The Effect Of Flash Sale Program On Shopping Enjoyment And Impulse Buying On Flash Sale On C2C E-Commerce

Diska Vannisa, Aldo Fansuri, Irdan Muchlis Ambon

Abstract: Research on flash sales generally discusses system failures and their effects on consumer purchases, but there is no research that discusses the characteristics of flash sales and their consequences for online shopping enjoyment and impulse buying. This research paper is intended to find out the influence of the characteristics of flash sale, namely perceived perishability and perceived scarcity on attitude towards flash sale and its effect on online shopping enjoyment and impulse buying. The study was conducted on flash sale users in C2C online commerce marketplaces in Indonesia. Data was taken from 376 respondents through a google form link that was spread using whatsapp. Data analysis is done through structural equation modelling using the SmartPLS 3 program. Some useful insights have been found by the results. There are significant positive relationships between perceived perishability and perceived scarcity on attitude towards flash sale and also significant positive relationships between attitude towards flash sale on online shopping enjoyment and impulse buying. This research has implications for e-commerce management to maintain the characteristics of flash sale. The recommendation for further research is to add other factors that are characteristic of flash sales and see whether differences in duration and availability of goods can affect consumer purchase intentions.

Index Terms: Flash sale, perceived perishability, perceived scarcity, attitudes toward flash sale, shopping enjoyment, impulse buying, C2C e-commerce.

1 INTRODUCTION

The development of the e-commerce industry in Indonesia had significant growth. E-commerce in recent years has become a solution for Indonesians to shop more efficiently and save time. Yusra (2018) reveals that an e-commerce service was considered a favorite because more affordable prices (31%), discount promos (26%), variations in product choices (19%), and free shipping (15%). Large capital companies are trying to enter the Indonesian market with various discount offers to increase platform users. This can be seen from the many programs related to discounts made by various e-commerce sites in Indonesia. The program that has been done lately is flash sale, or flash deal. Flash sale is an e-commerce sales system that offers low prices or discounts but is only valid within a specified time period. Flash sale can be defined as a special offer or limited period offer that ranges from 24-36 hours on certain products to encourage customers to buy products [1]. This flash sale aims to increase the number of users and e-commerce transactions. This is supported by research which states that discounts and free shipping collaboration during the sale season will have a positive impact on e-commerce conversion rates [2]. The flash sale program that received a large enough response from the people of Indonesia was Harbolnas 2018 which was marked by the number of participants in 2018 reaching 300 entities, compared to 2017 with only 240 entities [3]. The program was attended by more than 10 major e-commerce sites in Indonesia including Lazada, Bukalapak, Shopee, JD ID, Tokopedia, Blibli, Zalora, Elevenia, Bhinneka, and Sale Stock. In addition, revenues in Harbolnas 2018 reached IDR6.8 trillion, higher than in 2017 which was only IDR4.7 trillion. This proves that the 2018 Harbolnas can be regarded as one of the flash sale programs that is quite awaited by the people of Indonesia. In flash sale programs, it is often stated that the available products are limited. Previous research shows that purchase intentions and attitudes are more positive for products or offers with scarcity than for products or offers with attractiveness without scarcity [4,5,6]. Flash sale programs also always provide a short period of time for consumers to shop. Limiting the duration of promotional offers (perceived perishability) has an accelerating effect on purchases [7]. Hence, it is very important to know the factors that influence attitude toward flash sales. But from our review, there are no studies yet that investigate the influence of perceived scarcity and perceived perishability on consumer attitude toward the flash sales. During the shopping trips and purchases, the consumers might experience enjoyment and fun [8]. Few previous studies have researched the factors that influence shopping enjoyment. One study found the influence of personal factors from consumers such as attitudes toward advertising, individuality/uniqueness and price sensitivity to shopping enjoyment [8]. Based on research, the higher the personality factors and shopping enjoyment, the more impulse buying tendency will appear, thus encouraging consumers to do impulse buying [9]. Time-sensitive marketing and discount features of flash sales seem to attract more impulsive purchases. Flash sale is one of the promotional medias that can affect consumers’ shopping enjoyment and impulse buying. The common thing that becomes a managerial obstacle when implementing flash sales is the e-commerce system failure during the duration of the flash sales caused by the high access traffic [10,11,12]. Thus, it is very important for brand managers or e-commerces to find out what factors may affect the attitude of consumers to shop during a flash sale. Based on above, this research has the purpose to investigate the relationships between perceived perishability and scarcity and attitude towards flash sale as well as the relationships between the attitude towards flash sale and shopping enjoyment and online impulse buying. In this study the type of e-commerce that will be examined is customer-to-customer (C2C) e-commerce because it has a larger market than other

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types of e-commerce [13]. C2C e-commerce is a business model where two individuals or consumers transact or conduct business with each other directly [14]. Generally, an intermediary/third party maybe involved, but the purpose of the intermediary is only to facilitate the transaction and provide a platform for the people to connect to each other. The intermediary would receive a fee or commission, but is not responsible for the product exchange. The C2C e-commerce that we choose are Tokopedia, Bukalapak, Lazada, and Shopee because the four e-commerce sites are the e-commerce services with the highest traffic in browsers (desktop and mobile) [15]. Based on the discussion above, we establish the research questions as below:

- What are the relationships between perceived perishability and attitudes toward flash sale on the C2C e-commerce flash sale program?
- What are the relationships between perceived scarcity and attitudes toward flash sale on the C2C e-commerce flash sale program?
- What is the relationship between attitudes toward flash sale and shopping enjoyment on the C2C e-commerce flash sale program?
- What is the relationship between attitudes toward flash sale and impulse buying on the C2C e-commerce flash sale program?

2 LITERATURE REVIEW

2.1 The Effect of Perceived Perishability on Attitude Towards Flash Sale

Time limitations have received attention in flash sale promotions. Limited-time promotions are more effective than time-free promotions because they reduce the likelihood that subjects will continue to seek better agreements [16]. Flash sales provide limited time to offer limited items at discounted prices [17]. The impact of today's website time limits and discount rates on the effectiveness of product promotions [17].

2.2 The Effect of Perceived Scarcity on Attitude Towards Flash Sale

Marketing research has found that scarcity can influence the perception of goods by increasing attractiveness and desire [18]. To make a flash sale, sellers usually keep a portion of their items to show scarcity [19].

2.3 The Effect of Attitude Towards Flash Sale on Online Shopping Enjoyment

Retail promotion generates excitement due to novelty, surprise elements, and entertainment value [20]. Inventive and entertaining promotional events increase shopping enjoyment and loyalty to retail stores [21]. Retailers use in-store marketing strategies such as promotions and price reductions to create excitement in the store [22]. Shopping enjoyment is a characteristic associated with market involvement through behaviors such as exposure to mass media that transmits product information [23], and it must be positively related to the intention to visit web sites that are announced in advertisements [24]. Thus, previous studies suggest that there is a relationship between shopping enjoyment and promotion where flash sale is one of the promotional tools.

2.4 The Effect of Attitude Towards Flash Sale on Online Impulse Buying

Attitude is formed through experience and learning and that attitude influences buying behavior [25]. Attitude is influenced by three components: emotions (emotional responses to products), cognition (beliefs and product knowledge), behavior (consumer's intention to buy or use a product) [26]. Impulse buying is a sudden, attractive, hedonic buying behavior so that the speed of the impulse decision process precludes wise and deliberate consideration of information and alternative choices [27]. Impulse buying refers to direct purchases without pre-shopping purposes either to buy certain product categories or to meet specific needs [28].

3 METHODOLOGY

3.1 Model Development

This research model based on the literature review above can be illustrated in figure 1 and 4 hypotheses are developed.

Fig. 1. Research Model

The entire eight hypotheses are stated to have positive influences as follows. 

- **H1**: Perceived perishability has a positive relationship with attitude towards flash sale.
- **H2**: Perceived scarcity has a positive relationship with attitude towards flash sale.
- **H3**: Attitude towards flash sale has a positive relationship with shopping enjoyment.
- **H4**: Attitude towards flash sale has a positive relationship with online impulse buying.

3.2 Instrument Development

The target population in this study is all C2C E-commerce customers in Indonesia such as Tokopedia, Bukalapak, Lazada, and Shopee who have actively participated in flash sale programs in the past year. There is no data stating the number of customers of e-commerce in Indonesia with certainty so that the population of this study is unknown. The minimum number of samples needed in research with the Partial Least Square (PLS) based Structural Equation Model (SEM) method refers to the "10-times rule" approach [29], which builds on the assumption that the sample size should be greater than 10 times the maximum number of inner or outer model links pointing at any latent variable in the model. The
highest number of outer models in this study was 8, so the minimum PLS sample in this study was 80 samples. Data collection was carried out through online questionnaires distributed through researchers' social media. The question uses a 7-point Likert scale that has a value of 1 "strongly disagree" to a value of 7 "strongly agree". Respondents obtained were 456 respondents with the last year flash sale users as many as 376 respondents.

4 ANALYSIS AND DISCUSSION

4.1 Measurement Model Analysis
Measurement model testing carried out was convergent validity, discriminant validity, and composite reliability. Convergent validity serves to verify whether the measurement indicators for latent variables correspond to the theoretical concepts. Criteria for convergent validity are factor loading and Average Variance Extracted (AVE). Requirements that must be met are factor loading greater than 0.7 [29]. After processing using SmartPLS 3, from 38 indicator questionnaires, there are several indicators having a loading factor smaller than 0.7. Indicators that do not meet these requirements are the questions 'I like the offer on flash sale' (ATTITUDE1), 'When I shop at a flash sale, I think of transaction deadlines' (PERISH4), 'I find that flash sale transactions end quickly' (PERISH6), and 'Products of my choice are often rarely available' (SCARCITY4). Therefore, these four indicators must be issued for further analysis. The factor loading value after 4 indicators has been released can be seen in figure 2.

[Fig. 2. Factor Loading After Some Indicators Issued]

Table 1. Item Measurements

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>1  I feel that there is a limited amount of time available for shopping during the flash sale</td>
<td>1  I find that there is a limited number of products per category and items in the flash sale.</td>
</tr>
<tr>
<td>2  I realize that transactions during a flash sale do not last long</td>
<td>2  I find that the products that I am interested in are often sold out quickly during flash sale transactions.</td>
</tr>
<tr>
<td>3  I feel that transactions during the flash sale move quickly</td>
<td>3  I am worried about the number of products limited to the Flash Sale program.</td>
</tr>
<tr>
<td>4  When I shop at a flash sale, I think of transaction deadlines</td>
<td>4  Products of my choice are often rarely available.</td>
</tr>
</tbody>
</table>

Table 2. Composite Reliability and Average Variance Extracted Values

<table>
<thead>
<tr>
<th></th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude Towards Flash Sale</td>
<td>0.91</td>
<td>0.59</td>
</tr>
<tr>
<td>Impulse Buying on Flash Sale</td>
<td>0.94</td>
<td>1</td>
</tr>
<tr>
<td>Online Shopping Enjoyment</td>
<td>0.94</td>
<td>0.70</td>
</tr>
<tr>
<td>Perceived Perishability</td>
<td>0.89</td>
<td>0.68</td>
</tr>
<tr>
<td>Perceived Scarcity</td>
<td>0.86</td>
<td>0.68</td>
</tr>
</tbody>
</table>

The requirement that must be met is the AVE value for each variable greater than 0.5 [29,35]. Table 2 shows that all variables have AVE values greater than 0.5. With the fulfillment of the two criteria above, convergent validity can be considered achieved. Discriminant validity aims to ensure that reflective constructs have the strongest relationship with their own indicators (for example, compared to other constructs) in the PLS model [29]. Table 3 shows that the square root of Average Variance Extracted (AVE) values of all constructs are higher or have the strongest relationship with the indicators themselves than the correlation values among latent variables. Table 4 shows that the value of the Heterotrait-Monotrait Ratio (HTMT) meets the requirements, which is greater than 0.85 [36]. Thus, discriminant validity can be considered achieved. Composite reliability aims to test the consistency of each indicator in measuring its construct. Table 2 shows that the composite reliability value is greater than 0.7, so it can be
concluded that the indicators are reliable [29,35].

### Table 3. Square Root of Average Variance Extracted Value

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Perishability</td>
<td>0.830</td>
<td>0.842</td>
<td>0.830</td>
<td>0.826</td>
<td>0.826</td>
</tr>
<tr>
<td>Perceived Scarcity</td>
<td>0.826</td>
<td>0.830</td>
<td>0.826</td>
<td>0.826</td>
<td>0.826</td>
</tr>
<tr>
<td>Online Impulse Buying</td>
<td>0.842</td>
<td>0.830</td>
<td>0.826</td>
<td>0.826</td>
<td>0.826</td>
</tr>
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<td>0.826</td>
<td>0.826</td>
<td>0.826</td>
<td>0.826</td>
</tr>
<tr>
<td>Attitude Towards Flash Sale</td>
<td>0.826</td>
<td>0.826</td>
<td>0.826</td>
<td>0.826</td>
<td>0.826</td>
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</tbody>
</table>

### Table 4. Heterotrait-Monotrait Ratio (HTMT)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Perishability</td>
<td>0.524</td>
<td>0.486</td>
<td>0.462</td>
<td>0.438</td>
<td>0.438</td>
</tr>
<tr>
<td>Perceived Scarcity</td>
<td>0.438</td>
<td>0.438</td>
<td>0.462</td>
<td>0.486</td>
<td>0.524</td>
</tr>
<tr>
<td>Online Impulse Buying</td>
<td>0.621</td>
<td>0.524</td>
<td>0.486</td>
<td>0.462</td>
<td>0.438</td>
</tr>
<tr>
<td>Online Shopping Enjoyment</td>
<td>0.612</td>
<td>0.524</td>
<td>0.486</td>
<td>0.462</td>
<td>0.438</td>
</tr>
<tr>
<td>Attitude Towards Flash Sale</td>
<td>0.646</td>
<td>0.621</td>
<td>0.524</td>
<td>0.486</td>
<td>0.462</td>
</tr>
</tbody>
</table>

4.2 Structural Model Analysis

Structural testing models function is to see the correlation between constructs measured or in other words that determine whether or not the hypothesis is accepted. Structural models can be tested by looking at the value of R-Square models that indicate how much influence between variables in the model as shown in table 5. This test uses all respondent data without regard to e-commerce used in flash sales. From the R-square values in table 5, it is known that independent variable perceived perishability and perceived scarcity can explain as much as 35.6% of attitude towards flash sale. Perceived perishability, perceived scarcity, and attitude towards flash sale can explain as much as 34.6% of impulse buying on flash sale and 59.8% of online shopping enjoyment.

### Table 5. R-Square Model Values

<table>
<thead>
<tr>
<th></th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude Towards Flash Sale</td>
<td>0.356</td>
</tr>
<tr>
<td>Impulse Buying on Flash Sale</td>
<td>0.346</td>
</tr>
<tr>
<td>Online Shopping Enjoyment</td>
<td>0.598</td>
</tr>
</tbody>
</table>

Then using the bootstrapping procedure (bootstrap sample = 5000), an estimated path coefficient is obtained in the structural model and the results of the hypothesis decision as shown in table 6.

- **Hypothesis 1 is accepted.**
  - There is sufficient evidence that perceived perishability is positively related to attitude towards flash sale with α value of 0.519.

- **Hypothesis 2 is accepted.**
  - There is sufficient evidence that perceived scarcity is positively related to attitude towards flash sale with α value of 0.132.

- **Hypothesis 3 is accepted.**
  - There is sufficient evidence that attitude towards flash sale is positively related to online shopping enjoyment with α value of 0.773.

- **Hypothesis 4 is accepted.**
  - There is sufficient evidence that attitude towards flash sale is positively related to online impulse buying with α value of 0.588.

### Table 6. Path Coefficients

<table>
<thead>
<tr>
<th></th>
<th>Original Sample (O)</th>
<th>T Statistics (O/STDEV)</th>
<th>Values</th>
<th>Req.</th>
<th>Decisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERISH ATTITUDE &gt;</td>
<td>0.519</td>
<td>9.518</td>
<td>0.000</td>
<td>-t statistic &gt; 1.96</td>
<td>Accepted (H1)</td>
</tr>
<tr>
<td>SCARCITY ATTITUDE</td>
<td>0.132</td>
<td>2.711</td>
<td>0.007</td>
<td>-P value &lt; 0.05</td>
<td>Accepted (H2)</td>
</tr>
<tr>
<td>ATTITUDE ENJOY</td>
<td>0.773</td>
<td>25.331</td>
<td>0.000</td>
<td>Accepted (H3)</td>
<td></td>
</tr>
<tr>
<td>ATTITUDE IMPULSE</td>
<td>0.588</td>
<td>14.967</td>
<td>0.000</td>
<td>Accepted (H4)</td>
<td></td>
</tr>
</tbody>
</table>

4.3 Discussion

The results of the research on 376 respondents of Tokopedia, Shopee, Bukalapak, Lazada, and other e-commerce flash sale customers showed that there was a significant positive effect of perceived perishability and perceived scarcity on the attitude towards flash sale and also a significant positive effect of attitude towards flash sale towards online shopping enjoyment and online impulse buying. Thus H1, H2, H3, and H4 are proven to be acceptable. This is in accordance with previous research which states that the time limit given to sales makes consumers panic and do not want to miss in having the product even though the information provided is limited [37]. Consumers usually consider the unavailability or limited availability of products as heuristic cues that the object is valuable and desirable [38,18]. Retail promotion generates excitement due to novelty, surprise elements, and entertainment value [20].

5 CONCLUSIONS

The results of this study have implications for e-commerce management that perceived perishability during a flash sale is one of the factors that is big enough to influence consumer attitude. Besides that, perceived scarcity factor in the flash sale program also affects the consumer's attitude to immediately make a purchase. Therefore, perceived perishability and perceived scarcity must be maintained by e-commerce so that consumers remain stimulated to make flash sale transactions. This is confirmed by research which states that the service failure experienced by flash sale consumers does not affect their desire to return to flash sale transactions [40]. So, there is a possibility that the two factors above have a significant influence on the desire to make a flash sale transaction. Another implication is that management must also continue to improve their flash sale program systems because flash sales have a tendency to provide shopping enjoyment for consumers and can also be a great opportunity for e-commerce because there is a tendency for impulse buying during flash sale programs. There is still limitation of this research. This research does not examine the effective duration and number of products to stimulate the attitude of consumers in a flash sale. Thus, it is recommended for further research to observe the effect of differences in the duration and number of products during flash sale so that an effective duration and number of products are obtained.
6 REFERENCES


