

The measurement of end-user computing satisfaction of the banjar accounting information system

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Abstract. User satisfaction is a tool to measure the success of a system. Banjar Accounting Information System is an application that was built to facilitate in managing the administrative activities of the banjar adat sibang fund management in Sangeh Village. With this information system, some activities that are usually carried out manually can be handled more quickly and efficiently. This accounting information system is expected to shorten the fund management time. This system includes managing incoming and outgoing funds, managing loans and payments, and reporting. The system can automatically provide recapitulation of the results needed. In its implementation, this system was built so that it can be easily to use. From these problems, an analysis was carried out to measure the user satisfaction. The measurement of user satisfaction in this study uses the EUCS (End User Computing Satisfaction) method. The dimensions of content, accuracy, and timelines have a satisfaction level that is satisfied, while the other two dimensions namely format and ease of use have a satisfaction level that is either satisfied nor dissatisfied. The format dimensions and ease of use require improvements in system design so that the output of the system is pretended in a useful format and is more user friendly.

1. Introduction

At present information technology has become a basic requirement in carrying out all aspects of organizational activities and has an important role to gain competitive advantage. Business processes are much influenced by the rapid advancement of technology. Accounting information system is a system of people, data records, and activities to process data and information in an organization, either manually or automatically, which aims to support organizational activities [1]. Computer-based accounting information systems have the advantage of making it easier for organizations to produce information that is effective and efficient. The purpose of accounting information systems is to collect, store and process financial and accounting data and produce information reports that can be used by managers and other parties to make business decisions and make it easier to exercise proper control over organizational assets [2]. Therefore managers must be able to obtain quality information to improve management capabilities in decision making [3]. Decision making consists of several activities in problem solving to avoid the negative impact of the opportunities that exist. Difficulties of companies without accounting information systems are longer data retrieval times and inaccurate

information. In designing and implementing information systems, it is necessary to emphasize the management of information systems in building accounting information systems [4][5][6][1] by considering user needs and expected goals.

The banjar accounting information system is an application to facilitate the banjar management to manage the banjar sibang fund administrative activities in Sangeh village. With this accounting information system, the activities that are usually done manually can be handled more quickly and efficiently. This accounting information system is expected to shorten the fund management time. This system includes managing incoming and outgoing funds, managing loans and payments, and reporting. The application can provide a recapitulation of the results required. In its implementation, this application was made so that it can be easily used. This is a major consideration because users who will operate this application have limited ability to use computers.

Quality of service is expected to create satisfaction for users. The quality of the information system is very influential on the level of user satisfaction. The higher the quality of the system that is built and the quality of information in accordance with user needs, will foster a level of satisfaction for users. User involvement in the use of information system technology will determine the success of a quality system and information that is built. According to Doll and Torkzadeh [7] the definition of End User Computing Satisfaction of an information system is an overall evaluation of the users of the information system based on their experience in using the system. Evaluations using the EUCS model emphasize end-user satisfaction with technological aspects, by assessing the content, accuracy, format, time, and ease of use of the system.

An analysis of information system performance in the user's perspective was carried out by Roses, who examined to determine the level of user satisfaction with the Enterprise Resource Planning system in the context of the Transnational Bank [8] and Iliasa, A. conducted a case study in Malaysia of the Computerized Accounting System (CAS) [9]. Factors that are used as a reference are content, accuracy, format, ease of use, topicality for time, satisfaction with system speed and system reliability to measure the satisfaction of the end user of the computer. The results of the study show that ease of use, content, and accuracy have a significant effect on system user satisfaction. In other words, CAS is needed to provide accurate output or content. Research conducted by Ilias, A determines the relationship between End-User Computing Satisfaction (EUCS) factors, namely (content, accuracy, format, ease of use, timeliness, satisfaction with system speed, system reliability) and satisfaction. The empirical results of this study can provide support for the Doll and Torkzadeh model, which are related to factors that contribute to the satisfaction of end users of the accounting system. In addition, this study also evaluates the strong relationship between EUCS factors and satisfaction with the use of a computerized accounting system (CAS).

2. Methodology

An organization's information system can be said to be reliable if it has good quality and is able to provide satisfaction to users. With the satisfaction of these users, acceptance in the organization of information systems will arise. User satisfaction is one indicator of the successful development of information systems. The research variables are in accordance with existing instruments in the EUCS method, namely content, accuracy, format, ease of use, and timeliness as shown in Figure 1.

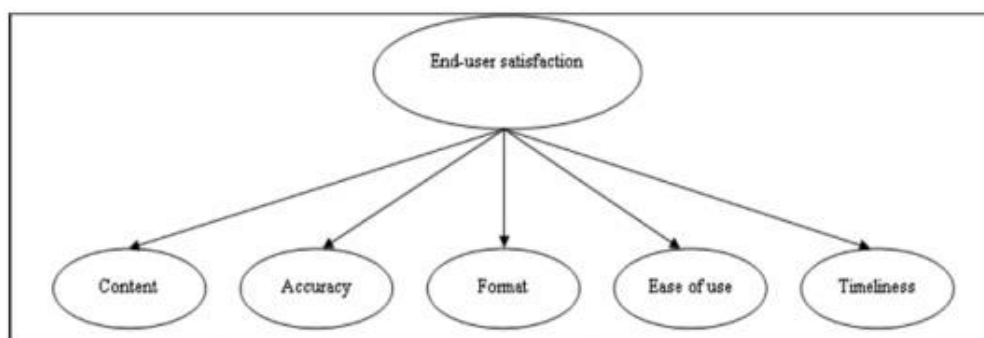


Figure 1. Instrument EUCS [10].

Doll et al have compiled the question items in the EUCS study, these questions were adopted and used as guidelines for making questionnaires for respondents. The list of question items to be asked in this study is shown in Table 1. The EUCS instrument consists of 12 items. This instrument was considered comprehensive because it collected items from questionnaire items from previous research studies and added items about ease of use that were previously ignored.

Data collection is done by literature study, questionnaires, observations. The validity of the measuring instrument is done by finding the correlation price between the parts of the measuring instrument as a whole using the Pearson product moment formula and reliability testing using the Cronbach alpha coefficient formula. The data analysis technique used in this research is descriptive analysis using mean testing.

For measuring the data obtained from filling out the questionnaire used Likert Scale namely Strongly Agree (4), Agree (3), Disagree (2) and Strongly disagree (1). Then the results of the questionnaire were tested using validity and reliability tests.

Table 1. The five dimension of end user computing satisfaction.

Dimension	ID Question	Question
Content	C1	The system provide the precise information you need
	C2	The system information content meet your needs
	C3	The system provide help that seemed to be just about exactly what you need
	C4	The system provides sufficient information
Accuracy	A1	The system is accurate
	A2	You are satisfied with accuracy of the system
Format	F1	The output of the system is pretended in a useful format
	F2	The system information is clear
Ease of Use	E1	The system is user friendly
	E2	The system is easy to use
Timeliness	T1	You get the information you need from the system at a suitable time
	T2	The system provides up-to-date information

3. Result

The level of user satisfaction in utilizing applications has been carried out using an end-user computing satisfaction analysis model covering 5 dimensions, further described in 12 item questionnaire statements. The number of respondents 25 people at 5% confidence level intervals. Testing the validity of each item used item analysis, which correlates the score of each item with a total score which is the sum of each item score. The minimum requirement to be considered eligible is if $r = 0.391$. The validation test results showed 12 items were valid so that they met the requirements for research analysis. The validity test results are shown in Table 2. Furthermore, the reliability test is performed to determine the instrument used precisely. Reliability test is the suitability of the measuring instrument with the measured so that the measuring instrument can be trusted or reliable. The reliability test can be done together with all questions. Reliability test can be seen in the Alpha value, if the Cronbach Alpha value > 0.60 then it is reliable. The reliability test results showed the Cronbach Alpha value for all variables is greater than 0.60 and declared reliable.

To determine the level of end-user satisfaction with the information system that was built, researchers convert the statement of satisfaction and dissatisfaction on the user questionnaire into five indicators as shown in Table 3.

Table 2. Validity analysis.

Dimension	ID Question	Question
Content	C1	0.548
	C2	0.415
	C3	0.461
	C4	0.417
Accuracy	A1	0.418
	A2	0.452
Format	F1	0.501
	F2	0.465
Ease of Use	E1	0.429
	E2	0.411
Timeliness	T1	0.533
	T2	0.420

Table 3. User satisfied level.

Level	Score	Satisfied Level
1	0.0 – 1.5	Very Dissatisfied
2	1.6 – 2.5	Dissatisfied
3	2.6 – 3.0	Neutral / Neither satisfied nor dissatisfied
4	3.1 – 3.5	Satisfied
5	3.6 – 4.0	Very Satisfied

The results of data processing on the questionnaire obtained conclusions from each dimension of satisfaction in the End User Computing Satisfaction model that is as shown in Table 4.

Table 4. Satisfaction level measurement results.

Dimension	Minimum	Maximum	Mean
Content	3.31	3.73	3.42
Accuracy	3.02	3.39	3.12
Format	2.98	3.35	3.05
Ease of Use	2.74	3.28	2.91
Timeliness	3.15	3.47	3.28

3.1. Content

The results for the content dimensions are a minimum value of 3.31, a maximum value of 3.73, and an average of 3.42. These results indicate the level of satisfaction at level 4, this shows that user satisfaction for the content dimension is satisfied.

3.2. Accuracy

The results for the accuracy dimensions are a minimum value of 3.02, a maximum value of 3.39, and an average of 3.12. These results indicate the level of satisfaction at level 4, this shows that user satisfaction for the accuracy dimension is satisfied.

3.3. Format

The results for the format dimensions are a minimum value of 2.98, a maximum value of 3.35, and an average of 3.05. These results indicate the level of satisfaction at level 3, this shows that user satisfaction for the format dimension is neutral (either satisfied nor dissatisfied).

3.4. Ease of use

The results for the ease of use dimensions are a minimum value of 2.74, a maximum value of 3.28, and an average of 2.91. These results indicate the level of satisfaction at level 3, this shows that user satisfaction for the ease of use dimension is neutral (either satisfied nor dissatisfied).

3.5. Timelines

The results for the timelines dimensions are a minimum value of 3.15, a maximum value of 3.47, and an average of 3.28. These results indicate the level of satisfaction at level 4, this shows that user satisfaction for the timelines dimension is satisfied.

4. Conclusions

Based on the description that has been described in the previous section, it can be concluded as follows. The dimensions of content, accuracy, and timelines have a satisfaction level that is satisfied, while the other two dimensions namely format and ease of use have a satisfaction level that is either satisfied nor dissatisfied. The format dimensions and ease of use require improvements in system design so that the output of the system is pretended in a useful format and is more user friendly.

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6. Acknowledgement

This research was funded by DIPA Politeknik Negeri Bali, with contract number: 1061/PL8/ LT/2019 SP.DIPA-042.01.2.401006/2019.