
THE IMPACT OF E-COMMERCE TOWARD CONSUMER PURCHASE INTENTION AT UD.CIPTA PRIMA MEDAN

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Abstract: This study empirically examines the website attributes in ecommerce influencing customer purchase intention. The writer do the observation and preliminary data that UD. Cipta Prima Medan is having problems which the manager says that there is no consumer purchase intention and most of the customers are only came from North Sumatra. The population that the writer used is the purchasing customers in UD. Cipta Prima Medan, which is 45 customers. The writer uses convenience sampling technique in which the sample are selected because readily available and convenience. In analyzing data, the writer used some methods such as statistics, normality test, validity test, reliability test, correlation test, determination test, linier regression, and hypothesis test. Based on statistical calculation and analysis, the data is highly valid and the questionnaire is reliable. The Pearson correlation coefficient is 0,87 and the determination is 75.20%. This means that there are high and positive relation between E - Commerce and consumer purchase intention. The linear regression equation of this variable is $Y = -3.54 + 1.28X$. The Zcount of this skripsi is 5,8 and Ztable 1,96. Since Zcount > Ztable, hence H_a is accepted. This means that E-Commerce has an impact toward Consumer purchase intention at UD. Cipta Prima.

INTRODUCTION

Electronic Commerce also known as E- Commerce has several benefits. Firstly, it is the Convenience. As people from around the world can purchase the item anytime and everywhere they are. Also, it has the convenience for the customer to do bank transfer or by using the credit card. Secondly, is the Product Catalog or description. Through the website, consumers can directly get to know the description and details about the products. Consumers' buying decision is very complex. Usually purchasing intention is related with consumers' behavior, perception and their attitude.

Purchase behavior is an important key point for consumers during considering and evaluating of certain product (Keller, 2001). Buying intentions play an important role in helping the companies predict customer buying behavior [Doddsetal., 1991]. Purchase intention, along with the intention to return, is one of the more commonly referred as online behavioral intentions [Hausman & Siekpe, 2009]. Customers with a positive purchase intention, for example, customers have developed positive or favorable feelings toward the product are more likely to make a purchase [Pavlou, 2003]. The customers formulate positive purchase intention over a period of time as before to buy a product, they search for information and the acquisition of the desired information, and customers feel more confident about their choice. Leelayotahyotin (2004) indicates the availability of useful and relevant information positively influences the customers of purchasing intentions and finally leads to the actual purchase.

According to Zaman (2013, p.126) "The Usability of an E- Commerce website is of utmost important as it will affect consumers trust toward the website and in turn their purchase intention." UD.CIPTA PRIMA is selling generator set that can use for households, hotel, college, hospitals and company. The generator can be used as power back up systems or "off - grid", resources that depend on the needs of users. Generator set often used by hospitals and industries that need resources steady and reliable, a high level of supply reliability, and also for rural areas that do not have the access to commercially supplied electricity through the existing distribution network (PLN). Also, the company also provides selling the spare parts for the generator set.

In this era, whether it is children or adults, everyone is using a smart phone. Smart phone have become very popular nowadays because it is addicted. Smart phone make it easier for people to do their things, because it allows for immediate access to data online whether they are at home, workplace, or even travelling. People nowadays seems to want a more efficient and effective lifestyle. With the help of smart phone, now everyone can browse the internet and even purchase the goods from the website. Rather than going to the retail store directly, people can browse the information through the website. Also, with the support of the super fast 4G internet, browsing the internet by using hand phone is no longer a problem. In contrast, it gives efficiency to the people. Moreover, there are plenty of online website such as Tokopedia, Olx, Rakuten, Amazon, E-bay where it gives efficiency to the consumer where they can make a purchase through their online website and also it provides save and easy payment transaction. The continuation of the development of communication technologies, the Internet, has increased both the retailers' potential to reach consumers all over the world and access of consumers to these retailers (Ilagan, 2009). One of the most important communication channels in the world is Internet are expanding and the use of the Internet is motivating some changes in the consumer purchase process (Casalo et. al, 2007).

Here are the Customer's sales that the company achieved for the past three years. The sales income from Medan customers in year 2013 is Rp 2, 269, 750, 000,-. and in the year of 2014 is Rp 2,108,285,000,- and last year is Rp, 1,896,677,000,- However, the sales income of customer from outside of North Sumatra for year 2013 is Rp 704,000,000,- and year 2014 is Rp 540,456,000,- and last year the sales decreased again to Rp 429,992,000,-.

Based on the existing phenomena, the purpose of the study is to find out and analyze how far E- Commerce impact the consumer purchase intention at UD.CIPTA PRIMA.

LITERATURE REVIEW

E- Commerce

Electric Commerce is an emerging concept that describes the process of buying and selling or exchanging of products, services and information via. Telecommunication and computer networks including the internet. E- commerce is about setting your business on the Internet, allowing visitors to access your website, and go through virtual catalog of your products or services online. When a visitor wants to buy something he/she likes, they merely “add” to their virtual shopping basket. Items in the individual shopping basket can be added or deleted, and when you’re all set to checkout, you head to virtual checkout counter, which has your complete total, and that will ask for the name, address etc. and method of payment (usually visa credit card). Once you have entered all this information (which is transmitted securely) and you can wait for delivery. Kalakota and Whinston (1997) define Electric Commerce from various perspective as:

- a. From a communications perspective, E-commerce is the delivery of information, products/services, orders and payments over telephone lines, computer networks or any other electronic means.
- b. From a business process perspective, E-commerce is the use of technology towards the automation of business transactions and workflow.
- c. From a service perspective, E-commerce is a tool that caters to the need of firms, consumers and management to cut down the transaction costs while improving the quality of goods/ services and increasing the speed of delivery.
- d. From an online perspective, E- commerce provides the capability of buying and selling products and information on the internet and other online services.

Consumer Purchase Intention

Perceived Price

The price is defined as the money that customers exchange in terms of service or product, or the value they receive. It is important for a company to retain loyal customers who are willing to pay higher prices for their favorite brand as price has a significant impact on brand loyalty which in turn effects on customer’s purchase intention. Lee et al (2010) studied the effects of consumer perception of price fairness on its purchase decision and referred to it as a proper predictor for purchase decision of consumer. Therefore, price is one important factor in customer purchase

Perceived Quality

Perceived quality is a general and intangible feeling about a product. Perceived quality can also be defined as the customer perception of general quality or superiority of one product or service in the light of its expected goal in comparison to other alternatives. Product quality is a key factor in assessing purchase intention. It is a continuous process of improvement that the continuous changes increase product performance and consequently the satisfaction of customers’ needs. Quality should be improved every moment as if a product has a better quality, customer will be more inclined to purchase it. Therefore, we can conclude that product quality is significant on measuring customer’s purchase intention.

Advertisement

Advertising is a subset of promotion mix that is as 4P (Product, price, place and promotion) in marketing mix. Advertising as one of the strategies of promotion, is an

important tool in creating awareness in the minds of potential customers in order to make decision to buy the product. Manufacturers create an emotional link with customers through advertising. As a result, it is more likely that these kinds of customers create an emotional link with the ads of their favorite brand.

Packaging

Packaging can have significant momentarily effects on customers' purchases intention due to the fact that customers are affected by appearance aspects of product especially its packaging in unplanned purchases. The study of Kawa et al. (2013) also showed that packaging has a significant impact on measuring customer's purchase intention.

Theoretical Framework

Theoretical framework is a collection of interrelated concepts, like a theory, that is supposed to show the relationship between the variables and the factors those are related to the problem of the research. This theoretical framework may guide the writer in doing research, determine what will be measured and find out the statistical relationship among the objects of the research. This Skripsi focuses on The impact of E- Commerce toward Consumer Purchase Intention in UD. CIPTA PRIMA. Therefore, According to Zaman (2013, p.126) "The usability of an E- Commerce website is of utmost as it will affect consumers trust toward the website and in turn their purchase intention."

Figure 2.1
Theoretical framework



Hypothesis

Hypothesis is a temporary answer which could be right or wrong and it needs to be proven. According to Cooper and Schindler (2010, p.494) "There are two kind of hypothesis, null hypothesis and alternative hypothesis". The Hypothesis needs to be tested through data collection or research because it may be wrong and only a forecast.

RESEARCH METHOD

According to Cooper & Schindler (2013:25), "Research design constitutes the blueprint for the collection, measurement, and analysis of data." In this research, writer decides to use methods that are used when doing a research which are as follows: 1. Descriptive research is used to gain the information and be able to describe the characteristics of the attributes or variables in a study. This method used to create understanding of the theories and facts related to a case and how they relate to each other. The purpose of this research is to test the existing of hypothesis or answer the question that is related to the subject researched. 2. Correlation research or causal research is the category of conclusive research, because of its attempt to reveal a cause and effect relationship between two variables. The purpose of this research is to decide if there is any correlation between the variables. According to Sekaran & Bougie (2011:89), "Population refers to the entire group of people, events, or things of interest that the researcher wishes to investigate".

The writer is taking 45 customers of UD.CIPTA PRIMA as sample. The writer uses convenience sampling technique in which the samples are selected because it is readily available and convenient. Validity Test is used to show the validity level of an instrument and data, such as questionnaire. Validity as defined by Gray (2004) is the degree to which data in a research study are accurate and credible. Reliability is used as one of the tool in collecting data and to show the reliability of an instrument and data. Reliability according to Gray (2004) is the degree to which an instrument will produce similar results at a different period.

Validity Test

Validity Test is used to show the validity level of an instrument and data, such as questionnaire. Validity as defined by Gray (2004) is the degree to which data in a research study are accurate and credible. An instrument that has a high valid level must have high validity. On the other hand, an instrument that has a low valid level must have low validity.

The formula used to count Validity is:

$$R_{xy} = \frac{\sum xy}{\sqrt{(\sum x^2)(\sum y^2)}}$$

Where :

$$x = X_n - \bar{x}$$

$$y = Y_n - \bar{y}$$

X_n = the rate score from x

Y_n = the rate score from y

\bar{x} = average score of X_n

\bar{y} = average score of Y_n

Reliability Test

Reliability is used as one of the tool in collecting data and to show the reliability of an instrument and data. Reliability according to Gray (2004) is the degree to which an instrument will produce similar results at a different period. A trusted instrument which is reliable will produce trustworthy data as well the reliability of the data is measure by using Standardized Cronbach's Alpha Formula.

$$\text{Reliability (Alpha): } \alpha = \left[\frac{k-1}{k} \right] \left(1 - \frac{\sum \sigma^2 b}{\sigma^2 t} \right)$$

Where :

α = reliability coefficient

k = number of questions

$\sum \sigma^2 b$ = total of variant question

$\sigma^2 t$ = total variants

$$\sigma^2 b = \sum x^2 - \frac{(\sum x)^2}{n}$$

$$\sigma^2 t = \sum t^2 - \frac{(\sum t)^2}{n}$$

x = the respond value of each respondent

n = number of responden

Normality Test

Test data normality using the Kolmogorov-Smimov test. $D = \sup_x |F_n(x) - F_0(x)|$

$F_n(x)$ = The cumulative probability value (cumulative distribution function) is based on sample data

$F_0(x)$ = The cumulative probability value (cumulative distribution function)is under H_0
 $P(Z < z_i)$.

The hypothesis is formulated as follows :

H_0 : $F_n(x) = F_0(x)$ data distribution is normal

H_1 : $F_n(x) \neq F_0(x)$ data distribution is not normal

Criteria for testing the samples using is to compare the probability of a certain level of significance, namely:

1. Significant or probability values < 0.05 , then the data distribution is not normal
2. Significant or probability values > 0.05 , then the data distribution is normal.

RESULT AND ANALYSIS

Validity

For variable X (E-Commerce), the lowest validity value is 0.86 and the highest value is 0.91 which both mean very strong data validity. As for variable Y (Consumer Purchase Intention), the lowest value is 0.87 and the highest value is 0.92 which both mean very strong data validity.

Reliability

Table 1.1

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.949	.961	10

Data gathered are all reliable as the reliability test result for variable X and variable Y is 0.95 which means good data reliability.

Based on the data and calculation that has been done, the writer got the following result and analysis:

1. From the calculation of validity test, the writer found out that the level of validity for Variable X (E-Commerce) and Variable Y (Consumer Purchase Intention) ranged from 0.81-1.00. This shows that all the questionnaires are valid (with very high level) which means that all the questions hit the target on problems correctly.
2. From the calculation of reliability test, the writer found out that the value of reliability test using Cronbach's Alpha formula results in 0.95. This value shows that the questionnaires in this research are reliable and trustworthy.
3. The mean, median and mode of Variable X (E-Commerce) calculated are all in the range of "disagree". It indicates that most of the respondents feel that they don't enjoy buying products from UD. Cipta Prima's website, thus most of the time, the respondents don't have much intention to buy products from UD. Cipta Prima anymore. The mean, median and mode of Variable Y (Consumer Purchase Intention) calculated are all in the range of "disagree". It indicates that most of the respondents don't feel satisfied with the price, quality, promotion and packaging offered by UD. Cipta Prima, thus, most of the time, makes the respondents don't have much intention to buy products from UD. Cipta Prima.
4. From the calculation of r (correlation) between Variable X (ECommerce) and Variable Y (Consumer Purchase Intention), the writer got the result of 0.87. It means that e-commerce has a very strong relationship with consumer purchase intention at UD. Cipta Prima.
5. From the determination calculation, the percentage relationship between e-commerce and consumer purchase intention at UD. Cipta Prima is 75.69% and the remaining percentage of 24.31% is affected by other factors.

6. The calculation result of linear regression is $Y = -3.54 + 1.28X$. This means that the value of Y (Consumer Purchase Intention) depends on X (E-Commerce) value in which every 1(one) unit of X added, the value of Y will increase by 1.28.
7. From the calculation of hypothesis test, the writer obtained that $z_{count} > z_{table}$ ($5.80 > 1.96$). It shows that null hypothesis (H_0) is rejected and alternative hypothesis (H_a) is accepted. Here, the writer can conclude that e-commerce has an impact toward consumer purchase intention at UD Cipta Prima.

CONCLUSION

1. The conclusions for this research is that E- Commerce has an impact toward the Consumer Purchase Intention at UD. CIPTA PRIMA Medan.
2. From the calculation of correlation coefficient between E- Commerce and Consumer Purchase Intention, the writer got the result of 0.87. It means that E- Commerce have strong impact (relation) toward Consumer Purchase Intention at UD. Cipta Prima Medan. Moreover, the hypothesis test that the writer found out that the Null hypothesis (H_0) is rejected and the Alternative hypothesis is accepted, which is E- Commerce has an impact toward Consumer purchase intention at UD.Cipta Prima Medan

REFERENCES

- [1] Cooper, C. R., & Schindler, P. S. (2010). *Business Research Methods* (10 ed.). Boston: McGraw-Hill.
- [2] Cooper, C. R. & Schindler, P.S. (2013) *Business Research Methods* (12th Edition). New York: McGraw-Hill Education.
- [3] Gray, D.E. (2004) *Doing Research in the Real World*. London: Sage.
- [4] Hsu, C. L., Chang, K. C., & Chen, M. C. (2012). The Impact of Website Quality on Customer Satisfaction and Purchase Intention: Perceived Playfulness and Perceived Flow as Mediators. *Information Systems and e-Business Management*, 10(4), 549-570.
- [5] Ilagan, S.V. (2009). Exploring the Impact of Culture on the Formation of the Trust in Internet Shopping. Department of Communication and Journalism and of the Faculty of Graduate Studies of the University of Wyoming.
- [6] Jackson.(2012).*Research Methods and Statistics : A Critical Thinking Approach*. Wadsworth, Cengage Learning, USA.
- [7] Kotler, P. (2010).*Marketing: An Introduction* (10th Edition). USA: Prentice Hall Lamb, et al.(2009). *MKTG*, Canadian Edition. Canada: Nelson Education Ltd.
- [8] Luo et al.(2012). The Effectiveness of Online Shopping Characteristics and WellDesigned Websites on Satisfaction. *MIS Quarterly*, 36(4), 1131-1144.
- [9] Sekaran, U., & Bougie, R. (2011). *Research Methods for. Business: A Skill Building Approach*. London: John Wiley & Sons. Zaman, H.B. (2013) . *Advances in Visual Informatics: Third International Visual Informatics Conference, IVIC*
- [10] Casalo, L. (2007). The Impact of Participation in the Virtual Brand Communities of Consumer Confidence and Loyalty: The Case of Free Software. *Online Information Review*, Vol.31, No. 6, Pp. 775–792.
- [11] Dodds et al. (1991). Effects of Price, Brand and Store Information on Buyers' Product Evaluations. *Journal of Marketing Research*, 28(August), 307-319.
- [12] Hausman, A.C. & Siekpe, J.S. (2009). The Effect of the Features of the Web Interface on the Consumption Online Purchase Intentions. *Journal Business Research*, Vol. 62, No. 1, Pp. 5–

- 13.
- [13] Jaafar et al. (2013). Consumers' Perceptions, Attitudes and Purchase Intention towards Private Label Food Products in Malaysia. *Asian Journal of Business and Management Sciences*. Vol. 2, No.8, pp. 73-90 .
- [14] Kawa et al.(2013).Factors Affecting Consumer Decision Making: A Survey of Young Adults on Imported Cosmetics in Jabodetabek. Indonesia: The SIJ Transactions on Industrial, Financial & Business Management (IFBM), Vol. 1, No. 5, November-December 2013.
- [15] Keller, K.L. (2001). Building customer-based brand equity. *Marketing management*. Vol. 10(2),pp.14-19.
- [16] Keeney, R.L. (1999). The Value of Electronic Commerce on the Internet for the Consumer. *Management Science*, Vol. 45, No. 4, Pp. 533–542.
- [17] Kuo, H. M., & Chen, C. W. (2011). Application of quality function deployment to improve the quality of Internet shopping website interface design. *International Journal of Innovative Computing, Information and Control*, 7(1), 253-268. Lee et al. (2010). Perceived price fairness of dynamic pricing. *Journal of Industrial Management & Data Systems*, 111, 531-550.
- [18] Leelayouthayotin,L.(2004). Factors Influencing Online Purchase Intention: The Case of the Health Food Consumers in Thailand. Retrieved May 12, 2014 from http://eprints.usq.edu.au/149/1/Thesis_August_04.pdf
- [19] Pavlou, P. A. (2003). Consumer acceptance of electronic commerce: Integrating trust and risk with the technology acceptance model. *International Journal of Electronic Commerce*, 7(3), 69-103.
- [20] Ranganathan, K. , Dey, R. & Ganapathy,S. (2002). Key Dimensions of Business-to-Consumer Sites. *Information and Management*, Vol. 39, No. 6, Pp. 457–465.
- [21] Rozekhi, N. A., Hussin, S & Noor, A. M. (2014). Attributable E-commerce toward Purchase Intention: Online Search of Food Product. *The SIJ Transactions on Industrial, Financial & Business Management (IFBM)*, Vol. 2, No. 3, May 2014.
- [22] Shah et al.(2012). The Impact of Brands on Consumer Purchase Intentions. *Asian Journal of Business Management*, 4(2): 105-110
- [23] Zhang et al. (2011). Repurchase intention in B2C e-commerce - A relationship quality perspective. *Information & Management*, 48(6), 192-200. Retrieved January 11, 2011 from <http://dx.doi.org/10.1016/j.im.2011.05.003>