

INFLUENCING FACTORS ON ONLINE CONSUMER BEHAVIOR: A CASE STUDY ON ONLINE SHOPPERS IN BANDUNG

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Abstract. *The online shopping environment in Indonesia has been growing significantly in the last ten years ago and also made a shifting in shopping behavior from traditional shopping to online shopping. The shifting may be stimulated by the growing number of online stores available in the industry. However, the shifting in shopping behavior is also influenced by some other factors such as education, environment, easiness of shopping, etc. With the sample from those students' online shoppers, this research has been determined what factors and which factors that were most influencing the online consumer behavior. The findings from this research was hopefully applicable in online businesses to help the management in crafting marketing strategy.*

Keywords: *consumer behavior; influencing factors; online shopper*

1. INTRODUCTION

Innovation is the great way to success in this digital age. The path of innovation in business means doing something different, smarter or better that will make a positive difference in terms of value, quality or productivity by using emerging or proved technologies of the world. The technology which has already proved itself in last two decades is of course the information technology (IT). It has dramatically changed the lives of the individuals and organizations. Currently online shopping, digital marketing, social networking, digital communication and cloud computing etc are the best examples of change which came through the wave of information technology. Now accurate business planning, effective marketing, global sales, systematic management, real time monitoring, instant customer support and long term business growth cannot be achieved at the optimum level without IT. [1]

Those who understand business can see a better business opportunity in the virtual world. Because of the benefits and advantages in online business, the online-business practitioners do not have to rent a real brick store to start the business, they only need computers, internet connection, and time. Thus, can be concluded that the information technology development takes a role in developing the online business that may lead to the economy development on Indonesia.

2. LITERATURE REVIEW

2.1. What shopping Online Is?

Shopping online can be as easy as click, click, buy. But if you don't watch out, it could become a habit that wrecks your finances.[2] A shop can be interpreted as a place to display products or services to be offered to customers. Meanwhile, "online" refers to be connected to the internet network. Thus, based on the interpretation of shop and

online, the definition of online shop is a place in the internet network that can be used to display the products or services to be offered to customers.

Existing online shop nowadays can be categorized to several categories. The categorizations may due to the product display, script used by the web, hosting used (free or not), payment methods, trading methods, security standard, etc. There are 10 most popular online shop in Indonesia i.e Lazada Indonesia, Tokopedia, Bukalapak, Blibli, Shopee Indonesia, JD.id, Elevenia, Bhinneka, Zolora Indonesia and Qoo10 Indonesia.

Lazada monthly traffic estimated (Mar 2018) is 118,500,000, followed by Tokopedia with monthly traffic estimate (Mar 2018) is 111,000,000. Bukalapak is the third with monthly traffic (Mar 2018) is 100,000,000.[4]

2.2 Consumer Behavior

According to Lars Perner, Professor of Clinical Marketing at USC Marshall, one definition is "The study of individuals, groups, or organizations and the processes they use to select, secure, use, and dispose of products, services, experiences, or ideas to satisfy needs and the impacts that these processes have on the consumer and society." [5]

People utilize the technology of internet not simply to buy any product in an online store; they also compare the prices between the available products, gathering information regarding the product and after sales service that they will get if they buy the product from any particular online store

The existing literature on online consumer decision process has mostly focused on determining the factors which influence the motivation of consumers to be involved in online shopping. In the area of consumer behavior study, there are common forms of purchasing manners that represent the process which consumers use in building a purchase decision. These forms are extremely vital to marketers since they are capable to elucidate and forecast consumers' buying behavior.

The conventional framework in analyzing the consumers' decision-making process is a five-step model. Given the model, the consumer progresses initially from a state of need or what is called problem recognition, to the step of searching information for the problem solutions. All of the information that is successfully gathered by the consumers will be used to evaluate the alternatives of solving the problem. The progress and judgment of purchasing evaluative criterion will result in the actual decision to purchase. Lastly, post-purchase behavior is important from the marketing point of view, since it will, sooner or later, influence the perception of the customers whether they are satisfied or dissatisfied with the products or services. This classic five stage consumer behavior encompasses the fundamental nature of consumer behavior under the majority perspectives. Nevertheless, the management of marketing issues in the virtual environment has to be resolved by individual e-marketers. [6]

3. RESEARCH METHODS

This research observed one dependent variable (hereinafter referred to as variable Y), which is the buyer's decision. This variable consists of the choice of product, the brand chose, which store to buy and the time of purchase.

The variable Y is being influenced by three independent variables (variable X1, X2, and X3) which are, the buyer's decision process (hereinafter referred to as variable X1), buyer's personal and environment (hereinafter referred to as variable X2), and buyer's web experience (hereinafter referred to as variable X3). In this case, the study will determine the reason of Online shoppers' online customers in choosing the brand, store and product.

Variable X1 is consist of the five-stage decision making process; however, the author has to add trust building since in online shopping trust is the most important factor than other factors. Same as the conventional shopping, trust is important but in online environment consumers tend to be more careful in choosing which store they will purchase the product from.

Variable X2 is the influence factor of variable X1. This variable consists of demographic, personal, cultural, sociological, economic, legal, and environment. Demographic profile of a customer is including gender, age, income level, racial, ethnicity, and education. The author believes that education plays a great role in shifting the conventional consumer behavior to online consumer behavior. The personality, culture, social life, and environment also contribute in shifting the consumer behavior. Friends and family may be the best influence for customers to change the way the shop. The legal seems like to give the least influence in shifting the consumer behavior in Indonesia. The author believes that the shifting is not because the government had imposed *the UU ITE No. 11 Tahun 2008* (Information and Electronic Transaction Act No.11, 2008) that controlling the online transaction. The economic condition of Indonesia also does not impact the consumer behavior as well. We all know that in 2009 Indonesia experienced a financial crisis, however, the online transaction in Indonesia at the time made a history by reaching 3.5 billion U.S. Dollars.

The last variable to be analyzed is variable X3 which is the website that consumers buy the product. The website's content is also affecting the decision-making process of consumers. Many consumers are more believe to the online store which has sophisticated websites.

4. RESULTS AND DISCUSSION

4.1 Correlation Analysis

Correlation analysis will determine relationship between variables and the direction of the relationship. Correlation value will be numbered from 0 to 1 or from 0 to 1. The positive and negative sign (+/-) shows the direction of the relationship between variables. Positive sign shows the same direction of change between variables. If one variable's value is going up then the others will be going up as well. In the contrary, negative sign shows the opposite changing between variables. If a value of one variable is increase, then the others will do the other way around, they will decrease

Table 1: Correlations

	Variable X1	Variable X2	Variable X3	Variable Y
Variable X1	1	.181*	.423**	.403**
Pearson Correlation		.027	.000	.000
Sig. (2-tailed)				
N	150	150	150	150
Variable X2	.181*	1	.099	.042
Pearson Correlation			.228	.609
Sig. (2-tailed)				
N	150	150	150	150
Variable X3	.423**	.099	1	.425**
Pearson Correlation		.228		.000
Sig. (2-tailed)				
N	150	150	150	150
Variable Y	.403**	.042	.425**	1
Pearson Correlation		.609	.000	
Sig. (2-tailed)				
N	150	150	150	150

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

The correlation level between Variable Y and X1 is 0.403, which means, based on Young's value of correlation, there is a substantial relationship between those two variables. It also means that Variable X1 has a quite strong influence to Variable Y. Variable X1 is the decision-making process of consumer behavior, while Variable Y is the buyer's decision.

Variable Y has a correlation value of 0.042 with Variable X2 which means that the relationship between those two variables can be neglected. The correlation value between Variable Y and X2 is far below 0.2 so if the author did the hypothesis test between them it will result that there is no correlation between Variable Y and Variable X2.

Variable Y has the greatest correlation value with Variable X3 to be compared with the other two variables. The correlation value of 0.425 means that there is a good relationship between these variables. Variable X3 is the web experience of the respondents, with the positive correlation value then it can be interpreted that if the online shop improving its web interface it is assumed that many potential customers will be attracted to shop at the store.

4.2 Linear Regression Analysis

Regression analysis is used to forecast a dependent variable (Variable Y) based on one or more independent variable (Variable X) in a linear equation. There are two main analyses in regression analysis. First is linear regression analysis, and second is coefficient test. Regression analysis with more than one independent variable usually require auto-correlation test. Auto-correlation is a relationship that occurs between the independent variables. Such a relationship is not allowed. Auto-correlation test can be done with Durbin Watson (DW) testing as follow:

Table 2: Regression Analysis Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.493 ^a	.243	.227	1.052	2.264

a. Predictors: (Constant), Variable X3, Variable X2, Variable X1

b. Dependent Variable: Variable Y

On the Model Summary column R is Pearson correlation coefficient that shows the degree of relationship between dependent variable (Variable Y) and the predictor variables (Variable X1, X2, and X3). The value of 0.493 in column R shows that the relationship between them is substantial. Column Durbin-Watson (DW) has a value of 2.264, which is in the range of $1.65 < DW < 2.35$, so can be concluded that there is no evidence of auto-correlation between all of the independent variables.

The Anova table below shows the linear analysis. To see if there is any relationship between the predictors' variable and the dependent variable, the value of significance column has to be less than the Constanta which has a value of 0.05. As we can see on Table 4.4, the column sig has value of 0.000 which means $0.000 < 0.05$, then can be concluded that there is a linear relationship between the predictor variables with the dependent variable.

4.3 Factor Analysis

Because of the size of the table, the author was unable to put any label to the variables. Following is the explanation of the variable respectively from component 1 to component 8.

Component 1

In Rotated Component Matrix table, component 1 contains variable Q12, Q2, Q13, Q6, Q1, and Q14.

Q12 – The price match with the income Q2 – The Website is attractive
Q13 – The price of Jiggle is economical Q6 – No need for website improvement
Q6 – No need for website improvement
Q1 – Product display in the website is attractive Q14 – No objection with the price

Component 1 is about the website interface and the products price; however, all variables regarding the price show negative values in the table which means an inverse correlation. Component 1 is the most influencing factor and can be categorized as *Web Exclusivity*.

Component 2

This component contains Q5, Q24, Q14, Q20, and Q15.

Q5 – User friendly website interface
Q24 – The products are always following the current trend
Q14 - No objection with the price
Q20 – Satisfaction of shopping
Q15 – Shopping based on necessity

From all of the variables only Q15 shows negative values, which means that the respondents are shopping not based on their necessity, but based on their desire. Component 2 can be categorized as Shopping for Fun.

Component 3

This component contains Q20, Q17, Q18, Q19, and Q22.

Q20 - Satisfaction of shopping

Q17 – Ability to build trust Q18 – Good store
performance Q19 – Right choice
Q22 – Right brand

There are no negative values from all of the variables; component 3 can be categorized as Trust.

Component 4

The fourth factor contains Q1, Q4, Q16, Q15, and Q23.

Q1 - Product display is attractive
Q4 – Benefit of testimonial for customers
Q16 - Information given is helping
Q15 - Shopping based on necessity '
Q23 – Good reputation

The fourth component can be categorized as Store's Image.

Component 5

This component contains Q18, Q21, and Q8.

Q18 - Good store performance
Q21 – Free-mistake service
Q8 – Products match the age

The component can be categorized as Service Factor.

Component 6

The six component contains of,

- Q18 – Good store performance
- Q22 – Right brand
- Q11 – Build prestige
- Q9 – Friends and environment

From the variables above this component can be categorized as Social Environmental Factor.

Component 7

Component 7 contains of ,

- Q10 – Products meet the taste
- Q3 – Ability to show the product from various angles

This component can be categorized as Attractiveness of Display.

Component 8

Component 7 contains only Q7, that is Ability to provide readable writing (such as product's name)

This component can be categorized as Easy-to-read Factor

CONCLUSION

1. Desire State of Consumers

The customers of online shop in Bandung were dominated by teenager with the age within 14 – 25 years old. Most of them are students with the income level less than IDR 1,500,000 per month. Interestingly, with such a low level of income the customers are willingly to buy the product that is in range of IDR 70,000 to IDR 125,500. Thus, it can be concluded that the customers buy the product are not based on the needs but on the desire.

2. Correlation Analysis

There is a correlation between buyer's decision (variable Y) and buyer's decision process (variable X1) with the correlation value of positive 0.403. On the contrary, there is no correlation or the correlation may be neglected between the personal and environment of the customers (variable X2) and the buyer's decision (variable Y). The correlation value between them (X2 and Y) was only 0.042. Meanwhile, the web experience (variable X3) shows a significant correlation with buyer's decision (variable Y) where the value is 0.425.

3. Regression Analysis

As shown in the Table 4.3, the Pearson correlation value is 0.493 or 49.3%. This value of correlation, based on Young, can be categorized in a substantial level. However, the Durbin- Watson analysis shows no auto-correlation between variables tested, since the value is 2.264.

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