# THE EFFECT OF MANAGEMENT ACCOUNTING INFORMATION SYSTEMS, MANAGEMENT ACCOUNTING INFORMATION QUALITY, SERVICES QUALITY TO USER SATISFACTION AND IMPLICATIONS ON DECISION MAKING PROCESS

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### **ABSTRACT**

Utilization of information technology, media and communication has changed the behavior of human society and civilization globally. The development of information and communication technology has also led the world into a relationship without boundaries (borderless) and causing changes in the social, economic and cultural significant. According to article 4 of Law No. 11 of 2008, the use of technology and electronic information held by the purpose among other; the intellectual life of the nation as part of a world information society progress is so fast. The role of information in an organization is divided into a decision-facilitating role and Influencing a decision (control) role. The population in this study was the operational manager of state bank in the city of Bandung. Quality of management accounting information systems, management accounting information quality, service quality of information systems affect the user satisfaction of information systems and user satisfaction management accounting information system affects the decision-making process by 62%.

**Keywords:** Information Technology, Information, Decision Facilitating

### 1. INTRODUCTION

As mandated in Law No. 11 Year 2008 on Information and Electronic Transactions mention that Indonesia has been placed as part of a world information society to achieve development of information technology where the technology development must be done optimally, diffused the whole society to national life.

But what happens when this is the system of banking supervision by Bank Indonesia (BI) is not as professional as the principle of banking supervision has not been implemented either by the Central Bank (Arif Budimanta, member of DPR RI, commission XI). So, that the case related to weak banking system widely reported by, among others:

(a) The survey results internet banking users in Indonesia come from major cities of Jakarta, Surabaya, Bandung and Yogyakarta. In addition, Indonesia ranks sixth in the world biggest Internet crime by using internet banking facility (Kompas News Paper; 2002). The case could cause customers do not trust the internet banking and do not want to re-use internet banking. Impact that can be caused, first, the bank will increase the number of ATMs (Automatic Teller Machine), branches and transaction forms printing, catalogs, brochures causing banks must pay great. The second impact, the bank has spent heavily to build systems internet banking internet banking but do not provide added value to customers because customers avoid internet banking. This raises the need for other strategies and thus will incur additional costs (Sri Maharishi: 2006). This case deals with the operational aspects of information technology, management of information technology in banks need to make

- improvements in the use of information technology so that the use of ATMs can actually provide security for its users.
- (b) Mode of reading the last record. As happened in the case of one of the customers who use the bank& ATM machines work the way criminals are reading the last record of recent transactions using the ATM card blank that has the ability to read the record of the PIN, as if no account of the card owner has attracted money respectively. This mode can be addressed through the management aspects of the banking electronic a way to reset the ATM machine so that the ATM machine can not read another card.
- (c) Service Internet Service Provider (ISP) using a modem connection, DSL, cable modem, wireless or leased line. ISP will connect users to the Internet through a network provider (network provider) and this applies also to the internet banking service. If the security system is vulnerable to the possibility of a virus or Trojan can be inserted so that data therein can be changed or retrieved. Internet banking service provider-can is potentially vulnerabilities and a cracker can retrieve customer data from various banks. This case is one of the challenges that must be anticipated by the bank and is one chore to develop risk management in using information technology.

Valuable information related to the suitability of the usefulness of information obtained by the costs incurred to obtain such information. Information is said to be worth if it benefits more effectively than it costs to get it.

While in Law No.11 of 2008 concerning information and electronic transaction systems, defines that the system is the integration of information systems between human and machine components that include hardware, software, procedures, human resources, and the substance of the information in their utilization functions include input, process, output, storage and communication.

While BI Regulation No.9/15/PBI 2007, defines information technology as a means of computer-related technology and telecommunication other electronic means are used in data processing and financial or banking services.

Utilization of information technology, media and communication has changed the behavior of human society and civilization globally. The development of information and communication technology has also led the world into a relationship without boundaries (borderless) and causing changes in the social, economic and cultural significant.

According to article 4 of Law No. 11 of 2008, the use of technology and electronic information held by the purpose for (a) the intellectual life of the nation as part of a world information society progress is so fast, (b) developing trade and the national economy in order to improve the welfare of the community; (c) improve the effectiveness and efficiency of public services, (d) open up greater opportunities to each person to advance thinking and capability in the use and utilization of information technology optimally and responsibly, and (e) provide a sense of security, justice, and legal certainty for users and providers of information technology.

The development of information technology allows banks to use it to improve operational efficiency and quality of banking services to customers. Information technology is a means of computer-related technology, telecommunications and other electronic means are used in the processing of financial data and / or banking services.

Banking services through electronic media (electronic banking) is a service that allows bank customers to obtain information, communicate and conduct banking transactions via electronic media such as ATMs, phone banking, electronic funds transfer, internet banking and mobile phone.

The role of information in an organization is divided into a decision-facilitating role and Influencing a decision (control) role. When the process of decision-making and control seen in isolation, based on decision theory and agency theory states that more public information is better than less public information. (Baiman and Demski, 1980).

In a decree of Directors of Bank Indonesia No.27/164/KEP/DIR and Bank Indonesia Circular Letter NO 27/9/UPB dated March 31, 1995 regarding the use of information systems by the bank can be seen that the implementation of information technology systems submitted to each bank. Bank Indonesia only provides guidance so that in practice does not harm customers and the bank itself. In section III, article 1 No.27/9/UPB Bank Indonesia Circular Letter dated March 31, 1995, stated that the purpose of securing information technology systems is to reduce the risk of information systems technology implementation that can be detrimental to the interests of the banks and the public.

Information and communication technology is believed to be an important factor for the progress of the nation in this era of globalization addition to the factors of production and the economy, information and communication technology as well as the motor in the social change in various aspects including one of them in banking.

Development of banking technology is growing very rapidly. This condition is mainly supported by the application of Internet technology. On the other hand, individual mobility is also higher so they need technology applications that can answer all the mobility needs guidance. In these conditions it is reasonable if it is then the use of all technology-based tools into a kind of lifestyle and almost all the work there is also demanding high-tech applications. Related to the above, Bank Indonesia believes that electronic banking or e-banking is the gateway to the future of the banking sector (Soetanto, 2013).

Based on the background of the present study was made formulation of the problem as follows:

- 1. How much influence the quality of accounting information systems management, management accounting information quality and service quality of information systems simultaneously affects the user satisfaction of information system.
- 2. How much influence user satisfaction of information system affects the decision-making process of operational managers.

### 2. CONCEPTUAL FRAMEWORK

Discuss banking information system cannot be separated from a discussion of the system, and banking information. Romney and Steinhart (2003) state that means the system is a collection of two or more components that are interconnected which interact to achieve a goal.

According to McLeod in his book entitled Management Information Systems (2001: p12) & information is processed the data or the data is quite meaningfully or freely translated information is processed data, or data that already has a specific meaning for the needs of

the user. Information System Success DeLone and McLean's Model (2003) described as follows:

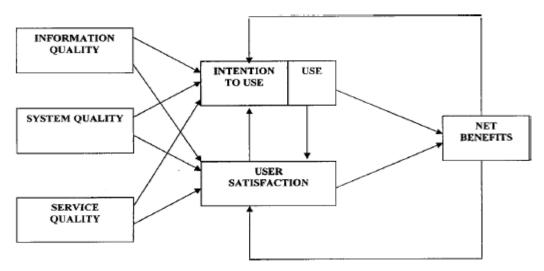


Figure 3. Updated D&M IS Success Model

Sources: The DeLone and McLean Model of Information Systems Success: A Ten-Year Update (Journal of Management Information Systems, Volume 19 No 4 pp 9-30 2003)

Banking Information System (BIS) is a system specifically for the purposes of processing the data bank with the application of computer technology in both hardware and software. Demands the implementation of BIS in globalizes current era requires the use of information technology as a key condition to demonstrate the quality of the field and into capital something important in winning the competition. With the ability of communication between the individual with other individuals in different places (apart over long distances) are characteristic in the globalization era. Communication technologies being the main pillar in question are a computer, networking electronic technology, software, and operator. In accordance with current technological developments, development of banking information systems has led to the use of webbased information technology, where all the information is in the system can be displayed by using the internet.

Development objectives and the development of BIS among others:

- a. Efficiency of the media and the space used for data storage/archival banking. Efficiency includes reducing the amount of paper used for recording data banks, reduction of space to store paper.
- b. Improve the data management capabilities of banking. Management may include the completeness and detail of the data, data security, data confidentiality, methods of data entry and retrieval, and so on.
- c. Ensure the accuracy, correctness and appropriateness of the data
- d. Ease of management and use of data, the application specific BIS better and precise, the management of banking data can be very easily without putting aside the risk factor. In this way, the parties concerned and the authorities simply turn on the computer to the data, than use an existing BIS program to process the data.

Adequate BIS is expected to improve the quality of information and increase the value of information, so that common problems can be resolved quickly and accurately. For example, the problems of data duplication, inconsistency the data, credit analysis, transaction deposit transactions and so on. As described in the BI Regulation No. 2007 which reads 9/15/PBI information technology as a means of computer telecommunications related technologies and other electronic means are used in data processing and financial or banking services.

The regulations explicitly explained that the dependence of the banking organization particularly strong information technology notwithstanding the negative impact such dependence would seem too likely that issued the Regulation on the application of risk management the use of information technology by the commercial banks.

### 3. RESULT

Effect of Accounting Information Systems Quality Management, Management Accounting Information Quality, and Service Quality Information System Against Information Systems User Satisfaction.

The hypothesis to be tested is the influence of the quality of accounting information systems management, the quality of accounting information and management information systems service quality information system user satisfaction. Based on the research paradigm to test the second hypothesis formulated:

Endogenous	Exogenous Constructs			
Constructs	KSIAM	KIAM	KPSI	Error variance
KPPSI	$\gamma_{1.1}KSIAM$	γ <sub>1.2</sub> KIAM	γ <sub>1.3</sub> KPSI	+ ζ1

## Description:

KSIAM: Quality of management accounting information system

KIAM: Quality of management accounting information

KPSI : Quality of information systems servicesKPPSI : User satisfaction of information system

 $\zeta_1$ : Other factors influence the user satisfaction of information system

 $\gamma_{1.1}$ : Coefficient influence the quality of accounting information system management information system user satisfaction

 $\gamma_{1.2}$ : Effect coefficient accounting information quality management information system user satisfaction

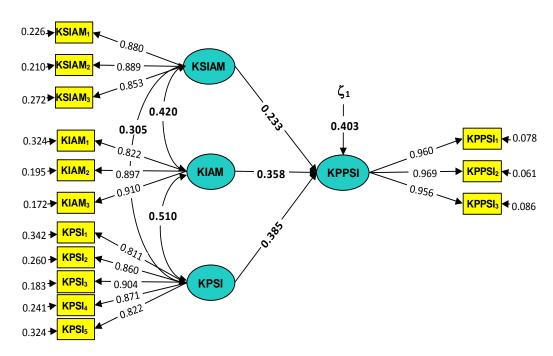
 $\gamma_{1.3}$ : Coefficient of impact of service quality on user satisfaction of information system information system

From the data processing software Smart PLS using structural equation as follows:

Endogenous Constructs	Exogenous Co	<u> </u>		
	KSIAM	KIAM	KPSI	Error variance
KPPSI	0,233 (2,013)	0,358 (2,704)	0,385 (2,749)	0,403

Note: Figures in brackets are the t-test statistic value.

Taken together these three exogenous variables (quality management accounting information systems, management accounting information quality and service quality information system) to contribute or influence by 59.7% of the user satisfaction of information on the banking system in the city of Bandung. Visually track diagram on the first hypothesis testing is described as follows. While the remaining 40, 3% are other factors beyond the three exogenous variable examined. The following diagram visually track:



There are further calculated the effect of each of the exogenous variables (quality management accounting information systems, management accounting information quality and service quality information system) information system user satisfaction.

Variables	Path coefficient	Direct influence	Indirect i	nfluence KIAM	through KPSI	Sub Total	Total
KSIAM	0.233	5.5%		3.5%	2.7%	6.2%	11.7%
KIAM	0.358	12.8%	3.5%		7.1%	10.6%	23.4%
KPSI	0.385	14.8%	2.7%	7.1%		9.8%	24.6%
Simultaneous influence						59.7%	

Among the three independent variables, the quality of information systems services provide the greatest impact on user satisfaction of information system, otherwise the variable quality of management accounting information systems provide the least impact to the system inform the user satisfaction the smallest of information on the banking system in Bandung.

Influence user satisfaction for information system decision-making process

The hypothesis to be tested is the influence of user satisfaction for information system decision-making process. Based on the research paradigm structure of the is formulated as follows:

Endogenous Constructs	Exogenous Constructs	Error variance
	KPPSI	
PPK	b <sub>2.1</sub> KPPSI	+ ζ <sub>2</sub>

Description:

KPPSI: User satisfaction of information system

PPK : Decision-making process

 $\zeta_2$ : Other factors influence the decision-making process

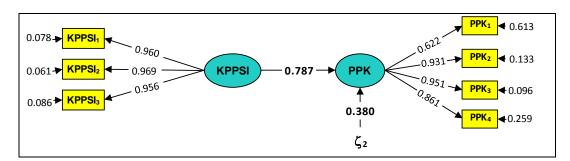
b<sub>2.1</sub>: Coefficient influence user satisfaction of information systems to the process of decision-making.

From the data processing software Smart PLS using structural equation as follows:

Endogenous	Exogenous Constructs	Error
Constructs	KPPSI	variance
PPK	0,787 (12,621)	0,380

Note: Figures in brackets are the t-test statistic value

Satisfaction of the use of information systems contribute to or influence for 62.0% of the decision-making process at the bank in the city of Bandung. While the remaining 38.0% is the influence of other factors beyond the satisfaction of the use of information systems.. Visually track diagram on testing the hypothesis is described as follows:



### 4. CONCLUSIONS

1. Quality of management accounting information systems, management accounting information quality, service quality of information systems simultaneously affect the user satisfaction of information systems in state-owned commercial banks in the city of Bandung. It shows that user satisfaction management accounting information system is highly dependent on information systems service quality. It shows that user satisfaction management accounting information system is highly dependent on information systems service quality.

2. User satisfaction management accounting information system affects the decision-making process at state-owned commercial banks in the city of Bandung, the magnitude of the effect by 62%.

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