Quality of the Website at Private Banks and National Government Banks in Indonesia: Review from the Perspective of the Customer

Intan Permatasari (*1st author*)

Undergraduate Student, Faculty of Economics
Gunadarma University
Depok, West Java, Indonesia
Flower_chuu@yahoo.com

Henny Medyawati (*2nd author*)

Faculty of Economics
Gunadarma University
Depok, West Java, Indonesia
henmedya@staff.gunadarma.ac.id

Ega Hegarini (*3rd author*)

Faculty of Computer Science
, Gunadarma University
Depok, West Java, Indonesia
ega@staff.gunadarma.ac.id

Farida(*4th author*)

Faculty of Computer Science
Gunadarma University
Depok, West Java, Indonesia
farida@staff.gunadarma.ac.id

Abstract— Implementation of E-Banking in Indonesia itself is a challenge for the bank, although the system has grown rapidly, there is not enough evidence of acceptance among consumers. This study aims to analyze the quality of internet banking services between the two types of banks, the state-owned banks and private banks from the customers. The variables used in this study are four variables namely WebQual Usability, Information Quality, Service Quality, and Social Interaction & Lifestyle Encouragement with research instrument consisting of 25 items of questions. The results of discriminant analysis showed a difference in internet banking service quality assessment between BNI and BCA in terms of Usability, Information Quality, Service Quality, and Social Interaction & Lifestyle Encouragement. In this study, of the four variables the differentiating factor is usability.

Keywords— *webqual, service quality, electronic banking*

I. Introduction

E-banking is basically the same as the service in the bank, as it allows the customer to perform virtually all banking transactions via internet. One of the e-banking services are widely used Internet banking that allows customers to access accounts and general information regarding the products and services bank through the bank's website, without the intervention or the inconvenience of sending mail, fax, and telephone original signature confirmation [20], [7]. Electronic banking system is actually not new in Indonesia's banking world. But in Indonesia, only about 10 banks that opened this services [21], including Bank Negara Indonesia (BNI) and Bank Central Asia (BCA). Reference [15] reported that half of the people who have tried online banking services will not become active users. One reason is the number of publications on cases related to the safety factor and the lack of attention and acceptance of internet banking. BNI is the first bank formed and owned by the Government of Indonesia in 1946. As of June 2011 BNI become commercial banks with the second largest number of customers in Indonesia, namely 11.722 million customers, and the fourth largest amount of assets with total assets of 299, 05 trillion rupiahs [9]. BCA is the largest private banks in Indonesia are ranked third largest bank by assets, namely 381, 90 trillion rupiahs by the number of customers as of June 2011 as many as 9.7 million customers. Both banks have a banking site that is informational, and transactional.. The site of BNI and BCA respectively and can be accessed through http://www.bni.co.id/ http://www.bca.co.id/. Both are the kind of site that displays information relating to the marketing of banking products and services contained in a standalone server. Under these conditions, then both bank customers become the object of study.

Risks contained on the website is quite large, it is necessary prudence and security in the use of passwords and other personal information [20], [3], [23]. This paper is based on the research by [14]. The aim of the study are (1) to analyze the differences between internet banking service quality of private banks (BCA) and the state-owned banks (BNI) (2) to analyze the most discriminating variables between the two groups of customers towards internet banking services.

II. Theoretical Framework

According to the FFIEC agencies [4], E-Banking is defined as the delivery of banking products and services, both traditional and new products or services automatically and direct to customers through electronic, interactive communication channels.

Mols et al. in [16] states that the diffusion of electronic banking is more determined by interest and acceptance of the offer made customers than the bank itself. Customer acceptance is the key driver that determines the rate of change in the financial sector, and empirical research about what prevents customers from receiving Internet Banking [18].

Research related to customer behavior in the use of internet banking show that there are a number of factors that underlie the behavior of customer such as demographic factors, motivation of the various banking technology and the emergence of individual acceptance of new technologies. It has been also demonstrated that consumer attitudes toward Internet banking is influenced by the experience of the use of computers and new technologies that have been experienced before (Laforet and Li in [16])

WebQual method used in this study is for the assessment of website quality perceptions of customers who visit the site. WebQual focused on website interface and is recommended to be one of scale Electronic Service Quality (e-SQ) most empirical [22]. This method was developed based on the theoretical background of the Theory of reasoned Action (TRA) and the Technology Acceptance Model (TAM). Reference[5] describe some models that can be applied to evaluate the quality of service on a website. The purpose of this study was to study models that can be applied in assessing the level of loyalty provided by the website. The analysis model of the other website quality is a model of Electronic Service Quality (e-Servqual). The model is composed of seven characteristics of quality of service, which consists of four main dimensions and three dimensions complement [25], namely efficiency, fulfillment, reliability, privacy, responsiveness, compensation, contact points. Reference [24] discuss web quality with qualitative method and formulated the electronic service quality evaluation method for online banking system. The study describes the Electronic Service Quality (e-SQ) on the site as well as the dimensions of WebQual and ServQual in depth.

This study uses the variable characteristics of a quality website from [2], adapted also by [1] and [8] i.e. Usability, Information Quality, Service Quality and Overall Interaction. In this study, the Overall variable is replaced with the variable Social & Lifestyle Encouragement, adaptation of social conditions and lifestyle [12] as well as the phenomenon of marketing communication channels is assessed relating to the development of the banking website of [6] and [19]. Encouragement Social & Lifestyle variables used to determine the source of customer information on the concept of electronic banking and the assumption that the truth has to do with the concept of electronic banking customer lifestyles.

The hypothesis of this study is the difference between internet banking service quality of private banks and state-owned banks. To ensure the smooth operation and security, Bank Indonesia also support and supervise the electronic banking system by issuing circulars No.6/18/DPNP on 20 April 2004 concerning the Establishment of Risk Management In Bank Administration Services activities through the Internet (Internet Banking), which is further implementation of the Bank Indonesia regulation No. 5/8/PBI/2003 dated May 19, 2003 on Risk Management for Commercial Banks and the Board of Directors of Bank Indonesia Decree No. 27/164/KEP/DIR dated March 31, 1995 on the Use of information Technology Systems Bank. The bank was considering the minimization of discomfort, transaction cost and time savings as an important benefit of e-banking and the possibility of access to confidential government site, the possibility of fraud, and lack of information security protection as the serious risks associated with e-banking [10].

III. Methodology

The scope of the research object in this paper is a state-owned bank was represented by BNI and the privately owned national bank was represented by BCA with the customer respondents were in Jakarta and surrounding areas. The questionnaire in this study was adopted from research [2], [8], and [13] with modifications. Population data of e-banking customers of both banks is difficult to obtain because it involves the privacy and confidentiality of clients of each bank.

Questionnaires distributed in three deployment methods, i.e. manually, through the facilities of e-mail, and through the internet community forums such as www.vivanews.com, www.indowebster.com and www.kaskus.co.id using online questionnaires that utilize the facility google docs. This study involves four variables are factors characteristic of website quality assessment, i.e. Usability, Information Quality, Service Quality, and Social Interaction & Lifestyle Encouragement.

Three baseline variables is a standard assessment in the WebQual 4.0. which the last variable was modified to determine the quality of a website in terms of lifestyle and social encouragement, adapted from [2], [1],[8], and [12]. The questionnaire using 7 Likert Scale Rating Summated i.e. from 1 (strongly disagree) to 7 (strongly agree). The questionnaire distributed to the users of e-banking customers BNI and BCA in Jakarta and surrounding areas consisting of 25 statements.

IV. Result and Discussion

A. Validity and Reliability Test

In this study, the questionnaire distributed to 150 respondents, 143 were returned as respondent and generate value by 95.3% response rate. These results suggest that further research can be done because the response rate has reached over 50% and is considered to have represented the necessary data sources.

The results of research on the characteristics of the customer's internet banking users in the two banks indicates the majority of users are aged 21-35 years old students and private sector employees who use a lot for business and education. Users of e-banking can be said has a high income at an average of 5 million per month and the majority has a background bachelor education. As for gender, the data obtained are almost equal proportion between male and female clients.

The results of the validity and reliability of the questionnaire showed that all indicator variables for Information Quality and Service Interaction Quality were valid and reliable. In Usability variable, the statement-6 in this variable is not valid because the value is below the r-table is 0.1642 so it is not included on the next test. These results contrast with the results of testing the validity of previous studies [12]. Reliability test results on these variables produced a Cronbach's Alpha of 0.657. All statements to the variable Usability has been reliable. The same condition also occurs in variable Social and Lifestyle Encouragement. The first item on this variable is not valid because the value is below the r-table is 0.1642 so it is not included on the next test. Reliability test on this variable indicates that the variable Social and Lifestyle Encouragement has been reliable.

Next stage of analysis is descriptive analysis aimed to determine the responses from the respondents of both banks. The results can be seen in Table 1, 2, 3 and 4 below.

TABLE. 1. DESCRIPTIVE STATISTICS FOR USABILITY

	N	Minimum	Maximum	Mean
US1	143	2	7	5.62
US2	143	2	7	4.9
US3	143	1	7	4.7
US4	143	1	7	4.62
US5	143	2	7	5.45
US6	143	1	7	5.08
US7	143	1	7	4.26
Usability	143	19	49	34.63

TABLE. 2. DESCRIPTIVE STATISTICS FOR INFORMATION QUALITY

	N	Minimum	Maximum	Mean
Info1	143	2	7	5.5
Info2	143	3	7	5.94
Info3	143	3	7	5.33
Info4	143	2	7	5.48
Info5	143	1	7	4.57
Info6	143	1	7	4.99
Infoqual	143	19	42	31.80

TABLE 3. DESCRIPTIVE STATISTICS FOR SERVICE QUALITY

	N	Minimum	Maximum	Mean
Sev1	143	1	7	4.92
Serv2	143	2	7	5.08
Serv3	143	1	7	5.23
Serv4	143	1	7	4.20
Serv5	143	1	7	3.24
Serv6	143	2	7	5.18
Serv7	143	2	7	4.99
Servqual	143	19	49	32.85

TABLE 4. DESCRIPTIVE STATISTIC FOR SOCIAL AND LIFESTYLE ENCOURAGEMENT

	N	Minimum	Maximum	Mean
Social1	143	1	7	3.94
Social2	143	1	7	4.81
Social3	143	1	7	4.74
Social4	143	1	7	5.48
Social5	143	2	7	5.37
Social	143	12	35	24.34

B. *Discriminant Analysis*

The next step is to determine the discriminant analysis the WebQual variable distinguishing factor. Usability variables showed significant results, it shows the quality of internet banking services in private banks or state banks associated with the ease and ability of customers to access it. Variable Information Quality has a significant result, which means the availability of sufficient information on the site affect the quality of internet banking services in each bank. Variable Service Interaction Quality showed significant results, the security and convenience in accessing banking sites affect the quality of internet banking services in each bank. Variable Social and Lifestyle Encouragement also showed significant results that show the quality of internet banking services in each of the banks affected by factors social and lifestyle clients. It can be concluded that all four variables have significantly different so the quality of internet banking services in private banks and state banks is affected by the ease of access, availability of information, security and lifestyle clients. Variable having the highest differentiating power is Usability (0.895), followed by the Information Quality (0.757), Service Interaction Quality (0.625), and the Social and Lifestyle Encouragement (0.496).

Respondents from BNI bank customers by 56 people and 87 people are BCA. Judging from the average (mean) per variable in each bank, Social and Lifestyle Encouragement variable has the highest average compared to other variables. On the banks of BNI 39.02, BCA banks by 41.75. This result shows that statistically, lifestyle and social encouragement helped clients become the most influencing factors in the use of e-banking, and when seen by the comparison between banks, BCA has higher average variable Social and Lifestyle Encouragement than the BNI, that can assumed that the majority of bank customers BCA considers e-banking is part of their lifestyle.

While on the smallest average found in Usability, for both banks. This indicates that although the e-banking has been regarded as a lifestyle, but it is still difficult to find customers who really maximize e-banking facilities solely to assist their financial affairs, associated with the ease and ability of customers to access e-banking facility itself.

Figures Chi-square of 12.687 with a high level of significance (0.000) showed a clear difference between the two groups of bank customers. In this study, only Usability most closely related to discriminant functions that can be incorporated into the model. Three other variables cannot be included in the model because it does not meet the requirements of the discriminant which is Information Quality has 0.583, service quality has 0.546, social and lifestyle encouragement 0.352. Discriminant function formed can be seen in the following equation: Z score = -6 + 0,203 Usability

The results of this classification in accordance with the descriptive analysis of the statistics that show the variable group Usability has the lowest average among other variables. Constant score indicates a negative value which supports previous analyzes. It is explained that in terms of usage, internet banking in Indonesia is still not too strong. Not many

users of e-banking customers who take advantage of the facilities available to the maximum and the majority of customers use the ATM more than internet banking or SMS banking. Discriminant function in the study was able to classify correctly at 59.4%. This value is above 50%, so the precision of the model is considered high, and the model can be used to classify the types of cases in a particular bank [17].

v. **Conclusion**

Based on the results of the hypothesis testing and data processing have been discussed in the previous section, it can be the difference between internet banking service quality of private national banks and the state-owned banks from the customer perspective. These results contrast with [8] which states that there is no difference in the quality of e-banking services among national private banks with government banks. The results also differ with [10] which states that there is no difference between the banking services quality to local banks. The variable that most distinguishes between two groups of clients to service customers internet banking was followed by a Service Usability Interaction Quality, Social and Lifestyle Encouragement and Information Quality.

The limitation of the study is limited to get respondents who actually use and understand fully the concept of e-banking. Quite a lot of clients who have been accustomed to using the internet but never opened bank website because as we know not all bank customers in Indonesia know this concept.

Acknowledgment

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