

Analysis of Customer Satisfaction Level on E-commerce in DKI Jakarta

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Abstract

Bukalapak as one of the largest e-commerce in Indonesia has the least number of visits compared to similar companies, even though the higher the number of visits, the greater the potential for transactions. This research aims to determine the level of customer satisfaction and can evaluate and optimize the services that Bukalapak has provided to customers. This research uses webqual dimensions consisting of usability, information quality and interaction. This research uses the research methods of Customer Satisfaction Index (CSI), Importance Performance Analysis (IPA) and Gap Analysis (GA). The sampling technique used was purposive sampling by distributing online questionnaires to 106 respondents. Based on CSI, Bukalapak customer satisfaction is in the very satisfied category, based on IPA there are four attributes that need to be improved, four attributes that need to be maintained and seven attributes need to be reduced in priority, based on GA there is one attribute that has a large enough Gap, namely security of personal data. Based on the results of this study, Bukalapak can prioritize improvements to the attributes of personal data security.

Keyword: Customer Satisfaction, Customer Satisfaction Index, Importance Performance Analysis, Gap Analysis, E-Commerce

1. Introduction

The use of digital technologies such as the internet, mobile phones, and online platforms has made it easier to access and transmit information and accelerate business processes (Aryne, 2022). Digitalization itself has a significant impact on the presence of e-commerce, the research notes that the number of e-commerce user growth in Indonesia is increasing by 24.53% annually with the number of users in 2023 amounting to 196.47 million users (Statista, 2023). There are at least five popular e-commerce sites used by Indonesians today, one of which is Bukalapak.

Bukalapak as one of the largest e-commerce in Indonesia has the least number of visits compared to similar companies in the same period, only has an average visit rate of 21 million (Ahdiat, 2022). Even though the higher the number of visits, the greater the potential for transactions (Hernikawati, 2021). There were also some complaints about the mismatch of product information listed on e-commerce, defective products, poor response from the company's customer service, and leakage of application user data (Rizal, 2020).

Customer satisfaction is a consumer evaluation that compares pre-purchase expectations and perceptions of post-purchase performance (Wulandari, 2020). Customer Satisfaction Index (CSI) is a method that compares expectations and performance, the greater the difference between performance and expectations, the lower customer satisfaction will be. Then Importance Performance Analysis is also widely used to determine rankings and identify actions that need to be taken by companies, and Gap Analysis is generally used to identify gaps in user expectations with current reality.

Based on the many problems that researchers found in Bukalapak, this study aims to analyze the level of satisfaction of e-commerce users in DKI Jakarta. Customer Satisfaction Index (CSI) results show the level of customer satisfaction that provides feedback to improve performance. The results of Importance Performance Analysis (IPA) show attributes that must be improved, maintained, reduced priority, and can be ignored, and the results of GAP Analysis (GA) are used to identify differences between what customers expect (expectations) and what customers actually receive or experience (reality). By using these three analysis methods, the researcher hopes to find out the level of satisfaction of Bukalapak users and it is hoped that the company can formulate solutions so that customer satisfaction matches customer expectations and minimizes the distance between expectations and performance felt by customers.

2. Literature Review

2.1 Customer Satisfaction

Customer satisfaction is a measure of how well a company's products or services meet customer expectations and increasing customer satisfaction and trust allows sellers to continue to compete with competitors and be able to continue to maintain their business (Rafiah, 2019). Customer satisfaction will help predict business growth and revenue. Satisfaction with service is the result of perceived value or quality and customers make their judgments based on what they perceive (Feng, 2021). Thus, customer satisfaction plays a crucial role in influencing the success and growth of e-commerce businesses.

Customer satisfaction has five dimensions: product quality, price, service quality, emotion, and convenience. The five dimensions generally separately have a significant effect on customer satisfaction (Salsabila, 2022). Nofiyanti states that there are at least three

dimensions of customer satisfaction: conformity to expectations, interest in visiting again, and customer willingness to recommend (Nofiyanti, 2020). The quality approach is an effective method that is associated as a dimension of customer satisfaction, and one of the familiar attributes used to measure the level of customer satisfaction on a website is the WebQual attribute.

2.2 WebQual

Webqual is a website measurement method or technique based on end-user perceptions and is generally used to determine customer satisfaction on a website platform. Webqual has three dimensions: Usability such as ease of use, ease of navigation, appearance, design, and positive experience. Information quality such as accuracy, trust, easy to understand, format, and relevance. Interaction includes reputation, information security, suitability, personalization and communication (Goswami, 2013).

2.3 Customer Satisfaction Index

Customer Satisfaction Index (CSI) is a measurement of the overall level of customer satisfaction using variables of importance and performance. The level of customer satisfaction can be determined by comparing the value of the CSI indicator between expectations and performance (Fadillah et al., 2020). Research by Fadillah et al. formulated a scheme to describe the level of satisfaction as presented in Table 1 below:

Table 1. Customer Satisfaction Index Interpretation

Index Range	Interpretation
0% – 34,99%	Very Poor
35% - 50,99%	Poor
51% - 65,99%	Cause of Concern
66% - 80,99%	Good
81% - 100%	Very Good

2.4 Importance Performance Analysis

Importance Performance Analysis is a useful method for identifying effective policies and strategies based on the importance and satisfaction of an attribute. the method can map customer perceptions of the importance and effectiveness of a service perspective (Setiawan et al., 2016). The key step in applying IPA is to map the search satisfaction attributes of the approach used into a four-group Cartesian diagram. The division into quadrants is done based on satisfaction and importance values. Each quadrant represents a specific category that will help researchers and decision makers in the organization determine future policies and strategies.

2.5 Gap Analysis

Gap Analysis is a tool or process to identify where the gaps and what differences exist between an organization's current situation and "what should" exist. Through gap analysis, organizations seek to modify the current situation to achieve the desired situation. The results of a gap analysis indicate critical areas where policy makers should take action to narrow the

gap and provide an objective and detailed picture of the direction and size of the gap among the constituents involved. Gap analysis contributes to drawing up organizational implementation plans and improving organizational effectiveness in various areas of the organization (Napitupulu, 2016).

3. Material and Method

This research uses quantitative methods with the object of research of people who live in DKI Jakarta who have made at least 5 transactions at Bukalapak in the last 6 months with the age of 18-24 years. The sampling technique used a purposive sample by distributing research questionnaires online. Research data analysis using IBM SPSS 23 which functions to process statistical analysis, validity test, reliability test, and importance performance analysis.

3.1 Design Study

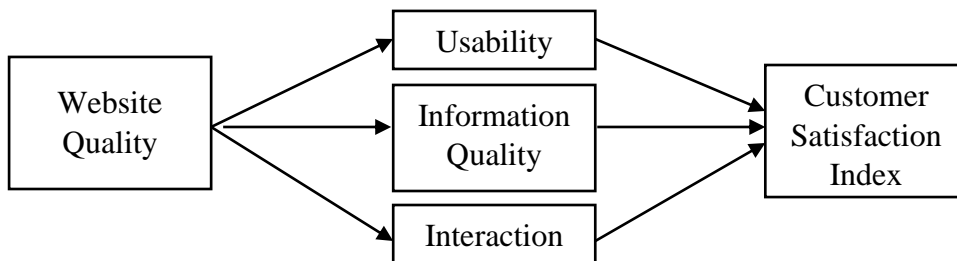


Figure 1. Satisfaction research model using CSI

4. Result

Based on questionnaires that have been distributed to 106 respondents, data is obtained in the form of Bukalapak user characteristics in DKI Jakarta, namely based on domicile, gender, and type of work of the respondent.

Table 2. Respondent Profile Descriptive Statistics

Criteria		Frequency	Percentage
Gender	Man	50	47,2%
	Woman	56	52,8%
Total		106	100%
Domicile	East Jakarta	40	37,7%
	West Jakarta	11	10,4%
	South Jakarta	29	27,4%
	North Jakarta	6	5,7%
	Central Jakarta	20	18,9%
Total		106	100%
Employment Status	Student	82	77,4%
	Private employees	21	19,8%
	Government employees	2	1,9%
	Other	1	0,9%

Total	106	100%

Table 3. Validity Test Result

Dimensions	Indicator	Importance Factor Loadings	Satisfaction Factor Loadings	Description
Usability	U1	0,842	0,693	Valid
	U2	0,684	0,701	Valid
	U3	0,730	0,711	Valid
	U4	0,704	0,630	Valid
	U5	0,777	0,755	Valid
Information Quality	IQ1	0,823	0,705	Valid
	IQ2	0,809	0,676	Valid
	IQ3	0,824	0,769	Valid
	IQ4	0,853	0,825	Valid
	IQ5	0,774	0,791	Valid
Interaction	I1	0,823	0,745	Valid
	I2	0,861	0,742	Valid
	I3	0,748	0,732	Valid
	I4	0,793	0,721	Valid
	I5	0,867	0,765	Valid

Table 3 shows the results of the validity tests of each dimensions. Referring to the validity test results table, it shows that all indicators for each dimensions are valid because they have a loading factor value of $> 0,1909$.

Table 2. Reliability Test Result

	Cronbach's Alpha	Description
Importance	0,957	Reliable
Satisfaction	0,938	Reliable

The reliability test is said to be reliable if it has a Cronbach's alpha value > 0.60 . In table 4, the reliability test results show that the three dimensions have a value above 0.60 so that they are declared reliable.

Table 3. Customer Satisfaction Index Result

Indicator	Importance Level		Satisfaction Level		WF	WS	CSI
	Total	MIS	Total	MSS			
Ease of use	490	4,62	445	4,20	6,72	28,23	80,9%
Ease of navigation	484	4,57	439	4,14	6,64	27,51	
Appearance	478	4,51	420	3,96	6,56	25,99	
Design	457	4,31	436	4,11	6,27	25,80	
Positive experience	488	4,60	433	4,08	6,70	27,36	
Accurate	496	4,68	445	4,20	6,81	28,58	82,9%
Trust	489	4,61	437	4,12	6,71	27,67	
Relevant	485	4,58	435	4,10	6,66	27,31	
Easy to understand	493	4,65	440	4,15	6,77	28,08	
Format	473	4,46	433	4,08	6,49	26,52	
Reputation	495	4,67	430	4,06	6,79	27,56	83,9%
Personal Security	505	4,76	435	4,10	6,93	28,44	
Personalization	477	4,50	443	4,18	6,55	27,36	
Communication	481	4,54	443	4,18	6,60	27,59	
Suitability	496	4,68	452	4,26	6,81	29,02	
Average score		4,58		4,13		27,53	
Total		68,75		61,94		413	82,6 %

Customer Satisfaction Index value based on three dimensions of website quality, namely the Usability dimension, obtained a CSI value of 80.93% and was included in the "Good" category. Then for the Information Quality dimension obtained a CSI value of 82.89% and was included in the "Very Good" category. Then the Interaction dimension obtained a CSI value of 83.98% and was included in the "Very Good" category. Based on the CSI value in each dimension, the Usability dimension needs attention so that it can provide a higher level of satisfaction to reach the "Very Good" category in the customer satisfaction index. The total level of satisfaction based on the CSI method in these three dimensions is 82.6% and is included in the "Very Good" category.

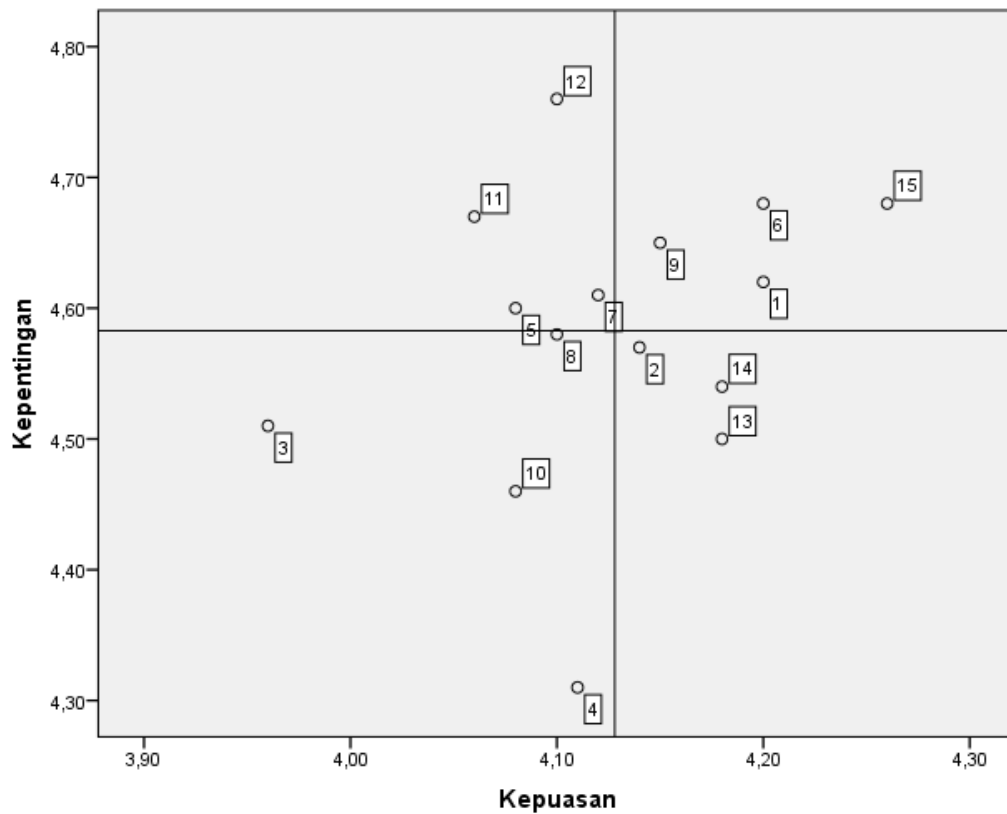


Figure 2. Importance Performance Analysis

The attributes included in quadrant I are Personal safety, Reputation, Trust, and Positive Experience. Then the four indicators have priority improvements for Bukalapak. The attributes included in quadrant II are Ease of use, Easy to understand, Accurate, and Suitability. So, the four indicators must be maintained by Bukalapak. The attributes included in quadrant III are Display, Design, Relevant, and format. Then the four indicators are not included in the priority of improvement for Bukalapak, generally can be ignored. The attributes included in quadrant IV are Ease of navigation, Personalization, and Communication. These three indicators can be interpreted as excessive, so they can be reduced if the company is efficient.

Table 4. Gap Analysis Result

Indicator	Average Satisfaction	Average Importance	GAP		Rank
			Per Indicator	Dimension	
Ease of use	4,62	4,20	-0,42	-0,42	6
Ease of navigation	4,57	4,14	-0,42		6
Appearance	4,51	3,96	-0,55		13
Design	4,31	4,11	-0,20		1

Indicator	Average Satisfaction	Average Importance	GAP		Rank
			Per Indicator	Dimension	
Positive experience	4,60	4,08	-0,52		12
Accurate	4,68	4,20	-0,48	-0,46	9
Trust	4,61	4,12	-0,49		10
Relevant	4,58	4,10	-0,47		8
Easy to understand	4,65	4,15	-0,50		11
Format	4,46	4,08	-0,38		4
Reputation	4,67	4,06	-0,61		-0,47
Personal Security	4,76	4,10	-0,66	15	
Personalization	4,50	4,18	-0,32	2	
Communication	4,54	4,18	-0,36	3	
Suitability	4,68	4,26	-0,42	5	

The calculation of the gap in the usability dimension obtained an average of -0.42 and was the smallest of the other dimensions, in the usability dimension the display indicator has the highest gap level of -0.55, which means that there is an imbalance between expectations that are too high and low reality so that it needs to be balanced with improvements and produce a low or unequal gap between interests and satisfaction, while the design indicator has a low gap figure of -0.20 so that Bukalapak can be said to be quite successful in their e-commerce design because between interests and satisfaction are not too far away in value.

In the Information Quality dimension, the average gap value is -0.46 worse than the Usability dimension but slightly better than the Interaction dimension, in this dimension the Easy to Understand indicator has the highest gap value at -0.50 which means expectations exceed reality, while the Format indicator has the lowest gap value in this dimension at -0.38 which means it is not too bad among the indicators in the Information Quality dimension but is still considered quite lame when compared to the design indicator which only has a gap value of -0.20.

The Interaction dimension has the worst average gap value of the three dimensions of Customer Satisfaction at -0.47. In this dimension, the Personal Information Security indicator is the highest contributor to the gap value at -0.66, even the highest of the 15 indicators in table 4.14, these results can be interpreted that Bukalapak's Personal Information Security is very far from the expectations of e-commerce users so that it can be a priority for company evaluation in improving Personal Information Security and minimizing gaps in the future, while Personalization has the lowest gap value in the Interaction dimension with a value of -0.32.

5. Discussion

This study shows that suitability, information quality, and interaction have a strong relevance in analyzing e-commerce user satisfaction. The results of analyzing user satisfaction using suitability, information quality, and interaction in this study can be used as an effective tool in analyzing user satisfaction. This shows that these three things are still relevant for measuring consumer satisfaction today. Conformance, information quality, and user interaction provide the basis for further development in analyzing consumer satisfaction in general. The results of this study can also be the basis for more in-depth research in the future.

Future researchers can also develop through other approaches that have never been or rarely used in research activities for the Bukalapak platform or other e-commerce, namely the product approach, time saved, delivery and service quality as done by (Wilson & Christella, 2019), (Setiawan et al., 2016), (Goranda et al., 2021), and (Nusifera & Najib, 2020)

6. Conclusion, Implication, and Recommendation

The results of validity and reliability tests that have been carried out on this research instrument show valid and reliable results. Furthermore, descriptive analysis was carried out on 106 research samples and obtained very high results at the level of importance and level of satisfaction. Then Customer Satisfaction Index analysis was carried out and obtained very satisfied results which showed that the services and experiences provided by Bukalapak based on usability, information quality, and interaction received a positive response by users in DKI Jakarta. Then based on the grouping results on Importance Performance Analysis, personal data security, reputation, trust, and positive experience have priority improvements for Bukalapak, and based on Gap Analysis, personal data security at Bukalapak has the highest level of gap and must be anticipated immediately so that user satisfaction can be maintained at a very high level.

The results of this study can be used as input for e-commerce platforms in Indonesia, especially Bukalapak, to pay more attention, especially to indicators included in Quadrant II on Importance Performance Analysis so that the satisfaction of Bukalapak customers can be maximized by minimizing the GAP between interests (expectations) and satisfaction (performance) then prioritizing indicators included in Quadrant IV if the company decides to make efficiency so that satisfaction is not significantly affected because it is done on indicators that have a low level of importance (expectations) but the performance of Bukalapak on these indicators is felt to be excessive.

Researchers should ensure that the sample of respondents selected reflects the geographic and occupational diversity of the target population as much as possible, researchers may consider conducting direct surveys in underrepresented areas or occupations. Future researchers can add several other approaches to their research such as the product, time saved, delivery and service quality approaches as done by (Wilson & Christella, 2019), (Setiawan et al., 2016), (Goranda et al., 2021), and (Nusifera & Najib, 2020). The researcher can be active slowly and follow relevant accounts and participate in conversations relevant to the research so that it can help the researcher build a network on the platform so that the researcher can create posts that explain the purpose of the research and how social media users can participate.

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