

The Role of Users in the Success of Accounting Information Systems Utilization in Cooperatives : Study Case Kota Pekanbaru

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Abstract— This research aims to understand the usage of accounting information systems in cooperatives in the city of Pekanbaru. The type of data used in this study is multiple linear regression analysis with where the sample-taking process utilizes purposive sampling. From the research results obtained from two factors that are examined only one that supports it, namely user involvement in the system development process. While the ability factor of personal information system technique was found to be incompetent.

Keywords—Accounting Information System, Cooperatives

I. INTRODUCTION

The development of information technology today makes information technology an important requirement for a company and an organization. Information technology is also inseparable from the information system used. Information technology can facilitate transactions in the business of a company or organization and can accelerate the processing of accounting data. According to [1] states that the information quality criteria stated must be accurate, relevant, timely and complete. Information is accurate, meaning that information has sufficient accuracy and is close to the actual reality. Relevant information is when the information is able to make changes in decision making in accordance with user objectives and problems faced by users. Timely information, that information must be available to decision makers when needed and the information does not appear in the past or the previous time. The quality of accounting information is influenced by the quality of accounting information systems.

In the research [2] it states that there are three basic functions of Accounting Information Systems, which are as follows:

1. To support management functions. Service structuring refers to the responsibility of management to properly manage company resources. Information systems provide information about the use of resources for external users through traditional financial

reports and other mandate reports. Internally, management receives information from various stewardship reports.

2. To support management decision making. Information systems provide managers with the information they need to carry out decision-making responsibilities.
3. To support the daily operations of the company.

The information system provides information for operational employees in carrying out their daily tasks efficiently and effectively.

With the provided elaboration upon accounting information systems, it is possible to see why they are also very necessary in cooperatives. In the study done by [3], it is stated that generally, traditionally run cooperatives have not adopted a more technologically driven paradigm. The same statement could be applied to the cooperatives that operate within Pekanbaru. The purpose of cooperatives is to provide services to members and not to make a profit, but it should be noted and watchful in their implementation, that selling goods on a cost basis will be able to encourage members to buy a lot of goods from cooperatives at cooperative prices, and then sell them outside the cooperative at market prices, aside from that, cooperatives need to benefit from the businesses that are run to be used for capital fertilization [3]. Achieving this purpose would be much easier and more effective if accounting information systems were to be applied, especially in the current technologically based era.

With the development of increasingly sophisticated technology, accounting information systems can actually be consider more as a necessity in the operation of cooperatives and SMEs, not merely a useful addition. Many factors need to be explored to be able to know the appropriate accounting guidance model that needs to be conveyed to the managers of cooperatives or small industries. So that they can carry out accounting even if it is simple in nature, so that the prediction of business development and small industry development can be directed and more focused.

Starting with a background explanation of this study, the remaining part of this paper would be organized as follows. In the next section, would discuss the Problem description and the purpose of the study. In section 3, a brief description of the theory used and related work. Section 4 explains the data analysis using multiple linear regressions as well as explain the results of the study and concludes the research.

II. PROBLEM DESCRIPTION AND THE PURPOSE OF STUDY

The data processed in this study were in the form of questionnaires distributed to the Pekanbaru City Cooperative with a purposive sampling method. The cooperatives given the questionnaire must meet the accredited criteria of at least B from the Indonesian cooperative department. The questionnaire given is the adoption of previous research that has been done and has been adjusted to the needs of research. The questionnaire is distributed and collected over a period of more than 3 months (May-Jul). In addition to the questionnaire data, interviews were conducted to provide stronger justification for the study.

Problem Formulation Based on the background described above, the problem will be examined in this study are:

1. Does the involvement of users in the development of systems affect the success of the use of accounting information systems? Cooperative Accounting in Pekanbaru City
2. Does the ability of personal techniques affect the successful use of the accounting information system of the Cooperative in Pekanbaru City
3. Does the lateness of use in the development and ability together influence the successful use of accounting information systems?

Research Objectives: The purpose of this study is to find solutions to problems related to the successful use of accounting information systems, when connected with user competencies and organizational culture in cooperatives in Pekanbaru City.

III. LITERATURE REVIEW

Information is fundamental in an organization, especially in the decision making process. The usefulness of information is to reduce the existence of uncertainty in making decisions about a situation. Information in relation to decision making is obtained from SI or also known as information processing systems.

The system is a combination of several elements that interact with each other to achieve goals. The system is a collection of elements that give rise to one another's relations. Information system development is the process of modifying or providing updates to some or all information systems.

As in [4] states that information is basically resources such as factories and equipment. Productivity as an important thing to stay competitive, can be improved through better information systems. Companies will be able to create competitive advantages through the information systems they build.

A. Definition of Accounting Information System

Accounting is a set of knowledge that studies the engineering of service provision in the form of quantitative financial information of organizational units or companies in a particular country environment and how to deliver (report) that information to interested parties to be used as a basis for economic decision making. The accounting model in the information technology era requires that the accounting model can measure the rate of change in resources, measure the rate of change in processes, measure intangible fixed assets, focus outward on customer value, measure processes in realtime, and enable networks [4].

[5] states that all forms of business and non-profit organizations serve accounting information to help stakeholders both from within the company as managers and external sources such as investors, government agencies, banks and others for decision making in the economic field.

B. Factors of Successful use of Accounting Information Systems

Research conducted by [6] states that there are factors that influence the performance of SIA including:

1) User Involvement in the System Development Process, that more and more user involvement will improve SIA performance due to a positive relationship between user involvements in the information system development process in SIA performance.

2) Personal Information System Technical Capability, the higher the personal technical ability of the AIS will improve the SIA performance due to a positive relationship between the personal technical ability of the AIS and the SIA performance.

3) Organizational Size, the greater the size of the organization will improve the performance of the AIS due to a positive relationship between the size of the organization and the performance of the AIS.

4) Top Management Support, the greater the support given by top management will improve the performance of the AIS due to the positive relationship between top management support in the process of developing and operating the AIS with the performance of the AIS.

5) Formalization of Information Systems Development, the higher the level of formalization of information systems development in the company will improve the performance of the AIS because there is a positive relationship between the formalization of the development of the system with the performance of the AIS.

6) User Training and Education Program, SIA performance will be higher if user training and education programs are introduced.

7) The existence of the Information System Steering Board, SIA performance will be higher if there is a steering board that is able to direct the SIA to run well.

8) Location of the Information Systems Department. SIA performance will be higher if the information systems department is separate and independent.

C. Cooperative Definition

Based on information obtained from the Central Statistics Agency data on the Statistics of Savings and Loans Cooperatives in 2016, the Cooperative is a collection of people to work together for the common good. Koperasi Indonesia was born on July 12, 1947 [7]. The cooperative business in Indonesia is based on Law No. 25 of 1992. Based on this law, the steps of cooperatives become more flexible because cooperative associations are considered to be the same as other business entities.

Cooperatives in Indonesia play a strategic role in driving the pulse of the people's economy and national development. The role and function of cooperatives is not only limited to economic activities, but also as a manifestation of the collective spirit, togetherness, and the principle of justice rooted in our society, namely mutual cooperation [5].

Cooperatives according to business level consist of primary cooperatives and secondary cooperatives [6].

1. Primary Cooperatives are cooperatives established by and consisting of individuals. Primary cooperatives can be formed by at least 20 (twenty) people.

2. Secondary Cooperatives are cooperatives established by and having cooperative members. Secondary Cooperatives are formed by at least 3 cooperatives. Secondary cooperatives can be divided into three types, namely:

1) Central Cooperative is a cooperative consisting of at least 5 (five) primary cooperatives.

2) Joint Cooperative is a Cooperative whose members have a minimum of 3 (three) central cooperatives.

3) Main Cooperative is a cooperative whose minimum membership is 3 (three) joint cooperatives. Main cooperatives are established in each capital city.

Cooperatives based on the type of business can be divided into:

1. Savings and Loans Cooperatives are cooperatives that have a single business that is to hold members' savings and serve loans.

2. Consumer Cooperative is a cooperative whose business field provides members' daily needs. Such needs are for example the need for food, clothing, and household furniture.

3. Producer's Cooperative is a cooperative whose field of business is making or producing goods.

4. Service Cooperative is a cooperative whose business activities are engaged in service activities.

D. Previous Research

Several studies on factors that influence the successful use of accounting information systems that have been carried out have different research results. Research conducted by [5] to find solutions to the problems of the quality of accounting information systems, which when connected with user competencies and organizational culture through deductive analysis that supports phenomena, then looks for evidence through empirical facts. While research conducted by [7] stated that partially the factors that had a significant effect on the satisfaction of SIA users in Susut Sub-district were the factors of the involvement of SIA users, while the personal technical ability variable had no significant effect. Simultaneously the factors that have a significant effect on performance Research conducted by [8] states the factors that influence the performance of accounting information systems, namely user involvement, personal technical ability, do not affect user satisfaction. Formalization of system development influences user satisfaction.

IV. RESULTS AND DISCUSSION

The role of users as the successful use of accounting information systems in cooperatives is analyzed using multiple linear regression equations (Multiple Linear Regression). The equation used is written as follows:

$$\text{Log } Y = b_0 + b_1 \log X_1 + b_2 \log X_2 + e$$

Obtained results as below:

$$\text{Log } Y = 0.492 + 0.170 \text{Log } X_1 + 0.42 \text{Log } X_2$$

Where

X_1 is a user engagement factor in the development of accounting information systems

X_2 personal information system engineering capabilities.

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant)	.492	.034	14.433	.000
	Log_X1	.170	.052	.323	.001
	Log_X2	.042	.043	.096	.331

a. Dependent Variable: Log_Y

A. The influence of user involvement in the development of accounting information systems

Estimation results show that the regression value of x_1 is 0.170 so every time a user is involved in the development, the successful use of the system has the potential to increase by 0.170 fold assuming other variables are constant. Significant value of x_1 of 0.001 < 0.05 indicates that user involvement has a significant effect on system success. This is because, users are the people who use the system directly so that when involved in system development, their role is very important to maximize what things are needed in the system so that it can be used effectively and as efficiently as possible [9].

I. Influence of personal information system technical capabilities

Estimation results show that the regression x_2 value of 0.042 then when the user has the ability to use technology, the success of using the system has the potential to increase by 0.042 fold assuming other variables are constant. Significant value of x_2 of 0.331 > 0.05 indicates that the user's technological ability has no significant effect on the success of the system. This result can be justified because, the ability of users may be able to simplify using the accounting information system but to succeed the system to function properly according to the desired function does not have a direct effect [10].

C. The influence of user involvement and technical ability are tested jointly

ANOVA ^a					
Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	.024	2	.012	6.361	.003 ^b
Residual	.171	92	.002		
Total	.195	94			

a. Dependent Variable: Log_Y

b. Predictors: (Constant), Log_X2, Log_X1

Based on the ANOVA table above, the significance of F Text is 0.003 < 0.05. This shows that the independent variables x_1 and x_2 (user involvement; the ability of user techniques) significantly influence the Y variable (the successful use of accounting information systems). This result is because if the user has a good competency in the use of information technology and is given the opportunity to be involved in the development of the system, the system will be developed according to needs so that the objectives of the use of the system are achieved [11].

V. CONCLUSION

The conclusion of the study shows that, the involvement of users in the development of the information system should be carried out by the cooperatives in the city of Pekanbaru to be able to have a system that is both usable and user friendly. Whereas Personal' ability to use technology should not be an important priority, users who are not yet proficient can be given training prior to using the system. But that does not mean that the ability to be ruled out, the results of the study, the combination of the two variables tested, will have a significant influence on the successful use of the accounting information system. So, it is expected that the Cooperative in the city of Pekanbaru can consider these two factors in the benchmark to see the success or failure of the use of the system. The weakness of this study is that it still examines in terms of user factors, there are still variables that should be examined for further research. From the aspect of the sample, hopefully the researcher can then multiply the sample under study so that the results obtained will be better.

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REFERENCES

- [1] M. Sidik, "Pengaruh Partisipasi Pengguna Terhadap Sistem Informasi Akuntansi Dan Implikasinya Pada Kualitas (Survei pada Kantor Pelayanan Pajak Pratama Kota Bandung)," 2014.
- [2] I. K. A. M. Putra, "Pengaruh Efektivitas Penggunaan, Kepercayaan, Keahlian Pengguna, Dan Kualitas Sistem Informasi Akuntansi Terhadap Kinerja Karyawan Pada PT PLN (Persero) Distribusi Bali," E-Jurnal Akunt. Univ. Udayana, vol. 17, no. 2, pp. 1516–1545, 2016.
- [3] P. Alex., K. Vasilis and B. Michel., "Digital economy and the rise of open cooperativism: the case of the Enspirial Network". Transfer: European Review of Labour and Research, 23(2), pp.177-192, 2017.
- [4] A, Ribka, and S. B. Hermanto. "Analisis faktor penerimaan dan penggunaan teknologi dalam sistem informasi akuntansi dengan pendekatan TAM." Jurnal Ilmu & Riset Akuntansi 4, no. 3 2015.
- [5] I, Deni. "Analysis of factors affecting the success of the application of accounting information system." International Journal of scientific & Technology research 4, no. 2, pp. 155-162, 2015
- [6] Andi, "Pengertian Sistem Informasi Akuntansi," in Sistem Informasi Akuntansi: Esensi dan Aplikasi, 2017, p. 6.
- [7] U. S. Cahyaning, D. S. P. Astuti, and M. R. Sunarko. "Pengaruh Kemampuan Pengguna Sistem Informasi, Keterlibatan Pengguna, dan Dukungan Manajemen Puncak Terhadap Kinerja Sistem Informasi Akuntansi pada PT BTPN Area Surakarta." Jurnal Akuntansi dan Sistem Teknologi Informasi 12, no. 2 , 2016.
- [8] A. W. A. Damana, and I. M. S. Suardikha. "Pengaruh Keterlibatan Pemakai, Pelatihan, Ukuran Organisasi dan Keahlian Pemakai terhadap Kinerja Sistem Informasi Akuntansi." E-Jurnal Akuntansi , PP. 1452-1480, 2016.
- [9] N. W. Ratnasari, "Analisis Faktor-faktor Yang Mempengaruhi Penerimaan dan Penggunaan Software Akuntansi Dengan Pendekatan Technology Acceptance model (TAM)," J. Ilm. Mhs. FEB Univ. Brawijaya, 2017.

- [10] Susilatri, A. Tanjung, and S.Pebrina, "Faktor-Faktor Yang Mempengaruhi Kinerja Sistem Informasi Akuntansi Pada Bank Umum Pemerintah di Kota Pekanbaru," J. Ekon., vol. 18, p. Hal 133-141, 2010.
- [11] K. Meilina, "Analisis penggunaan sistem informasi akuntansi pada usaha kecil dan menengah di Yogyakarta," Anal. Pengguna. Sist. Inf. Akunt. pada usaha kecil dan menengah di Yogyakarta, vol. 2, no. 1, p. 885, 2012.