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Electronic Banking Services in Indonesia An Analysis

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Abstract - **Utilization of electronic technology is progressively growing, no exception in Indonesia. A golden opportunity for banks that are competing in improving electronic banking services.The banking world in Indonesia is transforming toward digital banking.** The **purpose of this study is to measure the level of satisfaction of electronic banking services in Indonesia. This research instrument is composed of the dimensions of the existing internet banking services and the success of an e-commerce into an instrument of assessment of the profile of internet banking services in Indonesia. Research population is electronic banking service provided by bank in Indonesia. This research is conducted for the dimensions of internet banking services for personal banking.The results of the research indicate that the reason to use e-banking because of the practical reasons (79.10%), and level of electronic banking services in Indonesia has reached 81.4%.**

Keywords - Analysis; Electronic Banking; Service Quality.

I. INTRODUCTION

Technology rapidly growing and pervasive in various areas of life and became a lifestyle.Financial institution one of many institutions that affected by technology.The banking world in Indonesia is transforming toward digital banking, which is expected to eliminate banking services in the branches as customers begin to use digital services[1].Technology usage as a tool for banking transactions could be in many form, could internet banking and mobile banking.

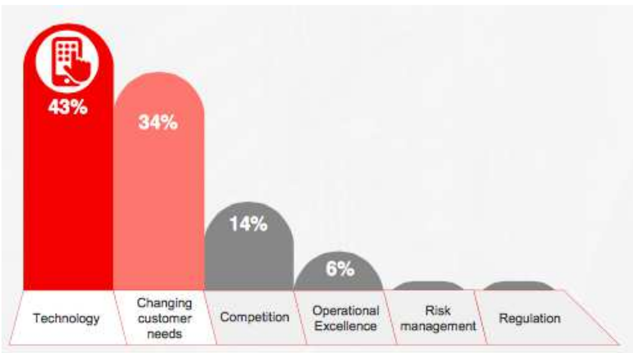

Figure 1. Main drivers of transformation in banking business in next 3-5 years[1]

Internet as a technology is progressively growing no exception in Indonesia a country with the highest number of active internet users in the world had 132.7 million out of almost 260 million population[2]. Internet usage in Indonesia is growing and become popular but the use of internet banking in Indonesia is currently not muchonly 7% of Indonesia's internet users admitted to using the Internet for banking transactions [3].

The opportunity given by internet banking, must be followedby transaction equality for customer. Indonesian Banking Regulation concerning implementation of Risk Management in the use of Information Technology by commercial banks, indicating the use of technology must take into account the risks that occur.

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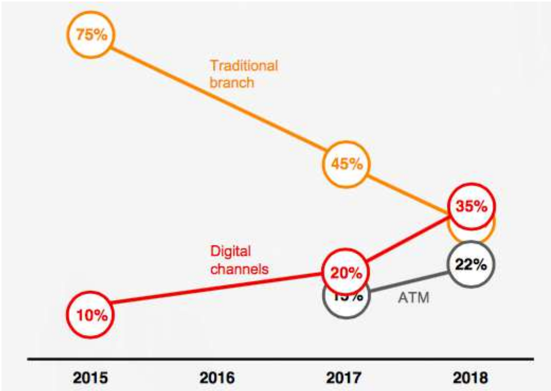

Figure 2. Estimate of the proportion of the customers transaction[1]

In a context within which banking institutions are increasingly committed to introduce a greater rationality in the evolving operation processes, and improve the service quality standards towards their customers. Banks managements should focus more in developing efficient action plans and strategies to meet the needs of their online customers, and understanding the importance play role of information systems as critical tools operate to improve banking online services as a competitive advantage and enhance their organizational efficiency; such as enable customers to function more independently and competence to conduct numerous online transactions on their own.

The purpose of this study is to measure the level of satisfaction of electronic banking services in Indonesia.

II. Materials And Methods

2.1 Electronic Banking

Electronic banking provides easy access to banking services to its customers. The interaction between users and the Bank has been substantially enhanced by deploying ATMs, phone banking, internet banking, and mobile banking [4].

According to Bank Indonesia, internet banking is one of bank services that enable customers to obtain information, communicate and made banking transactions through the Internet. Internet banking activity can be divided into three types, informational internet banking, communicative internet banking and transactional internet banking. Informational Internet banking is bank services to customers that give an information through the Internet and not to execute the transaction, Communicative Internet banking is the bank services to customers that give customer an ability to communicate or interact with the bank as providers of internet banking service in limited way and does not execute the transaction. Transactional internet banking is bank services to customers to interact with provider’s bank service and internet banking, and allowed to execute transaction [5]. The definition of internet banking according to Furst et al. is the use of the Internet as a long-distance channel for banking services, such as opening a deposit account, transferring funds between different accounts, and electronic billing and payment invoices [6].

Based on these definitions, Internet banking can be concluded as long-distance bank services such as informational, communicative and transactional using internet technology.

2.2 Internet Banking in Indonesia

The best four banks in Indonesia based on three indicators that exist in financial performance (Net income, Interest and Sharia Income, Assets) are[8]:

1. PT Bank Rakyat Indonesia Tbk (BRI).
2. PT Bank Mandiri Tbk (Mandiri)
3. PT Bank Negara IndonesiaTbk (BNI)
4. PT Bank Central Asia Tbk (BCA)

Generally internet banking features that offered to the customer are[11]:

1) Services: e-voucher Top up, prepaid electricity, Ticket, etc.
2) Payment: Credit Card, Telephone, Handphone, Internet, Insurance, Loan, Taxes, Electricity (PLN), Water (PAM), BPJS, etc
3) e-commerce payment
4) fund transfer
5) Account information
6) Credit Card information
7) Customer Credit Information
8) Investment Product Information
9) Deposit
10)Other Information

Factorsinfluencing the consumer's initial confidence in Internet banking are perceived security, perceived privacy, relative benefits, company reputation, website usability, and government support. Banking firms interested in expanding online financial services in developing countries should improve existing strategies or develop new approaches that take into account these factors. Perceived privacy and government support have no impact on the intention to use internet banking services in Indonesia [9].

Factors influencing the use of Internet Banking in

Indonesia according to Fatimah and Suyanto are Performance Expectancy, Trust and Social Influence.The most dominant variable of each factor is Internet banking allows the effectiveness and efficiency of time of the user (Performance Expectancy), the security of internet banking that uses (Trust) and advises to use internet banking from others such as family, friends, spouse (Social Influence)[10].

2.3 The dimensions of internet banking appraisal

The quality of Internet banking services can be measured using 18 dimensions as follows:[11][12][13]

Table 1. Dimensions of internet banking appraisal

No.	Dimensions
Banking service product quality	
1	Product variety/diverse features
	Product range
	Product features
Customer service quality	
2	Reliability
	Correct service
	Keep service promise
	Accurate records
	Keep promise as advertised
3	Responsiveness
	Prompt service
	Quickly solve problems
	Convenient service
4	Competence
	Ability to solve problems
	Knowledge to answer questions
5	Courtesy
	Address complaints friendly
	Consistently courteous
6	Credibility
	Confidence in the bank's service
	Good reputation
7	Access
	Availability for help
	ATM access
	Phone access
	e-mail access
	account access when abroad
8	Communication
	Clear answer
	Informing customer of important
	Availability of status of
9	Understanding the customer
	Personal attention
10	Collaboration
	External collaboration
	Internal collaboration
11	Continuous improvement
	continuous improvement on online
	continuous improvement on
Online systems quality	
12	Contents
	Information on products and
	Other information that customer
13	Accuracy
	Accurate online transactions
	Errors in interface
	Errors in contents
14	Ease of use
	Compatibility
	User friendly
	Easy log in
	Speed of responses
	Accessibility of the web site
	Function that customers need
	Easy navigation
15	Timelines
	Up-to-date information
16	Aesthetics
	Attractiveness of the website
17	Security
	Privacy
	Information transaction safety
Social Influence	
18	Suggest from others (family, friends, partner, etc.) to use I-banking

2.4 Framework

The framework of this study can be illustrated as in Figure 1. The level of customer satisfaction of electronic banking in Indonesia is influenced by 4 factors, namely banking service product quality, Customer Service quality,Online system quality and social influence.

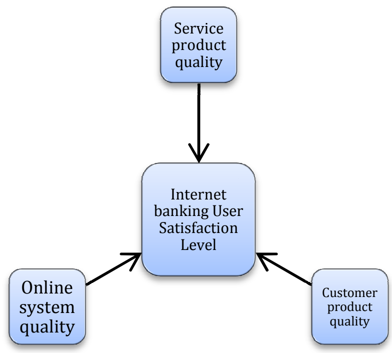

Figure 3. Research framework

2.5 Methodologies

The method has been used is descriptive research, dividing into several stages as follows:

1. First stage is the collection of literature data on the internet banking assessment dimension;
2. Second stage of this research is Data collection was done by distributing questionnaires to users ofinternet banking Indonesia by random sampling

method. The survey instrument contained 45 items adapted from previous studies. The survey measured participants' perceptions with a 5-point Likert scales, ranging from totally disagree to totally agree. Higher scores on this instrument indicated higher level of satisfaction. All data were collected by online survey.

3. Third stage is analyzing the data obtained used exploratory factor analysis technique.

This research instrument is composed of the dimensions of the existing internet banking services and the success of an e-commerce into an instrument of assessment of the profile of internet banking services in Indonesia. Research population is internet banking user in Indonesia.

III. Result And Discussions

Characteristics of respondents of internet banking users in Indonesia shows that the largest internet banking users are male, private employees and mostly Male. Bank BCA and Mandiri had biggest internet banking user (table 1).The type of service that is widely used by customers are Funds Transfer to another account and Checking Balance. Respondents who stated that they use e-banking because of the influence of others (family, friends, partner, etc.) are 7.5%, while most respondents state that the reason why they used e-banking is for practical reasons (79.10%). This result differs from previous research which states that the reason for using e-banking in Indonesia is because of the influence of others.

Table 2. Respondent's Characteristic

Gender	
Male	64.20%
Female	35.80%
Age	
< 26	22%
26 - 35	27%
36 - 45	25%
> 45	25%
Ocupation	
College student	10.40%
Lecturer	17.90%
Private Employe	55.20%
Civil Servent (PNS/ASN)	4.50%
Enterpreneur	10.40%
Others	6%
Bank	
BCA	49.30%
BNI	11.90%
BRI	1.50%
Mandiri	32.80%
Others	4.50%
frequently used e-banking facility	
Check transaction history	59.70%
check transaction status	35.80%
Shopping (tickets, credit, etc.)	64.20%
Paying bills (credit card, insurance, etc.)	53.70%
Funds Transfer to another account	80.60%
Checking Balance	76.10%
Online shopping pay	62.70%
Transfer of electronic money (e-wallet, go-pay, e-money, etc.)	41.80%
Others	7.50%
Reason used e-banking	
Recommendation from others (friends, parents, relatives, etc.)	7.50%
Practical	79.10%
Believe in a service bank	19.40%
Saving time	71.60%
others	6%

Based on the data obtained from the respondents, shows that the level of customer satisfaction e-banking services provided by the bank, is quite good as in table 3.It is seen that Banking service product quality has the highest satisfaction value while on-line systems have the lowest satisfaction level.

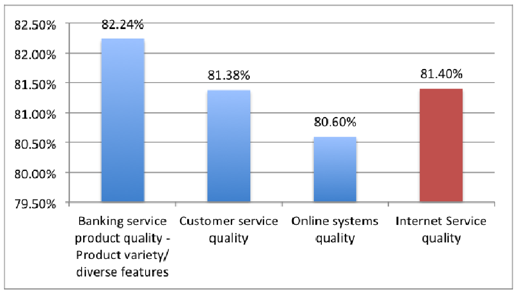

Figure 4. Degree of satisfaction of Internet banking services

Details of each type of quality assessed can be seen in Figures 5, 6 and 7. Banking service product quality based on product range and product features indicate that the product offered has reached high appreciation from the users.

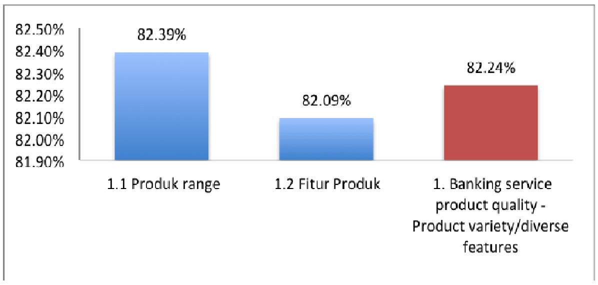

Figure 5. Degree of quality Banking service product quality dimension

The customer service quality group has an average satisfaction score of 81.38%. There are five dimensions that have below the average value, competence 79.70%, access 80.66%, understanding the customer 77.91%, collaboration 78.21% and continuous improvement 80.60%. This can be a concern for banks to prioritize and improve on this dimension.

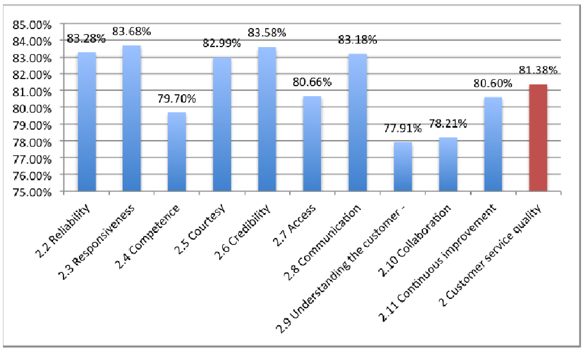

Figure 6. Degree of quality customer service quality

The online system quality overall has an average satisfaction score of 80.60%, which is the lowest score compared to the other 2 service groups. In this group, there are four dimensions that have a value below the average which is content79.25%, accuracy 76.72%, timelines 79.70% and aesthetics 75.22%. In this group, the highest value is the security dimension reaching 86.12%.

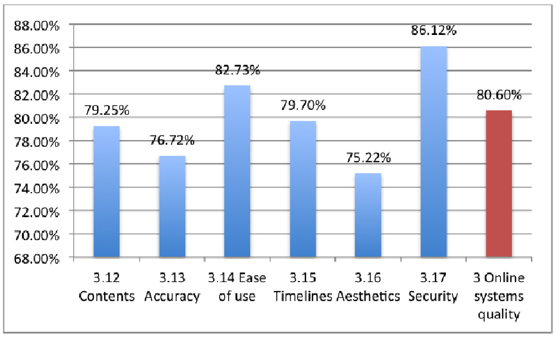

Figure 7. Degree of satisfaction Online system quality dimension

IV. Conclusion

Utilization of electronic banking in Indonesia is increasing and it is a concern for the banks of service providers. The results of the research indicate that the reason to use e-banking because of the practical reasons (79.10%), it means shifting from reason the influence of others (family, friends, partner, etc.)7.5%. The level of electronic banking services in Indonesia has reached 81.4%. The product offered by the bank is the dimension that has the highest level of satisfaction while the quality of the online system has the lowest satisfaction level. Dimensions that have a low value and that need attention arecompetence 79.70%, access 80.66%, understanding the customer 77.91%, collaboration 78.21%, continuous improvement 80.60%, content79.25%, accuracy 76.72%, timelines 79.70% and aesthetics 75.22%.

Recommendations given based on the results of research conducted is the bank should pay more attention to practical banking services and can save customer time.

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