

## ANALYZING USERS' EXPECTATION GAP OF AN INDONESIAN SHARIA ELECTRONIC BANKING SYSTEM

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### Abstract

*Sharia banking system has become a phenomenon in the last two decades. A bigger question arised when this banking system began to embrace open e-banking application and online versions of gadgets. It is interesting to see how sharia banking system can maintain service performance with e-banking and meet expectations of users. In this study, we examine WebQual (Website Quality) of an Indonesian sharia bank using variables usability, information quality, and service interaction. This study used a sample of 100 respondents and descriptive analysis technique followed by gap analysis. From the result, we found that overall there was negative value gap between the actual quality (performance) and ideal quality (importance). Based on this conclusion, the perceived quality was till yet to meet the desired ideal quality and good reputation of the website.*

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**Key Words:** website quality, e-banking, online commerce, electronic business

### 1. INTRODUCTION

In the current information age, the need for computer-based information systems is growing, in line with the current globalization and free trade that takes place around the world (Wardhana & Pradana, 2016). The success of computer-based information systems is supported by adequate facilities and infrastructure (Natyari, 2016). The use of information technology in daily life or business world in society has been very widespread all over the world. In addition, computer-based information systems can provide a competitive advantage for business (Laudon, 2016).

The role of information systems and information technology has opened up a new world and a world network without borders (Hussein & Aziz, 2017). It is realized that the development of technology called the Internet, has changed the pattern of life of the community, namely: business interaction, economic, social and cultural (Wardhana & Pradana, 2016). In today's banking world, information technology (IT) is evolving which drives companies develop strategy by using technology. This is also done by a private Indonesian sharia bank, BRISyariah, which since its inception in 2008, has set a vision to "become a modern retail bank by providing services that suit everyday needs".

Fueled by the development of the Internet, the more capable devices and software with high speed and the level of computer users including mobile gadgets, the more awake the BRISyariah customers will be the various conveniences obtained with the availability of online banking services / electronic banking. Responding to this, BRISyariah already has online banking / electronic banking services dedicated to BRISyariah customers, Teller Marchine Otomatis (ATM), Elektronik Data Capture (EDC),

SMS banking, mobile banking, internet banking, cash management system (CMS), open online table (Sohail & Shanmugham, 2003).

One of the companies that follow this trend is BRISyariah by launching an e-banking application in making online transaction website online named [www.brisyariah.co.id](http://www.brisyariah.co.id). BRISyariah comes with information services features, savings account information, savings / giro account information, deposit information, savings account transfers, transfers between BRIS accounts, online transfers to joint and prime network member bank accounts, interbank transfers through SKN (national clearing system), RTGS interbank transactions (real time gross settlement), electricity bill payment and prepaid electricity purchase.

Previously, there were no research results that measured the quality of BRISyariah mobile banking application website. Research on the level of quality can be used as a reference to improve website management for the better. With these indications, we are interested to examine the quality of BRISyariah mobile banking application website using Webqual

## **2. LITERATURE REVIEW**

According to Barreira et al. (2016), the information system is a flow of input, process and output that develops in an environment that circulate data and information. In the virtual era, internet is the most reliable information system, which referred to as virtual space or information superhighway. Now even at a relatively young age, everyone's already understands about the internet. According to Wijaksana (2017), the Internet is a corridor for the various types of resources available to it and each resource is accessed.

People who use the Internet to control what is done through a client device on a computer, like a Web browser software, which is a mutually agreed standard system for storing, searching, formatting and displaying information using client / server architecture (Laudon, 2016).

E-banking is also known as internet banking is an activity that perform transactions, payments, and other transactions via the internet with a bank's website that has a security system. There have been several previous researches focusing on the quality on internet banking using WebQual method, which is one of the methods or techniques of measuring website quality based on end user perceptions (end users) developed by Barnes & Vidgen (2000) as told in Barnes & Vidgen (2014).

This method is the development of SERVQUAL which is widely used previously on the measurement of service quality in general. WEBQUAL (Website Service Quality) is based on the concept of Quality Function Deployment (QFD) which is "structured and disciplined process that provides a means of identifying and carrying the voice of the customer through each stage of product and service development and implementation" which can be interpreted as a structured and disciplined process that presents the means to identify and bring the voice of the customer through every stage of development and implementation of a product or service (Baccinello et al., 2017). The latest version is WEBQUAL 4.0 that uses three categories of measurements with 23 questions. WEBQUAL method is one method to measure the quality of website and improve website management to be better based on end user assessment. WEBQUAL is compiled based on three research criteria that is usability , information and service interaction (Venkatesh, 2012).

### 3. RESEARCH METHODOLOGY

Types of research methods used by the authors in this study is a qualitative method. Research with qualitative method aims to explain the phenomenon with deep depth through data collection, conducted through observation, in-depth interview and literature study (Madiawati, 2016).

Table 1: List of Indicators

Dimensions	Indicators	Number
<i>Usability</i>	Easy to learn and operate	Item 1
	Easy to use	Item 2
	Easy to navigate	Item 3
	Appealing display	Item 4
<i>Information Quality</i>	Accurate information	Item 5
	Detailed level of information	Item 6
	Appropriate formatted information	Item 7
<i>Service Interaction</i>	Safe transaction	Item 8
	Accurate service	Item 9
	Sense of community	Item 10

Population in this research is user of e-banking website of BRISyariah. Samples used counted 100 respondents but based on data obtained. sampling technique is done by incidental sampling. Isidental sampling is a sample determination technique based on chance, ie anyone who accidentally / isidentally met with the researcher can be used as a sample, when viewed by the person who happened to meet it is suitable as data source (Sugiyono, 2014). Data collection was done with an online questionnaire on a scale of 1-5 (1 = strongly disagree, 5 = strongly agree).

Importance Performance Analysis (IPA) or Quadrant Analysis is a descriptive analysis technique introduced by Martilla and James in 1977 (Malhotra, 2013). Importance Performance Analysis is an analytical technique used to identify what important performance factors should be demonstrated by an organization in fulfilling the satisfaction of their service users (consumers). Initially, Martilla and James mean these methods for use in the field of marketing research and consumer behavior. However, in subsequent developments, its use has now been widespread in hospital, tourism, school, and even research studies on the performance of the public bureaucracy (government). IPA is used to understand more deeply about the perception of service users on the quality of the service. Dimension of importance shows how important the quality attribute by the users, while the dimension of performance shows how good the quality attribute is perceived by the user significantly.

#### 4. RESULT AND DISCUSSION

Based on gender, the number of respondents on the e-banking website users of BRISyariah is dominated by female gender that is as much as 68% of the 70 respondents, while the male gender as much as 32% of 30 respondents. The number of respondents in this study dominated by age > 30 years as many as 56% of 85 respondents, and age <20 years as many as 10% of 15 respondents. The number of respondents in this study is dominated by private employees as much as 43%, housewives as much as 10% that is 10 respondents. The number of respondents in this study is dominated by the intensity sometimes (1-2 weeks) as much 41% of 45 respondents, (week 3-4 times) as much as 18% ie 10 respondents, as frequent intensity (5-6 times week) as much as 5.2% ie 4 respondents and very frequent intensity (week > 6 times) as many as 15.6% ie 12 respondents.

Ideally, the ideal score expected for the respondent's answer to 2 questions in each group is 1000. From the calculation in the table shows the value obtained for the Performance group of 738 (73.80%) of the ideal score of 1000; while in the Importance group of 827 (82.70%) of the ideal score of 1000. Thus the dimensions of Service Interaction in the Performance group are in both categories and the Importance group is in very good category. The weighting of questionnaire data using the liker scale (1-5) is done by frequency tabulation of all indicators of each WEBQUAL dimension ie usability, information quality, and service interaction.

Table 2: Average weighted values of indicators

Indicators			<i>Performance</i>	<i>Importance</i>
1	<i>Usability</i>	Item 1	4,09	4,20
2		Item 2	4,01	4,07
3		Item 3	3,86	3,93
4		Item 4	3,91	3,93
5	<i>Information Quality</i>	Item 5	3,81	3,87
6		Item 6	3,85	3,86
7		Item 7	3,87	3,96
8		Item 8	4,00	4,01
9	<i>Service Interaction</i>	Item 9	3,96	4,04
10		Item 10	3,88	3,82
Average			3,925	3,968

Sumber: Data diolah dari SPSS version 20 for windows

Gap analysis is done to see the level of quality website sunmall.com seen from the gap (gap) between the perceived quality (actual) and the desired quality (ideal). The actual quality is indicated by the respondent's assessment of the performance (performance) of website quality-building attributes based on WEBQUAL dimensions, while the ideal quality is directed from the respondent's assessment of the importance of the quality attribute. To determine the value of the gap, can be seen from the

difference between the value of the actual quality (performance) and the quality of the ideal (importance).

Where:

$Q_i$  = quality level

$P_i$  = actual quality score (performance)

$I_i$  = value of ideal quality (importance)

Table 3: Gap Value of Usability Dimension

Indicators		Performance (P)	Importance (I)	Q (P-I)
1	Item 1	4,20	4,09	0,11
2	Item 2	4,07	4,01	0,06
3	Item 3	3,93	3,86	0,07
4	Item 4	3,93	3,91	0,02
Average		4,03	3,96	0,07

Table 4: Gap Value of Information Quality Dimension

Indikator		Performance (P)	Importance (I)	Q (P-I)
5	Item 5	3,87	3,81	0,06
6	Item 6	3,86	3,85	0,01
7	Item 7	3,96	3,87	0,09
8	Item 8	4,01	4,00	0,01
Average		3,92	3,88	0,04

Table 5: 4.7 Gap Value of Service Interaction Dimension

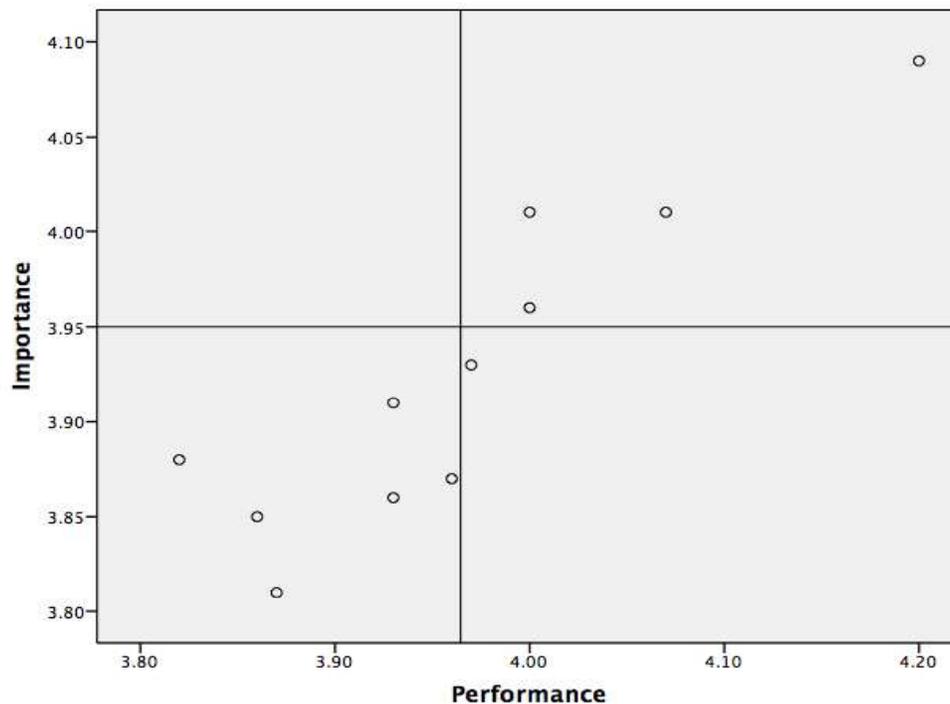
Indikator		Performance (P)	Importance (I)	Q (P-I)
9	Item 9	4,04	3,96	0,08
10	Item 10	3,82	3,88	-0,06
Average		3,93	3,92	0,01

Table 6: Gap Value of the whole WebQual Dimensions

Dimensiions	Perf. (P)	Imp. (I)	Q (P-I)
<i>Usability</i>	4,03	3,96	0,07
<i>linformation Quality</i>	3,92	3,88	0,04
<i>Service Interaction</i>	3,92	3,93	-0,01
Average	3,93	3,92	0,01

The table above shows the gap value of all three dimensions of WEBQUAL. From the table above, overall, the value of the difference between the actual quality (performance) and the ideal quality (importance) has a positive value. The mean difference value is (0.01). the dimension that has the biggest gap is Information Quality by the difference of (0.07). From these results indicate a positive value or  $Q < 0$ , which means that the actual quality perceived today meets the ideal quality desired by users of e-banking BRI Syariah application website, then the quality level is stated to meet the user's ideal activities.

Importance Performance Analysis (IPA) is used to see which website quality indicators are compatible with the user's wishes and which ones need improvement. The results of the IPA analysis show the location of each indicator in the IPA matrix consisting of 4 (four) quadrants.



From the graphic above we can see the position of each indicator in the IPA matrix and can be explained as follows: Attributes / statements that are in quadrant I is the absence of the number listed in quadrant I which indicates should be further enhanced performance in order to satisfy the user.

Next, attributes / statements that are in quadrant II is item no 1 question "Easy to learn", question no 2 is "Good competitiveness", and question no 8 is "Have a good reputation" which signifies that attribute / statement is important and has a high performance, so it must be maintained for the next time because it is considered very important / expected and the results are very satisfactory

Furthermore, in quadrant III there are questionnaires item 3 which is "Good design", and question 4 "Accurate information", and question no 5 "Resolve the problem correctly", and question no 6 "Respond quickly "and Question # 7" Provide Detailed Information ", and Question No. 10" High Confidence Level ", indicating that improvements to the attributes / statements included in this quadrant need to be reconsidered by looking at attributes / statements that have an impact on the benefits perceived by the visitor is large or small and also to prevent the occurrence of user satisfaction.

Last but not least, attributes / statements that are in the quadrant IV is the absence of the number listed in quadrant IV which indicates should be further enhanced performance in order to satisfy the user.

## 5. CONCLUSION

From the results of research and discussion in the previous chapter, it can be concluded that the level of quality Open Library website has not been in accordance with user expectations. There is a discrepancy that indicates a gap between the two assessment perspectives between the performance level and the expected level of importance or ideal quality.

Overall, the difference between these two valuation perspectives is negative with a value of (-0.39). Of the three dimensions of measurement, the usability dimension has a gap value of (-0.28), then the information quality dimension has a gap value of (-0.39) and the last dimension of service interaction has a gap value of (-0.5). Of the three dimensions, the biggest gap value is service interaction with a value of (-0.5).

Given this, it can be concluded that the actual quality perceived can not meet the ideal quality desired Open Library website users, especially from the quality attributes associated with service interaction in the website.

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**Website**

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