

SAKTI Application System and Information Quality Impact on the Performance of Finance Employees

Dinar¹, Haliah², Andi Kusumawati³, Nirwana⁴

¹⁾ Accounting Department of Fajar University Makassar-Indonesia

^{2,3,4)} Accounting Department of Hasanuddin University Makassar - Indonesia

Abstract:- The purpose of this study is to evaluate SAKTI application system and information quality impact on the performance of finance employees within the scope of the Communication and Information Technology (Kominfo) in South Sulawesi province. DeLone and McLean's information system model was applied in the study. The questionnaire survey was randomly distributed to all finance departments under the Kominfo South Sulawesi provincial, with a total sample processed by 30 respondents using the SPSS application version 25.

The results of multiple linear regression analysis show that the quality of the SAKTI application system does not affect the performance of financial department employees. In contrast, the quality of SAKTI application information affects the performance of financial department employees. The practical implication for SAKTI application developers is that the results of system quality have no effect due to the low indicator of user convenience (Easy to Use). Therefore, a response to user responses is needed for easier SAKTI application development.

Keywords:- System Quality; Information Quality; Individual Performance; Emloyees; Delone End Mclean Model.

I. INTRODUCTION

The Ministry of Finance of the Republic of Indonesia has been working to develop an information system since 2004. One of the information systems developed is using applications by central government work units to organize their activities, especially activities related to state financial governance. Various state financial management applications were used including:

- Budget Work Plan of the Ministry of Budget (RKA-K/L), the application used by satker in preparing budget proposals and activities.
- DIPA (Budget Implementation List), an application used by the task force, regional offices, and the Directorate General of Budget (DJA) to compile, certify, and revise DIPA.
- SPM (Letter of Payment), an application used by satkers to create invoices for the State Treasury Service Office. It is currently known as the Satker Application System (SAS).
- Accrual-Based Agency Accounting System (SAIBA), an application used by satkers to report on budget implementation and a reconciliation tool with KPPN, formerly known as SAKPA.

- The application used by the security guard to monitor and report state assets is the Management and Accounting Information System for State Property (SIMAK-BMN).
- Inventory, a program used by security guards to manage inventory or consumables (State Treasury Service Office, 2013).

Each of the applications mentioned above is unique and has its own database, but input and output data interactions are linked. Thus, some obstacles include the possibility of errors when processing repeated data entries in different applications to record accounting transactions of the same value. In addition, because the application above is offline, it can only be accessed from a computer that has the application installed. This results in information users (operators and collectors) needing help to adjust budgets in real-time.

In order to align the applications used by the task force, the previous application was developed into a single system that is integrity with a centralized database, based online, and can connect to SPAN. Thus, at the end of 2015, the central government launched an integrated application system developed by the Directorate General of Treasury (DJPB) of the Ministry of Finance, which manages the State Budget (APBN), known as the Agency-Level Financial Application System (SAKTI). Until this research was carried out, the SAKTI application consisted of a budgeting module, commitment module, payment module, treasurer module, fixed asset module, accounting module, and reporting module (Kemenkeu, 2021).

However, the implementation of the latest SAKTI application still found some problems related to complicated application features (un simplicity) because it was considered too sophisticated, unstable internet signal, unable to display reports in full, lack of technical training, lack of communication between admins and operators, both central and regional and other problems (Nasrudin, 2017). The study of Amriani and Iskandar (2019) is also similar, even when piloting SAKTI Phase III stated that the implementation of the SAKTI application in the BPPK environment had been empirically proven to be unsuccessful. Thus, some parties believe that efforts in developing the SAKTI application are expected to contribute to overall performance improvement for users and the organization. However, more than this belief is needed due to the lack of data support from the study. This underlies our anxiety about whether the implementation of SAKTI can improve users' performance, especially employees as operators. Performance refers to how well employees perform their duties relative to their responsibilities.

Users of information systems should be considered since there are significant contradictions with previous research. For example, Keristin and Linda (2018) researched how the quality of information systems affects the performance of employees in a company. The conclusion of his research that employee performance is influenced by the quality of accounting information systems is in line with the research of At-Tamimi and Siregar (2021), Harnowo and Santoso (2021) and Hadi (2022). However, according to Hidayat and Saleh (2017), and Amriani and Iskandar (2019), the system's quality has no effect on employee performance. Meanwhile, related to information quality variables managed to affect employee performance according to Hidayat and Saleh (2017), Keristin and Linda (2018), At-Tamini and Siregar (2021), Harnowo and Santoso (2021), and Hadi (2022). In contrast to the research of Amriani and Iskandar 2019 and Iskandar and Amriani (2021).

Therefore, research is needed to measure the quality of information systems on employee performance. This study selected the finance department in the Communication and Information Technology Service (Kominfo) of South Sulawesi province as a random sample as one of the SAKTI user agencies. This study was conducted to evaluate the SAKTI information system that can improve the performance of users or employees to enable the management of reporting in the South Sulawesi Communication and Information Technology in line with the development goals of the SAKTI Application.

Based on this, the researcher wants to ensure: 1) Is there any influence between the quality of the SAKTI application system on the performance of employees of the finance department of the South Sulawesi Communication and Information Technology? 2) Is there any influence on the quality of SAKTI application information on the performance of the finance department of Kominfo South Sulawesi?

Thus, to answer the questions and objectives of this study, we used information system performance measurements from DeLone and McLean (1992). So that the next section of this article consists of a literature review, hypothesis development, discussion of analysis results, and research conclusions.

II. LITERATURE REVIEW

A. System

Romney and Steinbart (2017) define a system of interconnected parts as two or more components to achieve a goal. A system is a collection of smaller component systems that support a larger system. These smaller component systems are often referred to as subsystems. Mulyadi (2018) and Krismiaji (2015) define a system as a group of people working together to achieve a goal.

System quality is valued by DeLone and McLean (1992) as a measure of information processing system performance. Technically, quality system measurement is more focused on measuring system performance. Users will anticipate an easy-to-use system that will help them complete tasks and save time.

A high-quality system will meet the criteria of dependency, accessibility, flexibility, and integration (Wibowo et al., 2018). System quality requires indicators that measure the level of quality that the system uses. Since the system's quality cannot be measured directly, an indicator is needed. The following indicators can be used to assess the quality of the system:

➤ *Easy to Use*

A quality information system is intended to guarantee user satisfaction in terms of using the system, which impacts the user's ability to carry out their work.

➤ *Response Time*

If access to the information system is as fast as possible, it can be assumed that the information system used is of high quality. Access speed increases user satisfaction with information systems to improve individual performance and influence organizations or agencies.

➤ *System Reliability*

A high-quality information system is a reliable system. If the information system is reliable, then it can be used. The resilience of the information system to malfunctions and errors becomes the mainstay of the information system in this arrangement.

➤ *System Flexibility*

The flexibility of the information system indicates that the information system is of high quality. The ability of information systems to adapt to user needs is referred to as flexibility.

➤ *Security*

A good information system has a strong security system. The security of this system is understood that user data being securely stored by the information system. User data must be kept confidential and stored in an information system that cannot be accessed by other parties freely.

B. Information

According to Kristanto (2018), information is data that has been transformed into a form that is more beneficial to the person who receives it. Without information, the system will not work properly and may die. According to Romney and Steinbart (2017), Data that is managed to provide meaning and improve decision making is referred to as information.

DeLone and McLean (1992) define information reliability as a measure of the output of an information system. According to a study, good decision making requires good knowledge (Nelson et al., 2005). Both of these researchers' statements suggest that a quality information system is needed to make quality decisions.

Al-Mamary et al. (2014) established that there are four (four) dimensions to measure the quality of information, namely:

➤ *Accurate*

Accuracy is defined as the correctness of information in relation to reality. Information should be free from inaccuracies and should not be misleading. Accurate information should clearly reflect the objectives. Because there may be a lot of noise between the source of information and the recipient of the information, the information must be correct.

➤ *Completeness*

The extent to which all statements relevant to the user population are mentioned in the stored information is referred to as completeness.

➤ *Relevance*

Users or users will benefit from this knowledge. The importance of information varies from individual to person.

C. Employee Performance

The performance of an employee is defined as the reliability and amount of work completed in accordance with his responsibilities (Mangkunegara, 2018). The results of a person's hard work can be used to assess his performance, which is a combination of skill, effort, and opportunity. The success or failure of organizational goals is determined by the performance of employees. As a result, in this study, employee performance can be read as the result of the company's efforts with actual behavior.

According to Emron (2017), performance is "the result of a related process measured over time according to predetermined conditions or agreements." Individual performance is defined by Simanjuntak (2005) as "The effort or result of one's work resulting from targets that must be achieved or carried out within a certain period of time."

Mangkunegara (2018) performance appraisal is defined as a systematic process of employee evaluation by the company's management, the work is given by the employee". The direct employee supervisor and the indirect supervisor are the leaders of the company who evaluate the performance of employees. Therefore, organizations or agencies always conduct employee performance assessments to find out employee performance throughout the specified time period.

According to Mangkunegara (2018), there are several indicators to assess employee performance, namely:

➤ *Reliability of Work*

Work activity refers to how well an employee performs the work for which he or she is duty.

➤ *Workload (Quantity)*

Quantity of work is how quickly the employee completes the work assigned to him.

➤ *Performance of Duties*

The extent to which the task is carried out by an employee in carrying out his responsibilities and how carefully he performs the task so that no mistakes occur.

➤ *Responsibility*

Responsibility is the ability of employees to work quickly without making mistakes.

III. HYPOTHESIS DEVELOPMENT

This research investigates the theoretical relationship between system quality and information quality and its impact on people or users. DeLone and McLean (1992) developed the DeLone and McLean information system success model by developing the Parsimoni model (complete but simple) (D&M IS Success Model).

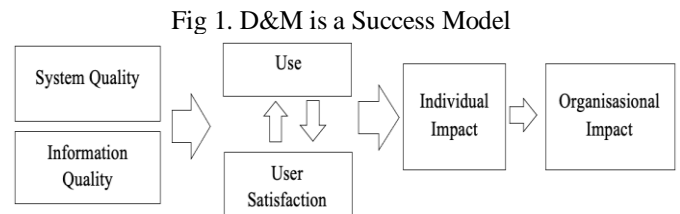


Fig 1. D&M is a Success Model

Source: DeLone and McLean (1992) in Jogiyanto (2007)

This model shows the relationship between six indicators of the success of information systems that affect individuals and even companies or agencies. It can be explained that both the quality of information and the quality of the system have an impact on the use and satisfaction of users, both independently and together. Usage volume may have a good or negative impact on User Satisfaction goals. Individual Impact is influenced by User Use and Satisfaction, which further affects Organizational Impact. A paradigm can be formulated based on the above framework:

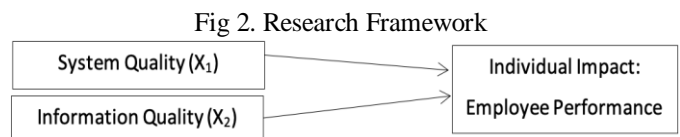


Fig 2. Research Framework

Source: Data processed (2022)

A. Research Hypothesis

System quality refers to the quality of the combination of information system hardware and software (DeLone & McLean, 1992); it can be said that the reliability of the system and the quality of the system output provided make users feel afraid to use it. This will increase the use of the system.

Keristin and Linda (2018), conducted a study on the direct relationship between system quality and employee performance and found that the quality of employee performance has a significant effect on accounting information systems. The following hypotheses are presented in the study based on the previous description, namely:

H1: The quality of the SAKTI application system has a significant effect on the performance of finance employees

The definition of information quality is a measure of system output (DeLone and McLean 1992; 2003). According to O'Brien (2011), quality information is more accurate, up-to-date and easily adapts to management as complete

information. According to the above definition, the quality of information output produced by the information system is referred to as the quality of information. User ratings about the usefulness or importance of information govern the quality of information.

Information users play an essential role in the development of the company or agency. User information can help to improve the performance of information systems. Good information system performance if the user can understand, use, and apply technology to turn it into valuable information for decision making, allowing the achievement of the goals of the company or institution and the performance of individuals can be correctly measured.

Al Amin (2014) conducted a study on the relationship of information on employee performance and found that it had an effect. This research is supported by the findings of Hidayat and Saleh (2017), who found that the quality of information affects employee performance. The presented theory is based on this description:

H2: The quality of information on the SAKTI application has a significant effect on the performance of employees in the finance department

IV. METHODOLOGY

This study examines the system and quality of SAKTI application information and employee performance in the finance department. The relationship between two or more variables was determined using quantitative methods in this study. In this study, the following variables were used as free variables: system quality (X1) and information quality (X2), while employee performance (Y) was determined as variable. Information from respondents is collected through questionnaires with questions or statements sent to respondents using quantitative research methods with a survey approach.

This research was conducted at the Ministry of Communication and Informatics of South Sulawesi province, an agency that operates to provide communication and information technology services for the community. The population of this study was all employees who used SAKTI in all work units (Satker) under the South Sulawesi Communication and Information Technology. The sampling technique uses a *random sampling* method from representatives of the Communication and Information Service of South Sulawesi province. Respondents were asked to answer questions from questionnaires distributed through the google form application.

V. RESULTS AND DISCUSSION

Table 1. Validity Test Results

Variable	Items	R Count	R Table	Information
System Quality	KS 1	0,961	0,361	Valid
	KS 2	0,291	0,361	Invalid
	KS 3	0,880	0,361	Valid
	KS 4	0,961	0,361	Valid
	KS 5	0,898	0,361	Valid
	KS 6	0,738	0,361	Valid
	KS 7	0,887	0,361	Valid
	KS 8	0,554	0,361	Valid
	KS 9	0,874	0,361	Valid
	KS 10	0,912	0,361	Valid
Information Quality	KI 1	0,950	0,361	Valid
	KI 2	0,894	0,361	Valid
	KI 3	0,830	0,361	Valid
	KI 4	0,933	0,361	Valid
	KI 5	0,933	0,361	Valid
	KI 6	0,379	0,361	Valid
Employee Performance	KP 1	0,904	0,361	Valid
	KP 2	0,583	0,361	Valid
	KP 3	0,938	0,361	Valid
	KP 4	0,903	0,361	Valid
	KP 5	0,859	0,361	Valid
	KP 6	0,904	0,361	Valid
	KP 7	0,938	0,361	Valid

Source: Data processed (2022)

Based on table 1, there are 9 (nine) statements from the questionnaire that have been tested on the system quality variable declared valid because it has a positive correlation coefficient value greater than 0.361. The correlation coefficient for item system quality (KS 2) is negative and less than 0.361. Meanwhile, 6 (six) statements from the questionnaire were tested and declared valid on the information quality variable. There were 7 (seven) statements from the questionnaire that were tested were declared valid for employee performance variables.

A trustworthy assessment is an assessment of a person's response to a statement remaining consistent or stable over time. A variable is said to be reliable if Cronbach's alpha is greater than or equal to 0.70. Table 2 shows Cronbach's alpha greater than 0.70 so it is inferred to be reliable and reliable.

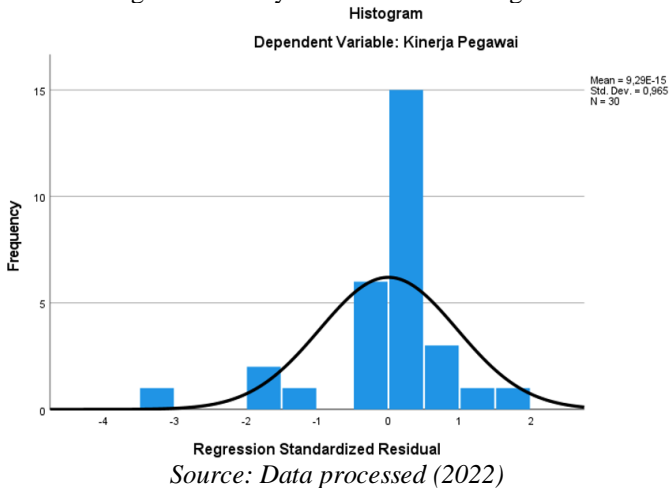
Table 2. Reliability Test Results

No	Variable	Cronbach' Alpha	Information
1	System Quality	0,865	Reliable
2	Information Quality	0,914	Very Reliable
3	Employee Performance	0,945	Very Reliable

Source: Primary Data Processing Results (2022)

Figure 3 shows the presence of normal distributed data because the graph model is normal, where the significant level is > 0.05.

Fig 3. Normality Test Results – Histogram



The RSquare value of 0.956 or 95.6% in table 3 shows that system quality (X1) and information quality (X2) have a simultaneous effect on the employee performance variable (Y) by 95.6%, and the remaining 4.4% is influenced by other variables.

Table 3 Coefficient of Determination Test Results (R²)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,978 ^a	,956	,953	,58664

1. Predictors: (Constant), Information Quality, System Quality

Source: Data processed (2022)

Table 6. Multiple Linear Regression Test Results

Type		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2,102	1,645		1,278	,212
	System Quality	,244	,124	,276	1,963	,060
	Information Quality	,861	,170	,710	5,052	<,001

1. Dependent Variable: Employee Performance

Source: Data processed (2022)

The results of the Multiple Linear Regression Test in the table above explain the research results as follows:

A. The Effect of System Quality on Employee Performance

Employee performance is not affected by the quality of the system. The results of the t test (partial) system quality variable (X1) on employee performance (Y) using SPSS 25 showed that the calculation was 1.963. At the same time, the significance value is 0.60, greater than 0.05. As a result, the first hypothesis (H1) which did not contain a significant influence between variable X1 on variable Y and was empirically proven, was rejected.

As a result, this study did not find a relationship between the SAKTI system's quality and financial officers' performance in the South Sulawesi Communication and Information Technology. The findings of this study are in line

with the findings of Hidayat and Saleh (2017) who conducted research on the impact of marketing information systems on employee performance at PT. Hidayat and Saleh. CORE (Persero).

B. The Effect of Information Quality on Employee Performance

Employee performance is positively and significantly influenced by the reliability of information. Based on the analysis of SPSS 25, the results of the t-test (independent) of the information quality variable (X2) on employee performance (Y) resulted in a calculation of 5,052. The significance value of 0.01 is less than 0.05, and the value. Thus, the quality of information (X2) has a positive and significant effect on employee performance (Y). From the results of experimental testing, the second hypothesis (H2) was proven.

The quality of information about Kominfo South Sulawesi employee performance has a positive and significant effect. It provides relevant, understandable and sufficiently complete information to improve employee performance so that it can be used in financial reporting decision making. The better the operator's performance, the higher the quality of information produced by the information system (DeLone and McLean, 1992).

These results are in line with the results of Amin's research (2014), that the quality of information and the quality of information systems have an impact on user satisfaction and performance. This is also in accordance with the research conducted at PT. Nusa Mandiri Utama by Norina (2022), namely there is a positive and partial relationship between system quality, information quality, and service quality and user satisfaction and employee performance.

VI. CONCLUSION

The test results of the effect of the quality of the SAKTI system on the performance of employees of the finance department of the South Sulawesi Communication and Information Technology, the quality of the system does not affect employee performance. While the effect of sakti information quality on the performance of employees of the finance department of Kominfo South Sulawesi, the quality of information affects employee performance.

Based on the results of the study, the system quality variable did not affect the performance of confirmed users from respondents' responses regarding system quality, namely the low indicator of user satisfaction (*Easy to Use*) in using the SAKTI application. Respondents think that the SAKTI application is still difficult to use, because it lacks flexibility in changing or adjusting data that has already been inputted through the application. Thus, the contribution of this research for the SAKTI application development team is to consider the response from users, so that the presence of the SAKTI application can improve the performance of financial employees as system operators both from system quality and information quality. With maximum employee performance, it

is expected to be able to improve agency performance (Delon and McLean, 2003).

The limitations of this study, only using a relatively small sample, and limited to one agency that uses the SAKTI application. Subsequent research could use a larger sample count and a variety of agencies. Further studies can be expanded by adding service quality variables (Delon McLean, 2003) and testing the impact not only on individual (employee) performance, but also impact on organizational (agency) performance.

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