THE INFLUENCE OF CONSUMPTION VALUE ON CHOOSING SMARTPHONES AMONG COLLEGE STUDENT IN MANADO

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ABSTARCT

Smartphones are the common mobile phone as we know, also a new kind of technology that have a capability equal as computer to do every day job. Values from using smartphones influence college student to choose which smartphones to use as the best choice and the right tools to use. The purpose of this study to analyze influence of consumption value on choosing smartphones among college student in Manado. Where the independent variables are conditional value, functional value, emotional value, and epistemic value influence the consumer choice as the dependent variable. This research aim college student use smart phones in Manado. This study has been conducted through literature study as well as questionnaire administered survey. The research method associate with multiple regression analysis method with 100 respondent of different age groups, income and occupation have been consider for the survey. The collected data were analyzed to comply with the objectives and also to draw conclusions. Conditional value influence college student to choose smartphones especially phone itself. Most of college student choose Iphone because its simplicity in extent, features that are used, and nature. Consequently, in general, the researcher believes that analysis of the demographic characteristics can explain the research findings of the influential factors and the ones insignificant to the decision making process. From this research are most of the consumers choose the smart phone based on conditional value concluded that consumption values do influence consumer choice within the college student that uses smart phone in Manado.

***Keywords**: consumption values, consumer behavior, consumer choice*

INTRODUCTION

Today, mobile smart phone is a new emerging mobile technology and has been widely used. This new mobile artifact not only overturns the traditional business model of mobile industry, but also creates new avenues of mobile market opportunities. Although mobile pay-per-use services have attracted increased attention in recent years, few studies have provided limited insight into mobile technology adoption in pay-per-use services. In this study, we examine the determinants of behavioral intention of mobile smart phone users the theory of consumption values, and explore the roles of these values in mobile smart phone context. Ever-changing technologies have indeed created its demand in the world today. Many people are so dependent on technology that they have unknowingly become the slaves of technology. It has also helped to create convenience to the people. To date, many people are using their mobile phone as their personal digital assistant, one example is Smartphones.

Smart phone is a combination of mobile phones and personal digital assistant. As a mobile phone, it can be used to make phone calls, update contact list, personal calendar and task list. With technology enhancements, its role as a personal digital assistant will help to create access of electronic email, web pages and Microsoft

applications. Thus, it infiltrating the corporate world and making employees more productive. The use of Smart phones has been increasing exponentially in recent years. The popularity of Smart phones can be related to the capability of Smart phones to act as communication devices and for other uses. Just like ordinary phones, Smart phones enable communication despite the communicating parties being very far away from each other. In Business, Smart phones are widely used to communicate with business partners. Smart phones are also widely used to in various stages of business transactions including ordering, purchasing and selling. Smart phones enable business travelers to book and confirm flights whenever they are saving them from the inconvenience of queuing. For other users Smart phones are an entertainment tool. Today's range of Smart phones comes equipped with thousands of applications to entertain their users. Users can play advanced computer games on their Smart phones, watch and download movies, listen to stored music or opt for radio stations.

Equipped with superior capabilities to access the internet, Smart phones are used for searching information on almost every aspect of life. With a Smartphone a user can read news online on what interests them be it politics, sports or entertainment news. Smart phones also provide valuable sources of information for consumers who are seeking to make a purchase decision. With these superior capabilities Smart phones are expected to keep dominating the mobile phone market for many years to come. In coming years the Smartphone is expected to become the most preferred device for navigating in unfamiliar places. People are likely to integrate more aspects of their lives with Smart phones including security where one can watch their homes using CCTV surveillance. The capabilities of Smart phones may also see them replace some of current technologies as they take over their roles. Devices such as mobile MP3 players and gaming consoles will be under serious threat from the increasing popularity of the Smartphone. Today, mobile smart phone is a new emerging mobile technology and has been widely used. This new mobile artifact not only overturns the traditional business model of mobile industry, but also creates new avenues of mobile market opportunities.

Although mobile pay-per-use services have attracted increased attention in recent years, few studies have provided limited insight into mobile technology adoption in pay-per-use services. In this study, we examine the determinants of behavioral intention of mobile smart phone users based on the theory of consumption values, and explore the roles of these values in mobile smart phone context. The nature and extent of this study is explored through discussing replication research and detailing the research which this study is based on. Limitations of this study and key definitions are then examined followed by a description of how this thesis is structured.

Research Objectives

The objectives of this research are to analyze the influence of:

1. Conditional value influence the consumer choice of smart phone partially.
2. Functional value influence the consumer choice of smart phone partially.
3. Emotional value influence the consumer choice of smart phone partially.
4. Epistemic value influence the consumer choice of smart phone partially.
5. Does conditional value, Functional value, Emotional Value, and Epistemic value influence consumer choice smart phone simultaneously.

THEORETICAL REVIEW

Consumer Behaviour

Fouladivanda, et.al. (2013) define consumer behavior as the activities in which people possess and as well, consume and finally dispose products and services. The field of consumer behavior covers a lot of ground: it is the study of the processes involved when individuals or groups select purchase use, or dispose of products, services, ideas, or experiences to satisfy needs and desires, Solomon (2011:33). Consumer behavior mainly sheds light on how consumers decides to spend their various resources like time, money etc. on various products so as to meet their needs and requirement. Consumer behavior encompasses study of what, when, why and where the consumers will buy their products. It also focuses on how often the consumers use the products.

Consumption Value

Consumption value relates specifically to the product or service being considered and to the perceived utility of the product. This perceived utility can be defined as expected satisfaction, expectancy model of human motivation. Not only do consumption values reflect and predict consumers' purchasing behavior, but they cast influence on the post-purchase satisfaction. It's acknowledged and empirically proven Hu, et.al (2009) that consumers' value systems greatly affect their satisfaction and sense of happiness. Most market choice behavior involves two or more consumption values. They define each of their five consumption values as follows

1. Functional Value

Perceived utility acquired from an alternative's capacity for functional, utilitarian, or physical performance. Functional value concerns the utilitarian functions and services that a product can offer. The value is often manifested through a product's composite attributes such as qualities or features that can deliver impressions of utilitarian performance (Tseng, 2011).

2. Emotional Value

Perceived utility acquired by an alternative as a result of its ability to arouse feelings or affective states. It has been argued that emotional components, such as enjoyment and playfulness, could promote the use of information systems, respectively, (Tseng, 2011).

3. Conditional Value

Perceived utility acquired by an alternative as a result of the specific situation or the context faced by the choice maker. Thus, conditional value could be described as a specific case of other types of value (Sweeney & Soutar, 2001).

4. Epistemic Value

The perceived utility acquired by an alternative as a result of its ability to arouse curiosity, provide novelty, and/or satisfy a desire for knowledge, it entails curiosity for new content and knowledge gained through testing new services (Pihlstrom & Brush, 2008).

Conceptual Framework

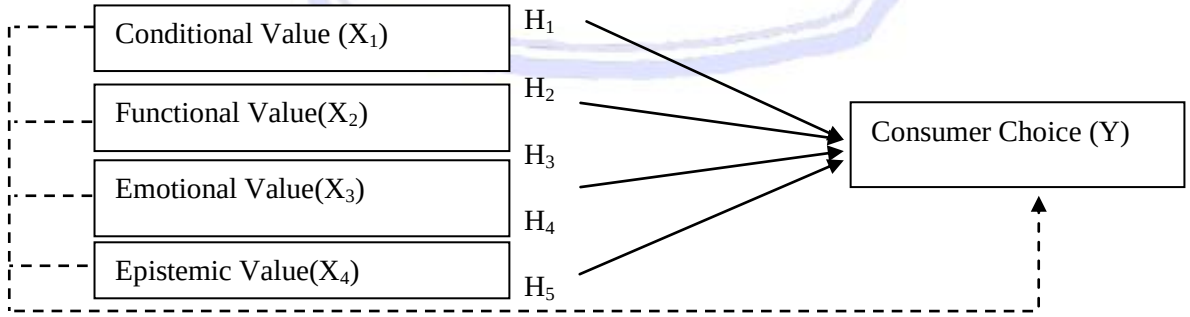

Figure 1. Conceptual Framework
Source : Theoretical Review

Simultaneously
Partially

Research Hypothesis

H_1: Conditional Value, Functional Value, Emotional Value, Epistemic Value influence the consumer choice of smart phone simultaneously.
H_2: Conditional Value influence the consumer choice of smart phone partially.
H_3: Functional Value influence the consumer choice of smart phone partially.
H_4 Emotional Value influence the consumer choice of smart phone partially.
H_5: Epistemic Value influence the consumer choice of smart phone partially.

RESEARCH METHOD

Type of Research

This research use causal type of research where it will analysis influence of Conditional Value, Functional Value, Emotional Value, and Epistemic Value on consumer choice

Place and Time of Research

This study is conducted in Manado during research on September to November 2013.

Population and Sample

The population is the entire group of people, events or things of interest that the researcher wishes to investigate, and sample is a subset of a population, it comprises some members selected from it Sekaran & Bougie, (2009:262). The population in this research is mainly in this research is people in Manado who using motorcycle. The sample of this research is 100 respondents who used Smartphone. The random sampling was applied in this research regarding to obtain information quickly and efficiently.

Data Collection Method

There are two types of data that are used to make an appropriate result, which is primary and secondary data. For this research will be used the primary data and secondary data. The primary data get from respondent. The secondary data is taken from books, journals, and relevant literature from library and internet. These secondary data were used in the background, literature review, research method, analysis and discussions.

Data Analysis Method
Validity and Reliability Test

To analyze the validity of questionnaire, Person Product Moment is used. An instrument measure is valid if the instrument measure what ought to be measured. Validity for each variable is good where the values are above minimum level of 0.30. The reliability of a measure is established by testing for both consistency and stability. Consistency indicates how well the items measuring a concept hang together as a set, Cronbach‟s alpha is a reliability coefficient that indicates how well the items in a set are positively correlated to one another Sekaran and Bougie, (2009:162).

Multiple Regressions on Analysis Method

Linear regression is used to model the value of a dependent scale variable based on its linear relationship to one or more predictors. The method of analysis used in this study is multiple regression models approach the return. Cooper and Schindler (2001:767) stated that multiple regression analysis is a technique to observed value more than one X to estimate or predict corresponding Y value. The formula of multiple linear regression is as follows:

$$Y = + \boldsymbol{\beta X1} + \boldsymbol{\beta X2} + \boldsymbol{\beta X}3 + \boldsymbol{\varepsilon}$$

Whereas:

β	: Beta
α	: Alfa or constant
ε	: Error
Y	: Consumer Choice
X_1	: Conditional Value
X_2	: Functional Value
X_3	: Emotional Value
X_4	: Epistemic Value

RESULT AND DISCUSSION

Result

Validity and Reliability

Validity test is used to know whether the instrument is valid or not. The instrument is valid if the score of indicator is positive and more than 0.3 (r > 0.3). The result show Conditional Value (X_1) 0.545, Functional Value(X_2) 0.162, and Emotional Value (X_3) 0.166, Epistemic Value 0.110 (X_4). This means that all the indicators are valid. Reliability test is used to check the consistency of the measurement instrument. The reliability test in this research using Alpha Cronbanch, which will show the instrument, is reliable if the coefficient is more than 0.6. The value of Cronbach Alpha is 0.876 which are more than 0.6. Therefore, the measurement instruments used for this research are reliable and the instrument can get the consistent result if used in different times.

Classical Assumption Test
Multicollinearity

Table 1. Multicolinearity Test Table

Model		Collinearity Statistics	
		Tolerance	VIF
1	Conditional	.881	1.134
	Functional	.804	1.244
	Emotional	.828	1.208
	Epistemic	.813	1.231

a. Dependent Variable: Consumer Choice

Tolerance of age reference conditional value is 0.881, functional value is 0.804, emotional value is 0.828, epistemic value is 0.813, it means that the tolerance value of those four variables are more than 0.2, while the VIF value of reference conditional value is 1.134, functional is 1.244, emotional value is 1.208, epistemic value is 1.231, it means that the VIF value of those four variables are less than 10, the model concluded to be free from multicollinearity.

Heteroscedasticity

One assumption of regression model is heterocedasticity where models in which the error terms do not all have the same variance. In figure below were shown the result of heteroscedasticity test.

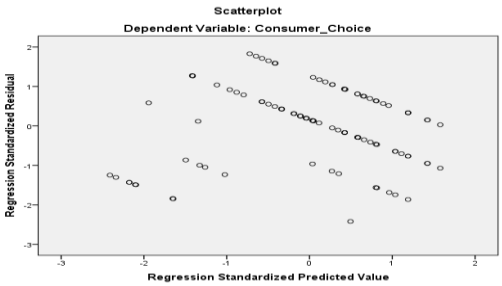

Figure 1.Heteroscedasticity Result
Source: Data Processed 2014

Figure above shows that the pattern of the dots is spreading and does not create a clear pattern, and the dots are spreading above and below 0 (zero) in the Y axis, thus this proves that the model is free from heteroscedasticity.

Normality

Normality test can be identifying by using graph of P-P.Plot. The data will distribute normally if the value of P-P Plot is near diagonal line of the graph. The shape of the histogram should approximately follow the shape of the normal curve The P-P plotted residuals should follow the 45-degree line. To identify the normality test, figure 4.8 will shows the graphic results for the normality test.

Normality Test

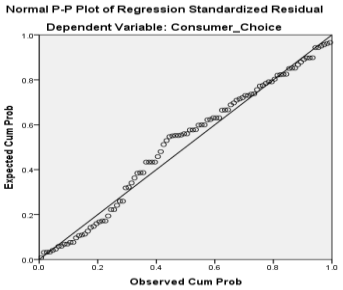

Figure.2 Normality Test
Source: Data Processed 2014

Figure above shows that the data collected in this research that is represented by dots are spreading near the diagonal line and spreading follows the direction of the diagonal line. This proves that the model has passed the Normality Test.

Multiple Regression Analysis

Table 3. Multiple Regression Result

Model		Unstandardized Coefficients		Standardized Coefficients	
		B	**Std. Error**	**Beta**	**t**
1	(Constant)	.060	.527		.113
	Conditional	.545	.101	.462	5.411
	Functional	.162	.089	.163	1.823
	Emotional	.166	.108	.136	1.540
	Epistemic	.110	.112	.087	.980

a. Dependent Variable: Consumer Choice

From the analysis, obtained by linear regression equation as follows:

$$\mathbf{Y = 0.060 + 0.545\ X_1 + 0.162\ X_2 + 0.166\ X_3 + 0.110\ X_4}$$

Constant (b_0) 0.060 shows the effect of relationship between Conditional Value (x_1), Functional Value (x_2), Emotional Value (x_3), Epistemic Value (x_4) to the Consumer Choice (Y). It means if all independent variables are equal to zero then the Consumer Choice (Y) is predicted to be 0.060

1. Consider other variables are constant or equal to zero, if there is one unit increasing in X_1 (Conditional Value) then the Consumer Choice (Y) will increase 0.545.
2. Consider other variables are constant or equal to zero, if there is one unit increasing in X_2 (Functional Value) then the Consumer Choice (Y) will increase 0.162.
3. Consider other variables are constant or equal to zero, if there is one unit increasing in X_3 (Emotional Value) then the Consumer Choice (Y) will increase 0.166.
4. Consider other variables are constant or equal to zero, if there is one unit increasing in X_4 (Epistemic Value) then the Consumer Choice (Y) will increase 0.110.

Multiple Coefficient of Determination (R^2)

Table 3. Table R and R^2

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.624[a]	.389	.363	.910	.389	15.123	4	95	.000	1.965

a. Predictors: (Constant), Epistemic, Conditional, Emotional, Functional

b. Dependent Variable: Consumer Choice

The coefficient of determination (R^2) measures how far the ability of a model in explaining variation of dependent variable. The value of coefficient of determination is between 0 and 1. The coefficient of determination (R^2) of 0.389 shows that the linear relationship in this model is able to explain the Consumer Choice (Y) for 38.9% while the rest 61.1% is explained by other factors not discussed in this research.

Hypothesis Test
F-Test

F test is used to determine the whole effect of all independent variables to dependent variable. This test is done by comparing the f_{count} with f_{table}. If f_{count} is higher than f_{table}, h_0 is rejected and h_1 is accepted.

Table 4. F-test Result

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	50.088	4	12.522	15.123	.000[b]
	Residual	78.662	95	.828		
	Total	128.750	99			

a. Dependent Variable: Consumer Choice
b. Predictors: (Constant), Epistemic, Conditional, Emotional, Functional

The level of significant of 0.05 (α = 0.05) and degree of freedom (df) of 4; 95, the F_{table} from F distribution table is $F_{4;\ 95;\ 0.05}$ = 2.467, while F_{count} from Table 4.11 is 15.123. The result is $F_{count} > F_{table}$ = 15.123 > 2.467. Since the F_{count} is greater than F_{table}, H_0 is rejected and H_1 is accepted. So, it obviously shows that there is linear relationship in this multiple regression model. Based from the F-test result, is obtained that $F_{count} > F_{table}$ = 15.123 > 2.467. T clearly proves that independent variable simultaneously influences dependent variable. Moreover, the value of R is 0.624. This value shows that overall independent variables namely: Conditional Value, Functional Value, Emotional Value and Epistemic Value have strong and positive relationship with Consumer Choice. Thus hypothesis is accepted.

T-Test

T-Test is a test to determine the significance of the effect of independent variables X_1 (Conditional Value), X_2 (Functional Value), and X_3 (Emotional Value), X_4 (Epistemic Value) partially that will explain the dependent variable Y (consumer buying decision). According to T-Test, if $t_{count} > t_{table}$ (t_{count} is more than t_{table}), H_0 is rejected and if $t_{count} < t_{table}$ (t_{count} is less than t_{table}), H_0 is not rejected. The value of t_{table} is gained with **t_{table} = TINV (0.05, n-k)**. The values of each variable are shown on the table 7 below:

Table 5. T-test Result

Dependent Variable	T_{counta}	T_{table}	Description
X_1	5.411	1.9852	Accepted
X_2	1.823	1.9852	Rejected
X_3	1.540	1.9852	Rejected
X_4	0.980	1.9852	Rejected

The partial influence for each independent variable will be explained as follow:

1. Conditional Value (X_1) to Consumer Choice (Y)

Conditional Value is 5.411. Since there is a level of significant 5%, then the t table will be $t_{95;0.025}$ = 1.9852. By comparing the t_{count} with t_{table} : 5.411 > 1.9852 then the t_{count} is higher than t_{table}, meaning H_0 is rejected and H_1 is accepted. Thus, Conditional Value has a significant effect to Consumer Choice.

2. Functional Value (X_2) to Consumer Choice (Y)

Functional Value is 1.823. Since there is a level of significant 5%, then the t table will be $t_{95;0..025}$ = 1.9852. By comparing the t_{count} with t_{table} : 1.823 < 1.9852 then the t_{count} is lower than t_{table}, meaning H_0 is accepted and H_1 is rejected. Thus, Functional Value has no significant effect to Consumer Choice.

3. Emotional Value (X_3) to Consumer Choice (Y)

Emotional Value is 1.540. Since there is a level of significant 5%, then the t table will be $t_{95;0..025}$ = 1.9852. By comparing the t_{count} with t_{table} : 1.540 < 1.9852 then the t_{count} is lower than t_{table}, meaning H_0 is accepted and H_1 is rejected. Thus, Emotional Value has no significant effect to Consumer Choice.

4. Epistemic Value (X_4) to Consumer Choice (Y)

Epistemic Value is 0.980. Since there is a level of significant 5%, then the t table will be $t_{95;0..025}$ = 1.9852. By comparing the t_{count} with t_{table} : 0.980 < 1.9852 then the t_{count} is lower than t_{table}, meaning H_0 is accepted and H_1 is rejected. Thus, Epistemic Value has no significant effect to Consumer Choice.

Discussion

The research was conducted in Manado. The total number of questionnaires is one hundred derived from one hundred respondents. Questionnaires have been distributed among consumer who use smart phones (IPhone, Samsung Galaxy, Blackberry). The period of this research is during September to November 2013. The questionnaires were distributed to respondents consisted of male and female respondent. The result indicates that male customers are mostly the consumers of smart phone. This research is conducted with Multiple Linear Regression Model where this research has identified Consumer Choice as the dependent variable and other characteristics such as Conditional Value, Functional Value, Emotional Value and Epistemic Value as the independent variables. From this research shows that all independent variables have a positive relationship with the Consumer Choice as the dependent variable. Every one unit increase or decrease in each independent variable, will be followed by an increase or a decrease in dependent variable.

Hypothesis Test and by using the level of significant H_0 is rejected and H_1 is accepted. It clearly proves then that independent variable simultaneously influences dependent variable. From the influence of independent variables to dependent variable partially shows that, the most significant factor influencing consumer choice is conditional value. The beta value (regression coefficient) resulted from multiple linear regression analysis shows that variable of conditional value has the highest value, meaning this variables influences consumer choice. This value is the highest compared with other variables toward consumer choice. The Coefficient of determination shows that independent variables are able to explain consumer choice. It means explained by other variables that are not included in the model. Since independent variables used in this research is more than two variables then adjusted is preferably used. Variation of dependent variable can be explained by four independent variables.

DeLone and McLean (2003) conclude that there are deficiencies related to the "use" construct and they emphasize that use as a construct is too simplistic and needs to be further developed to include both the extent, what features that are used, and nature how those features are used. Conditional value influence college student to choose smartphones especially Iphone itself. Most of college student choose Iphone because its simplicity in extent, features that are used, and nature. Consequently, in general, the researcher believes that analysis of the demographic characteristics can explain the research findings of the influential factors and the ones insignificant to the decision making process.

CONCLUSION AND RECOMMENDATION

Conclusion

The research objective of this research conclude:

1. Conditional value, Functional value, Emotional value, and Epistemic value influence Consumer choice simultaneously and partially.
2. Conditional value influence partially and significantly.
3. Functional value influence partially and significantly.
4. Emotional value influence partially and significantly.
5. Epistemic value influence partially and significantly.

Recommendation

Here are the recommendations on choosing smart phone. Most of the consumers choose the smart phone based on conditional value. These top three products (Apple, Samsung, Blackberry) needs to keep maintain their conditional value such as the quality of the brand, service, and the using ability. Apple known as the most prestigious smart phone with their premium Smart phone and highly recommended. Also Samsung and Blackberry that's lately trying to be as prestigious as Apple. Functional Value Based on data respondent, Functional value has no partial influence to consumer choice. That because people buying smart phone not because the design or the main function of smart phone itself. Therefore Apple, Samsung and Blackberry should be able to increase the consumer choice based on functional value.

Emotional Value Consumers do not pay much attention to emotional value of choosing smart phones. Based on data, emotional value has no significant effect to consumer choice. Smart phone's company should pay more attention to emotional value to increase the consumer choice. Epistemic Value Smart Phones Company needs to increase the epistemic value such as product information, special deal and create the curiosity on customers so they want to choose the smart phone. They can increase the epistemic value through advertisement so people will curious about their new product.

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