

ANALYSIS OF THE RELATIONSHIP OF MANAGEMENT ACCOUNTING INFORMATION SYSTEMS, ACCOUNTING INFORMATION QUALITY AND SERVICE QUALITY

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Abstrak

This study uses a model of implementation success DeLone and McLean (2003). This study aims to examine the relationship between the quality of accounting information systems management, management accounting information quality and service quality.

The research method used is descriptive and explanatory survey verificative. The sampling technique used was simple random sampling at four public banks which exist in the city, these banks include: 1) Bank Rakyat Indonesia, 2) Bank Mandiri, 3) Bank Negara Indonesia, and 4) Bank Tabungan Negara. The number of respondents who collected a total of 42 respondents. Data was collected by distributing questionnaires conducted from December 2012 to late January 2013. Analysis of the data used was Partial Least Square with SPSS version 20.

The results reveal a strong relationship exists between the quality of accounting information systems management, information quality and service quality in public government-owned bank in the city of Bandung. Keywords: model of DeLone and McLean, accounting information systems management, information quality, service quality, user satisfaction

Keywords : management accounting information system, accounting information systems, service quality.

Introduction

Mandate of the Republic of Indonesia Law No. 11 Year 2008 on Information and Electronic Transactions said that Indonesia had been placed as part of the information society the world to achieve sustainable development of information technology where the technology has to be done optimally, diffused throughout society in order to educate the nation. Furthermore, the Board's decision letter No.27/164/KEP/DIR Bank Indonesia and Bank Indonesia Circular NO 27/9/UPB dated March 31, 1995 regarding the use of information systems by the banks, that the implementation of information technology systems submitted to each bank . Bank Indonesia only provide guidance so that in practice does not harm customers and the bank itself.

Kennith (2012:15) defines information systems as follows : *Information system can be defined technically as a set of interrelated components that collect (or retrieve), process, store and distribute information to support decision making and control in an organization.*

Developments in information technology allow the bank to use it to improve operational efficiency and quality of banking services to its 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, mobile phone.

In order to improve operational efficiency and quality of banking services to its customers, banks are required to develop a business strategy of the bank with more use of advanced information technologies to improve the competitiveness of the bank. The application of management accounting information system has brought changes in the operations and management of the data bank so that it can be done more efficiently and effectively, and deliver information more accurately and faster.

Article 8 of the Regulation of Bank Indonesia No.9/15/2007 stated that the bank is required to have policies and procedures for the use of information technology, the policies and procedures for the use of information technology at least include the following aspects: (a) management, (b) the development and procurement; (c) information technology operations, (d) communications network, (e) information security, (f) business continuity plan; (g) end user computing; (h) electronic banking, and (i) the use of information technology service providers.

Here are the cases relating to the use of technology:

- a. Mode of reading the last record. As was the case with one of the customers who use the bank's ATM machine. The workings of an ATM criminals are reading the last record of the last transaction using an ATM card blank that has the ability to read the record of the PIN, as if no accounts had cardholders to withdraw money respectively. This mode can be addressed through the management aspects of electronic banking is a way to reset the ATM cash machine so that the machine can not read another card.
- b. Service Internet Service Provider (ISP) using a modem connection, DSL, cable modem, wireless or leased line. ISP will connect users to the internet via 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 be 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 the use of information technology.

Identify the problem

Is there a relationship between the quality of accounting information systems management, information quality and service quality management accounting information systems.

Research Objectives

Getting clarity on the relationship between the quality of accounting information systems management, information quality and service quality management accounting information systems.

Theory

According to McLeod in his book entitled Management Information Systems (2001; p12) "information is processed the data or meaningful data"

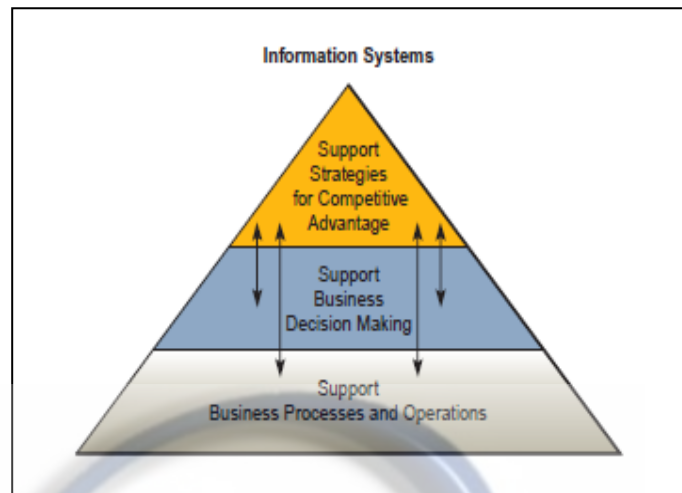
Meanwhile, according to O'Brien & Marakas (2008:327) quality of information grouped into three dimensions:

- 1) The dimension of time are: timeliness, currency, frequency, time period
- 2) Content dimension: accuracy, relevance, completeness, conciseness, scope, performance
- 3) Form dimensions: clarity, detail, order, presentation, media

According to Jogiyanto (1997) the quality of the information depends on three things:

- a) Information should be accurate (accurate), means that information should be free from mistakes and not biased or misleading. Accurate also means that the information must clearly reflect the intention.
- b) Information should be timely (timely basis) information coming at the receiver must not be late, because the information is the cornerstone in the decision making. When the decision was too late, it can be fatal in the organization.
- c) Relevant (relevance), means that information has benefits for the wearer. Relevant information for each person is different from one another.

Romney and Steinbart (2003) *A system is a set of two or more interrelated components that interact to achieve a goal. Systems are almost always composed of smaller subsystems, each performing a spesific function supportive of the larger systems.*



Source: O'Brien.

*"The three Fundamental roles of the business application in Information Systems".
Introduction to Information System, 15th edition. (2010,page 8)*

According to O'Brien, there are three basic reasons that a business organization using information technology, among others:

1. Support of business processes and operations.

Information technology to support business processes and operations, for example in the banking world, the use of information technology widely used for financial transactions, recording of employee salaries, credit analysis, and so on.

2. Support of decision making by employees and managers.

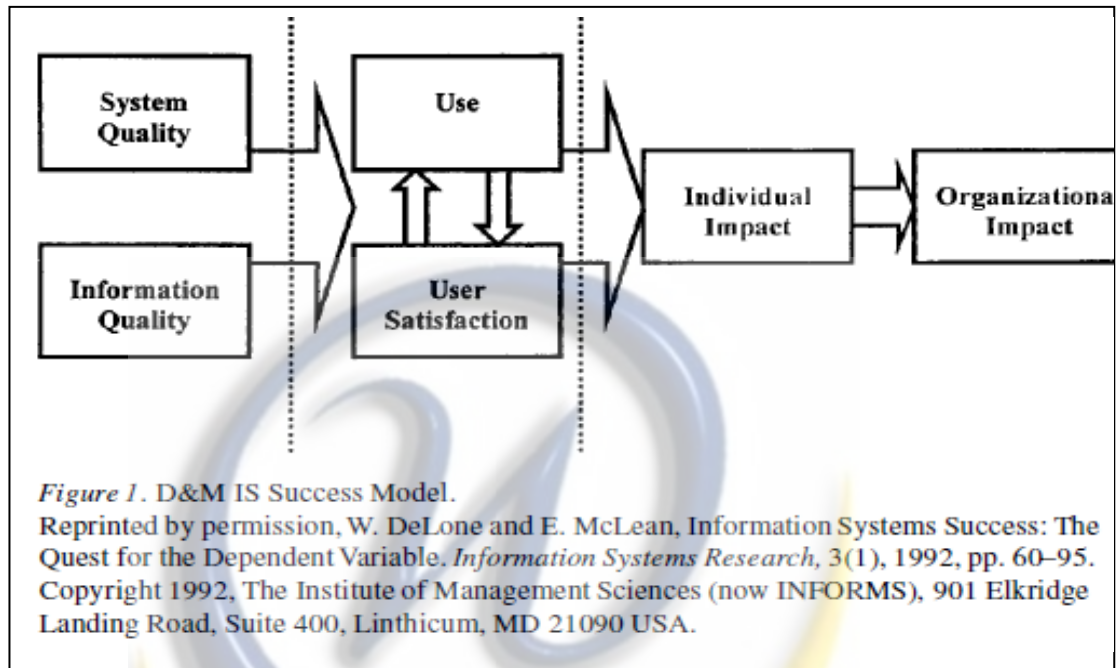
Information technology will also support decision making for both managerial and employee level. In addition to support decision-making, information technology can also provide the advantage of knowing our competitors.

3. Support of strategies for competitive advantage.

Information technology will support the company in its ability to retain loyal customers and will even add to the consumer. Due to the use of technology as well as can be used also for a promotional event products / services that we offer.

Compared to the model's success Laudon K.C. and Jane P. Laudon, DeLone-McLane models that can be a concern to the researchers. DeLone Model-McLane

has undergone several improvements, first appeared in 1992 models can be seen in Figure 1. The model has undergone improvements, namely in 2003.



Source :

**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)

Accounting Information Systems (AIS) is used to describe a system that processes data processing applications company. Data processing is done SIA, following a relatively standard procedure, detailed data handling, and mainly focuses on historical data. SIA helps solving problems through the standard reports generated mengihtisarkan company's financial condition and provide a large data base (Mc Leod and Schell, 2001). SIA also acts as a safety net assets of the company. With the element of control or checks in the accounting system, a variety

of fraud, irregularities and errors can be avoided or tracked so it can be repaired (Widjajanto, 2001).

Table : Operationalization of Variable

Variable	Concept Variable	Dimension	Indicator	Scale
Quality of Accounting Information Systems Management (X_1) Laudon & Laudon (2005); O'Brien & Marakas (2008); De Lone & Mc Lean (2003) (KSIAM)	Harmonious integration of the various components that support.	Organization (KSIAM ₁)	1. Organizational structure 2. Description of Duties 3. Coordination 4. procedure	Ordinal
		Manajemen (KSIAM ₂)	1. Plan 2. Organizing 3. Leadership 4. Control	Ordinal
		Technology (KSIAM ₃)	1. Software Quality 2. Adequacy of the database 3. Conformity software	Ordinal
Information Quality of Management Accounting (X_2) Brien & Marakas (2008); De Lone & Mc Lean (2003); Heni Nurani (2011) (KIAM)	The characteristics of the qualitative characteristics of information generated by the information system	Time (KIAM ₁)	1. Timely 2. Current 3. Available every needed 4. The time period 5. Characteristics of the qualitative 6. Characteristics of information 7. Generated by the information system	Ordinal
		Contents (KIAM ₂)	1. Relevant 2. Complete 3. Brief 4. Scope 5. Performance	Ordinal
		Format (KIAM ₃)	1. Clear 2. Details 3. Suitability form 4. form of presentation 5. Media considerable	Ordinal
Service Quality	Level of fit	Accuracy	1. Data that is	Ordinal

Information System (X ₃) Bentley&Whitten (2007); De Lone & Mc Lean (2003); Heni Nurani (2011) (KPSI)	between customers' expectations with their perceptions of the service performance information system	output System (KPSI ₁)	accurate 2. The process that is accurate 3. Accuracy of information	
		Ease of Use (KPSI ₂)	1. The system is easy to operate 2. The system is easy to learn	Ordinal
		Reliability (KPSI ₃)	1. In accordance with the requirements 2. Consistency between process and outcome	Ordinal
		Flexibility (KPSI ₄)	1. Flexible to the exclusion 2. Flexible to changes	Ordinal
		Coordination (KPSI ₅)	1. Integrated with other systems 2. Consistency with other systems	Ordinal

Result

The hypothesis to be tested is the relationship between the quality of accounting information systems management, information quality and service quality management accounting information systems. Visually diagram the relationship between the independent variables in testing the first hypothesis is described as follows.

0.226	KSIAM₁			
		0.880		
0.210	KSIAM₂	0.889	KSIAM	
		0.853		
0.272	KSIAM₃			0.420
0.324	KIAM₁	0.822		
0.195	KIAM₂	0.897	KIAM	0.305
		0.910		
0.172	KIAM₃			
0.342	KPSI₁			0.510
		0.811		
0.260	KPSI₂	0.860		
		0.904	KPSI	
0.183	KPSI₃	0.871		
		0.822		
0.241	KPSI₄			
0.324	KPSI₅			

The image above can be seen the correlation coefficient between the quality of accounting information systems management with quality management accounting information of 0.420 with a positive direction. This means that the quality of management accounting information system have a strong enough relationship with the quality of accounting information in the management of government-owned commercial bank in the city of Bandung. Then the coefficient of correlation between the quality of accounting information systems management with service quality information system at 0.305 with a positive direction. This means that the quality of management accounting information systems have a weak relationship with service quality of information on the banking system in the city of Bandung. Furthermore, the coefficient of correlation between the quality of accounting information management with service quality information system for 0.510 with a positive direction. This means that the quality of accounting information management has a strong relationship with quality of care information systems in public government-owned banks in the city of Bandung.

Table

**Test Result Management Accounting Information System Quality,
Information Quality and Service Quality Information System**

Relationship	Koef. Korelasi	t_{count}	t_{critical}	Ho	Ha
X1 → X2	0,428	2,927	1,96	rejected	be accepted
X1 → X3	0,305	2,025	1,96	rejected	be accepted
X2 → X3	0,510	3,750	1,96	rejected	be accepted

Based on the test results can be seen:

- a) T_{count} correlation of quality management accounting information system with accounting information quality management (2.927) greater than $t_{critical}$ (1.96). Because t_{count} greater than $t_{critical}$, then the error rate of 5% so it was decided to reject H_0 and H_a accepted. So based on the test results it can be concluded that the quality of management accounting information systems have a significant relationship with the quality of accounting information in the management of government-owned commercial bank in the city of Bandung.
- b) Correlation t_{count} quality of accounting information systems management with service quality information system (2.025) is greater than $t_{critical}$ (1.96). Because t_{count} greater than $t_{critical}$, then the error rate of 5% so it was decided to reject H_0 and H_a accepted. So based on the test results it can be concluded that the quality of management accounting information systems have a significant relationship with service quality information system in general banking public government-owned Bandung.
- c) T_{count} correlation accounting information quality management with service quality information system (3.750) is greater than $t_{critical}$ (1.96). Because t_{count} greater than $t_{critical}$, then the error rate of 5% so it was decided to reject H_0 H_a accepted. So based on the results of the test with a 95% confidence level was concluded that management accounting information quality has a significant relationship with service quality information system owned commercial banks in the city of Bandung.

Conclusion

Quality of management accounting information system have a strong enough relationship with the quality of accounting information management, while the quality of accounting information systems management has a weak relationship with quality of care information systems and quality management accounting information has a strong relationship with quality of care information on the banking system's general government in the city of Bandung.

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