

QUALITY ANALYSIS OF THE JAKARTA NOTEBOOK.COM WEBSITE USING WEBQUAL 4.0

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Abstract

Electronic commerce has become a fairly developed concept in the field of technology today. In addition to providing convenience and advantages compared to conventional shopping concepts, including all the desired information, consumers can be accessed in more detail, quickly without being limited by place and time, and the transaction process can be done more easily. JakartaNotebook.com is one of the largest online store companies engaged in the sale of IT goods that was established in 1999 and has been serving online purchases since January 8, 2003 until now. Competition among competitors in the field of e-commerce has been overwhelming and competing with each other in innovation to be superior in the market. This study will conduct a quality test of one e-commerce JakartaNotebook.com company using the Web Qual method. In its implementation with this method to measure quality on a website based on the observation of the questionnaire to the user as a source of data. Jakarta Notebook is rarely with a number of 47% and who often accesses with a number of 31%, but overall the quality of usability, information quality, and quality design has a positive effect on user satisfaction. The results of the Jakarta Notebook website assessment were used as feedback for the evaluation of the development and improvement of the Jakarta Notebook website itself.

1.0 INTRODUCTION

Nowadays, information technology (IT) is growing rapidly. Many businesses use IT to support and develop their business performance. Supported by various advantages and advantages of the internet, among others, the cost of an internet connection that is relatively affordable and the availability of unlimited information, the internet is currently one of the main needs of the community in meeting all needs related to information (Nurhayati, 1998).

JakartaNotebook.com is one of the largest online store companies engaged in the sale of IT goods that was established in 1999 and has been serving online purchases since January 8, 2003 until now. JakartaNotebook.com is an e-commerce site that utilizes the internet as a medium in developing its business processes, through the JakartaNotebook.com website, buying and selling transactions can be done online. Many beneficial things that are obtained

from online transactions both from the seller or the buyer, this is what makes e-commerce websites a medium for buying and selling transactions that are very popular in the current technological era.

In Indonesia, other than JakartaNotebook.com, there are still many other e-commerce websites, such as Bhinneka, Tokopedia, Bukalapak, Lazada, Shopee, Blibli.com, and others. All existing ecommerce websites will compete in winning the hearts of visitors by continuously improving quality and always trying to meet all the needs of visitors.

2.0 THEORETICAL

2.1. Literature review

In previous studies, there have been several journals that use the android application. Among these are:

Johanes Fernandes Andry's research, Joshua Yuda, Harvey Pratama, Anthony Veru entitled "Website Quality Analysis Using Webqual 4.0 Method in E-Commerce Jd.Id" in this study is more focused on determining the quality assessment of JD ID websites with WebQual 4.0 methods focuses on three dimensions of area: usability, information quality, and service interaction. This research was conducted using qualitative methods. While what distinguishes the research they do with researchers is, it only focuses on assessing the Jakartanotebook.com website by distributing questionnaires[1].

Meldy Saimon, Antonius Rachmat, Rosa Delima's research entitled "The Application of Waterfall and Webqual 4.0 Methods in the Development of Asa Mandiri Motor Dealer Website" in this study analyzes the quality of a Kaskus website with the dimensions contained in Webqual namely Usability, Information, and Service Interaction and Importance-Performance Analysis (IPA) methods. While what distinguishes the research they do with researchers is, it only focuses on assessing the Jakartanotebook.com website by distributing questionnaires.[2]

Diana's [3] research, Nuri David Maria, Veronika entitled "Analysis of Bengkulu Province Website Quality Using the Webqual 4.0 Method" in this study provides recommendations for local governments to develop quality websites so that the development of e-government websites in Indonesia increases to a level of maturation, consolidation and finally reach the level of utilization. While what distinguishes the research they do with researchers is, it only focuses on the evaluation of the Jakartanotebook.com website by distributing the Himawati Aryadita Research questionnaire, Dyah Ayu Widyastuti, Niken Hendrakusuma Wardani, entitled "Quality Analysis of E-Commerce Website Services Against User Satisfaction Using the Webqual 4.0 Method "In this research examines the extent of user satisfaction in using e-commerce website services. The websites examined in this study are Bukalapa, Tokopedia and Lazada. While what distinguishes the research they do with researchers is, it only focuses on assessing the Jakartanotebook.com website by distributing questionnaires[4].

Johanes Fernandes Andry, Kevin Christianto, and Fuji Rahayu Wilujeng's research entitled "Using Webqual 4.0 and Importance Performance Analysis to Evaluate E-Commerce Websites" in this research This study examines the quality of websites, such as Lazada. Website that the author used. In this research, to see what quality that website has and what are the importance of that quality. While what distinguishes the research they do with researchers is, it only focuses on assessing the Jakartanotebook.com website by distributing questionnaires[5].

Research Agnek Manik, Irma Salamah, Eka Susanti, entitled "Webqual 4.0 Method for Evaluating the Quality of Sriwijaya State Polytechnic Website" In this study using a quantitative descriptive research method by conducting surveys and primary data collection through interviews with the distribution of questionnaires to police website users as a respondent. While what distinguishes the research they do with researchers is, it only focuses on assessing the Jakartanotebook.com website by distributing questionnaires[6].

2.2. Theoretical basis

1. Consumer Behavior

"Consumer behavior represents the study of individuals and the activities that take place to satisfy their realized needs". To understand more about consumer behavior [1],[7] simplifies a concept by determining why, who, when and how consumers make purchases:

- a. Why do consumers buy?
To strengthen the concept of themselves, to maintain their lifestyle, to be something they want to be, to gain acceptance as part of a group that is already a part of them, and/or to express the identity of their culture.
- b. What internal and external factors influence their purchases?
Every consumer is influenced internally by his own attitude, personality, perception, self-concept, and emotions. They also have to deal with external influences, such as household structure, group associations, and their cultural beliefs.
- c. Who do they buy from?
Consumers buy goods and/or services from companies that can meet their psychological needs so as to make them feel accepted, understood, important, and comfortable.
- d. When do they buy?
Consumers buy things based on their consumption patterns; this is determined by the life cycle of their family and household structure.
- e. How do they purchase?
Consumers go through the decision making process that guides them in their purchases. This process takes into account the internal and external influences of consumers.

2. WebQual

WebQual has been developed since 1998 and has experienced a number of iterations in the compilation of dimensions and question points. This study uses the Webqual 4.0 method to analyze the quality of e-government websites through the concepts of usability, information quality, and service interactions [2].[8]

Usability is quality related to site design. Information quality is the quality of the content contained on the site. Service interaction is the quality of service interaction experienced by users when users investigate the site deeper. Table 1 shows the category and WebQual 4.0 questionnaires.

Table 1. WebQual 4.0 Method [9][10][11]

Category	Question
Usability	1. Site can be identified from the initial interface.
	2. Symbols can be easily recognized
	3. Web color design is comfortable to see
	4. Font type and size are easy to read
	5. The background color is contrasted with the font color
	6. Fast page delivery is displayed
	7. The site address is easy to remember
Information Quality	8. Information is quite clear
	9. Reliable information
	10. Up-to-date information
	11. Useful information for users
	12. The information presented varies

Quality of Service Interaction	13. There is additional knowledge from website information
	14. The site has a good reputation
	15. The site provides a sense of security during the transaction
	16. Ease of providing input/suggestions via email
	17. Ease of communication with organizations (link to SKPD)
Overall	18. The speed of the manager responds to questions and provides responses
	19. Overall opinion regarding website quality

3. IPA (Importance Performance Analysis)

Importance-Performance Analysis was first proposed and introduced as a means to measure the level of customer satisfaction with a product or service.

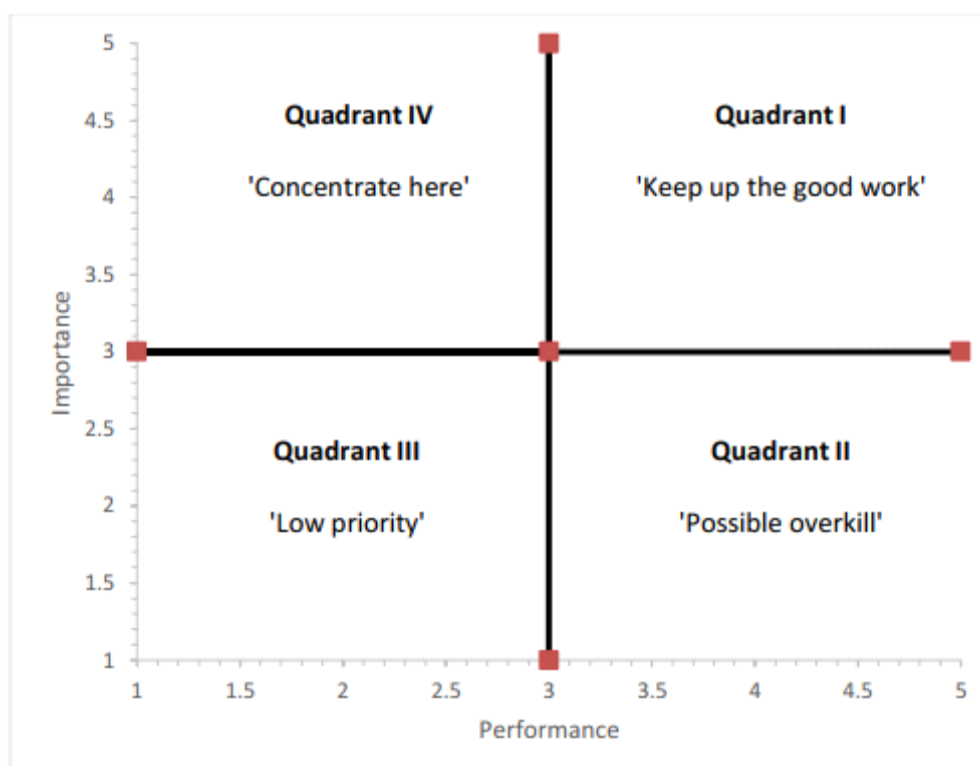


Image 1. Interpretative Phenomenological Analysis Matrix [12]

The IPA approach recognizes consumer satisfaction as a function of two components, namely the importance of products or services to consumers and business performance in providing services or products in meeting consumer expectations[13]. It can be concluded that IPA not only checks the performance of a product or service, but also the importance of the product or service as a determining factor for respondent satisfaction. The simplicity of comparison with IPA between data analysis and application makes it an attractive method for practitioners and evaluators.

3.0 METHODOLOGY

3.1 Research Methodology

The research methodology used in this research is descriptive quantitative method. Descriptive quantitative research is research by analyzing data obtained from a sample of the study population using certain statistical methods.[14] For primary data, researchers used an online-based survey method. Secondary data were obtained from the analysis of previous studies

discussing the quality of e-commerce websites using the WebQual method. The following research methodologies are used:

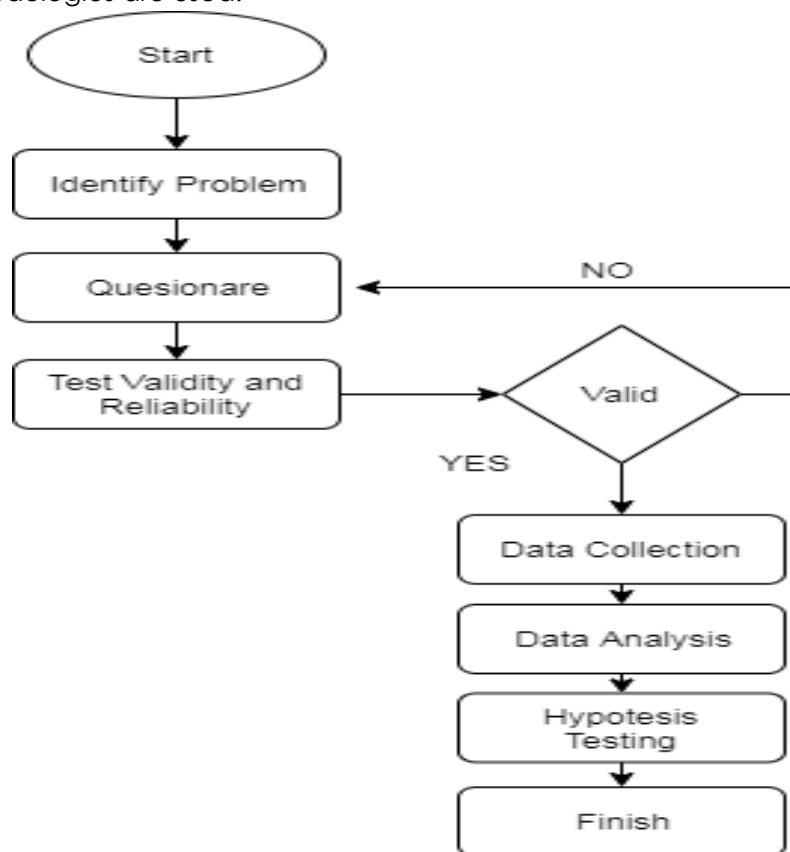


Image 2. Research Methods

- a. Identity problem: describe the problems that exist in Jakartanotebook.com:
- b. Questionnaire: a number of questions and/or written statements are the right approach for WebQual to gather information from respondents about how the information was received by users.
- c. Validity and Reliability Test: validity and reliability tests are conducted to test whether the answers given by respondents can be stated and to out whether find the data can be used.
- d. Data Collection: data collection is done to separate the necessary.
- e. Data Analysis: after that, the data will be calculated based on the perceptions and expectations of each variable so that it will produce an average number that is processed.
- f. Hypothesis Testing: To answer the truth results from the analysis of Importance Performance Analysis (IPA) at once to answer the hypothesis of any dimension, then use the t test between the perceptions and expectations of the user to know GAP information system quality of service.

4.0 DISCUSSION

4.1 Profile of Respondents

Based on the distribution of questionnaires conducted on 27 February 2020-2 March 2020, there were 108 respondents.

Table 2. Respondent Demographics

Demographics	Percentage
Gender	
Female	31%
Male	69%

Age	
17-25 years	42%
26-33 years	34%
>34 years	24%
Profession	
Civil Servants	
Self employed	
Private Employee	
School Student/College Student	26%
Others	
Frequency of website access	
Very Often	31%
Often	19%
Very rarely	3%
Rarely	47%

4.2. Validity test

In our research, to test the validity we use Pearson Correlation Product Moment in two directions. The data that we have obtained from respondents who have used / accessed jd.id we tested the level of validity. This is done to find out whether the data obtained is in line with the reality and can be researched. Validity testing is done by comparing r count and r table where the value of r table is obtained from the two-way product moment r table with a significance level of 1% with $n = 40$. The r table value for $df = 38$ ($df = N-2$) is 0,4026. If r arithmetic $>$ r table, then the question items from the questionnaire can be categorized valid. If r arithmetic $<$ r table then the question items from the questionnaire are categorized invalid. Therefore, every item in question must have a value above 0.4026 to be categorized valid. In table 3, we describe the validity of the WebQual 4.0 variable, it can be seen that all r counts are greater than r tables, so respondent data obtained from the questionnaire are considered valid.

4.3. Analysis Results

From a number of questions that have been given to respondents there are 21 questions that have been calculated as follows:

Table 3. All Question Questionnaire Calculation

Question	r count	r table
1	0.6288	0.4026
2	0.6278	0.4026
3	0.7062	0.4026
4	0.6357	0.4026
5	0.6605	0.4026
6	0.6781	0.4026
7	0.6978	0.4026
8	0.7033	0.4026
9	0.6366	0.4026
10	0.6259	0.4026
11	0.7169	0.4026
12	0.7408	0.4026

13	0.7221	0.4026
14	0.6644	0.4026
15	0.5041	0.4026
16	0.6302	0.4026
17	0.6082	0.4026
18	0.6077	0.4026
19	0.685	0.4026
20	0.6737	0.4026
21	0.6115	0.4026

In accordance with the above calculation, one of the questions is stated as minus question because the r count is below 0.6, which is the question 15 compared to the other questions.

Table 4. Minus Question Questionnaire Calculation

Question	r count	r table
1	0.6321	0.4026
2	0.6304	0.4026
3	0.7106	0.4026
4	0.6413	0.4026
5	0.6586	0.4026
6	0.6829	0.4026
7	0.6994	0.4026
8	0.7076	0.4026
9	0.6359	0.4026
10	0.6273	0.4026
11	0.708	0.4026
12	0.7436	0.4026
13	0.7283	0.4026
14	0.6624	0.4026
16	0.6189	0.4026
17	0.6043	0.4026
18	0.6056	0.4026
19	0.6876	0.4026
20	0.6869	0.4026
21	0.615	0.4026

5.0 CONCLUSION

The results of the Jakarta Notebook website quality research on user satisfaction that has been carried out from this research can be concluded that the level of users who access Jakarta Notebook is rarely with a number of 47% and who often accesses with a number of 31%, but overall the quality of usability, information quality, and quality design has a positive effect on user satisfaction. After the questionnaire results of all the questions that most dominant positive effect on user satisfaction is the provision of relevant information. The results of the Jakarta Notebook website assessment were used as feedback for the evaluation of the development and improvement of the Jakarta Notebook website itself. This study shows that the WebQual category that has the highest importance rating is Usability. This shows that the Usability category is a very important factor to customer satisfaction.

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