The Impact of Social Media on Consumers’ Purchase Intention: A Study of Ecommerce Sites in Jakarta, Indonesia

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ABSTRACT
Many companies in Indonesia have begun to use social media as an approach to interact with their consumers. This research aims to analyse the critical significance of social media in daily routines, including its impact on consumers’ purchase intention. The variables cover a combination of staged impacts, which defines social media as offering several variables exogenous variables, e.g. openness, speed, dependence and perceived price, perceived risk and perceived value, in affecting purchase intention as the endogenous variable. The respondents involve people who have around two or three times purchasing experiences at e-commerce sites (repeating customers). The research is particularly conducted in Jakarta, in which the data are gathered through a purposive sampling technique, which has then gathered 307 samples. These responses are processed through factor and SEM analysis. Looking at the results, the highest impact towards consumers’ purchase intention is the perceived value, while it is negatively affected by perceived price and risk. The application of this research toward certain ecommerce or online brands can be implemented in the future.

Keywords: Social Media, Perceived Value, Purchase Intention, E-commerce Website

1 INTRODUCTION
E-commerce (electronic commerce) has become an important to conduct trading activities over products and services via online sites at the internet. Through an internet accessibility, companies have begun to shift their approach over their target audience by utilizing social media campaigns, sales emails, forums and e-commerce websites.

Schimmenti et al (2014) argued that website have significant relation in improving
brand image towards company economic performance, but “the adoption of the website as sales channel is hardly diffused”. While, social media is considered as trend that could influence consumers to a certain extent in buying process (Permatasari and Kartikowati, 2016). Customers can directly interact and share their buying experience (Kshetri and Jha, 2016). Using social media, consumers can directly response to “opinions, comments, and suggestions about products that they offered, so consumers can get the products that they want and need” (Singh and Cullinane, 2010). These may have then triggered changes of online shoppers’ intention in purchasing their needs (Leggatt, 2012). Therefore, companies have been using social media to facilitate either new online purchases or repeated ones.

In particular, companies utilize social media as their communication and marketing tools to connect with either new or repeating customers, which, as a result, they may trigger a word of mouth undoubtedly to work more quickly online compared to offline (Singh and Cullinane, 2010; Chen, 2014; Sianipar and Yudoko, 2014; Kshetri and Jha, 2014). Also, any customer service strategy that may have included social media as part of its long-term business plan has a higher chance to maintain corporate competitive advantages (Lee, 2013; Rezaei and Ismail, 2014). Therefore, it may then allow customers to get influenced by social media in, for example, seeking for information on products or services through ecommerce, making them to establish a stronger purchase intention (Singh and Cullinane, 2010; Kshetri and Jha, 2016).

The motivation of online shopper to give information in ecommerce refer to assessing the benefits and risks of ecommerce behavioral in tracking and releasing privy information (Jai, Burns and King, 2013; Rezaei and Ismail, 2014). Kim, Gupta and Li (2005) study investigated synchronized influence of perceived price and perceived risk on customer behavior from online shopping, from their research it is found out that “perceived price have effects on customer purchase intention, but only for repeat customers and for potential customers, perceived risk and perceived price have effects towards purchase intention mediated by perceived value”.

This study is intentionally aimed at investigating whether social media may have given any impact on consumer’s purchase intention at ecommerce in Jakarta, Indonesia. Acknowledging that consumer behavior is a relatively general and broad issue, this study is hence narrowed down to focus on an association with the decision making process, by which it may associate the intention of online shopper to purchase items.
2 LITERATURE REVIEW

2.1 Social Media

Social media may have been affecting decision making processes by acting as a medium for open social interactions between individuals. With social media, the gap between interactions and consumers channel selection can be bridged (Rezaei and Ismail, 2014). In fact, it may also affect individual intentions during daily purchases. In fact, some factors originated from social media may have triggered consumers’ purchasing motivation and developed a new consumption pattern online, i.e. the social media purchasing (Atchariyachanvanich and Hitoshi, 2007; Chen, 2014; CNNIC Online Shopping Report, 2014; Hoa, 2014). In details, “social media purchasing consists of two steps: 1) seeking and obtaining product information through social media platforms; and 2) developing purchasing intention or making a purchase.” Also, the research suggests that companies are required for being able to effectively understand and manage consumers via social media platforms. Hence, they may understand their consumers’ purchase intention.

Practically, variables taken in the current research are originated from several researches. In particular, there are two prior researches posited as the main references in establishing the current theoretical framework, i.e. Chen (2014), Kim, Gupta and Li (2005). Chen (2014) has conducted a research on the particular influence of social media in terms of sociability, usability, dependence and involvement towards consumer behavior, including perceived risks, perceived values and trusts towards purchase intention. On the other hand, perceived price may have been directly affecting purchase intention of repeating consumers (Jacoby and Olson, 1972; 1977; Urbany, 1997; Kim, Gupta and Li, 2005). In particular, openness, speed, dependence, perceived value, perceived risk and perceived price are recognized as independent variables, while purchase intention is posited as the dependent variable for a further research analysis. In contrast, Reibstein’s (2002) found that price is an important factor for dragging potential customers to buy product in site. According to Reibstein, price is becoming the minimal factor for repeat customer in buying product in the same site. While, Zeithaml (1988) point out that price as quality indicator. The variable of perceived price is hence taken from Urbany (1997) in Kim, Gupta and Li’s research (2005). It is added as one of variables that may show a significant impact towards the purchase intention of repeating customers that more certain about quality. Kim, Gupta and Li (2005) have focused on repeat customers’ value as an assessment of cost and harm during purchase, while price and risk could directly affect intention, it is mediated by perceived value based on transaction utilities.

Additionally, Mao, Zhu and Sang (2014) were also investigated about social media
marketing towards value and risk perceptions as factors to influence consumer interest thus to buy products. Perceptions have been examined and concluded that most consumers are sensitive to value when evaluating to make purchase, as a matter, they might check and compare value with price itself.

2.2 Perceived Risk
Consumers are being satisfied for products and services that may not cost them any harmful effect. In other words, perceived risk refers to an uncertainty for consumers whether the transaction may produce any benefit or loss (Permatasari and Kartikowati, 2016). Hence, social media usability is stated as having an impact on perceived risk. In particular, social media usability may affect the risks as people are able to openly share their opinions, reviews, recommendations and complaints by utilizing social media. According to Mayfield (2008) and Taprial and Kanwar (2012) social media usability consist of three aspects such as speed, accessibility and openness. Chen (2014) defined only two variables that have significant effects on consumer perceived risk. The result shows that social media openness and speed have negative and significant influence on consumer’s perceived risk in using social media. “The faster the content is available and accessible to consumers on social media, the lower perceived risk consumers will have on the social media platform” (Chen, 2014).

Furthermore, perceived risk has been recognized as the perceptions of consumers towards their uncertainty of an outcome. It implies that an increase of consumers’ risk perception may then lower the value perceived for conducting shopping activities at ecommerce sites. In previous studies, “most consumers felt unsafe due to the perceived risks of conducting online payment. Therefore, they prefer to place the order via the traditional channels where they can chat the salesperson” (Jang Chan and Chen, 2013). Chen (2014) also stated that “consumer’s confidence in evaluating the quality of products and making decisions to purchase products will reduce perceived risk”. The similar results also found that perceived risk has a significant impact on perceived value by Kim, Gupta and Li (2005).

2.3 Perceived Value
Social media dependency relations has been concerned by many researcher. Hereafter, “Internet Dependency Relations (IDR) is known as a predictor of online consumer activities” (Patwardhan and Yang, 2003). Ahn and Kim (2013) found that online shopper attitudes of social media dependency has influenced consumer’s behavioral intention in using mobile shopping buying experience. While, Chen (2014) argued that the dependency of consumers on social media is having a significant impact on
perceived value. The degree to which consumers rely on social media to fulfill their needs has a positive influence on consumer’s perceived value on social media platform. “the more dependent one is on social media, the more perceived value one will gain and more trust one will have on social media” (Chen, 2014).

Next, consumers’ perceived value refers to the benefits to which consumers evaluate their potential gains and costs of products and services being considered. In fact, perceived value has a relation to purchase intention because a larger benefit may then offer more perceived values for consumers. Perceived value is found to have an effect on purchase intention (Kim, Gupta and Li, 2005; Chen, 2014). Likewise, Mao, Zhu and Sang (2014) have concluded that perceived value is the most important criteria of purchasing intention. They results found that consumers' perceived value have positive affects consumer purchase intention. Based on the research and suggested theories, perceived value has been considered as a factor influencing consumers in determining their purchases.

2.4 Perceived Price
Price can be posited in both positive and negative perceptions. Perceived price is posited as positively related to financial losses, while it is negatively related to gains as perceived price is the amount of money. Moreover, price may increase when the value of a product remains constant, while it may also change due to cost expenses and situations. Besides, an increased price may lower the value of a transaction, thus perceived price has a negative effect on perceived value. Perceived price has a significant relationship with perceived value (Kim, Gupta and Li, 2005). The finding has also been supported by previous researchers Sweeney (1991; 2001).

Price is becoming the most important factor that affects consumer buying decision. Consumers are willing to pay for products and services being considered by site. By offering a higher money value, it may then make perceived price as becoming a significant impact on purchase intentions (Kim, Gupta and Li, 2005). Previous researchers reported that perceived price have positively impact consumers’ purchase intention. Kim, Gupta and Li (2005) finding shows that the impact of perceived price on purchase intention is stronger for repeat customers than for potential customers. “The research found repeat customers to be more price-sensitive”. Meanwhile, Chen (2014) described that “perceived price has been identified as having the positive relationship with tendency towards buying intention in private label products”.

2.5 Purchase Intention
In the current research, prior research frameworks are combined to produce the
following framework (Figure 1). The research integrates social media affect consumer purchase intention for repeat customers. Social media factors could affect consumer behavior perceptions, perceived risk and price towards perceived value then purchase intention. Perceived price could affect purchase intention of repeat consumers directly (Jacoby and Olson, 1972; 1977; Kim, Gupta and Li, 2005) while perceived value affects purchase intention directly (Kim, Gupta and Li, 2005; Chen, 2014). As a distinguished positioning, the current work uses usability as consisting of openness and speed towards perceived risk, a dependence towards perceived values and perceived values towards purchase intention.

Figure 1   Conceptual Framework

Looking at the conceptual framework (Figure 1), there are seven hypotheses aimed at investigating the intention of consumers in conducting decision making processes during their online shopping activities at ecommerce sites. To fulfill the objectives of the current research, these hypotheses are particularly formed for being examined further:

\[ H1: \text{Social media openness has an impact on perceived risk} \]
\[ H2: \text{Social media speed has an impact on perceived risk} \]
\[ H3: \text{Social media dependence has an impact on perceived value} \]
\[ H4: \text{Perceived risk has an impact on perceived value} \]
\[ H5: \text{Perceived price has an impact on perceived value} \]
\[ H6: \text{Perceived value has an impact on purchase intention} \]
\[ H7: \text{Perceived price has an impact on purchase intention} \]

3     RESEARCH METHOD
This study uses a quantitative research method by survey. Research samples are gathered by non-probability sampling. Respondents are people within Jakarta, Indonesia, who have had experiences in purchasing items (shopping) at ecommerce sites. Data gathering by spreading the questionnaires for being analyzed further. The questionnaires are hosted at Google drive and spread through social media, emails and direct spreading at several shopping malls in Jakarta. In the end of data gathering, a total of 307 valid responses out of 334 samples are compiled. “The sample size estimation are 100 samples means poor, 200 samples means fair, 300 samples means good, 500 samples means very good and 1000 samples means excellent” (Comfrey and Lee, 1992; Malhotra, 2010; Permatasari and Kartikowati, 2016). This means that the sample pass the requirement of good sample’s criteria. The analysis in this study used structural equation modelling (SEM) to process the data and obtain results. “SEM is a statistical technique that allows the testing of a series of complex relationships simultaneously” (Kline, 2011; Permatasari and Kartikowati, 2016).

4 ANALYSIS AND RESULTS
4.1 Descriptive statistics
The demographic profiles being analyzed include gender, age, income level, occupation, duration of social media usage, most visited ecommerce site and reasons to purchase online (Table 1).

Table 1 Respondents profile

<table>
<thead>
<tr>
<th>Demographic</th>
<th>Characteristics</th>
<th>%</th>
<th>Demographic</th>
<th>Characteristics</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Man</td>
<td>56</td>
<td>Age</td>
<td>18-25</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td>Woman</td>
<td>44</td>
<td>26-33</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>34-41</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Occupation</td>
<td>Student</td>
<td>36</td>
<td>Income Level</td>
<td>&lt;1.000.000</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Employee</td>
<td>55</td>
<td>1.000.001-2.500.000</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Entrepreneur</td>
<td>8</td>
<td>2.500.001-5.000.000</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>1</td>
<td>5.000.001-10.000.000</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>&gt;10.000.001</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Social Media Usage Duration (average in 1 day)</td>
<td>30 minutes</td>
<td>14</td>
<td>Main Reason Purchasing through Ecommerce</td>
<td>Convenience</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>30 minutes-1 hour</td>
<td>20</td>
<td></td>
<td>Product and Services</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>1 hour-2 hours</td>
<td>23</td>
<td></td>
<td>Price</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>2 hours-3 hours</td>
<td>15</td>
<td></td>
<td>Advertisement and Promotion</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>&gt;3 hours</td>
<td>28</td>
<td></td>
<td>Others</td>
<td>1</td>
</tr>
</tbody>
</table>
4.2 Statistical Analysis

In terms of statistical software, this study utilizes SPSS and Amos as statistical tools for validity test, reliability test and data analysis. The validity and reliability tests produce a result in which the responses have passed all the criteria, by which the data are considered as valid and reliable. The model fit results are presented in Table 2, showing that all criteria have passed the minimum value by which the data are considered as being mostly in a good fit.

Table 2  Model Fit Results

<table>
<thead>
<tr>
<th>Model fit Criteria</th>
<th>Research Result</th>
<th>Cut-off Criteria</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>0.000</td>
<td>0.005</td>
<td>Significant</td>
</tr>
<tr>
<td>Goodness of Fit Index (GFI)</td>
<td>0.842</td>
<td>0.5 ≤ GFI ≤ 1</td>
<td>Good Fit</td>
</tr>
<tr>
<td>Adjusted GFI (AGFI)</td>
<td>0.781</td>
<td>0.5 ≤ AGFI ≤ 1</td>
<td>Good Fit</td>
</tr>
<tr>
<td>Root Mean Square Error of Approximation (RMSEA)</td>
<td>0.104</td>
<td>0.05 ≤ RMSEA ≤ 0.1</td>
<td>Mediocre Fit</td>
</tr>
<tr>
<td>Tucker Lewis Index (TLI)</td>
<td>0.855</td>
<td>0 ≤ x ≤ 1</td>
<td>Good Fit</td>
</tr>
<tr>
<td>Comparative fit Index (CFI)</td>
<td>0.885</td>
<td>0 ≤ x ≤ 1</td>
<td>Good Fit</td>
</tr>
<tr>
<td>Normed Fit Index (NFI)</td>
<td>0.857</td>
<td>0 ≤ x ≤ 1</td>
<td>Good Fit</td>
</tr>
<tr>
<td>Inferential Fix Index (IFI)</td>
<td>0.886</td>
<td>0 ≤ x ≤ 1</td>
<td>Good Fit</td>
</tr>
<tr>
<td>CMIN/DF</td>
<td>4.34</td>
<td>2.0 &lt; CMIN/ DF ≤ 5.00</td>
<td>Reasonably Fit</td>
</tr>
</tbody>
</table>

By conducting a further analysis, four of the seven hypotheses, *i.e.* H3, H4, H5 and H6, are stated as being supported and significant (Table 3). In details, the current research reveals that the openness of social media has no significant impact on perceived risk. Therefore, the hypothesis one is rejected, which is in fact in contrast to the Chen’s research (2014), and perceived risk is hence not significantly affected by social media openness in Jakarta, Indonesia. Besides, there is a negative impact from social media speed to perceived risk; however, it is not significant. In other words, the hypothesis two is rejected, while the finding is in contrast to Chen’s study (2014), and perceived risk is hence not significantly affected by speed of social media in Jakarta, Indonesia.

Next, a test on the hypothesis three discovers that social media dependence may have significantly affected perceived value. Therefore, the hypothesis is supported in parallel with Chen’s findings (2014). Besides, it shows that the degree to which consumers may have relied on social media platforms to fulfill their needs has been influencing
consumers’ perceived value. Consumers in Indonesia have had a high social media usage during their daily routines. Thus, creating groups and communities at social media may help companies to attract loyal consumers through discussions, in which they may raise the likelihood of customers to conduct purchasing activities at their ecommerce sites (Chen, 2014).

Furthermore, a higher risk may mean a less value consumers are more likely to perceive. In the current research, perceived risk is found as significantly affecting perceived value. Therefore, the hypothesis four is supported. According to Kim, Gupta and Li (2005), perceived risk does not have any direct effect on purchase intention, yet the effect is mediated by perceived value. Consumers are apparently reluctant to conduct online purchasing activities due to risks related to payment, frauds, quality and late delivery. Decreasing risks during transactions may then produce a better assessment by consumers, thus increasing their value for gaining purchases.

Moreover, a higher price may have been producing a less value consumers are more likely to perceive. In particular, perceived price is discovered to significantly affect perceived value. Therefore, the hypothesis five is supported, while it is in parallel with Kim, Gupta and Li’s study (2005) that has suggested perceived price as having an impact on perceived value. The current research reveals that a stronger sensitivity of consumers to price may have lowered the impact of perceived price in affecting the worth of perceived value (Kim, Gupta and Li, 2005). Consumers are sensitive to prices in conducting shopping activities at either physical shops or ecommerce sites, in which they consider price as a primary factor that may determine whether one will make a purchase online or offline.

Next, the hypothesis six has stated that a higher value may mean a stronger intention for conducting purchases consumers are most likely to perceive when considering to buy products or services at ecommerce sites. In fact, the variable significantly affects purchase intention, which supports the results of Chen (2014) and Kim, Gupta and Li (2005). In particular, perceived value has become the most important criteria in consumers’ purchasing intention on ecommerce sites. Besides, Chen (2014) has stated social media marketing as being instructive in helping a company to gain a distinctive positioning from others, to establish a long-term relationship with consumers and to create a dependency among consumers. The likelihood of purchasing to the company is high when consumers have some correlated needs.

The last hypothesis (H7) has stated that a more perceived price may mean a less intention for conducting purchases consumers are most likely to perceive when considering to buy products or services at ecommerce sites. Therefore, the last
hypothesis is rejected. The finding is contrast to Kim, Gupta and Li’s study (2005) that has found perceived price as influencing purchase intention only when repeating customers have been more certain about quality.

Table 3  Hypothesis Conclusion

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Coefficient</th>
<th>T VALUE (C.R)</th>
<th>Sig. (P)</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1 → Social media openness has an impact on perceived risk.</td>
<td>2.428</td>
<td>1.266</td>
<td>0.205</td>
<td>rejected</td>
</tr>
<tr>
<td>H2 → Social media speed has an impact on perceived risk.</td>
<td>-2.090</td>
<td>-1.032</td>
<td>0.302</td>
<td>rejected</td>
</tr>
<tr>
<td>H3 → Social media dependence has an impact on perceived value.</td>
<td>0.198</td>
<td>5.755</td>
<td>***</td>
<td>supported</td>
</tr>
<tr>
<td>H4 → Perceived risk has an impact on perceived value.</td>
<td>0.388</td>
<td>4.014</td>
<td>***</td>
<td>supported</td>
</tr>
<tr>
<td>H5 → Perceived price has an impact on perceived value.</td>
<td>0.521</td>
<td>8.975</td>
<td>***</td>
<td>supported</td>
</tr>
<tr>
<td>H6 → Perceived value has an impact on purchase intention.</td>
<td>0.856</td>
<td>6.356</td>
<td>***</td>
<td>supported</td>
</tr>
<tr>
<td>H7 → Perceived price has an impact on purchase intention.</td>
<td>0.036</td>
<td>0.303</td>
<td>0.762</td>
<td>rejected</td>
</tr>
</tbody>
</table>

5   CONCLUSION AND DISCUSSION

The result analyzes the impact of social media towards consumers’ purchase intention at e-commerce business in Jakarta, Indonesia, by focusing on repeating customers as the respondents. In particular, the impact of purchase intention is mediated by two variables, i.e. perceived risk and perceived value. Looking at the seven proposed hypotheses, this research discovers four hypotheses as being significant, while the rests are rejected.

This research successfully identifies factors that impact repeat consumer’s purchase intention from social media context. In particular, several notions have emerged. First, from a practical perspective, this study has confirmed earlier suggestions that put an emphasis on value as one of the most important drivers of online transactions at e-commerce businesses. For increasing the value of ecommerce companies, they should maintain the relationships through interactions by making set of activities or events in social media. “Online shopper testimonial on social media influence value co-creation activities” (Fisher and Smith, 2010; Singh and Cullinane, 2010; Rezaei
and Ismail, 2014). (Kshetri and Jha 2016) also stated that social media should maintain good relationship to connect and attract their consumers, by providing web or networking sites that give free space and good access. Therefore, companies will have higher value in the eyes of consumers and lead them to make purchases. Second, the social media dependence has a significant impact on perceived value, in which a higher usage of social media may have led to a higher perceived value for consumers. “Online social shoppers believe that they save time and can order more products” (Rezai and Ismail, 2014). Third, perceived value is influenced by both perceived risk and perceived price, yet lower risk and price may produce a higher perceived value for consumers (Kim, Gupta and Li’s, 2005; Chen, 2014). The companies are also suggested to cooperate with other companies for certain periods by having partnership and cooperation; ecommerce companies could increase value and reduce cost or risk at the same time since both parties have constructive attainment, and consumers find it very helpful.

6 FUTURE RESEARCH

There are many factors that may impact consumers to make decision for purchase at the end. The researcher recommends future research to investigate on various online media for their effectiveness in promoting the existence of ecommerce or other types of online business. The evaluation of this research can be linked to consumers’ purchase decision-making based on their purchase intention. Due to limit of time, researcher recommends future research to use samples more than 300, so it will draw generalizable conclusion, and also extend TAM model and other factors that could affect perceived value. With more comprehensive research, the future research can expand to other research objects (other than ecommerce) and apply model towards local startup business performance in developing countries.
APPENDIX
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REFERENCES


