A Conceptual Model of E-Service Quality at Branchless Banking in Indonesia

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Abstract
The digital era, the banking industry revolution and the globalization of the market, have an impact on all companies as well as on the branchless banking industry. Most companies try to attract customers and win the competition in the highly competitive electronics market. The purpose of this article is to examine the theoretical foundations of electronic service quality and develop conceptual models. Better quality electronic services will increase satisfaction and create good relationships with customers. Although the quality of electronic services is increasingly attracting the attention of researchers, research in this area is largely focused on identifying the dimensions of electronic service quality without paying deeper attention to the mechanisms behind perceived quality. Measuring the quality of electronic services in banking is very important in achieving a high customer base. This article proposes a conceptual model to measure the quality of electronic branchless banking services, helps develop an appropriate scale to measure the quality of electronic services in the branchless banking industry, helps maintain and improve the performance and effectiveness of electronic service quality to retain customers.

Keywords: Indonesia, Branchless Banking, Electronic Banking, E-Service Quality, Conceptual Paper

INTRODUCTION
The rapid development of technology has made the internet as the best channel to provide banking services and products to customers. Banks inevitably have to adapt their business needs to technological advancements through the operating system by using the internet as part of a strategic plan. The industrial revolution that is now developing will change the way banks operate and compete, so that it will have an impact on traditional branch networks decreasing rapidly [1]. States that the internet is a very serious threat both to the customer
base of traditional banking oligopolies and to its benefits. Customers now demand a high level of comfort and flexibility, strong and easy-to-use financial management products and services that cannot be offered by traditional retail banking. Internet banking has enabled banks and financial institutions to provide this service by utilizing broad public network infrastructure [2]. Customers in the current information technology era are also quite concerned with the quality of electronic services provided by each bank. Banks must be able to maintain good performance and correct deficiencies in customer ratings that are expected to use their services in the future [3]. The bank can know the extent of the quality of services that have been provided to customers, so that it can identify factors that need to be maintained or improved in connection with bank services to customers in the future [4]. This condition is certainly a challenge for banking businesses to continue to improve the services and banking products themselves, how to always maintain the market share that has been obtained and try to better develop a wider customer network [5]. The key to the success of banks is to remain competitive and continue to improve service quality to better meet customer needs and provide superior service [6]. Banking has begun to minimize conventional transactions and maximize online transactions. With more and more banks offering online banking, it's quite difficult for customers to choose the most appropriate bank for online transactions because the needs of electronic customers are diverse. High levels of service quality have increasingly been recognized as one of the most important factors contributing to the success of any business based on e-transactions [7]. The concept of electronic services has been increasingly used by researchers and practitioners since the beginning of 2000. Electronic services have become a business model of service trends in the service sector in the current industrial era. Electronic services can be defined as providing electronic services to customers [8]. E-service is a web-based service that is delivered via the internet [9,10]. According to a study [11], e-service operations are operations where all or part of the interaction between service providers and customers is carried out via the internet. According to a study [12], the banking perspective "service quality is a form of assessment of the level of service provided by banks to customers to meet the needs and desires of customers as expected". Some definitions about service quality according to some experts above make the writer summarize that e-service quality in banking especially in branchless banking is "meeting the needs and desires of consumers to service electronically to customers via the internet in order to meet customer expectations and satisfaction". The contribution of this article relates to the fact that the proposed model is integrated holistically towards various relevant factors that influence the quality of electronic services into a single model. These factors are general characteristics for traditional services and electronic services, typical characteristics of electronic services, dimensions of relevant electronic service quality especially in branchless banking.

LITERATURE REVIEW
Branchless Banking
As a banking innovation in reaching financial services to branchless banking customers operate without going through the bank's physical office but only utilizing the services of agents or information and communication technology so that banking financial services can be done anywhere and anytime. The most common examples of branchless banking services are mobile banking, internet banking, electronic money, mobile money, etc. [13]. Use of technological facilities and / or involve third party services, especially to serve people who have not been served by financial / unbanked services. The great potential is owned by branchless banking in expanding the distribution of financial services, especially to the poor who are not reached by traditional bank branch networks; can reduce shipping costs, for banks and customers, build and maintain shipping channels for customers to access services [14]. In addition to efficiency reasons, the use of branchless banking is intended to obtain convenience and speed of transactions without going through a bank teller [15]. The poor are referred to people who have low incomes, non-permanent income and cannot be
predicted. While on the other hand they also lack financial products and services that suit their needs. The poor who are not reached by banks or are called unbankable are ultimately marginalized, unable to carry out production activities optimally so that they do not contribute significantly to the economy. In the digital age many things can be facilitated, in the field of financial services, for example, what is called branchless banking or banks without busy offices is implemented. This is believed to help financial inclusion strategies in accelerating welfare even distribution [16].

**E-Banking**

Virtual banks or "branchless banks" are a relatively new concept used to define banks that do not have physical buildings such as branches, but offer services only through the internet and ATMs to deposit or withdraw funds [17]. Online banking is different in many ways from traditional banking. One of the most striking differences concerns the connection to the bank's information processing system. Customer behavior is also shifting to mobile and digital payments globally, and will totally use digital by 2030 [18]. In online banking, customers have direct access to bank information systems from home, office, school or other places where network connections are available. In this new situation, the customer is defined as the end user of the bank's data processing system. In end-user computing, the user's personal computer plays an important role [19]. An online banking user performs at least one of the following online transactions: a) Check account balances and transaction history, b) Pay bills, c) Transfer funds between accounts, d) Request a credit card down payment, e) Check checks, and f) Manage investing and trading in shares. An increase in the customer base will be achieved by using an internet system and is more efficient than using other distribution media from the perspective of the bank. People are becoming more comfortable with online banking and they believe that all banks need to offer online banking services. A study [20], notes that the benefits of e-banking include: 1) competitive advantage, 2) customer retention and attractiveness, 3) increased revenues, and 4) cost reduction.

**E-Service Quality and Definitions**

Based on the definition of traditional services [21,22], electronic services are defined as actions, efforts or performance which are mediated by information technology (such as the web, information kiosks and cellular devices). The electronic services include service elements from e-tailing, customer support and service, service delivery. According to a study [23], the quality of electronic services is the extent to which a website facilitates shopping, purchasing and shipping of products and services that are efficient and effective. This definition involves a complete service experience by the customer during all stages of the online shopping process and consists of aspects of pre-website, on-site and post-website services. Another definition according to a study [24], is the overall assessment of consumers and evaluation of the superiority and quality of e-service offerings in virtual markets.

**E-Service Quality in Banking**

A review of the dimensions of internet banking electronic service quality used to measure the quality of electronic services at the country level shows that in addition to the dimensions used in E-SERVQUAL, some researchers find site aesthetics, guarantees and personalization of sites also important. The study [25], on the quality of internet banking electronic services in the US recommends three dimensions for the quality of electronic services namely Efficiency, Contact, Customization. Efficiency was also found as a major component of the quality of electronic internet banking services in Hong Kong [26], Sweden [27] and Taiwan [28].The study also revealed that usability, ease of use, reliability, responsiveness, security, privacy emerged as dimensions of internet banking in Hong Kong. Study. For internet banking in Taiwan it shows that the dimensions that make up the quality
of electronic services are Efficiency, Fulfillment, System Availability, Privacy, Contacts, Compensation, Site Aesthetics, Customization.

**E-Service Quality Dimensions and Measures**

There are a number of methods that enable the measurement of a company's electronic service profile as perceived by its customers. The best-known method is WEBQUAL, developed by a study [29], E-SERVQUAL, developed by E-TailQ was developed by a study [30] and E-SERVQUAL developed by a study [31], as well as the number of clicks, or purchases generated are measured as measurement instruments using the commercial performance of the website [32]. In this paper the researchers only pay attention to the quality of electronic services, so the emphasis is only on the electronic service quality scale. E-SERVQUAL is a method for measuring the quality of electronic services on a website based on the same principles as the original SERVQUAL method and includes several dimensions that are similar to those of SERVQUAL. The quality of electronic services can be defined as an evaluation and overall customer assessment of the excellence and quality of electronic service delivery in virtual markets [33]. Next, the dimensions of electronic service quality identified in different studies are reviewed and discussed. The results of the literature analysis are summarized in Table 1.

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<th>S.No</th>
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<th>Dimensions</th>
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<td>Dabholkar (1996)</td>
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<td>E-service</td>
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<td>8</td>
<td>Wolfinbarger &amp; Gilly (2003)</td>
<td>Fulfillment /reliability Website design Customer service Security/privacy</td>
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<td>12</td>
<td>Parasuraman et al., (2005)</td>
<td>Efficiency, Availability, Fulfillment, Privacy, Responsiveness, Compensation and Contact</td>
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A Conceptual Model of E-Service Quality
The literature shows a lack of dimensions for measuring electronic service quality (e-SQ). Previous researchers used various dimensions for e-SQ based on their field of study. In addition, some researchers identify different dimensions for the same field and the general dimensions of action according can change to the researchers’ study context. The results of the study indicate that the dimensions of E-SERVQUAL depend on different types of services in the same industry from various industries [34]. Based on the literature review and selected steps for electronic service quality (e-SQ) mentioned in Table 1, the conceptual model for measuring e-SQ in the banking industry was formulated after focus group discussions with bank managers, as shown in Figure 1. The dimensions of this model are those that have a high impact on measuring the quality of electronic services in the branchless banking industry in Indonesia. This study combines many common dimensions used by other researchers under the following dimensions which are then arranged in the following hypothesis:

Conceptual Framework

![Conceptual Framework Diagram]

Figure 1. Proposed Framework for E-Service Quality Branchless Banking Context.
Efficiency
A website is easy to use, well structured and requires minimum information to be inputted by customers [35]. For this, the following hypothesis is proposed:
H₁. There is an effect of efficiency on the quality of electronic services.

System Availability
System availability refers to the correct site technical functions [36]. For this, the following hypothesis is proposed:
H₂. There is an effect of system availability on the quality of electronic services.

Fullfilment
This dimension refers to the extent to which the site promises about shipping orders and the availability of goods fulfilled. For this, the following hypothesis is proposed:
H₃. There is an effect of fullfilment on the quality of electronic services.

Privacy
Using security tools at banks will provide a safe environment for customers to use electronic services without fear and concern about the disclosure of customer's personal and financial information [37]. Some security features include:
- Do not reveal customer's personal and personal information
- Provides a safe environment without the risk of electronic piracy
- Use secure software to offer services to customers
H₄. There is an effect of privacy on the quality of electronic services.

Contact
Availability of assistance is by telephone or online representative. For this, the following hypothesis is proposed:
H₅. There is an effect of contact on the quality of electronic services.

Responsiveness
This relates to flexibility, fast delivery, consistency and accuracy of services delivered [38-45]. For this, the following hypothesis is proposed:
H₆. There is an effect of responsiveness on the quality of electronic services.

Website Design
In terms of human-computer interaction, the type of website design is very important and has an intensive impact on user performance [46]. Website design aims at an attractive and pleasing appearance [47]. Further research on the quality of internet services mainly focuses on website design and all authors agree that the website must be designed in such a way as to improve the conception of customers on the website and its services, H₇. There is an effect of website design on the quality of electronic services.

Commission
Providing qualitative banking services together with the right fees and commissions always leads to customer satisfaction and as a result they are considered the main concern of bank managers [27,48]. Meanwhile, taking a lower commission in the banking industry is considered a relative advantage. Various studies show that successful banks ask for lower commissions on their services and take high commissions often challenge their success [49,50]. The way to achieve this goal is that the internet banking reduces operational and official costs successfully and saves relevant costs helping banks reduce or even eliminate their commissions H₈. There is an effect of commission on the quality of electronic services.

PROPOSED FUTURE RESEARCH
To test the reliability and validity of the proposed conceptual model, data can be collected
from professionals, internet banking customers through interviews and structured questionnaires and statistical software that can be used are SPSS, PLS, AMOS, Lisrel, NVivo, etc. Analyzing the proposed structural model can test the hypothesis. This finding can help in determining the significance and influence of the dimensions of the quality of electronic services in banking, especially in branchless banking in Indonesia.

CONCLUSION

The proposed conceptual model aims to measure the quality of electronic services in the branchless banking sector focused on 8 (eight) dimensions, namely; efficiency, system availability, fulfillment, privacy, contact, responsiveness, website design and commission. The proposed model is based on relevant prior literature and research. The proposed dimension has an influence on the quality of electronic services. Signifying the dimensions of electronic service quality significantly can help branchless banking improve the quality of electronic services, especially the validation of these dimensions is considered from the viewpoint of users and employees. This finding will lead to building an appropriate scale to measure the quality of electronic services in the Indonesian branchless banking industry, which in turn will help improve the efficiency of electronic service quality to achieve customer satisfaction. Consequently, this will lead to the achievement of competitive advantage for branchless banking providers. The recommendation for further research is a model of electronic service quality. The proposed model can be tested with quantitative studies. Cross-cultural studies can be carried out to explore the role of different quality dimensions in models in different cultural environments. In addition, a comparative study on the quality of electronic services between businesses and consumers and also between business and business can be done using the proposed model as a theoretical framework.

REFERENCES