Understanding Customer Satisfaction on Internet Banking: A Case Study in Indonesia

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Article Info

Abstract
The study aims to understand the factors contributing to satisfaction when using internet banking services. This research was carried out by using a qualitative and quantitative approach, as it is intended to analyze the results of banking marketing. Data were collected by filling out questionnaires from 120 respondents who used internet banking of banks in Indonesia. Besides, a focus group discussion was conducted to deepen the factors which contribute to customer satisfaction. Findings. The results indicated that convenience and reliability are factors that can quickly and accurately reduce customers’ dissatisfaction and inconvenience. The reliability factor is the main cause of customer dissatisfaction in using internet banking (52.08%), while convenience is the major factor leading to customer satisfaction (61.07%). Customer segments have influenced the customer's expected priority of choosing Internet banking services.

Keywords: Customer satisfaction; Internet banking; Convenience; Reliability

JEL Classification: G21, M30, O14

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1. Introduction

Bank continues to improve customer service quality (Zarei, 2010). One of the Bank’s strategies in reacting to the advancement of information technology is the use of information and communication technology based on the Internet. Internet banking is one of the Bank’s technology-based services. Bank continues to enhance the quality of internet banking services as it is an effective strategy for consumer security and competitive advantage (Clemes et al, 2012). Another reason is that nearly every bank uses of Internet banking (Hassan et al., 2012).

The development of digital technology in the field of information and telecommunications is driving the growth of world markets. Several types of transactions such as Business-to-Business (B2B) and Internet-based Business-to-Customer (B2C) transactions are growing (Alsheikh and Bojei, 2012). Bank also takes the opportunity to support business transactions with the convenience of payment systems through information technology-based bank services.

Internet banking bank services provide convenience for customers. This includes complex information exchanges (Ivanauskiene et al. 2012), 24-hour daily service, easy and cheap access, availability of several types of transactions (Al-Ajam and Nor, 2013), speed and the convenience
of transaction time and process (Nasri, 2011), and ability for customers to manage the bank transactions they want.

The benefits obtained by the bank include the ability to serve customers in a wider area in various parts of the world without distance and time limitation (Nasri, 2011). In addition, banks can reduce costs, inconvenience information delivery to customers, and inconvenience productivity without increasing costs (Waithaka and Nzeveka, 2015). The availability of various applications such as e-commerce can be equipped with payment facilities connected to internet banking (Callaway and Jagani, 2015).

The development of the internet is followed by an increasing number of users (Zafar et al., 2011). In the implementation of internet banking use, bank aims to fulfill and satisfy the needs of its customers. Therefore, banks are careful to create and to implement service values. Value creation is needed to create customer satisfaction and loyalty (Mustak et al., 2013).

Easy and convenient bank services based on information technology need to be followed by the ability of banks to control and manage various risks in the use of internet banking. Various security technologies are needed by banks to guarantee their services and increase customer confidence, especially since customers and bank personnel do not meet face to face when customers transact through internet banking. This can cause concern in the customer over the threat of internet banking security attacks. Security is important for banks to develop marketing strategies (Nasri, 2011).

Competition between banks in increasing the adoption of bank services - including internet banking - is intended to increase satisfaction with meeting the needs and values of customers. A review of customer involvement in value creation is needed in order to create customer satisfaction and loyalty (Mustak et al., 2013). Companies need to manage customer involvement well so that the impact is effective (Wattanakamolchai, 2008).

Various studies review customer involvement through the customer's opinion on the satisfaction of the bank's internet banking services. Ling et al (2016) concluded that web design and content, convenience and speed are the top three factors that influence customer satisfaction toward Internet Banking. Research by Ahmad & Al-Zu'bi (2011) concluded that accessibility, convenience, security, privacy, content, design, speed, fees and charges had a positive effect on Jordanian Commercial Bank customers' satisfaction, loyalty, and positive WOM. Research by Nochai&Nochai (2013) shows that providing 24 hours-7 days service, completing a task accurately, contacting staff to check immediately, providing accurate information & up to date, transaction process is fast, and providing online registration times are the important factors that have the impact on customer satisfaction. In his research, Nimako & Mensah (2014) concluded that complaining responses and frequency of complaining, and between complaining responses and overall satisfaction.

The problem that internet banking companies faced is customer frustration in using internet banking services. This is particularly true given the interbank competition which needs banks to continue improving their services. This paper aims at defining and evaluating the factors that decide customer satisfaction when using the Internet banking services offered by the bank.

1.1. Customer Satisfaction on Internet Banking

Customer satisfaction is the goal of any public service, including bank internet banking (i-banking) services. Therefore, the bank is continuing its efforts to increase the satisfaction of consumers of i-banking. Akram & Asghar (2012) explained that customer satisfaction in i-banking can be seen in several ways including costs borne by customers as compensation for the
usage of i-banking banks, good customer experience during transactions, good access and speed of i-banking operation.

Ling et al (2016), Ahmad & Al-Zu'bi (2011), Nochai & Nochai (2013) show that several aspects including speed, convenience, security, content, web design, process accuracy, and communication with bank staff affect satisfaction the customer. These aspects are related to the ability of banks to conduct internet banking with better technology so that the satisfaction indicator in the research of Nimako & Mensah (2014) namely the frequency of complaints can be decreased.

The concept of reliability is the ability of internet banking services to remain available properly or as promised to meet customer needs. According to Ahangar (2011), is associated with the convenience of downloading or accessing bank websites, the availability of accurate or correct information with easy-to-understand language, and the ability to make transactions run smoothly until completion. Nochai & Nochai (2013) view the idea of reliability as a complete transaction, i-banking should run well as planned from the time a customer firstly uses it. With a small level of constraints, the concept of reliability can be attributed to the convenience felt by customers in making transactions, resulting in satisfaction using i-banking.

The concept of Reliability according to Ma (2012) is how banks provide services as promised, such as the ability of bank internet banking to provide services that can be downloaded quickly, accurate bank information, and the bank’s website does not stop when customers need information (Irabatti, 2013), including completeness of information (Nimako & Mensah, 2014).

The security definition is the possibility of intrusion from internet banking and the bank’s attempts to enhance the protection of internet banking services. Nochai & Nochai (2013) indicated that some security-related issues, including the ability of i-banking to store data accurately or correctly, the ability to guarantee transactions and privacy, the ability to search the background of past transactions to validate or check transactions made. According to Gupta & Bansal (2012), the idea of security can be viewed from how customers interpret banks, to be truthful in implementing i-banking, banks do not commit fraud, and banks keep i-banking stable. Gupta & Bansal (2012) and Nochai & Nochai (2013) share a common view on the importance of customer data being managed honestly and avoiding security breaches and unnecessary customer data usage.

Security is also related to privacy, namely the confidentiality of customer information as in the research of Zarei (2010), Hassan et al (2012) and Rod et al (2009). In the study of Clemes et al (2012), security is a risk perception that must be considered in the use of information technology. Security is an aspect developed by banks to give trust to customers, including through password level security (Zanoon and Gharaibeh, 2013). The security of a web affects the interest in using internet banking.

The concept of speed or efficiency is the technological capabilities available or provided by banks that can be used with a low amount of time. According to Nochai & Nochai (2013), the concept of efficiency appears when customers can make transactions quickly. When customers face obstacles, there is a full support feature that can help obtain solutions. Information provided by i-banking is renewable information. The minimum time for using i-banking can occur if the customer can easily obtain information, log in and log out quickly, and i-banking access can be made at any time (Ahangar, 2011).

In the research of Ahmad & Al-Zu'bi (2011), speed is associated with the ability to download information, web response time which affects customer satisfaction. In relation to the ability of bank personnel, speed can be related to the speed of bank personnel looking for
solutions to the constraints of using bank internet banking which can also increase customer satisfaction.

The definition of convenience is linked to banks' ability to respond to customer requests to perform financial transactions with i-banking and banks' ability to manage customer-faced problems. When customers face issues using i-banking, there is information available that the customer can easily track to get a straightforward answer to the issue at hand (Ahangar, 2011). This information can come from fast online chat facilities from banks' customer service. Ahangar (2011) explains that the implementation of i-banking is how a bank's website or online application can be accessed conveniently and easily. Additionally, it is also the bank's mindset to be able to compensate customers for issues that cause losses. A bank's website must be convenient to learn and be easy to use.

In Davis (1989) ease or 'ease' means "freedom from difficulty or great effort". Its application in internet banking services, customers use a minimum of effort, free from difficulties. Consumers feel the benefits of internet banking in the ease of using it (Munusamy et al, 2012). Convenience can include the ease of learning, operating and overcoming obstacles using internet banking.

Information quality plays an important role in the use of internet banking and influences customer satisfaction. The quality of information is important because customers do not face bank officers yet only through information technology that the information provided to customers’ needs to be preserved to build customer trust (Namahoot and Laohavichien, 2015). Non-quality information may have a substantial negative effect on the bank. The information quality dimensions which have a significant impact include accuracy, completeness, relevance, and timeliness (Ayyash, 2017).

Namahoot and Laohavichien (2015) stated that quality and information quality systems are important factors in the IS success model, and this determines customer confidence in financial transactions, the higher the system quality and information quality, the higher the customer trust. System quality is related to reliability, convenience, ease of use, functionality, and other system metrics. Information quality is related to the characteristics of the output offered by the IS, such as accuracy, timeliness, and completeness.

2. Research Method

The present study uses a qualitative approach by analyzing factors that become the cause of customer satisfaction or satisfaction in using internet banking. Data were collected from 120 respondents through questionnaires. Respondents' answers were then grouped into several factors. The number of choices of respondents on a factor was then counted. The results of the study on 120 respondents were discussed in Focus Group Discussion activity to examine more closely factors that caused satisfaction in the use of internet banking.

Criteria for respondents in this study are bank customers who have experience using internet banking for more than 6 months. The selection of respondents based on these criteria is based on the consideration that the length of time using internet banking for more than 6 months can describe the satisfaction or dissatisfaction of customers using internet banking in Indonesia.

3. Results And Discussions

In this study, researchers compiled a composition of 120 respondents, grouped in terms of age, occupation, and education. The classification in education consists of 6 respondents from high school, 23 respondents from diploma, 76 respondents from bachelor degree, 12 respondents
for postgraduate degree, and 3 respondents from doctoral degree. The respondents' age is divided into ranges of 20 to 25 years (49 respondents), 26 to 30 years (31 respondents), 31 to 35 years (12 respondents), 36 to 40 years (11 respondents), 41 to 45 years (5), 46 to 50 years (9 respondents), more or equal to 51 years (3 respondents). The occupations include businessmen (10 respondents), students (26 respondents), private employees (26 respondents), civil servants (30 respondents), bank employees (6 respondents), employees of state-owned enterprises (7 respondents), lecturers (6 respondents), housewives (2 respondents), and others (7). 5 Focus Group Discussion participants consist of 3 bank staff and 2 private workers who had the experience of using internet banking.

3.1. The factor of Customer Dissatisfaction

In the questionnaire, as many as 120 respondents received open-ended questions about factors caused respondents' dissatisfaction with the use of bank internet banking services in Indonesia. The results of data collection are arranged in several factors presented as follows.

Table 1. Causes of Respondent Dissatisfaction Using Bank Internet Banking services

| Factor                | Percentage |
|-----------------------|------------|
| Reliability           | 52.08%     |
| Speed                 | 19.80%     |
| Information quality   | 14.58%     |
| Convenience           | 8.34%      |
| Safety                | 5.20%      |

Reliability is the ability of the internet banking service of a bank to be sufficiently accessible, to operate normally, not experience interruption or failure to be accessed by customers. 52.08 percent of respondents chose this factor and became the most selected factor in the main cause of customer dissatisfaction when using internet banking services.

Respondents perceived some dissatisfactions because bank's internet banking could not be used or stopped in the middle of the transaction process. This is triggered by 4 points, such as system interruptions, during maintenance, high access, and system design. System failures such as the bank's website used by the respondent cannot be reached due to an error, sometimes automatically experiences signing out of the network yet the transaction is running but the transaction finalization information is not transmitted.

Maintenance happens when the bank performs the data updating process at certain hours, such as 11 pm-01 am. When access is high as at certain hours, the level of use of the bank's website is high, causing internet banking access becomes slow or interrupted. The system design needs to be improved, as there is an internet banking system that is designed to wait only 2 minutes. If the customer does not carry out activities for 2 minutes, the machine will log out automatically, and this is perceived as an annoyance by the customer as the customer will relogin.

Respondents opinion above shows that reliability is the availability of a bank website that can be accessed well at all times so that customers can use the bank's website for financial transactions.
Speed is the ability of internet banking systems to process in a short time, so consumers no need to wait long for the ongoing transaction process. Dissatisfaction with the speed factor of the internet banking service of the bank positions the second spot with a percentage of 19.80 percent of respondents' choices.

Customer dissatisfaction with the speed of internet banking services is due to a long-term internet banking service, the transaction process is delayed, internet banking is late in sending transaction notifications via email, customers are unable to access internet banking due to slow connections, and slow Wi-Fi. The delay in the transaction process happens due to weak internet networks that consumers use or heavy traffic to the bank's website due to many visitors.

Another dissatisfaction among respondents is the lack of fast internet banking services due to non-simple service procedures that resulted in a non-fast service process. For example, this happens in the long process of receiving and sending token code to the customer's device while the customer must come to the bank's branch office to fix it when facing problems or disruptions in using internet banking. This is exemplified when a customer encounters a blocked token; to unblock, the customer has to go to the bank branch. This was experienced by a respondent who had to come to the bank branch office to take care of complaints that had been long handled by the bank.

Information quality is information that is presented well and is needed in time. Dissatisfaction with information quality factors in the use of the internet banking services of the bank was ranked 3 (14.58%).

Respondent dissatisfaction with the quality of the information included no response from the internet banking and lack of intervention notification. One example is the absence of a transaction success statement or failure statement. Another concern is the lack of information during maintenance from the Bank's website, which makes the client feel worried and confused. Concerns often arise because there is no warning during the error system, no warning of transactions occurring from and to the customer's account and checking of mutations that can only be performed within a short limited time. The level of detail the customer needs can be a source of discontent. Some respondents were disappointed because the current account lacks accurate dissatisfaction. Likewise, the period of information available is of concern to the respondent, for example, the transaction history time limit which can be read is only the last 30 days, while respondents need transaction information for more than 30 days.

Convenience is the ability of internet banking services to be easily used by customers with low effort. Respondent's dissatisfaction over the convenience factor in the bank's internet banking services is the 4th position (8.34%).

Respondents' dissatisfaction with the inconvenience of internet banking services included difficulty in making transfers between banks, the intended account number is not detected directly by the system, difficulty changing or resetting passwords due to insufficient information about ways or procedures for changing passwords, or frequent requests change the password by the system so that it is inconvenient for customers.

Convenience is also related to security that increased security can affect the level of convenience of using internet banking which is getting lower. The more layers of security that a customer must pass through, the less easy it is for customers to use internet banking, so banks need to find a balance between the convenience and security of internet banking, the safer and more comfortable to use internet banking.
Security is a sense of security felt by customers to avoid crimes involving customer data and transactions. The dissatisfaction of respondents with security factors in the internet banking services of the bank is in fifth place (5.20 percent).

Dissatisfaction with the security of Internet banking involves concerns about the reliability of Internet banking services. Some respondents said “security is still in question,” “is internet banking security verification reliable,” “is security verification reliable,” and “are there still data leaks at the bank”. Respondents’ doubts or distrust may be caused by the bank's lack of communication to further convince customers that the bank continues to improve internet banking service security.

This is a challenge for banks to be able to continuously improve the security of internet banking services and conduct outreach and education to customers about internet banking security. The responsibility for securing the use of internet banking rests with the customer, while the responsibility for providing internet banking services rests with the bank.

### 3.2. Customer Satisfaction Factor

In the questionnaire, a total of 120 respondents answered open-ended questions about factors which resulted in satisfaction of respondents using internet banking services in Indonesia. The data collection results are listed in the table below.

| Table 2. Causes of Respondent Satisfaction Using Bank Internet Banking services |
|---------------------------------|-------------------------------|
| Convenience                    | 61.07%                        |
| Speed                          | 29.77%                        |
| Security                       | 9.16%                         |

Convenience is the key factor the respondents selected (61.07 percent). Respondents viewed convenience as being able to use internet banking services from anywhere and not constrained by a geographic location. They do not have to come to the bank to queue and they can do transactions anywhere with an internet-connected device for specific transactions, such as power payments, loans, purchases of fares, checks of balance. Transactions made via automatic teller machine (ATM) can also be carried out via internet banking.

The satisfaction of the respondent with the speed factor in the internet banking service of the bank is in second place (29.77 per cent). It is possible to quickly meet the pace in the process of performing transactions, backed by a reliable internet network and bank workers who are willing to satisfy different customer needs. Customers do not need to go to the bank to meet the teller, and they can make transactions anywhere so that the customer's time for transactions is sufficient.

Respondents' satisfaction with the security factor in the bank's internet banking services was ranked third (9.16%). Transactions are safe because they take place in non-cash. Cash payments are prone to robbery. For this, the confidentiality of customer data needs to be improved and the quality of information must be accurate. In addition, banks also need to provide security guarantees for internet banking services.
3.3. Focus Group Discussion Result

The researcher is adding focus group discussion to deepen the details. Five respondents who were interested in conversation exercises for the focus group explained their views as follows.

Informant 1

“The usability of internet banking services is a big concern for consumers not to switch to other internet banking services. Convenience is correlated with the convenience of menu options on the bank’s website or minimum information. An evaluation of satisfaction or dissatisfaction with internet banking services can be achieved best with a short-fast survey carried out after the customer has made a transaction such as a money transfer. Customers need to be compensated to inspire clients to carry out a quick survey in earnest.”

“The opinion of the first informant shows that the strength of internet banking services related to reliability is the main consideration of customers not to switch to another bank's internet banking services. Thus it is important for banks to continue to improve this reliability factor.”

Informant 2

“All banks provide convenience. If the respondent is a businessman, speed is more important than convenience as business people want to make transactions more often, so speed is very important. While the convenience is the key for business customers, the transaction procedures needs to be simpler.”

“The opinion of the second informant shows that banks need to pay attention to the volume of transactions from customers as indicators to increase the speed of internet banking services. High transaction volumes require faster and easier internet banking applications so that customers continue to use internet banking.”

Informant 3

“From the banking side, the main thing is security because banking operations are related to various regulations, including the provisions of the ‘Financial Services Authority’ that security must be properly maintained by banks with more security procedures. I prefer a simple menu on internet banking. Security needs to be improved for corporate customers and they need to be distinguished from personal customer segments.”

“The opinion of the third informant shows that banks need to maintain and improve the security of internet banking services that are held because of the high sensitivity of the money being transacted. This is especially true for business people with large amounts of money. Therefore, the application of better security procedures must be carried out.”

Informant 4

“Some banks make customer segments. The retirement customer segment is more concerned with convenience and tends to use an ATM for transactions due to the relatively low capacity to learn technology. The middle segment is concerned with convenience and security, while the upper segment is concerned with reliability and speed so that routine transactions can be carried out without obstacles”
“The opinion of the fourth informant shows that the use of internet banking depends on the characteristics of the customers. The upper class segment is different from the lower class segment. The difference in the use of internet banking is also in the age segment. Banks need to improve internet banking services with performance capabilities to be able to adjust to various segments and to various customer characteristics.”

Informant 5

"Often banks increase security in layers even though it makes it easier for customers to use internet banking, for example, passwords for logins plus one time passwords (OTP). Difficulties experienced by customers who have a lot of internet banking are banks because between banks different arrangements of passwords consisting of letters and numbers or numbers only. Security is very important for banks but this always reduces the convenience or convenience of customers. I agree that reliability is also important so that the bank’s website will continue to run well or remain available properly. Whatever happened was a feature available but the customer did not know its use because of the lack of information explaining the features."

“The opinion of the fifth informant shows how important security is to customers, and internet banking security perceptions can differ between customers. Customer awareness that better security demands less convenience in using internet banking becomes important for banks to educate about safety and comfort.”

4. Results And Discussions

Internet banking service policy is intended to meet customer needs and increase customer satisfaction. The direction of the bank’s internet banking service should pay attention to some main factors that can increase customer satisfaction, reduce customer dissatisfaction, pay attention to customer desires and pay attention to the ability of the bank’s human resources in serving customers.

Five main factors cause customer dissatisfaction in the use of internet banking, namely reliability, speed, information quality, convenience, and security. Improved services on the factors of reliability, speed, quality of information, convenience, and security can reduce customer dissatisfaction. This is indicated by reliability as a factor with the highest percentage of 52.08%.

In the factor of customer satisfaction, three factors cause customer satisfaction including convenience, speed, and security. If the bank can continue to improve the quality of these factors, the bank can increase customer satisfaction, especially convenience, a factor with the highest percentage (61.07%).

From all factors that cause customer satisfaction or dissatisfaction using the bank’s internet banking, there are two main factors to be considered in bank internet banking services, namely reliability and convenience. If the bank pays attention to increase conveniences the reliability and convenience factor, it can reduce customer dissatisfaction and increase customer satisfaction quickly and accurately.

Focus Group Discussion activities with 1, 2, 3, 4, and 5 informants show how important the role of technological factors in internet banking services is. Technology reliability is the most important according to the first informant that customers do not move to other banks’ internet banking. Speed is more important than convenience for business customers because of high transaction volumes so speed is needed (second informant), security is important because it relates to the Financial Services Authority (3rd informant) regulations, various customer
segments affect the priority of internet banking services which include security, convenience and reliability (4th informant), security is sometimes at odds with convenience; the better, the lower the degree of consumer comfort when using Internet banking (5th informant).

5. Conclusions

Customer dissatisfaction related to the use of Internet banking is influenced by 5 main factors. These cover reliability, speed, quality of information, convenience, and protection. While 3 Major factors affect satisfaction of customers when using Internet banking, are convenience, speed and security. The reliability factor is in the top position leading to customer satisfaction (52.08 per cent), while the comfort factor is in the top position leading to customer satisfaction while using internet banking (61.07 percent). If banks can promote efficiency and convenience-related service changes, this will reduce dissatisfaction and increase for customer satisfaction in using internet banking quickly and appropriately.

Security can diminish consumer comfort using internet banking. Layered protection can make the internet banking system secure, but due to various security procedures, can reduce the level of comfort of customers using internet banking. The customer segment will influence the priority the customer wants in internet banking services, for example the top-class customer segments prioritize the reliability and speed of transactions.

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