Trustworthiness Perception and Decision to Conduct Transactions through E-Commerce Websites in Indonesia

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Abstract. The objective of this research paper is to examine the influence of internal and external schemes on both the trustworthiness perception and the purchasing decision of the consumers through digital media in Indonesia. The data collection is conducted through online survey of 392 respondents aged 18 or above who have at least conducted one online transaction. The collected data is analyzed using structural equation modeling (SEM) to examine the seven key hypotheses. The results of this study show how internal scheme (the aspects of how the message is transferred and consumer’s knowledge) and external scheme (the aspects of the credibility of the e-commerce B2C websites, references and public comments) influence on the trustworthiness of the sites. Furthermore, this trustworthiness aspect influences the consumer’s purchasing decision. However, only the external scheme that has a direct influence on consumer’s purchasing decision. This study implies that e-commerce also contains elements of consumerism. It is recommended that online consumers realize, understand, able to refrain, and having the motivation to resist consumerism. In addition, the government needs to issue stricter regulations amid the online marketing efforts that are too aggressive and involve various types of the irresponsible external schemes.

Keywords: communication, e-commerce, marketing scheme theories, purchasing, trustworthiness, transaction decision

INTRODUCTION

According to the 2013 data from the Indonesian Internet Service Providers Association (APJII), the number of Indonesian Internet users is projected to grow from the 2013 forecast of 82 million to 107 million in 2014. This number is predicted to increase to 139 million in 2015 (www.apjii.or.id).

Internet users, also known as netizen (a portmanteau of the words Internet and citizen as in "citizen of the net"), are individuals who are actively involved in online communities by communicating in digital media or Internet in general such as e-mail, blog, and other social media platforms such as Facebook, Twitter, Path, Instagram, LinkedIn, etc.

The rapid growth of Indonesian Internet users shows the shift of business communication patterns from conventional media, such as print and electronic media, which include newspapers, magazines, radio, and television to new media that is digital media (Gupta & Walter, 2013).

This situation creates a special market for both business institutions and social institutions to be able to reach this segment of Internet users, and to influence them to do transactions on e-commerce websites.

However, from the consumer’s point of view, there is still a gap especially in the level of trust of the Internet users to want to conduct transactions through digital media. The low level of trust of the consumers toward the existing of e-commerce websites in Indonesia is revealed on a report the National Consumer Protection Agency (BPKN). According to the report, which brought up facts and consumer perception discussed on focus group discussions in 2012, the level of trust the Internet users to want to conduct transactions through e-commerce websites (BPKN, 2012).
The business model of e-commerce through digital media is also discovered in traditional commerce, such as Business to Consumer (B2B), Consumer to Consumer (C2C), and Business to Consumer (B2C) relation. This research paper focuses on the B2C e-commerce where the customer’s decision to conduct transactions is confirmed on B2C site, managed by the institution’s marketers, and is followed by payment process through payment options that is both chosen and approved by the customer.

Based on the description above, basically there are two major considerations from consumers before deciding to conduct online transactions, namely the consideration based on experience or consideration based on the marketer’s marketing communications efforts. In other words, there are both internal and external experiences that lead to consumers to decide on online transactions.

The individual’s internal experience can be expressed as the individual’s internal scheme. This is explained through scheme theory. Scheme theory explains that humans compare both internal and external schemes to make a decision. The internal scheme may be in the form of knowledge or experience that is used to interpret the contents of message. Meanwhile, the external scheme covers the persuasion from external sources that push individuals to come to a decision. A lot of theories or findings have attempted to explain what are these external external sources. Lee and Kozar (2006), for example, found the relevance of the information was the main factor to determine the decision to make transactions. Meanwhile, a study from Wu et al (2003) reaffirmed the importance of content of the information as the main factor in the decision to make transactions. Also, eWOM (electronic Words of Mouth) was found to be the important variable in marketing communications (such as Hennig-Thurau et al, 2010; Rong et al, 2012; and Al-Sudairi et al, 2012). In the packaging needs to be perceived as a highly important marketing communication tool in communicating the brand message, and has to be utilized to the fullest at the point of purchase in order to attract consumer attention (Cahyorini and Rusfian, 2011).

Because of the many factors proposed to explain the external scheme, there is a need to conduct a comprehensive study to evaluate these factors and their influence in the consumer’s decision to conduct transactions.

Among the many variables said to have influence toward the decision to make transactions, the trust variable appears to be a stand-alone variable. Previous research papers (Kim, Silvasailam, Rao. 2004) showed that trust is a significant factor in explaining the transaction process in e-commerce websites. However, this variable does not fit to either internal or external scheme.

In the Journal of Computer Mediated Communication, which has a perspective of science communication, Jarvenpaa et al (1999) defined “trust” as “either confidence or hope that vendor’s words or promise is reliable and that vendor would not take advantage from consumer’s vulnerability”, which is also the definition of trust that is used by Head and Hassanein (2002). By definition, “trust” refers to the existence of both communicant and communicator. Therefore, in this research paper, it is possible to place “trust” as a stand-alone variable, outside the internal and external scheme.

Based on the description above, there is a research gap that needs to be filled: how the influence of internal scheme, external scheme, and trust perception encourages the decision to make transactions in online business. By understanding the connections between these variables, marketers could more easily perform their communication activities in the internet by observing how individuals come to a decision to conduct online transactions amid the online business climate in Indonesia, which is still full of consumer’s lack of understanding as well as doubt toward online business. This knowledge allows marketers to formalize a more effective and efficient communications strategy toward the intended customers and encouraging better image for online business. From the consumer’s side, this knowledge would open the insight to understand the important factors in the decision-making to make a purchase or transaction that is relatively different between performing it through digital media and conventional media or face-to-face.

From the description above, this research paper is based from two assumptions, namely: (1) The low level of consumer’s trust to purchase or make transactions through e-commerce websites so therefore it is necessary to figure out both internal and external scheme that influence the trust level; and (2) With the increase of the consumer’s trust toward the organizer of e-commerce websites it is expected that the consumer’s decision to make transactions through e-commerce websites may also increase.

Based on the basic assumptions above, the research subject is formulated by two principal questions. First, is the influence of both internal and external scheme toward consumer’s perception toward marketer could be trusted? The second question is whether both internal and external scheme influence consumer’s decision to purchase/make transactions?

This research paper is an update from previous research projects that examined the individual’s behavior in making a decision from various perspectives by using different approaches. As an example, Hussein (2012) used framing theory to find out the ability of a message to influence respondents. However, framing theory focuses on both the message’s content and language style, not including the design.

The next research was conducted by Lee and Kozar (2006), which found that the relevance of the information was the main factor in determining the decision to make transactions. Also, a study from Wu & Ding (2007) reaffirmed the importance of the content of the information and the contents of the message as the main factor in the decision to make transactions. Meanwhile, eWOM (electronic Words of Mouth) was found to be an important variable in marketing communications. While Head and Hassanein (2012) opted to study the third party’s stamp as the referee variable in their research.

The difference between the studies above and this research paper is the usage of theories with the background of science communication as the accompanying unit of analysis and framework. The novelty of this research paper is the usage of the aspect of public comments, including eWOM, rather than the justification from a third party with authority like in Head and Hassanein’s study (2012). This is suitable with both online communications and social
media that are currently widely used compared to 2002. This paper is also different from Awad and Ragowsky’s study (2008) because the WOM that is used in this research consists of comments and recommendations between consumers rather than suggestions toward sellers. This perspective is more in line with the interactions in the digital media because it encourages both initiative and bigger role from the consumer’s side. On Awad & Ragowsky’s study (2008), it is little found that customers are willing to give suggestions toward sellers on online marketing, but all of them give comments and recommendations to each other as it is easier to do due to social proximity and the convenience to do so in the digital media.

This research paper also inclines to a survey research that could capture reality compared to heavily controlled experimental research such as Kim and Benbasat’s study [1999]. The perspective of this research paper is directed at the perspective of the science of marketing communications, which is more compatible for a consumer’s behavior that lean to communications done through digital media with the aim to persuade transactions, compared to the sociology perspective as used by Shareef et al (2013).

In line with the formulation of the problem, as well as observing previous studies as described above, on this research paper the author has chosen several theories of communications that are relevant to build the initial research mode, either on macro-level, meso-level, or micro-level. On the macro-level, this research paper uses the references from the integrated theories of marketing communications (Du Plessis et al, 2010), namely the process of persuasive communications from the marketer with the aim to influence consumers to make transactions.

On the meso-level, the research paper uses the scheme theory, (Axelrod, 1973), which differentiate between internal scheme on the communicant and the external scheme in the form of the quest for additional information from a third party to increase trust in order to make a decision to conduct transactions. The scheme theory is developed from the thought of Jean Piaget who investigated and wrote the subject of cognitive development between 1927 and 1980. There are two types of scheme, namely internal and external schemes (Kusumasondjaja, 2012). Promotion, publication, and public opinion, are the elements of external scheme, namely the aspects that came beyond the communicant’s mind and experience.

On the micro-level, several theories that are applied here include the accommodation theory (Giles, et al, 1991) that emphasize on the aspect of message delivery and the communicant’s reaction; the attribution theory (Lee & Kozar, 2006) that emphasizes on the aspect of the communicant’s knowledge and the communicator’s credibility as the source of message; and the uncertainty reduction theory that explained the communicant’s confidence by finding out additional information either from a credible third party’s reference or public comments extracted from digital media, including electronic Word of Mouth/ e-WOM (Hu, et al, 2008).

In order to summarize the overall theories that were used to build the conceptual model, Figure 1 illustrates the Framework that connects the theories (CAPITAL font), research variables (lingkaran white circles), and indicators (white boxes).

By observing the framework on Figure 1 above and applied theories, the following description would explain how the hypotheses were built by observing the connections between research variables, from hypothesis 1 to hypothesis 7.

Knowledge has been found to be significantly influence the cognitive compatibility toward message, which is an indication for reliability, confidence, or consistency in conducting transactions (Kim, et al, 2004). This cognitive compatibility also influence the trust level, which is the precondition of conducting transactions. Since cognitive compatibility came from knowledge and knowledge is internal scheme, then the author created a hypothesis that internal scheme positively influence the consumer’s perception that marketer is trustworthy. Therefore, Hypothesis 1 is that internal scheme positively influence the consumer’s perception whether the marketers’ are trustworthy.

According to a study from Sangran, Siguaw, and Guan (in Ma & Agarwal, 2007), consumers attempt to create social network to increase trust in order to encourage online transactions within a business environment that does not have strict regulations. The function of this social network is to meet the consumer’s social integration needs. In this network, consumers shared information about products to each other in the form of e-WoM. They evaluate the products as well as the sellers, based on claims that are compared to other people’s experience, which produce a certain level of trust toward the sellers. This shows that the aspects of public comments, third-party reference, and source credibility, which are part of the external scheme, also have an important role in encouraging the consumer’s trust. Therefore, hypothesis 2 stated that external scheme positively influence the consumer’s perception whether the marketers’ are trustworthy.

In marketing literature, there is a concept of brand image congruity (Head & Hassanein, 2002), Hu et al (2008), stated that consumers tend to assess good product if they rate the marketer is also good. This demonstrates the role of a marketer in determining the consumer’s perception on the quality of goods. Message content, language style, and design, which are the message aspects of e-commerce websites, would be evaluated by the consumer’s internal
scheme based on his or her knowledge and experience before making purchase decisions. Based on the logic, it is concluded that internal scheme influence the decision to make a purchase. With that, hypothesis 3 states that internal scheme influence the consumer’s decision to make a purchase/transaction.

The scheme’s function is smoothen decision-making process. If someone did not have internal scheme as reference for messages received from marketers to buy certain products, he or she would need cognitive efforts to be able to make purchasing (Campbell, 2000b). In order to reduce this cognitive burden, individuals would search for additional information that is accessible either on social engine, publications on mass media, or public comments about certain products. The reference in the form of external scheme allows consumers to make purchasing decision (Kreice & Morgan, 1970). In line with the view from Kreice & Morgan (1970), it can be concluded that external scheme positively influence purchasing decisions. Therefore, hypothesis 4 states that external scheme positively influence the consumer’s decision to make a purchase/transaction.

In this research paper, all of the supporting theories were summarized to build a framework in the form of a model consists of two exogenous variables, namely internal and external schemes that provide inputs to endogenous variables, namely trustworthiness perception. The trust role itself is found to have a large influence in purchasing decision in the e-commerce context (Giles, et al, 1991; Hu, et al, 2008). The same conclusion is also found in the B2B model e-commerce context (Durvasula, et al, 1996). Based on the study results of Durvasula et al (1996), it can be concluded that trust level positively influence purchasing decisions. Hypothesis 5: trustworthiness perception positively influence the consumer’s decision to make a purchase/transaction.

Since the evaluation of something initially set from preconceptions in the form internal scheme, then this scheme should have more role compared to external role in building trust. Should consumers have already had the tendency to trust as well as experience with products or intended people (Du Plessis, 2006), then he or she would be more easily to trust compared to individuals who do not have either this tendency or knowledge or experience. Furthermore, in order to strengthen the internal scheme, consumers would attempt to increase his or her confidence by leaning on external scheme to build trust before the trust grow. In line with the study results from Du Plessis (2006), hypothesis 6 could proposed: internal scheme is more influential than external scheme in influencing consumer’s perception that marketers are trustworthy.

Based on the view above, internal scheme should have more influence toward purchasing decisions than external scheme. This is because internal scheme involves easier cognitive process than external scheme because internal scheme, which consists of the aspect of messages received by consumers and the aspect of consumer’s knowledge toward offered products, lies within consumers. Meanwhile, the encouragement from external scheme such as publications, advertisements, or product information, would influence consumer’s cognitive process to purchase (Gao, etal, 2005), but not as strong as the capacity of internal scheme that directly provide assessments toward purchase. In line with the study results from Gao et.al (2005), it can be concluded that Hypothesis Theory 7 is that internal scheme is more influential than external scheme in influencing consumer’s decision to make a purchase/transaction.

The overall hypotheses from 1 to 7 above, in general, is covered on Figure 3, which is the framework based on the connections between research variables. In particular, Hypothesis 1, 2, and 6, aim to answer the first research question, while Hypothesis 3, 4, 5, and 7, aim to answer second research question.

The following description is the further elaboration from the framework based on connections between the variables of this research.

**RESEARCH METHODS**

This research uses Structural Equation Model (SEM) method to test the initial model constructed based on theories. The stage of analysis that will be conducted is elaborated on Figure 2. In essence, the initial model that is constructed based on applied theories will be processed by statistical test to examine the model’s suitability, to interpret the model, and, eventually, to produce the final model as research result.

Overall, based on the applied theories, both internal and external scheme become a part of consumer’s evaluation toward trustworthiness perception, which, in turn, determine transaction decisions. Therefore, Figure 3 is used as a framework, which is the initial model of this research.

The population of this research paper is the Indonesian Internet users who make online transactions. Indeed, this is a very large number and it is difficult to obtain pure random sample. The researcher attempted to collect 400 respondents to meet the minimum limit from Krejcie & Morgan (1970) with the snowball sampling method. This sampling technique has been applied on studies on the population of online consumers such as on Wu and Ding (2007), because online consumers were more difficult to identify...
than traditional consumers. This did not stop Wu and Ding (2007) from applying SEM method on their research.

Key respondents should be pulled from several categories of individuals that are confirmed to have individuals aged 18 or above who certainly have conducted at least one online transaction (18 is the age of majority or threshold of adulthood according to Law 13/2003 on Manpower, Article 1, Point 26). In this research paper, the age of majority is assumed to be the age where someone is able to make his or her own decisions to make online purchases.

In accordance to the research orientation on four business models: loans, exchange, donation, and online shops, the researcher targeted several institutions which represent these business models and operate in Indonesia. These respondents include the customers on three e-commerce websites and five institutions that represent business, education, and social fields.

These respondents act as the gateway to distribute questionnaire to wider target audience by selecting and inviting potential respondents in accordance to the snowball sampling technique. The questionnaire is distributed via online and, to fill in the questionnaire, respondents could open the following link: http://survey.disertasi.net/index.php/867591/lang-id.

The online questionnaire is closed when the number of respondents who fill in the questionnaire exceed the target number of samples, which is 400 respondents at the minimum.

RESULT AND DISCUSSION

The measurement is conducted by using the questionnaire. In line with this instrument, the researcher should conduct validity and reliability test on the questionnaire. The examination is conducted on the answers from 79 respondents who already filled in the questionnaire. The initial examination results shows that one of the variables, namely “knowledge”, is not reliable because the results of the Cronbach’s alpha of this variable is below the minimum limit. After further investigation, it turned out that there are two respondents who provided different answers for questions in the same and similar variable. These respondents answered “strongly agree” on initial question, but for the next question they answered “strongly disagree.” Therefore, the answers from both respondents were excluded, so that only 77 respondents left to be re-examined.

The calculation results indicated that the instrument of these seven variables has a quite high reliability number, because the value of Cronbach’s Alpha (α) is above 0.60, which shows that the variable is reliable. Meanwhile, of all the 19 questions that were tested on 77 respondents who filled in questionnaire completely and in accordance with the procedure, all of the questions declared as valid because they have rcalculate higher than rtable on the standard of significance at 5 percent (two tails), which is 0.221. Since overall value of rcalculate (Corrected Item, Total Correlation) > rtable (yaitu 0.221) at 77 respondents, then it is concluded that the indicators of the variables in the questionnaire are valid to be used as the variable’s measuring instrument.

The research is conducted through online survey toward 449 respondents who filled in the questionnaire, but only 392 respondents filled in the questionnaire completely and meeting the filter criteria, which is Internet users aged 18 or above who have conducted transactions on e-commerce websites at least one time. The researcher used a software program: IBM SPSS AMOS (generally known as AMOS program) for structural analysis that examine the connections between research variables. The Maximum Likelihood procedure is applied for this analysis. The model suitability statistics for this model is satisfied, which is (CMIN/DF = 3.783; GFI = 0.875; AGFI = 0.834; RMR = 0.037), as shown by Table 1 below.

Furthermore, Figure 4 demonstrates the standard estimation from each connections along with the degree of significance from the connections. It appears that every connections is significant (> 0.30) except for the variable of internal scheme’s influence toward transaction decision (< 0.30).

Both the discussion and the interpretation from each hypothoses test results on the seven research hypotheses are elaborated below.

Internal scheme positively influence trustworthiness

Table 1. The Measurement of SEM Analysis for Model Suitability

<table>
<thead>
<tr>
<th>Suitability Measurements</th>
<th>Acceptable levels of suitability</th>
<th>The results of the analysis</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMIN/DF</td>
<td>Between 2 and 5</td>
<td>3.783</td>
<td>Good</td>
</tr>
<tr>
<td>GFI</td>
<td>GFI ≥ 0.90 is good-fit, 0.80</td>
<td>0.875</td>
<td>Marginal</td>
</tr>
<tr>
<td></td>
<td>≤ GFI &lt; 0.90 is marginal fit</td>
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<td></td>
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<tr>
<td>AGFI</td>
<td>AGFI ≥ 0.90 is good fit, 0.80</td>
<td>0.834</td>
<td>Marginal</td>
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<tr>
<td></td>
<td>≤ AGFI &lt; 0.90 is marginal fit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RMR</td>
<td>RMR ≤ 0.05 good-fit</td>
<td>0.037</td>
<td>Good Fit</td>
</tr>
<tr>
<td>RMSEA</td>
<td>RMSEA ≤ 0.05 is close fit</td>
<td>0.084</td>
<td>Good Fit</td>
</tr>
</tbody>
</table>

Source: The results of data processing with AMOS program...

Figure 3. Initial Structural Model: The Influence of Schemes toward Trustworthiness and Transaction Decision

Source: The Simplification of Research Conceptual Model on Figure 1
Internal scheme positively influence trustworthiness perception ($p = 0,000; \gamma_{11} = 0,344$) : Hypothesis is accepted. With hypothesis 1, the researcher investigated the connection between internal scheme and trustworthiness perception. The result above shows significant positive connection between internal scheme within consumers and trustworthiness perception. This result is important because previous research projects did not provide enough observation on the role of internal scheme within individuals toward trustworthiness perception to marketers.

Internal scheme positively influence trustworthiness perception ($p = 0,000; \gamma_{12} = 0,325$) : Hypothesis is accepted. By definition, the integrated marketing communications intervention is directed to encourage marketers and their brands to gain trust in order to build long-term relations with customers and to encourage transactions. Therefore, the ability of the integrated marketing communications intervention should have strong and positive connections with the trustworthiness perception. The stronger the internal scheme in influencing consumers, the stronger the perception of the consumers toward brand and consumers as a trustworthy party. This result is in line with various research projects in the past such as Sangran et al (2009) and Xia (2010). Marketing communication intervention is the key factor that explain the trust level of the respondents toward marketers and also could reflect the natural interaction between communicant and communicator in the process of building trust.

There is no influence between internal scheme and the decision to make transactions ($p = 0,116; \gamma_{21} = 0,106$) : Hypothesis is rejected. This hypothesis is rejected, this result shows that an individual’s motivation to explore websites because of the design, feeling the advantages of conducting online transactions, or understanding on how to make online transaction, did not determine whether that individual actually conduct transactions. The product’s specific factor might determine why this happens. In addition, respondents could indirectly relate with transaction decision through trustworthiness perception. That is, respondents should be able to trust first before they could make a decision to conduct online transactions.

External scheme positively influence transaction decision ($p = 0,000; \gamma_{22} = 0,430$) : Hypothesis is accepted. This result confirms previous research projects about the role of marketing communications in encouraging transaction decision. Hypothesis 4 is confirmed, supporting the results collected by Manchanda et al (2006), who investigated banner advertising as the information on Internet that influence consumers to make decisions.

Trustworthiness decision is believed to positively influence transaction decision ($p = 0,000; \beta_{21} = 0,370$): Hypothesis is accepted. Hypothesis 5 confirms that there is a significant connection between trustworthiness perception and transaction decision, in line with the result of the research conducted by Shareef et al (2013), who also conducted a research on transactions on digital media. However, this is slightly different from the research conducted by Kusumasondjaja (2012), which placed the variables of trust and the willingness to purchase variable in parallel variables.

Internal scheme is more influential than external scheme toward trustworthiness perception ($\gamma_{11} = 0,344 > \gamma_{12} = 0,325$) : Hypothesis is accepted. Hypothesis 6 is supported. This finding is significant in this research. Trustworthiness perception is more determined by the consumer’s ability to understand the ways to conduct transactions, advantages from conducting such transactions, and individual’s encouragement to examine information in detail as a result of the message content that is relevant with his or her need, instead of because of promotional programs or discounts, the visibility of these websites on search engine, or experience perception owned by these websites. This result is in line with the research conducted by Ferrin and Dirks (2002), which saw that each individuals have a tendency to trust. In this context, there are two factors that influence the trust level, namely the personal factor of the trusting person and the situational factor including the perception of the trusting person. Ferrin and Dirks (2002) found that internal factor is more influential than external factor. The soaring influence of internal scheme toward trustworthiness perception in this research compared to external scheme can be explained based on the strength of personal effect in creating trust degree.

Internal scheme is more influential than external scheme toward transaction decision ($\gamma_{21} = 0,106 < \gamma_{22} = 0,430$) : hypothesis rejected. With the rejection of this hypothesis, the test results show that the understanding of the communicant about messages based on his or her experience is still less than the communicant’s consideration on the marketer’s credibility, the marketer’s publication toward targeted consumers, or recommendations from friends and connections, to encourage the communicant to conduct online transactions. This result shows that consumers are encouraged from emotional side and not rational side in decision-making, because the consideration of a decision is submitted on external influence rather than internal.

The role of trustworthiness perception variable (trust) in the final model of this research serves as intervening variable as well as moderating variable. As the intervening variable, trustworthiness perception mediates the connection of either internal scheme or external scheme toward decisions causing direct and indirect effects. As moderating variable, the trustworthiness variable is instrumental in moderating the connection of external scheme toward transaction decision and thus strengthen the influence of external scheme toward transaction decision. However, trustworthiness variable does not moderate the internal scheme variable connection toward decision so that it does not strengthen the ability of internal scheme in encouraging transaction decision. In other words, internal
scheme only indirectly influence but this influence is not strengthened, which is different from external scheme that influence both directly and indirectly and the indirect influence is strengthened by trustworthiness variable. Figure 5 below is formalize as the research final model, by eliminating the insignificant connections from structural model on Figure 4.

Furthermore, by juxtaposing this final model of the research with five types of innovation user by Rogers & Everett (2003), which are: innovators, early adopters, early majority, final majority, and left behind, then the groups of consumers in the context of e-commerce could be categorized based on their decision-making process, which are: Early Adopters, Early Followers, and Late Followers.

The decision-making flow of the early adopters is Internal scheme > Trusted > Decision. That is, Early Adopters are those who, after receiving the message, have already possessed an adequate internal knowledge about the mechanism and the advantage of an e-commerce website, so that they could assess whether the offer of a presented product/service is trustworthy. If it is trustworthy, these consumers would make a decision to conduct transactions. Innovators are those who are bold and prepared to try new things. Usually, these people are those who have a dynamic lifestyle in big cities with wide social connections and relations. In the context of digital media, these are the Internet users in a broader sense, who have utilized Internet as a part of the lifestyle of those who want express, efficient, effective, productive, modern, as well as innovative. Meanwhile, Early Adopters are those who are always searching for the latest information related to innovation, bold enough to give it a try, and become opinion leaders about new things in their community.

The decision-making flow of the early followers is Internal Scheme > External Scheme > Trusted > Decision. This means that Early Adopters are those who, after receiving the delivered message, feel that their internal scheme is not comprehensive enough for them to be able to understand the mechanism and the advantage of a presented product/service through a certain e-commerce website. Therefore, in order to assess whether the offer is trustworthy, these consumers would make a decision to conduct transactions. These consumers are the type who would remain cautious before making a decision to adopt an innovation or a new product offer, and it may take a relatively long period of time. This type of people play an important function as the main reference to show to the whole community that an innovation or a new product is worthy to be used or useful enough.

The decision-making flow of the late followers is Internal scheme > External scheme > Decision. This means that the Late Followers are those who, after receiving the delivered message, feel that their internal knowledge is not comprehensive enough for them to be able to understand the mechanism and the advantage of product/service offered through certain e-commerce websites. Therefore, in order to make a transaction decision, these people need additional information from their external scheme, namely whether the message source is trustworthy, whether there is a credible reference as supporter, or whether there are public comments (including from Early Adopters and Early Followers) that recommend or even discredit the offer.

The consideration of the external scheme would be the foundation for these people to make transaction decisions. In this context, the trust factor toward message source would only serve as moderator or strengthener. That is, although the communicant may not fully trust the message source, but the information from the external scheme, especially recommendations from Early Adopters and Early Followers would be considered as adequate for them to make transaction decisions. In the context of marketing communication in digital media, this type of consumers is referred to as irrational consumers (Entman, et al, 2009), where the influence or social pressure play a strong role in encouraging someone to make a certain decision or to take a certain action. In the typology of innovation users (Rogers, 2003), this group consists of Late Majority type and Left Behind type.

The Late Majority type is the group that is more careful in accepting an innovation or trying a new product. This group of people would wait until many people already adopted the innovation before they finally make a decision to give it a try. Meanwhile, the Left Behind type consists of people who are the last ones to receive and adopt an innovation or a new product. They tend to be more traditional, and scared to try new things. When this group has finally adopted an innovation, most people already adopted other innovations, and consider this group as outdated.

CONCLUSION

The results of this research paper showed that both internal and external schemes have an influence toward trustworthiness perception. This is in line with scheme theory. The scheme theory stated that humans have an internal scheme and this internal scheme serves as the individual’s pilot. As long as an information is relevant and is not very different from internal scheme, the information is going to be perceived, maintained, and remembered.

External scheme that supports internal scheme in turn would increase the individual’s trust level. This explains the positive influence, either for internal scheme or external scheme on trustworthiness perception. In line with this, if the
internal scheme does not fit with the external scheme, then distrust perception would appear.

Unlike with the hypothesis, the external scheme is actually more significantly influence purchasing decision compared to the internal scheme. Although the internal scheme indirectly influence the purchasing decision through trust perception, the connection between trustworthiness perception and purchasing decision has a smaller coefficient line than the coefficient line between the external scheme and purchasing decision. The internal scheme is defeated by the external scheme. This concludes that the consumer’s purchasing decision is not always a rational decision. The non-rational element comes from the information and third-party recommendations. Therefore, consumers who are not fully trust a product/service, could be encouraged to make transactions should they find an interesting additional information on search engine, found positive public comments, and receiving recommendations from their friends or connections.

With the domination of the external scheme toward the internal scheme, this research paper implicitly conclude that e-commerce would encourage netizen to have the tendency to spend more, causing the consumerism pattern from online consumers to possibly increase. It is recommended that online consumers to realize, understand, able to refrain, and have the motivation to not overspend.

Furthermore, the government has to issue a stricter regulations in the form of regulations and monitoring toward aggressive online marketing efforts that involve various types of manipulative external scheme. As an example, there is a strategy of online marketing that exploit the credibility of the information source, biased third-party references, and engineered public comments.

REFERENCES


Campbell, N. 2000b. Databases of Expressive Speech. ISCAA


Kusumasondjaja, Sony. 2012. Travelers’ responses to online information on consumer-generated media for travel-related services. Ph.D. Curtin University, School of Marketing, Curtin Business School


Ma, M. & R. Agarwal. 2007. Through a Glass Darkly:
Information Technology Design, Identity Verification, and Knowledge Contribution in Online Communities.