

THE INFLUENCE OF MARKET PLACE MOBILE APPLICATION TOWARDS PURCHASE INTENTION BY WEBQUAL 4.0 METHOD

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Abstract. This study aims to recognize and analyze the effect of mobile marketplace applications on buyer decisions in Indonesia. The existence of the mobile marketplace application is able to facilitate one's work such as shortening time in transactions, shopping for daily necessities, and travel transportation. WebQual 4.0 is used to measure the mobile application marketplace influence on purchasing decisions based on user perception. The research method used is a quantitative descriptive method. The data collection technique is distributing questionnaires with Likert scale analyzed using SPSS 24. Samples of data were processed as many as 100 respondents of mobile market place application users in Indonesia. The measurement time for processing the data of this research is May to June 2020. Based on the analysis of the data obtained, It is found that the whole hypothesis proposed in this study have positive and significant effects on the purchase intention of prospective digital marketplace customers. From the results of data processing, it is also obtained that simultaneous webqual 4.0 dimensions have an effect of 69% on buying decisions on the digital marketplace.

Keywords: usability, information quality, interaction quality, purchase intention, webqual 4.0

Introduction

Nowadays Internet is something that needed by the public, especially in Indonesia. The internet enable someone to do something and shorten the job. For example in buying and selling activities, internet has greatly simplified and shortened the transaction time between the seller and the buyer, especially if the buyer is a worker who doesn't have much time to shop for daily needs or even his own personal needs.

The emergence of the Internet has a lot of influence in the world of technology, economics and business. The behavior of businessman are increasingly showing a graph rise significantly, indicating that the role of the Internet is vital for the improvement of the economy, both companies and individuals. In the company's view, an increase in sales of goods or services becomes better if it utilizes technological advances that exist today.

According to HootSuite's social media management research platform and social marketing agency We Are Social entitled "Global Digital Reports 2020", nearly 64 percent of Indonesia's population is connected to the internet network. Research released at the end of January 2020 said, the number of internet users in Indonesia reach out 175.4 million peoples, while the total population in Indonesia is around 272.1 million. Compared to 2019, the number of internet users in Indonesia increased by around 17 percent or 25 million users. During 2019, internet users in Indonesia age 16 to 64 years have an average time of 7 hours 59 minutes per day to be in cyberspace. This figure exceeds the global average which only spends 6 hours 43 minutes on the internet per day.

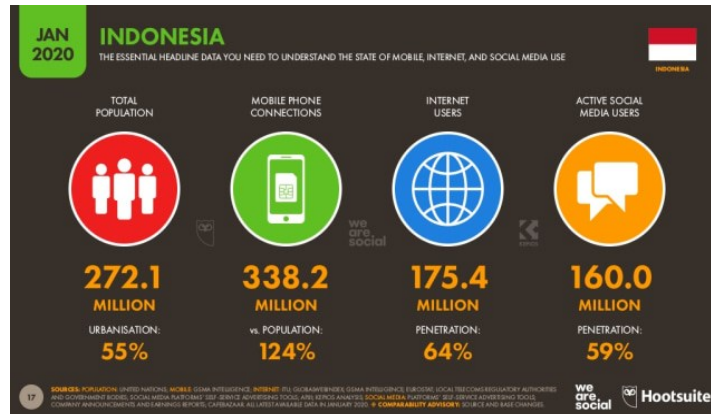


Figure 1.

Currently the Internet became the flagship for businessmen in an attempt to win business competition. Along with the increase on internet users in the world, a big opportunity for business people to make it easier to do marketing for developing their business fields. With public as consumers, they can choose what the goods and services needed for 24 hours indefinitely and they do not need to come directly to buy the desired goods. This will save their time and costs.

Business on marketplace is an example. Many marketplace entrepreneurs are looking for business opportunities through online applications. Especially when the covid-19 virus outbreak emerged in Indonesia recently, the government imposed large-scale social restrictions and it led the movement of people become narrower to conduct shopping transactions directly but this provides a great opportunity for businessmen to create their own online marketplace.

Marketplace is a website or online application that provides facilities to carry out the buying and selling process. Basically, the online marketplace has a concept that is more or less the same as the traditional market that already exists. Marketplace owners are not responsible for goods sold, because their work only provides a place for sellers who want to sell and help them to meet customers and make transactions easier. The transaction itself is regulated by the market. Then, after receiving the payment, the seller will send the goods to the buyer. One of the reasons why the marketplace becomes popular is because of its easy and convenience usage.

Currently online marketplaces have sprung up with the categories of products or services offered in each business, for example traditional markets that open their own online market places because of the impact of this pandemic, and there are also transporter companies that open online markets to make it easier for customers to order with these services.

On a broader scale, the application of the marketplace is not only limited to the supply of goods in the form of products, but also related to services. Many hotels and transportation services have taken advantage of the development trend to increase the company's revenue. This progress is trying to be utilized by entrepreneur in marketing products, with relatively lower costs, and time efficiency so that the scope of marketing is able to reach all parts of the sales process with more systematic.

Especially in the current 4.0 Industrial Revolution era, digitalization has penetrated into easier sales and purchases, seen from the many online market place businesses. It is certainly must also be supported by how good and safe the quality of the mobile application is made in order to make it easier for customers to make transactions at the online market place. This leads to a strategy of how to make the customer's intention to make a purchase at the online market place.

The decision to buy has several factors that influence including the trust. In online transactions having certainty and asymmetrical information is a strong requirement, therefore there must be mutual trust between the seller and the buyer.

The aim of this research is to provide a descriptive quantitative analysis of the effect of the mobile marketplace application on purchasing decisions using the Webqual 4.0 method, which is valued by how much influence the Usability, Information Quality, and Interaction Quality available in current mobile marketplace application.

Basic Theory

1.1 Digital Marketing

According to Ridwan Sanjaya & Josua Tarigan (2009: 47) Digital marketing is a marketing activity including branding that uses website-based media sharing. For examples, there are blogs, websites, e-mails, adwords, and various social media networks. This definition also describes the management and implementation of marketing activities using electronic media.

Digital marketing strategy is very popular because there are many advantages compared to using conventional marketing strategies such as:

- Affordable costs
- Accurate Measurement of Digital Marketing Results
- easiness to Reach the Ideal Target Market
- More Competitive market
- Ease to Change Tactics and Strategies
- Its capacity to Reach Broader Market Target

Digital Marketing is now entering a larger market area, where today's digital marketing activities can be done through a mobile device. According to eMarketer, mobile technology greatly influences consumer buying behavior through applications that can be installed on mobile device.

1.2 Mobile Application

Mobile applications According to Buyens (2001) comes from the words application and mobile. By the term, The application is a program that is designed to provide functions according to the needs of users while the term of mobile literally means movement.

Mobile applications are currently widely used for managing various tasks in everyday life because it can make it easier. Currently the mobile application can be downloaded via the Apple app store and Google play store.

1.3 Webqual

Webqual is one of the methods or techniques for measuring website quality based on the perception of end users. This method is the development of Servqual which was widely used before in measuring service quality. Webqual 4.0 is organized based on three main areas namely Information Quality, Interaction Quality and Usability. Barnes & Vidgen (2003) define the terms as follows:

- a. Information Quality: Includes accurate information, reliable information, up to date information, information in accordance with the topic, easy to understand, detailed information and presented in an appropriate design format.
- b. Interaction Quality: Includes the ability to provide a sense of security during transactions, possess a good reputation, facilitate communication, create more personal emotional feelings, have confidence in providing personal information, be able to

create specific communities, provide confidence that the pledge is to be fulfilled.

- c. Usability: Includes the ease of websites to learn, the ease to understand, the ease to explore, the ease of use, the attractiveness of the website, the pleasant interface, has good competence and provides a pleasant new experience. In addition, the dimensions of Webqual 4.0 come from many system information assessment, this means that Webqual has a strong foundation such as Servqual Parasuraman or the user satisfaction.

1.4 Purchase Intention

Mentally and psychologically, consumers have long process until they ultimately decide to buy the product. According to Kotler and Keller (Philip Kotler K. K., Marketing Management, 2012) the buying process is all their experience in learning, choosing, using. This shows that individual activities are directly involved in obtaining and using the goods offered. In making a purchase intention, consumers can arrange five sub-decisions: brand, supplier, quantity, time and payment method.

Framework & Hypothesis

Research Model

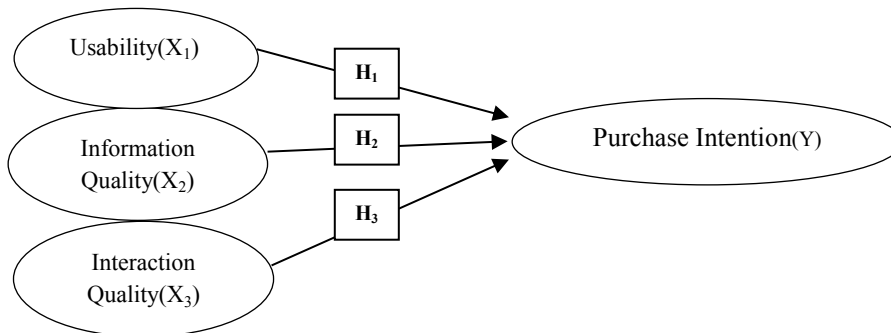


Figure 2.

To see the effect of each Webqual 4.0 variable. Model conducted in this study is shown on the image above.

The hypothesis in this study is:

H₁: Usability(X₁) has positively effect on Purchase Intention (Y)

H₂: Information Quality(X₂) has positively effect on Purchase Intention(Y)

H₃: Interaction Quality (X₃) has positively effect on Purchase intention(Y)

Method

This research was conducted on 100 respondents who filled out questionnaires with questions about the influence of the elements of usability, information quality, and interaction quality on purchasing decisions on the mobile marketplace application. Measurements used to measure the instrument on respondents' responses is a Likert scale with intervals.

The analytical method used in this study are:

- a. Descriptive quantitative analysis that is conducted by analyzing quantitative data that has been obtained through a questionnaire distributed to users of the mobile application marketplace.
- b. Multiple linear regression analysis as a preference analysis is used to find out how much influence the elements of Usability, Information Quality, and Interaction Quality with customer purchasing decisions in mobile marketplace applications with data processing using the SPSS 24.0 application

Data collection method

Questionnaire

Questionnaire is a series of questions that are arranged systematically to be filled by respondents, and then once filled is returned to the researcher. Questionnaires using closed questionnaire. The questionnaire has already provided the answer so that the respondent only need to choose (Arikunto, 2014).

The preparation of questionnaire uses a likert scale, which is a scale used to measure the attitudes, opinions, and perceptions of a person or group of people about social phenomena (Sugiyono, 2013). In this study, the scores given for the Likert scale are as follow:

SELECTION OF ANSWERS	SCORE
VERY DISAGREE	1
DISAGREE	2
ENOUGH AGREE	3
AGREE	4
VERY AGREE	5

Table 1.

Discussion and Result

The results of the characteristics of respondent from our research questionnaire can be seen in the table below:

Gender	Percentage
Male	41%
Female	59%
Age	
<20	2%
21-30	65%
31-40	20%
41-50	9%
>51	4%
Profession	
Student	23%
Government Employees	9%
General Employees	55%
Entrepreneur	13%
Transaction In Application Mobile Marketplace	
Yes	97%
No	3%

Table 2.

To determine the effect of mobile application marketplace on purchasing decisions, this study is using multiple linear regression analysis techniques. Multiple linear regression is a linear relationship between two or more independent variables (x_1, x_2, x_3) with the dependent variable (Y). This analysis is used to determine the direction of the relationship between the independent variable with the dependent variable whether each independent variable is positively or

negatively related and to predict the value of the dependent variable if the value of the variable has increased or decreased.

Regression Coefficient

Table 3.
Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant)	-0,504	0,93		
	Total_X ₁	0,445	0,117	0,362	3,811
	Total_X ₂	0,267	0,111	0,251	2,397
	Total_X ₃	0,327	0,097	0,303	3,385

a. Dependent Variable:
Total_Y

From these data it can be seen the results of the regression analysis and obtain the coefficient for the usability variable (X₁) of 0.445, information variable (X₂) 0.267, interaction variable (X₃) of 0.327 with a constant of -0.504. So the regression equation model obtained is:

$$Y_1 = -0,504 + 0,445 X_1 + 0,267 X_2 + 0,327 X_3$$

This Linear Equation can be interpreted as follows:

Constants (a) = -0.504, the constant value is negative here means that if the variable score usability, information, interaction does not exist or equal to zero, then the satisfaction score will decrease.

Coefficient b₁ = 0.445 X₁ Usability variable coefficient is positive, it means that the effect of usability, information and interaction on purchasing decisions is positive and strong enough. If the value of the three elements increases, the purchasing decision will be even higher.

Coefficient b₂ = 0.267 X₂, coefficient of information quality variable is positive meaning that the influence of purchasing decisions in mobile market place applications is getting stronger. If the value of the information variable increases, the purchasing decision will be even higher.

Coefficient b₃ = 0.327 X₃, interaction coefficient variable is positive, it means that the influence of interaction quality on purchasing decisions is positive and strong enough

Based on the above explanation, it is clear that the results of the study indicate the influence of usability, information quality and interaction quality on purchasing decisions on the mobile marketplace application.

The findings of this study are expected to help managers of the mobile marketplace application to meet the needs and convenience of users, which in turn will lead to purchasing decisions.

Hypothesis

Before discussing partially the influence of the independent variables on the dependent variable , a simultaneous test is performed. This test aims to test the hypothesis that the independent variables (usability, information, interaction) together have a significant influence on the dependent variable (purchasing decision) .

With the results of the calculation of the F test (F test) if the significance level <0.05 then H_0 is rejected and accepts H_a meaning that the independent variable (Usability, Information, Interaction) jointly influences the dependent variable (purchasing decision).

If the significance of > 0.05 then H_0 is accepted and refused H_a means that the independent variable (Usability, Information, Interaction) together no effect on the dependent variable (purchase decisions) for more details see the following table:

F Test
Table 4.
ANOVA^a

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	345,635	3	115,212	76,092	,000 ^b
	Residual	145,355	96	1,514		
	Total	490,99	99			

a. Dependent Variable: Total_Y

b. Predictors: (Constant), Total_X₃, Total_X₂, Total_X₁

From the results of the analysis above, probability level of 0.000 (Significance) The probability value is smaller than 0.5, then together with the usability, information, interaction quality variables, significantly influence the purchase decision variable.

T Test
Table 5.
Coefficients^a

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-0,504	0,93		-0,542	0,589
	Total_X ₁	0,445	0,117	0,362	3,811	0
	Total_X ₂	0,267	0,111	0,251	2,397	0,018
	Total_X ₃	0,327	0,097	0,303	3,385	0,001

a. Dependent Variable: Total_Y

From the table above, it can be seen from the results of the regression analysis that the coefficient for variable X_1 is 0,445, X_2 is 0,267 and X_3 is 0,327 with a constant of -0,504 so the regression equation model obtained is as follows:

$$Y_1 = -0,504 + 0,445 x_1 + 0,267 x_2 + 0,327 x_3$$

The results of the analysis using the SPSS 24 program are as follows:

1. The influence of usability on purchase decision
Test results webqual 4.0 influence on purchasing decisions, shows the t value of 3,811 and P value (sig) of 0.0000 under alpha 5% means that usability influence the purchase decision.

The beta value in the unstandardized coefficient of the usability variable shows a figure of 0.445 which means that if the usability variable is increased by one unit then the purchase decision will increase 44.5%

2. The Influence of information quality on purchasing decisions

The test results of the influence of the quality of information on purchasing decisions, shows the calculated value of 2,397 and p value (sig) is 0.018 which is below alpha 5% means that the quality of information affects the purchase decision.

The beta value in the unstandardized coefficient of the information quality variable shows 0.267 one unit then the purchase decision will increase by 26.7%. This shows that if the quality of information on the mobile marketplace application increases, there will be higher expectations on purchasing decisions for customers who use the mobile marketplace application.

3. The Influence of Interaction Quality on purchasing decisions.

The test results of the influence of interaction quality on purchasing decisions on the mobile marketplace application show the value of t count 3.385 and p value (sig) is 0.001 which is below alpha 5%. This means that interaction quality affects purchasing decisions on mobile marketplace applications.

The beta value in the unstandardized coefficient of the interaction quality variable shows a figure of 0.327, one unit then the purchase decision will increase by 32.7%. This shows that if Interaction Quality is improved, it is probable that the customer's purchase decision in the mobile market place application will be obtained and ultimately the customer will be loyal.

**R Test
Table 6.**

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,839 ^a	0,704	0,695	1,23

a. Predictors: (Constant), Total_X₃, Total_X₁, Total_X₂

Table Model Summary shows the value of the correlation coefficient (R) which refers to the level of relationship between variables is (0.839). The results of data analysis on the purchase decision variable shows that R square is 0.695 or 69.5%. This shows that the independent variable (Usability, information, interaction) is only able to explain the dependent variable by 69.5%, the remaining 30.5% is explained by other variables that do not exist or are not taken into account by the analysis of this study.

Conclusion

Based on the results of the study and the description of the discussion in this study, it can be concluded as follows:

1. Mobile marketplace applications have been very important for individual purchasing needs. It has occurred before this large-scale social discussion period, and can be seen in the number of respondents, out of 100 people who filled out the questionnaire 97% had used the mobile marketplace application for purchases.
2. Simultaneously In the results of this study, the quality of the website has a significant influence on consumer purchasing decisions. The results show the quality of usability,

quality of information, and quality of interaction significantly influence purchasing decisions on mobile marketplace applications used by respondents.

3. Variable (Usability, Information Quality and Quality Interaction) may explain the variable y is purchasing decisions by 69.5%, whereas $(100 - 69.5) = 30.5\%$ changing other variables.

It is recommended for several mobile marketplace applications in Indonesia at this time to continue to maximize the quality of the website by paying attention to respondents' responses to the item question of website quality variables, in this study seen in the total variable X_2 (Information quality) which has a smaller t-count value of Y (purchasing decisions) compared to 2 other variables, namely: 2,397. That means the value of the quality of existing information in mobile application marketplace that exists today is no less meet the wishes of the user.

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