

The Influence of Information Quality and Information System Quality of Regional Assets on User Satisfaction at the Provincial Government of South Sumatera

Kartika Rachma Sari^{1,*} Zainal Arifin¹ Desi Indriasari¹ Choiruddin¹

¹ Politeknik Negeri Sriwijaya

*Corresponding author. Email: kartikasyahrul@yahoo.co.id

ABSTRACT

The Regional Assets Information System application program is used to carry out the process of managing Regional Assets in a computerized manner which aims to harmonize the implementation of Regional Assets Management policies in accordance with applicable regulations. In this study, the influence of information quality and information system quality of Regional Assets Information System on user satisfaction at the Provincial Government of South Sumatera was analyzed. Data collection is conducted using questionnaire. Variable that used in this research are Information Quality, System Quality and User Satisfaction. Data analysis is conducted using Descriptive Statistic and Multiple Regression Analysis. The results showed that the system quality (X1) and the information quality (X2) have an effect either simultaneously or partially on user satisfaction of The Regional Assets Information System application program.

Keywords: *Information Quality, System Quality, User Satisfaction, Regional Assets Information System.*

1. INTRODUCTION

Regional asset is an asset of the Regional Government that must be managed properly to increase the efficiency and effectiveness of the implementation of government performance. Regional assets must be managed with the principles of effective, efficient, professional and modern by promoting good governance so as to increase public confidence in regional financial management.

In the decision making process, information is very important. For this reason, an integrated information system is needed to process data and present information on regional assets quickly, precisely and accurately. The application of an accounting information system for local governments is regulated by Government Regulation Number 56 of 2005.

The Financial and Development Supervisory Agency (BPKP) through The Information System Application's Team at the Deputy for Supervision of Regional Financial Administration has developed A Regional Assets Information System. This application is an application program that is used to carry out the management process of Regional Asset in a computerized manner which aims to harmonize the implementation of Regional Property management

policies in accordance with applicable regulations. The Regional Property Information System is expected to be able to support the achievement of local government accountability at the level of the Regional Financial Management Work Unit.

System quality is a characteristic of inherent information about the system itself, where system quality refers to how well the hardware, software, and procedural policies of the information system can provide information on user needs (Delone and McLean, 1992). The purpose of implementing the Regional Assets Information System made by the Financial and Development Supervisory Agency (BPKP) aims to assist local governments in managing local government assets.

The quality of an information system is a very important element, because if the information system used is qualified, then the personnel of the information system user will be satisfied. Information systems should be designed appropriately to meet user needs so as to create user satisfaction. From the research of Istianingsih (2009), it provides empirical evidence that the quality of information systems has a positive and significant effect on user satisfaction. Based on the

results of these tests, they concluded that there was a positive relationship between system quality and user satisfaction. From the description above, it can be proposed a hypothesis that the quality of Regional Asset Information System has a positive effect on user satisfaction.

Information quality is "the degree to which information has content, form, and time characteristics, which give it value for certain end users" (O'Briens, 2005: 703). A system from the use of Information Technology must be able to provide information to support decision making in a company/organization. Therefore, it all depends on the quality of information produced. In his testing, Seddon (1997) found that there is a positive relationship between the Quality system and User Satisfaction. From the description above, a hypothesis can be proposed, namely the quality of The Regional Assets Information System positively affects user satisfaction.

Generally, user satisfaction is a measure of the success of information systems. User satisfaction reflects how far users believe in an information system provided to meet their information needs, or user satisfaction describes how users perceive information systems in real (Guimaraes, et al., (2003)). Although information system user satisfaction is not economical and cannot be directly linked, user satisfaction can be measured and compared over time.

Research conducted by Molla and Licker (2001) shows that the quality of a computerized e-commerce system has an effect on user satisfaction. The results of this study are reinforced by the revision of research conducted by DeLone and McLean (2003) which also shows that system quality affects user satisfaction. If users of information systems believe that the quality of the system and the quality of information generated from the system used is good, they will feel satisfied using the system (Istianingsih and Wijanto, 2008).

DeLone and McLean (2003) stated that Reliability, ease of use, flexibility, and functionality are measures of system quality. Research conducted by Supriatna and Jin (2006) also used the variables of reliability, ease of use, and flexibility as variables which they considered affect user satisfaction. The same thing was done by Illias et al., (2007) in their research, system reliability and ease of use are variables that affect user satisfaction at the responsibility center in the government sector in Labuan, Malaysia. Meanwhile, Olsina et al., (2008) considered functionality as one of the characteristics of quality attributes for academic websites.

According to Janson and Subramanian (1996), the problem that usually occurs in a computerized information system is that the system is incompatible with the business processes and information needed by the organization. Disturbing technical difficulties in

software, interfacing problems in the system, and difficulties in hardware can frustrate users and reduce user satisfaction (Istianingsih and Wijanto, 2008).

System quality focuses on the interaction between the user and the system. According to Nelson et al. (2005: 26) "Several dimensions to measure system quality include system reliability, system flexibility, system integration, system accessibility, and system response time". Information system users certainly hope that using information systems will get the information they want. The good and bad performance of an Information System can be seen through the satisfaction of the Information System user itself.

In order to provide quality and useful information, to maintain government assets, to provide reliable, relevant, and timely financial reports that will be used as part of the assessment of financial performance and operational performance of a government organization. Application of the Regional Assets Information System is one of the determinants of user satisfaction with the information system which ultimately increases the loyalty of users in the use of the information system.

2. LITERATURE REVIEW

2.1. User Satisfaction

In system implementation, user satisfaction is one measure of success (Jawad & Reeves, 1997). Satisfaction can be interpreted as a condition in a person or group of people who have succeeded in getting something they need and want (Sutardji and Maulidyah, 2006). While Kotler (2002: 42) provided a definition that satisfaction is the feeling of pleasure or disappointment of a person which arises after comparing his perceptions/impressions of the performance (or results) of a product and his expectations. End users can be defined as the final or end users of something that is intended (Bergensen, 2008). If users are not satisfied with an information system, it is difficult to consider the success of an information system (Zviran et al, 2005). If the results obtained exceed expectations, of course the user will feel very satisfied (Bergensen, 2008).

2.2. Information System

Laudon and Laudon (2000: 9) stated that an information system can technically be defined as a series of interconnected components to collect (obtain), process, store, and distribute information to support decision making and supervision in the organization.

There are eight components of the information system, Krismiaji (2002: 16). the eight components are:

1. Objectives, each information system is designed to achieve one or more goals that provide direction for the system as a whole.

2. Input, data must be collected and entered as input into the system. Most of the inputs are transaction data.
3. Output, the information produced by a system is called output. The output from a system that is put back into the system as input is called feedback.
4. Data storage, data is often stored for future use again. The data stored here must be updated to keep the data up to date.
5. Processing, data must be processed to produce information using processing components. Currently, most companies process their data using computers, so that information can be generated quickly and accurately.
6. Instructions and procedures, information systems cannot process data to produce information without detailed instructions and procedures. Computer software (program) is made to instruct the computer to process data. Instructions and procedures for computer users are usually summarized in a book called a procedure manual.
7. Users, people who interact with the system and use the information generated by the system are called users. In the company, the definition of a user includes employees who carry out
8. Security and supervision, the information generated by an information system must be accurate, free from various errors, and protected from unauthorized access. In order to achieve such information quality, a security and control system must be established and attached to the system.

2.3. Information System Quality

The definition of quality that is most often mentioned is that quality is the ability to achieve goals and adjust the needs of users and customers (Poll, 2008). Needs and characteristics play an important role in defining a quality (Yuadi, 2008). Each user differs from each other in understanding, feeling, and judging what quality is. The concept of quality is defined by experts from various points of view. In the information system success model proposed by DeLone and McLean (2003) states that system quality is a measure of technical success, information quality is a measure of semantic success, user satisfaction describes the influence of individuals and organizations which is a measure of the effectiveness of success.

2.4. Information Quality

Information quality is the degree to which information has content, form, and time characteristics, which give it value for certain end users (O'Brien, 2005). Information quality is the quality of output in the

form of information produced by the information system used (Rai et al., 2002). Liu and Arnett (2000) state that the best quality information will increase the perceived usefulness of users and increase the use of information systems. The quality of information can also be seen with the potential to produce unlimited information both within the organization and outside the organization (Barnes et al., 2003).

3. METHOD

This research was conducted using two types of research, namely descriptive research and verification. Descriptive research is research with the aim of obtaining a description of the conditions of the research variables. Verification research aims to test the correctness of a hypothesis by collecting data in the field. In this study, the hypothesis to be tested is the Quality of Information and Quality of Information Systems in the Application of Regional Assets Program on User Satisfaction in the government of South Sumatra Province.

This research tried to analyze the influence of The Information Quality and information System Quality of Regional Assets on User Satisfaction at Regional Work Units in the Government of South Sumatra Province. This evaluation was carried out based on the user's satisfaction criterion expressed in De Lone and McLean's model. Research population included administration officials for user assets, assets administrators and assistant in charge of assets in Regional Work Units in the Government of South Sumatra Province. 42 questionnaires have been distributed to them to collect data.

The study data were collected using a self-designed questionnaire developed based on the users' satisfaction criterion following DeLone and McLean's model. The collected data were put into the SPSS software 20 version.

To analyze the data gathered by the measuring instruments and transform the qualitative responses into the quantitative ones, the item-weighting method was used. Evaluating the respondents' views was done using 5-point Likert scale. Finally, the mean scores gained for the criteria in question were calculated using Multiple regression analysis. The use of this analysis aims to see the effect of information quality and information system quality on user satisfaction. The equation model is as follows:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + e$$

Y = User satisfaction

a = Constants

X₁ = Information Quality

$X2 = \text{Information System Quality}$

$e = \text{error}$

4. RESULT AND DISCUSSION

The results of data processing by using SPSS v.20 software can be made multiple linear regression models. several steps were taken to look for the influence between the independent variable and the dependent variable, through the influence of information quality (X1) and information system quality (X2) on user satisfaction (Y). The regression results can be seen below

$$Y = 1,661 + 0,149 X1 + 0,441 X2 + e$$

$Y = \text{user satisfaction}$

$a = \text{Constants}$

$X1 = \text{Information Quality}$

$X2 = \text{Information System Quality}$

$e = \text{error}$

It can be seen from the equation that information quality (X1) and information system quality (X2) both have a significant effect on user satisfaction (Y). The interpretations of the equation are:

1) Constant = 1,661

A constant value of 1,661 shows the value of user satisfaction if there are no system quality and information quality variables, or the value of the two variables is zero.

2) $b1 = 0.149$

The $b1$ coefficient value of 0.149 indicates that the influence of the information quality variable on user satisfaction will increase by 0.149 with the assumption that the other independent variables are constant.

3) $b2 = 0.441$

The $b2$ coefficient value of 0.441 shows that the influence of the information system quality variable on user satisfaction will increase by 0.441, assuming the other independent variables are constant. The influence of the information system quality variable on user satisfaction is said to be significant because the probability is smaller than α . ($0.035 < 0,05$)

The correlation coefficient between variables $X1$, and $X2$ is on table 1

Table 1. Summary Model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,552 (a)	,304	,253	,26859

1	,552 (a)	,304	,253	,26859
---	-------------	------	------	--------

Based on table 1, the correlation coefficient between variables $X1$ and $X2$ to Y is 0.552. This means that the degree of relationship strength is quite high. While the determination coefficient is obtained by R square value of 0.304 or 30.4%. This means that in this case User satisfaction can be explained by the variables $X1$ and $X2$. The remaining 0.696 or 69,6% is explained by other factors not examined in this study.

This research Analysis tested two hypothesis which are, namely:

H1 : Information Quality has a positive effect on user satisfaction at the provincial Government of South Sumatra.

H2 : Information System Quality has a positive effect on user satisfaction at the provincial Government of South Sumatra.

The test results of Information Quality has a positive effect on user satisfaction at the provincial Government of South Sumatra. Information quality is the degree to which information has content, form, and time characteristics, which give it value for certain end users. Thus the the Information Quality of assets influences user satisfaction of administration officials for user assets, assets administrators and assistant in charge of assets Regional Work Units in the Government of South Sumatra.

The test results of the Information System Quality variable has an effect on user satisfaction can be proved, because it has a significance level less than 0.05 that is equal to 0.015. Thus the the Information System Quality of assets influences user satisfaction of administration officials for user assets, assets administrators and assistant in charge of assets at the provincial Government of South Sumatra.

Information system quality included reliability, ease of use, response time and flexibility has an effect on user satisfaction. The user of system application must Filling in Inventory Card for asset A, B, C, D and F and Making a Report on the User's assets continuously. They had to be made manually before, but now using the application of regional asset information system, it becomes easier, so that for the user, the Information System of assets application provides convenience for them in administering the management of regional asset. Thus the information system of regional asset application will influence the attitude of respondents to their satisfaction can provide data quickly and can be used at any time to meet their needs

4. CONCLUSION

The purpose of this study is to explore the influence of The Information Quality and information System Quality of Regional Assets on User Satisfaction at the provincial Government of South Sumatra. Based on the results of these studies, it can be concluded as follows:

1) Information Quality has positive effect on User Satisfaction at the provincial Government of South Sumatra. 2) Information system Quality has positive effect on User Satisfaction at the provincial Government of South Sumatra. Information System quality has a strong influence on the optimization of User Satisfaction has positive effect on User Satisfaction at the provincial Government of South Sumatra.

Variables Information Quality and Information System Quality is able to explain variable User Satisfaction equal to 30,4 % while 69,6% is explained by other variable.

REFERENCES

- [1] Alavi, M., and Gallupe, R.B. (2003) Using Information Technologi in Learning: Case Studies in Business and Management Education Programs. *Academic of Management Learning and Education*, 2(2), 139-153.
- [2] Arikunto, Suharsimi (2006) *Prosedur Penelitian Suatu Pendekatan Praktik*. Edisi Revisi VI. Jakarta: Rineka Cipta
- [3] Basuki, Harsono dan Edi Abdurrachman (2001) Analisis Peranan Perangkat Lunak Komputer Bersifat Open Source (Linux) Bagi Efisiensi dan Efektifitas Pemanfaatan Teknologi Informasi. Universitas Bina Nusantara, *Laporan Teknis*.
- [4] Bergensen, Bard M. (2008) User Satisfaction and Influencing Issue. *Artikel*. www.iu.hio.no/~frodes/rm/bard.pdf
- [5] Brookes, M.(2003). Higher Education: Marketing in A Quasi-Commercial Service Industry. *International Journal of Nonprofit and Voluntary Sector Marketing*, 8(2), 134-142.
- [6] Chadhar, M. A. dan Nasrin Rahmati. (2004) Impact Of National Culture On ERP Systems Success. *Proceedings of The Second Australian Undergraduate Students Computing Conference*. pp. 23 – 31
- [7] DeLone, W. H. dan Ephraim R. McLean (2003) The DeLone and McLean Model of Information Systems Success: A Ten – Year Update. *Journal of Management Information Systems/Spring* vol. 19. No. 4, pp. 9 – 30.
- [8] Istianingsih dan Setyo H. Wijanto (2008) Pengaruh Kualitas Sistem Informasi, Perceived Usefulness, dan Kualitas Informasi Terhadap Kepuasan Pengguna Akhir Software Akuntansi. *Symposium Nasional Akuntansi XI*. Pontianak: 23 – 25 Juli 2008
- [9] Janson, M. A., dan Subramanian, A. (1996) Packaged software: Selection and Implementation Policies. *INFOR*, 34(2), 133-151.
- [10] Jawad, A. Q., and R. Reeves.1997. Successful Acquisition of IT Systems. *Working Paper*.
- [11] Krismiaji (2002). *Sistem Informasi Akuntansi*. Yogyakarta: UPP AMP YKPN.
- [12] Laudon, Kenneth C., dan Jane P. Laudon (2000). Organization and Technology in The Networked Enterprise. *Management Information System*, Six Edition, International Edition. www.prenhall.com/laudon.
- [13] Molla, A., dan Paul S. Licker (2001). E Commerce Systems Success: An Attempt To Extend And Respecify The DeLone and MacLean Model of IS Success. *Journal of Electronic Commerce Research*, Vol. 2, No.40
- [14] Olsina, L., D. Godoy., G. J. Lafuente. dan G. Rossi (2008) "Specifying Quality Characteristics And Attributes For Website". www.gidis.ing.un/pam.eduar/downloads/pdfs/olsina_web-e.pdf
- [15] Rai, A., Sandra S. Lang dan Robert B. Welker (2002) Assessing the validity of IS success models: An empirical test and theoretical analysis. *Information Systems Research*, 13, 1, 50–69.