

Consumer Trends to Visit Online Shopping (Survey in Postgraduate Students of Universitas Pendidikan Indonesia)

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Abstract. This study aims to conduct a thorough analysis of the tendency of consumers to visit online shopping sites that are done repeatedly. The method used in this study is a survey method with a quantitative approach. To find data about the tendency of consumers to visit online shopping sites, a questionnaire is used that contains questions about the topics discussed. The population in this study is all postgraduate students of Economic Education 2017 at Universitas Pendidikan Indonesia. The collected data will be tested for reliability and validity, then a regression analysis is used thoroughly for each related variable. The results of this study indicate the influence of each variable used. The level of online shopping site visits is not only influenced by one factor, but many factors influence it. Therefore, the results will be very useful for the development of online shopping sites that will increase economic growth in the era of digital economy.

1. Preliminary

The survey conducted by the *Asosiasi Penyelenggara Jasa Internet Indonesia* (APJII) in 2016, as many as 132.7 million people from 256.2 million people of Indonesia have been connected to the internet. This means that more than 50% of Indonesia's population has used the internet. This creates great opportunities for online transactions. One of the impacts is the increasing use of E-Commerce, where people get the convenience of shopping with just one touch of a finger. This allows increasing the intensity of online shopping [1], [2]. E-commerce is one type of online shopping information system that is becoming a trend in the world of modern technology [3], [4]. The dominance of E-Commerce which is able to change consumer behavior from offline shopping to online shopping must be balanced by the company's awareness in creating online shopping experiences [5], [6]. Iprice Group in 2017 featured the 10 strongest E-Commerce companies in Indonesia as follows:

Table 1. E-Commerce with the number of visits Most

RANK	VISITS	APPS INSTALL	TWITTER	INSTAGRAM	FACEBOOK	EMPLOYEES
1	Lazada	Ali express	Bibli	Hijup	Lazada	Mapemall
2	Tokopedia	Zalora	Tokopedia	Shopee	Zalora	Lazada
3	Elevenia	Tokopedia	Lazada	Lazada	Bibli	Tokopedia
4	Bukalapak	Lazada	Bukupedia	Gwood	Tokopedia	Bukalapak
5	Bibli	Shopee	Elevenia	Mothercare	Shopee	Matahari mall
6	Jd id	Bukalapak	Bukalapak	Brodo	Bukalapak	Bibli
7	Shopee	Matahari mall	Matahari mall	Tokopedia	Matahari mall	Shopee
8	Blanja	qoo10	Bhineka,	Matahari Mall	Elevenia	Bhineka
9	Matahari mall	Bibli	Zalora	Zalora	Brodo	Zalora
10	Bhineka	Elevenia	Hijup	Bukalapak	Bhineka	Elevenia

Source: Iprice Group 2017

The indicator developed by Iprice Group lies in how high the intensity of consumer visits to the company's website is developed, so that the main objective of E-Commerce companies that must be fulfilled is the provision of excellent service centered on customer satisfaction. The hope is the increasing intensity of website visits so that the chances of online transactions on these sites are getting bigger. This is part of a marketing strategy that must be understood and implemented by every E-Commerce company. In addition, Demangeot & Broderick (2006) further explained the importance of the relationship between the online shopping environment and marketing planning.

Recently, a number of studies have discussed the design of web-based e-commerce application systems and identified many different design features. For example, [8] identified several design factors from E-commerce sites consisting of information quality, service quality, playfulness, quality of system design, and system usage. Liu et al. (2001) found that well-designed sites will produce customers who are better off to the site and its products. These findings became our motivation to do similar research by adding website design variables in our next study.

This research is motivated by the research of Demangeot and Broderick (2006) in which sense-making potential and exploratory potential are seen as a framework for organizing a company in understanding how consumers feel and process the shopping environment when they shop online. While website design is the key to success in determining how a website can contribute to creating a virtual environment that consumers can feel, process and use as their experience in the online shopping environment.

2. Literature Review

Demangeot & Broderick (2006) divided the online shopping environment into three categories of approaches as follows:

- a) Initiative Approach to Scale Development [9], [10]. This approach is based on identifying the perceived quality of an online shopping site. Website quality measurement Loiacono et al. (2002) describe the use of the framework of thinking from the Theory of Reasoned Action (TRA) and Technology Acceptance Model (TAM) as a starting point for developing web quality measures to investigate consumer reuse.
- b) Stimulus - Organism - Response (S-O-R) approach of Mehrabian & Russell (1974). This stimulus approach assumes that responses to environmental stimuli (S) can be treated as an approach or avoidance (R) response, with the experience of individuals in the environment (O) as mediators. Individual reactions to the environment are carried out in two ways, namely approach and avoidance.
- c) Cognitive Approach in online shopping. E. Rosena & Purinton (2004) apply Kaplan's (1987) preference framework that distinguishes between sense-making potential and exploratory potential, between direct prospects and future attributes, rather than merely suggesting or arriving at promising results. Singh, Dalal, & Spears (2005) also use Kaplan's (1987) preference framework and found that web page design is preferred and behavioral intention can be explained by two higher constructs, namely understanding information and involvement of web pages (involvement). Furthermore, Bai, Law, & Wen (2008) deepened the design of web pages by measuring the quality of the website into five dimensions, namely purchasing information, service / product information, destination information, quality information, and contact information.

The presentation of the literature above gave rise to two main conclusions. First, the cognitive approach shows how consumers provide insight into the online shopping environment. All buyers are information seekers, this process presupposes searching for product information and considering products, whether they are involved in the pre-purchase information gathering process, or just browsing and satisfying their interests in certain product categories [16].

Second, the difference between sense-making potential and exploratory potential seems very appropriate for the context of online shopping. The online shopping environment has great potential for exploration where they can be interactive, live and become a source of information both in verbal and sensory forms. But at one point in time, they can only display one page in the form of a hyperlink

in the form of an image or search engine that can display thousands of other pages. This situation occurs because the computer dimensions are limited so that the activity becomes less intuitive than the real environment. In this case sense-making potential is defined as the perceived ability of a retail website to facilitate orientation, navigation and consumer achievement tasks [5].

3.1. *Online Shopping Site*

“Online shopping sites are retail websites where customers can browse, evaluate, order, and buy products or services. In short, shopping internet sites are online versions of physical retail stores where all their relevant transactions and activities take place in online virtual space” [10]. Furthermore, Byun (2011) simplifies the quality of an online shopping site by looking at a web page as the first contact or gate of a user when visiting a website, so that the principle of page design must be positive. This page design will form the sense-making potential that encourages exploratory potential. Page design builds steps whether the page can be accessed quickly and allows easy navigation between pages, whether the content is interesting and easy to read, while content may play a role in motivating users to visit the site again [17]. For this reason, researchers believe that the better the website design, the more sense-making potential can be felt.

3.2. *Online Shopping Environment*

“The online shopping environment allows consumers to search for information and buy products or services through direct interaction with online stores” [18]. Environmental psychologist Kaplan (1987) argues that two important human needs in the environment are the need to understand (sense-making potential) and the need to explore (exploratory potential). Both needs exist simultaneously, and can be fulfilled by the information conveyed by signals present in the environment. The higher the sense-making potential makes a website increase, causing more consumers to be able to see the exploratory potential.

3.3. *Shopping Value*

The motive behind shopping behavior is not only to find the product that is sought, but also the satisfaction obtained from the shopping process [21]. A person's motivation to move in an online shopping environment consists of hedonic values and utilitarian values [22]. Utilitarian values are defined as values that come from achieving utilitarian and hedonic, and hedonic values are defined as the value obtained from the enjoyment of shopping for one's own sake [23]. When consumers think websites are easier to understand, the tendency to search for products is also easier, so the possibility of navigation is more productive. Thus, the authors argue that the higher the potential sense-making of an online shopping site will increase utilitarian value.

“The involvement that results from exploring the content of a website can provide further product knowledge for its own sake, and is considered a pleasant intrinsic experience. The presence of involvement indicates that this experience is hedonically beneficial” [24]. “Consumers may be able to enjoy the interaction of life with the product without continuing with the purchase, and this alone can produce a hedonic value” [25]. For this reason, involvement with the content of online shopping websites is positive with the production of hedonic values.

Engagement is also known to improve information processing skills and seek further information [20]. Consumers involved pay more attention [26], to facilitate instrumental tasks [19]. Furthermore, site exploration and interest in seeing more products and further information can cause consumers to look for products that are more suitable, so shopping trips are more successful in utilitarian terms [27]. Therefore, researchers also suspect that the content of online shopping websites will affect the utilitarian value of the product.

4. **Methodology**

The approach taken in this study is quantitative. Collecting data to test the conceptual model, represented in Figure 1, was collected from survey activities. The sample used in this study is the

Postgraduate Students of Universitas Pendidikan Indonesia. Sample selection is based on students because it is possible that more technology literacy, and more active become online buyers compared to the average of other consumers. Postgraduate students are more representative of consumers who will come when the flow of technology develops faster and more sophisticated. Meanwhile, who is the seller and how the seller markets their products is considered when designing future versions of their website [5]. Second, the diversity of background of graduate student status (married status, number of children, employment status, busyness outside of college) makes graduate students selective in utilizing their time to shop online. Third, because the pressure of postgraduate students to be more sensitive and up to date on the latest phenomena and current developments, may also create a tendency of exploratory behavior, and it is very possible to increase the observed level of involvement and hedonic value [5].

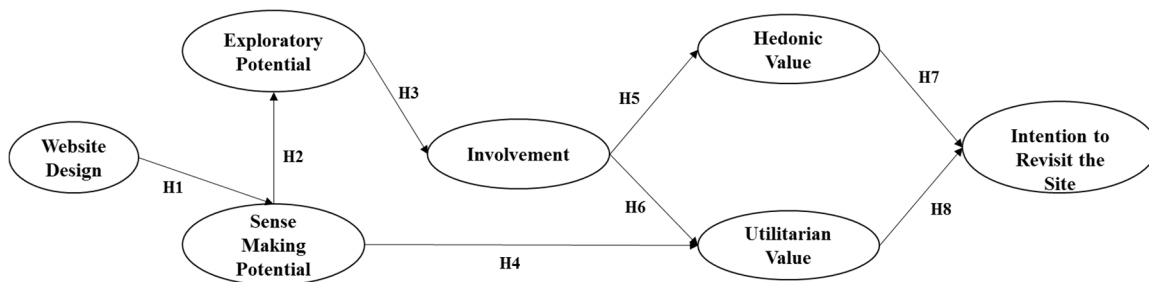


Figure 1. Conceptual Model

The population in this study is 918 new postgraduate students of the 2017 class year as seen based on the Graduation Letter (LOA) and New Student Registration Circular for the 2017/2018 year of force (Test December 2016, May 2017 and July 2017). To collect research data, researchers gave questionnaires to 279 respondents containing questions regarding the consumer experience in an online shopping environment at Lazada. Lazada was chosen because based on the survey conducted by I-Price Team (2017) it was stated as the website with the most visit intensity [2]. Respondents selected were respondents who had shopped or at least had opened the Lazada website in the past month. Data collection is done within one week. Several research instrument designs are made to maximize the picture of consumer behavior in an online shopping environment.

5. Research Result

The formulation of the proposed problem needs to be known whether the formula is accepted or not, for that a survey is conducted for postgraduate students about online shopping responses. The survey was conducted using a research instrument in the form of a questionnaire with 80 questions from the predetermined indicator. The following are the results of simple linear regression test data.

Table 2. Results (answers hypothesis)

H	Model Summary			Anova	Coefficients (B)			Sign	T / F Table	Ket
	R	R Square	Adjust R Square	F Count	t	Cons	Var			
H1	,650A	,422	,418	111.8	10.574	9.941	0.291	0,000	0.05	Sig
H2	,708a	,502	,499	154.2	12.418	23.035	.917	0,000	0.05	Sig
H3	,832a	,693	,691	345.1	18.577	1,087	0.226	0,000	0.05	Sig
H4	,600a	,360	,355	85.9	9.268	4.416	.224	0,000	0.05	Sig
H5	,689a	,474	,471	138.1	11.749	7.340	1,945	0,000	0.05	Sig
H6	,739a	,546	,543	184.2	13.571	1.935	0.785	0,000	0.05	Sig
H7	,745a	,555	,552	191	13.819	-1.380	.216	0,000	0.05	Sig
H8	,452a	,205	,199	39.36	6.274	1.672	0,349	0,000	0.05	Sig

Source: 21. SPSS for windows and MS Excel

H1. The better the website design, the more the sense-making potential can be felt.

Hypothesis test results show that t count is greater than t table and F count is greater than F table. The significance value also shows a value smaller than 0.05. These results can be interpreted that there is an influence of the independent variable on the dependent variable, which means that hypothesis 1 is accepted with the influence value seen from R square of $0.422 \times 100 = 42.2\%$. Whereas, based on the B var coefficient value, the increase is 0.291, which means that when an increase in website design increases the sense-making potential. These results indicate that the better a website design, the greater the potential for the company to be able to look superior to other competitors in the eyes of consumers or clients. Effective website design can change the appearance of the website to be interesting to be seen and visited by consumers. In this case, attractive website design can help companies achieve success in the midst of increasingly tight business competition. The design process of a website will include creativity, technical knowledge, and experience.

H2. The higher the sense-making potential makes a website increase, causing more consumers to be able to see the exploratory potential.

Hypothesis test results show that t count is greater than t table and F count is greater than F table. The significance value also shows a value smaller than 0.05. This result can be interpreted that there is an influence of the independent variable on the dependent variable, which means that hypothesis 2 is accepted with the influence value seen from R square of $0.502 \times 100 = 50.2\%$. Meanwhile, based on the coefficient value of B var, the increase is 0.917, which means that the higher the potential sensing, the more consumers can see the exploratory potential. These results prove that actually site visitors want the information they need to be found efficiently and quickly. Because of that accessibility can take various forms. Other ideas include the organization of web content into small pieces of easily digestible parts by utilizing a format that makes sense to users and even makes it easy for users to skim the writing on a web page.

H3. Involvement of consumers with the content of online shopping websites has increased as a perception of exploratory potential.

Hypothesis test results show that t count is greater than t table and F count is greater than F table. The significance value also shows a value smaller than 0.05. This result means that there is an influence of the independent variable on the dependent variable, which means that hypothesis 3 is accepted with the influence value seen from R square of $0.693 \times 100 = 69.3\%$. Whereas, based on the coefficient value of B var, the increase is 0.226, which means that the higher the exploration potential, the consumer involvement with the content of online shopping websites will increase. Based on these results indicate that consumers need to experience themselves in the exchange process so that trust can be formed in the mind of consumers who are defined as involvement. Through this consumer involvement, experience will be created, which is the beginning of the formation of trust.

H4. The higher the sense-making potential of an online shopping site will increase utilitarian value.

Hypothesis test results show that t count is greater than t table and F count is greater than F table. The significance value also shows a value smaller than 0.05. These results can mean that there is an influence of the independent variable on the dependent variable, which means that hypothesis 4 is accepted with the influence value seen from R square of $0.360 \times 100 = 36\%$. Meanwhile, based on the B var coefficient value, the increase is 0.224 which means that the higher the sensemaking potential an online shopping site will increase utilitarian value. Increasing utarian shopping motivation shows consumers shopping by making purchases or not purchasing goods or services that consumers have specified as needed. Utilitarian value perception can depend on what consumers want to achieve from the shopping activity. The utilitarian criterion emphasizes the ability of a product that fits the function of everyday consumer life. This utilitarian value is only limited to the level of dependence and necessity of the product user.

H5. Engagement with the contents of online shopping websites is positive with the production of hedonic values.

Hypothesis test results show that t count is greater than t table and F count is greater than F table. The significance value also shows a value smaller than 0.05. This result can be interpreted that there is an influence of the independent variable on the dependent variable, which means that hypothesis 5 is accepted with the influence value seen from R square of $0.474 \times 100 = 47.4\%$. Whereas, based on the B var coefficient value, the increase is 1.945 which means that the higher the involvement with the content of online shopping websites will increase the production of hedonic values. The high motivation for hedonic shopping is the drive to shop as a result of subjective views that are emotionally influenced to seek mere pleasure. Consumer hedonistic considerations present cognitive aspects that lead to impulsive purchases. A pleasant experience when shopping can be caused by the fulfillment of emotional desires, in order to eliminate negative feelings in consumers.

H6. Engagement with the contents of online shopping websites results in utilitarian value production.

Hypothesis test results show that t count is greater than t table and F count is greater than F table. The significance value also shows a value smaller than 0.05. This result can be interpreted that there is an influence of the independent variable on the dependent variable, which means that hypothesis 6 is accepted with the influence value seen from R square of $0.546 \times 100 = 54.6\%$. Whereas, based on the coefficient value B var, the increase is 0.785, which means that the higher the involvement with the content of the online shopping website will increase the production of utilitarian value. "Utilitarian value applies when consumers focus on tangible benefits when shopping. This tangible attribute is the result of cognitive stimulation in consumers which then affects consumer behavior in the selection of products or retail outlets in accordance with the needs of the consumers themselves" [28]. This perception of utilitarian value is determined by how much the consumption needs that drive this shopping experience are met. This proves that consumers shop effectively and efficiently.

H7. Consumers who have obtained high levels of hedonic (hedonic value) from online shopping websites are more likely to visit the site (intention to revisit the sites).

Hypothesis test results show that t count is greater than t table and F count is greater than F table. The significance value also shows a value smaller than 0.05. These results can mean that there is an influence of the independent variable on the dependent variable, which means that hypothesis 7 is accepted with the influence value seen from R square of $0.555 \times 100 = 55.5\%$. Whereas, based on the B var coefficient value, the increase is 0.216 which means that the higher the hedonic value of the online shopping website, the consumer will tend to visit the site (intention to revisit the sites). Hedonic shopping motivation is similar to utilitarian shopping motives, only purchasing decisions are related to fulfilling the value of hedonic shopping, such as feeling a pleasant experience, entertainment, and fantasy. The value of hedonic shopping refers to the feeling of pleasure and pleasure that consumers receive from all the buying experiences associated with shopping.

H8. Consumers who have obtained high levels of utilitarian value from online shopping web are more likely to visit the site (intention to revisit the sites).

Hypothesis test results show that t count is greater than t table and F count is greater than F table. The significance value also shows a value smaller than 0.05. These results can be interpreted that there is an influence of the independent variable on the dependent variable, which means that hypothesis 8 is accepted with the influence value seen from R square of $0.205 \times 100 = 20.5\%$. Whereas, based on the value of the B var coefficient, the increase is 0.349 which means that the higher the utilitarian value of the online shopping website, the consumer will tend to visit the site. The utilitarian buying motives include comfort seekers, diversity seekers, quality goods seekers, and reasonable price levels. Utilitarian value motives, derived from rational thinking that has been planned, while hedonic shopping motivation is the impulse to shop results from subjective views that are emotionally influenced to seek mere pleasure.

6. Conclusion

After finding the results of research and conducting a discussion, the following can be concluded as a whole (1) The better the website design, the more sense-making potential can be felt, (2) the higher the sense-making potential makes a website increase, causing more consumers are able to see the potential of exploration (exploratory potential), (2) Involvement of consumers with the content of online shopping websites increases as a perception of exploratory potential, (3) The higher the potential sense-making an online shopping site will increase utilitarian value, (4) Involvement with the contents of online shopping websites is positive with the production of hedonic values, (5) Involvement with the contents of online shopping website results in utilitarian value production, (6) Buyers who have obtained hedonic values the height of an online shopping website is more likely to me visit the site (intention to revisit the sites), (7) Consumers who get a high utilitarian value from online shopping web tend to revisit the site.

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