provide whatever is needed in shopping for necessities, such as office equipment, school equipment, buying cinema tickets, paying credit, buying clothes and buying credit.

The number of internet users in Indonesia which is more than 100 million users is one of the forces driving the growth of e-commerce. Based on research by Merchant Machine (2019), a research institute in the UK, the average amount of money spent by Indonesians on e-commerce reaches US \$ 228 / person or around Rp. 3.19 million / person. Of the total expenditure, Indonesians use 17.7% to buy airplane tickets and book hotels, as much as 11.9% to buy clothing and footwear products and as much as 10% to buy health and beauty products [17].

Based on these explanations, this study will focus on analyzing the content of brand experience from the results of brand posts made by the marketplace with the largest number of visitors and transaction value in Indonesia on its Facebook brand page to find out how these four dimensions affect customer engagement. This study provides empirical support that underlies that brand post has an important role in encouraging customer involvement in companies that affect brand experience.

2. Literature Review

Brand experience is an area in the marketing literature that can bring satisfaction and loyalty from customers [10]. Brand experience is also defined by Brakus (2009) in Tafesse (2016) as consumer responses to sensations,

feelings, cognitions, and responses generated by stimuli related to brands that are part of the design and identity, packaging, communication, and the brand environment.

Tafesse (2016) explains that brand experience has a relationship with sensory, affective, intellectual, and consumer behavior. Through brand experience, experience components are identified, consisting of perceptual, social, epistemic, and embodied dimensions. The four experiences are then discussed in more depth, namely as follows:

1) Perceptual Experience

The perceptual experience involves a sensory component which includes the customer's sight and hearing [16]. When consumers and brands interact with brand cues such as logos, voices, characters, and brand products, these sensory components will be active [5]. Brand posts have sensory, emotional, and contextual details that can add to the level of perceptual experience [15]. Ashley and Tuten (2015) state that brand pages can provide visual and auditory effects that give brand posts an impression.

2) Social Experience

Social experience allows customers to feel interaction with the company by forming a brand community. Brand pages that share a large number of interactive brand cues can provide a more social experience [16]. Interactive activities between brands and customers can trigger social experiences that have an impact on increasing customer ownership of the brand and allow customers to co-create and get brand meanings [7].

3) Epistemic Experience

Epistemic experiences involve customer cognitive and brand information [16]. Epistemic experiences make consumers think creatively about products or solve product-related problems which make this experience dimension creatively and functionally stimulating. Epistemic experiences can be shared by providing informative content that appeals to consumers' needs for creativity and problem solving [12].

4) Embodied Experience

Materialized experiences involve active physical interaction with customers [16]. Materialized experiences can be activated through direct mechanisms such as touching, smelling, tasting, and using products [9]. A materialized experience is activated through a brand page indirectly, for example in promoting brand events such as sponsorship events, product launches, and other events related to the brand [4].

According to Kabadayi and Price et al. (2014), customer engagement in social media is created through customer interaction with brands on social media that encourages cooperative behavior among customers by promoting company products to their environment and is expressed in cognitive and affective forms. Customer engagement creates customer trust in the company so as to create loyalty that allows customers to repurchase the company's products or services [11]. Based on the explanation above, it can be concluded that customer engagement is customer engagement with a company that is able to strengthen brand value and is characterized by repeated interactions between

the customer and the company. This interaction is in the form of likes or comments on the company's brand page on social media.

Customer engagement is important for companies because it encourages cooperative behavior with customers in promoting the company's products to their environment and builds brand awareness that allows customers to make repeat purchases of the company's products or services.

3. Framework

The framework in this study refers to the model developed by Tafesse (2016) in a study entitled "An experiential model of consumer engagement in social media". The variables used in Tafesse's research include perceptual experiences, social experiences, epistemic experiences, and material experiences that generate customer engagement and have indicators in the form of brand post likes and brand post shares with control variables seen from the number of brand of page followers, brand exclusivity, and brand country of origin.

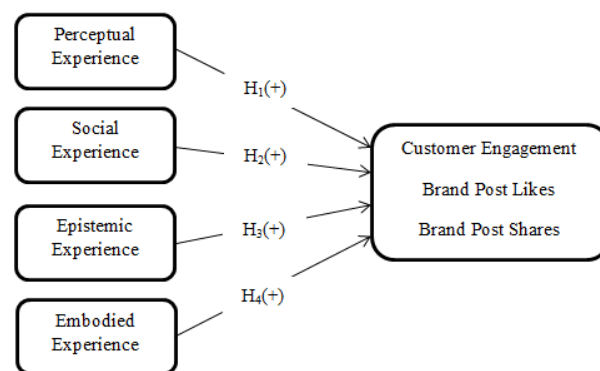


Figure 1: The Research Framework that adapted and modified from Tafesse (2016)

However, this study did not use the control variables for number brand of page followers, brand exclusivity and brand country of origin because this study was only conducted in one country in Indonesia and did not categorize brands because it only examined one industry, namely e-commerce. So that in this study, it can only be seen how the influence of the variables of brand experience revealed by Tafesse (2016) on customer engagement. The framework used in this study is depicted in Figure 1 by adopting the previous research model from Tafesse (2016), then looking at the influence of the variables mentioned on customer engagement.

4. Method and Result

The research methodology according to Winando (2019) is a scientific way to obtain valid data with the aim of being able to find, develop, or prove certain knowledge so that it can be used to understand, solve, and anticipate problems in certain fields. According to Ahmad (2018), content analysis is a research method used to determine trends in communication content and there are two approaches that are often used, namely quantitative content analysis and qualitative content analysis.

Content analysis initially developed in the field of quantitative newspapers. Content analysis can be used to analyze all forms of communication, such as in newspapers, books, films, etc. to obtain information from the communications delivered.

Quantitative content analysis is an analysis that uses scientific research techniques that aim to describe the characteristics of the content and draw inferences from the content [2]. Using the quantitative content analysis method, it can get an overview or understanding of the various contents of communication messages conveyed on social media and the results can be generalized.

This research uses quantitative content analysis method. Quantitative content analysis is defined as a scientific research technique with the aim of looking at the characteristics of the content and drawing conclusions from the content. Quantitative content analysis allows identification of communication content that appears systematically and is carried out objectively, validly, reliably, and can be replicated [6].

This research has several research characteristics which are shown in the following table:

Table 1: Research Characteristics

No.	Research Characteristics	Type
1.	Based on the method	Quantitative content analysis
2.	Based on purpose	Correlation
3.	Based on the type of investigation	Causal
4.	Based on engagement	Does not interfere with the data
5.	Based on the unit of analysis	Organisasi
6.	Based on the implementation time	Cross Sectional

Based on the research objectives, this study uses correlation objectives. Correlation research is research that collects data to see the relationship between two or more variables in the subject or object under study [3].

The type of investigation used in this research is causal research. Causal research is research that describes the causes of a problem [8]. Meanwhile, according to Silalahi (2015), causal research is research that is conducted when a variable causes changes in other variables. In short, the variables used in causal research are causal variables.

The involvement of researchers in this study was not to intervene with data because researchers took data that was already available on the internet and did not manipulate data. The unit of analysis used in this research is organizational because it is e-commerce companies in Indonesia. Based on the time of implementation, this study used a cross sectional. In a cross sectional study, data and information are collected and then processed, analyzed, and conclusions are drawn at a certain time period [8].

This research focuses variables on customer engagement based on the model developed by Tafesse (2016) in a study entitled "An experiential model of consumer engagement in social media". Based on the research there are four dimensions of experience, namely the experience of

perception, social, epistemic, and manifested. The operational variables of the study then explain the indicators, definitions, examples, and coding procedures of the four variables.

The data used in this study is secondary data in the form of official brand posts contained on the brand page of Facebook e-commerce business model marketplace in Indonesia namely Tokopedia, Shopee, Bukalapak and Lazada in a span of two months with an estimated number of 1.043 brand posts and using Fanpagekarma which is an online tool of social media data takers.

In reproductive reliability is used holsti formula to measure reliability between nodes. The holsti formula was first introduced in 1969 by R. Holsti. According to Eriyanto (2015) this reliability shows the percentage of approval between the two nodes when assessing a content. The holsti formula should be used in all categories used in research with the following calculation formulas:

$$CR = \frac{2 \times M}{N1 + N2}$$

Description:

CR = coefficient of reliability

M = number of codes approved by each encoder

N1 = code created by encoding one

N2 = code created by encoding two

The coefficient of reliability is indicated by zero to one, where zero means that none of the contents are approved between encodes and one means that all content is approved between encodes. The higher the coefficient of reliability, the higher the level of reliability. The holsti formula has a minimum reliability coefficient of 0.7 or 70%. If the result of reliability coefficient above 0.7 or 70% means that the data is reliable, but if the result of reliability coefficient below 0.7 or 70% means that the data is not reliable.

Reliability testing in this study was conducted by two nodes given a measuring instrument in the form of a sheet of code and will assess in accordance with the provisions on the code sheet. Encoding one is Reynara Napitupulu or the researcher himself, and the encoding two is Erni Martini S. Sos. M.M. who is a research supervisor in this study. Reliability testing in this study was conducted on 10% of the total sample data of 105 data by taking data from each brand page Facebook marketplace. Here is the table of calculation results using holsti formula:

Table 2: Holsti Formula Calculation Results

	Perceptual		Social		Epistemic		Embodied	
	Agree	Disagree	Agree	Disagree	Agree	Disagree	Agree	Disagree
	105	0	91	14	99	6	84	21
Result	1		0.867		0.943		0.8	
Description	Reliable		Reliable		Reliable		Reliable	

Based on the calculation of processed data using holsti formula on the dimension of perception, social, epistemic, and manifested shows the results of the coefficient of

reliability above 0.7 or 70% so that the processed data can be said to be reliable. If the researchers later conducted research with the same objects and research methods although different at the time of the study was conducted will also show the same results.

5. Conclusion

The categorization taken based on Tafesse (2016) research can be used in this study using the same coding procedure. This also means that the dimensions of brand experience can be used in measuring consumer engagement and valid for use in further studies.

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