

## **The Role of Management in the Successful Implementation of Computer Based Accounting Information Systems (Study on Cooperatives in Semarang City, Indonesia)**

Agung Wibowo<sup>1</sup> Susetyo Darmanto<sup>2</sup>

<sup>1)</sup> *Departement of Accounting, Faculty of Ekonomika dan Bisnis Universitas 17 Agustus 1945 Semarang, Indonesia.*

<sup>2)</sup> *Departement of Management, Faculty of Ekonomika dan Bisnis Universitas 17 Agustus 1945 Semarang, Indonesia.*

---

**Abstract:** *This study aimed to find empirical evidence of the role of management in the successful implementation of computer-based accounting information systems. The population of this research is all cooperatives that use a computer-based accounting information system in Semarang City of 460. The sample used is 215 cooperatives determined based on the Slovin formula. Sampling is done by simple random sampling. The analytical tool used to test hypotheses is multiple regression and path analysis. Hypothesis test results prove that the role of management, user participation, user training, and user ability partially has a significant positive effect on the successful implementation of a computer-based accounting information system. The results also prove that user training effectively mediates the role of management in determining the successful implementation of a computer-based accounting information system.*

**Keywords:** *Management Role; User Participation, User Training, Successful Implementation of Accounting Information Systems.*

---

Date of Submission: 30-12-2019

Date of Acceptance: 13-01-2020

---

### **I. Introduction**

As one type of business organization, cooperatives have recently been faced with increasingly fierce competition challenges, both with fellow national business organizations and with international business organizations, and are also faced with increasingly high task complexity, so cooperatives require computer-based accounting information systems (computer based accounting information system - CBAIS) which is able to process data into information quickly and accurately. By implementing CBAIS and supported by competent human resources, all cooperative operational information can be processed in a timely, integrated and accurate manner.

In order for a cooperative to be successful in implementing CBAIS, it must be considered the determining factors that are the key to the successful implementation of the computer-based accounting information system, which will greatly affect the effectiveness of accounting information system performance. The determinants of the successful implementation of a computer-based accounting information system include the role of top management, user participation, user training, and user ability.

The role of top management is a major factor that ensures the successful implementation of CBAIS. Top management plays an important role in every stage of the CBAIS development cycle, including the implementation phase (Wilkinson, 2009); (Raghunathan & Raghunathan, 1988), so that the most decisive step in the successful implementation of CBAIS is the role of top management.

The results of research have proven the positive role of top management in CBAIS performance (DeLone, 1988); (Choe, 1996). However, the lack of awareness of CBAIS users on the importance of the role of top management raises the perception that top management support does not affect the successful implementation of CBAIS (Rahadian, Amir, & Murtini, 2014).

One other factor that really determines the success of CBAIS implementation is user participation (George H. Bodnar & William S. Hopwood, 2013). Intense user participation will provide a sense of satisfaction with the system being implemented. User satisfaction will indirectly provide a sense of comfort, confidence, and a sense of belonging to the CBAIS that is being implemented, so that the users will work well, which in the end the CBAIS implementation is successful. The more intense user participation in implementing CBAIS, the greater the success of the implementation (Barki & Hartwick, 1994). However, the lack of awareness of users of accounting information systems about the importance of participation at the system implementation stage raises

the perception that user participation has no effect on the successful implementation of accounting information systems (Rahadian et al., 2014), (Utami, Astuti, & Sunarko, 2016).

Another factor that also determines the successful implementation of CBAIS is user training. Training is a short-term education, systematic and organized, in order to achieve mastery of skills in certain fields. In implementing CBAIS, user training is designed to encourage users to acquire good skills, so that they can carry out their tasks effectively and efficiently. The higher the user's ability to use CBAIS, the more effective and efficient they are in carrying out their duties. This shows that the implementation of the system is increasingly successful (Lovita & Andriyani, 2019); (Ayu & Damayanthi, 2018). However, the lack of socialization to users regarding the importance of training and because of a lack of priority, the training does not consistently affect the effectiveness of computer-based information systems (Kharisma & Juliarsa, 2017).

In addition to training, user ability is also an important factor that determines the success of CBAIS implementation. The user's ability in the form of individual knowledge and skills obtained through training that is held by the company. The user's technical ability has a significant positive effect on the successful implementation of CBAIS (Kharisma & Juliarsa, 2017). However, empirical research proves that the technical ability of the users is not a prerequisite for successful implementation of the system (Rahadian et al., 2014). This shows that the lack of understanding of system users about the importance of technical capabilities in the implementation of computer-based accounting systems.

There are differences in the results of research on critical success factors for the implementation of CBAIS, so this study tries to find empirical evidence of the implementation of computer erasis information systems in cooperatives in the city of Semarang. This research is different from previous studies because it was conducted comprehensively using path analysis.

### **Hypothesis Development**

Top management plays an important role in every stage of the development cycle of accounting information systems, including the stages of planning and implementation (Wilkinson, 2009); (Raghunathan & Raghunathan, 1988), so that the most decisive step in the successful implementation of CBAIS is the role of top management.

The management's roles include as a motivator and coordinator of all parties involved in the development and implementation of CBAIS, as well as a facilitator who provides all the needs of CBAIS development and implementation, including funding guarantees, and as a supervisor in the CBAIS development and implementation process (Choe, 1996).

As a motivator, top management must be able to provide motivation to all parties involved in the development and implementation of CBAIS through providing an understanding of the importance of CBAIS for organizational effectiveness and efficiency. As a coordinator, top management must be able to bring together the views of the importance of the system to all parties involved in the development and implementation of CBAIS, so that they can work in harmony and integration. Coordination is also very important to avoid rejection of the system (Romney & Steinbart, 2012).

As a facilitator, top management must provide the resources and authority needed to implement CBAIS, including funding guarantees and prioritizing them. The results of the study have proven that top management has a positive role in the performance of information systems (DeLone, 1988); (Choe, 1996), so the hypothesis can be formulated as follows.

H1: The role of management has a significant positive effect on the successful implementation of a computer-based accounting information system.

One of the factors that determine the successful implementation of CBAIS is user participation (George H. Bodnar & William S. Hopwood, 2013). User participation, in the development and implementation of CBAIS, will give users a sense of satisfaction with the system being implemented. User satisfaction will indirectly provide a sense of comfort, self-confidence, and a sense of belonging to CBAIS, so that CBAIS users will work well and ultimately the implementation of CBAIS will be successful. this shows that the more intense user participation in implementing CBAIS, the greater the success of the implementation (Barki & Hartwick, 1994), so that the following hypothesis can be formulated.

H2: User participation has a significant positive effect on the successful implementation of a computer-based accounting information system.

Training is a systematic and organized short-term educational process to achieve mastery of skills in a particular field through the development of thought processes, attitudes, knowledge, skills and abilities. In terms of implementing CBAIS, the training is designed to encourage training participants to gain knowledge and skills in the CBAIS field, so that they can carry out their tasks effectively and efficiently. The higher the ability of trainees to carry out their tasks effectively and efficiently shows that CBAIS implementation is more successful (Lovita & Andriyani, 2019); (Ayu & Damayanthi, 2018), so that the following hypothesis can be formulated.

H3: User training has a significant positive effect on the successful implementation of a computer-based accounting information system.

Technical ability of the accounting information system of the users is one of the keys to the successful implementation of CBAIS. Users who understand well the details of CBAIS and are skilled in using them will make the implementation of CBAIS more successful (Pardani & Damayanthi, 2017); (Artanaya & Yadnyana, 2016). In-depth user technical ability regarding the workings of CBAIS is very important as a provision to be able to operate CBAIS effectively, so that it will ultimately increase the successful implementation of CBAIS in an organization. Therefore the following hypothesis can be proposed.

H4: The user's ability has a significant positive effect on the successful implementation of a computer-based accounting information system.

One of the roles of management in the development and implementation of CBAIS is as a motivator. As a motivator, top management must be able to motivate CBAIS users to actively participate in the implementation of the newly developed CBAIS. Motivation can be done through providing an understanding of the importance of CBAIS for organizational effectiveness and efficiency. Aside from being a motivator, management also has an important role as a coordinator. Top management must be able to bring together the views of the importance of the system to all parties involved in the development and implementation of CBAIS, so that they will participate more. Large participation from users can encourage them to work in harmony and integration. Coordination is also very important to avoid rejection of the system (Romney & Steinbart, 2012). So, the greater the role of management, both as a motivator and as a coordinator, the greater the role of the user in implementing CBAIS, so that the following hypothesis can be formulated.

H5: The role of management has a significant positive effect on the participation of users of computer-based accounting information systems.

The role of management in each organization can be different, depending on the management style of each. The role of management in training is the role of management in the process of employee participation in training activities, starting from the analysis of training needs, sending employees to training, to the transfer of knowledge activities of employees in the work environment after participating in training programs (Shiryan, Shee, & Stewart, 2012). The greater the role of top management in directing the organization to achieve its goals, the more influential it will be on the effectiveness of the process of knowledge transfer in the organization (Sukmawati, Thoyib, Setiawan, & Surachman, 2010).

H6: The role of management has a significant positive effect on training CBAIS users.

Training is a systematic and organized short-term educational process to achieve mastery of skills in a particular field through the development of thought processes, attitudes, knowledge, skills and abilities. In terms of implementing CBAIS, the training is designed to encourage training participants to gain skills, both knowledge and skills, in the CBAIS field. Training plays an important role in improving the work ability of employees, both new employees and old employees. Training can significantly improve employee work abilities (Graha, 2006). Training is also needed to prepare CBAIS users to have the ability to operationalize newly developed systems effectively.

H7: User training has a significant positive effect on the ability of users of computer-based accounting information systems.

The role of management in implementing CBAIS is a set of behaviors and efforts made to improve the ability of CBAIS users. Top management plays an important role in the implementation of CBAIS (Wilkinson, 2009); (Raghunathan & Raghunathan, 1988). The role of management includes being a motivator and coordinator of all parties involved in the implementation of CBAIS, as well as a facilitator providing all the needs in implementing CBAIS, including funding guarantees, and as a supervisor in the CBAIS development and implementation process (Choe, 1996).

As a motivator, top management provides motivation to all parties involved in implementing CBAIS through providing an understanding of the importance of developing capabilities so that the implementation of CBAIS can be effective and efficient. As a coordinator, top management unites the views of all parties involved in the implementation of CBAIS, so that they work in a harmonious and integrated manner so that their abilities can collectively improve. Coordination is also very important to avoid rejection of the system (Romney & Steinbart, 2012).

As a facilitator, top management provides the resources and authority needed in conducting the training, so that the ability of all parties involved in implementing CBAIS can be improved. Therefore the following hypothesis can be proposed.

H8: The role of management has a significant positive effect on the ability of users of computer-based accounting information systems.

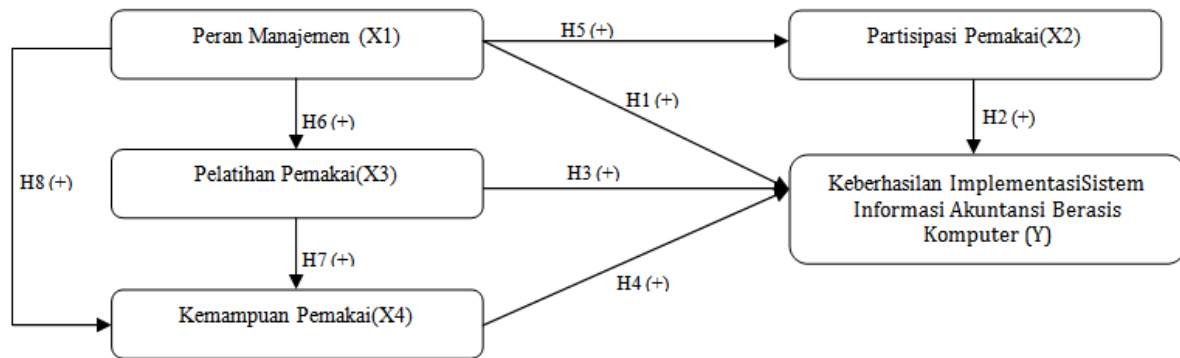


Figure 1. Research Model

## II. Research Methods

The population of this study was all cooperatives in the city of Semarang as many as 460. The samples used were 215 cooperatives determined based on the Slovin formula. Sampling was done by simple random sampling, while the subjects of this study were employees of the accounting department. The research data was collected through a survey with the help of a questionnaire sent via email. Before the questionnaire was sent, by telephone, selected respondents were asked for their ability to fill out the questionnaire. Respondents who were unable to fill out the questionnaire were replaced by other respondents with simple random sampling. A total of 215 questionnaires were sent and returned on time and completed.

The analytical tool used for hypothesis testing is ordinary least square (OLS) multiple regression with  $\alpha = 0.05$ . The regression model used to test H1, H2, H3, H4 is as follows.

$$Y = \alpha_1 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e_1. \text{ (Model 1)}$$

To test H5, a regression model is used:

$$X_2 = \alpha_2 + \beta_5 X_1 + e_2. \text{ (Model 2)}$$

To test H6 the regression model is used:

$$X_3 = \alpha_3 + \beta_6 X_1 + e_3. \text{ (Model 3)}$$

To test H7 and H8 regression models are used:

$$X_4 = \alpha_4 + \beta_7 X_1 + \beta_8 X_3 + e_4. \text{ (Model 4)}$$

Variable Success of CBAIS Implementation is measured by a five-point Likert scale, where a high score indicates CBAIS implementation is more successful. The success of CBAIS is operationalized using five elements, namely: (1) Facilitating work, (2) Providing information, (3) Having authorization to avoid abuse, (4) Flexible, (5) Describing the contribution of achieving organizational goals.

The Management Role variable is measured using a five-point Likert scale, where the higher the score indicates the higher the management's role in the successful implementation of CBAIS. The role of management is operationalized using five elements, namely (1) As a motivator, (2) As a coordinator, (3) As a facilitator, (4) As an evaluator, (5) As a supervisor.

The User Participation variable is measured using a five-point Likert scale, where the higher the score indicates the higher user participation in the successful implementation of CBAIS. User participation is operationalized using five elements, namely (1) Participation in development, (2) Improving user relations with information systems experts, (3) Expanding CBAIS insights, (4) Easing management and user responsibility, (5) Helping CBAIS performance become more effective.

The User Training Variable is measured using a five-point Likert scale, where the higher score indicates the higher the success of user training in supporting the successful implementation of CBAIS. User training is operationalized using five elements, namely (1) The necessity of training, (2) Improving the skills to run CBAIS appropriately, (3) Improving adaptation to new CBAIS changes, (4) Improving performance in operating CBAIS, (5) Assisting CBAIS performance become more effective.

The User Ability variable is measured using a five-point Likert scale, where the higher score indicates the higher the user ability in implementing CBAIS. The user's ability is operationalized using five elements, namely (1) The requirement to have technical ability to operationalize CBAIS, (2) The requirement of an ability test in operationalizing CBAIS, (3) The existence of integrated capability with CBAIS, (4) Can be utilized in operating CBAIS, (5) Help CBAIS performance become more effective.

**III. Results**

Hypothesis testing for H1, H2, H3 and H4 was performed using Regression Model 1 obtained from table 1:

**Table 1. Model 1 Regression Coefficient**

Model		Unstandardized Coefficients	Std. Error	t	Sig.
1	(Constant)	1.341	0.600	2.234	0.027
	The Role of Management (X1)	0.181	0.034	5.298	0.000
	User Participation (X2)	0.119	0.017	6.874	0.000
	User Training (X3)	0.417	0.051	8.202	0.000
	User Ability (X4)	0.243	0.046	5.282	0.000

a. Dependent Variable: Successful Implementation of Computer Based Accounting Information System (Y)

$$Y = \alpha_1 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e_1.$$

$$Y = 1.341 + 0.181X_1 + 0.119X_2 + 0.417X_3 + 0.243X_4 + e_1.$$

Hypothesis testing H1: The Role of Management (X1) has a significant positive effect on the Success of CBAIS Implementation (Y). Based on table 1, it is known that the coefficient of Management Role variable (X1) is  $\beta_1 = 0.181$  with significance = 0.000, so that the H1 hypothesis is accepted, meaning that the higher the Management Role (X1), the higher the CBAIS Implementation Success (Y).

Hypothesis testing H2: User Participation (X2) has a significant positive effect on the Success of CBAIS Implementation (Y). Based on table 1, it can be seen that the coefficient of the User Participation variable (X2) is  $\beta_2 = 0.119$  with a significance of 0.000, so the H2 hypothesis is accepted, meaning that the higher the User Participation (X2), the higher the Success of CBAIS Implementation (Y).

Hypothesis testing H3: User Training (X3) has a significant positive effect on the Success of CBAIS Implementation (Y). Based on table 1, it can be seen that the coefficient of the User Training variable (X3) is  $\beta_3 = 0.417$  with a significance of 0.000, so the hypothesis H3 is accepted, meaning that the more intense the User Training (X3) will be the higher the Success of CBAIS Implementation (Y).

Hypothesis testing H4: User Ability (X4) has a significant positive effect on the Success of CBAIS Implementation (Y). Based on table 1, it can be seen that the coefficient of the User Capability variable (X4) of  $\beta_4 = 0.243$  with a significance of 0.000, so the hypothesis H4 is accepted, meaning that the higher the User Capability (X4), the higher the Success of CBAIS Implementation (Y) is accepted.

Hypothesis testing H5 used the Regression 2 Model obtained from table 2:

**Table 2. Model 2 Regression Coefficient**

Model		Unstandardized Coefficients	Std. Error	t	Sig.
2	(Constant)	7.271	2.142	3.395	0.001
	The Role of Management (X1)	0.603	0.107	5.639	0.000

a. Dependent Variable: User Participation (X2)

$$X_2 = \alpha_2 + \beta_5 X_1 + e_2.$$

$$X_2 = 7.271 + 0.603X_1 + e_2.$$

Hypothesis testing H5: Management's Role (X1) has a significant positive effect on User Participation (X2). Based on table 2, it can be seen that the coefficient of the Management Role variable (X1) is  $\beta_5 = 0.603$  with a significance of 0.000. This significance value is smaller than 0.05 and the  $\beta_5$  value shows a positive sign, then the H5 hypothesis which states that Management's Role (X1) has a significant positive effect on User Participation (X2) is accepted.

Hypothesis testing H6 used Regression Model 3 obtained from table 3:

**Table 3. Model 3 Regression Coefficient**

Model		Unstandardized Coefficients	Std. Error	t	Sig.
3	(Constant)	7.999	1.208	6.620	0.000
	The Role of Management (X1)	0.604	0.060	10.001	0.000

a. Dependent Variable: User Training (X3)

$$X_3 = \alpha_3 + \beta_6 X_1 + e_3.$$

$$X_3 = 7.999 + 0.604X_1 + e_3.$$

Hypothesis testing H6 which states that Management's Role (X1) has a significant positive effect on User Training (X3). Based on table 3, it can be seen that the coefficient of the Management Role variable (X1) is  $\beta_6 = 0.604$  with a significance of 0.000, so the hypothesis H6 is accepted, meaning that the greater the Management Role (X1), the greater the intensity of User Training (X3).

Hypothesis testing H7 and H8 used Regression Model 4 obtained from table 4:

**Table 4.** Model 4 Regression Coefficient

Model		Unstandardized Coefficients	Std. Error	t	Sig.
4	(Constant)	0.115	0.886	0.130	0.897
	The Role of Management (X1)	0.104	0.049	2.130	0.034
	User Training (X3)	0.891	0.046	19.458	0.000

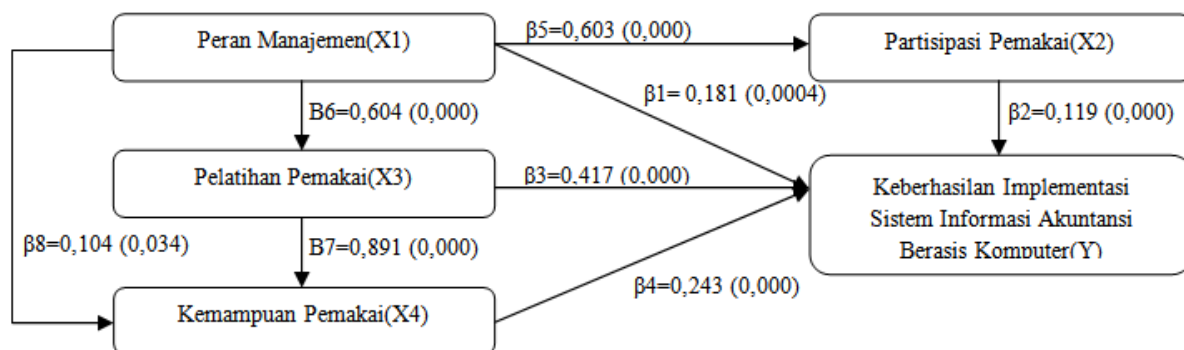
a. Dependent Variable: User Ability (X4)

$$X_4 = \alpha_4 + \beta_7 X_1 + \beta_8 X_3 + e_4.$$

$$X_4 = 0,115 + 0,104X_1 + 0,891X_3 + e_4.$$

Hypothesis testing H7: User Training (X3) has a significant positive effect on User Capability (X4). Based on table 3, it can be seen that the coefficient of the User Training variable (X3) is  $\beta_7 = 0.891$  with a significance of 0.000, so the hypothesis H7 is accepted, meaning that the more intense the User Training (X3) will be the higher the User Ability (X4).

Hypothesis testing H8: Management's Role (X1) has a significant positive effect on User Capability (X4). Based on table 3, it can be seen that the coefficient of the Management Role variable (X1) is  $\beta_8 = 0.104$  with a significance of 0.034, so H8 is accepted, meaning that the greater the Management Role (X1), the higher the User Capability (X4). For more details, testing these hypotheses is presented in Figure 2.



**Figure 2.** Analisis Model

#### IV. Discussion

##### Direct Effect of Management's Role on the Successful Implementation of Computer-Based Accounting Information Systems.

Management's role in determining the Success of CBAIS Implementation can be directly or indirectly through User Participation, User Training and User Capability. The role of management directly on the success of CBAIS implementation is evidenced by the acceptance of the H1 hypothesis: there is a significant positive effect of the management's role on the success of CBAIS implementation. This means that the higher or wider the Management Role, the more successful CBAIS Implementation will be.

These results prove that the most decisive step in implementing CBAIS is getting support from top management (Wilkinson, 2009). Top management plays an important role in every stage of the development cycle of accounting information systems, including the planning and implementation stages. Empirical research results prove that the role of top management has a positive influence on the performance of information systems (DeLone, 1988); (Choe, 1996). The role of management is a very important factor in determining the success of all activities related to accounting information systems (Raghunathan & Raghunathan, 1988). Top management plays an important role in each cycle of CBAIS development and implementation. This role is as a motivator and coordinator for all parties involved in the development and implementation of CBAIS, as a facilitator who provides all the needs of the development and implementation of CBAIS, including funding guarantees, and as a supervisor in the CBAIS development and implementation process (Choe, 1996). Management's role is the third key factor, after User Participation and User Training, for the successful

implementation of CBAIS. This can be seen from table 1, where Management Role has a value of  $t = 5.298$  which is smaller than User Participation with a value of  $t = 6.874$  and User Training with a value of  $t = 8.202$ .

#### **Direct Effect of User Participation on the Success of the Implementation of Computer-Based Accounting Information Systems**

The results of hypothesis testing H2, prove that there is a significant positive influence of User Participation on the Success of CBAIS Implementation. This means to increase the Success of CBAIS Implementation it is necessary to first increase User Participation. The higher user participation, the greater acceptance and adaptation of users to CBAIS, thereby increasing success in its implementation. The results of this study support the research conducted by (Nurhayati & Mulyani, 2015); (Lahuddin, Modding, Semmaila, & Lamo, 2017) which proves that user participation has a significant positive effect on the successful implementation of CBAIS. user participation creates a more positive attitude towards CBAIS so that it will increase success in its implementation. From table 1 it is known that User Participation is the second key factor after the User Training for Successful CBAIS Implementation, this is indicated by the value of  $t = 6.874$  below the value of  $t = 8,202$  from User Training.

#### **Direct Effect of User Training on the Successful Implementation of Computer Based Accounting Information Systems**

The results of hypothesis testing H3, prove that there is a significant positive effect of User Training on the Success of CBAIS Implementation. This means to increase the Success of CBAIS Implementation, it can be done by increasing the frequency of training for users. The more frequent training of CBAIS users, the knowledge and skills of CBAIS users will increase so that the implementation of CBAIS will be more effective. The results of this study are consistent with research conducted by (Lovita & Andriyani, 2019) which proves that CBAIS user training will increase the effectiveness of CBAIS in official 3 kg LPG gas supply companies in East Jakarta. From table 1 it is known that User Training is the first key factor of the Success of CBAIS Implementation, this is indicated by the highest  $t$  value, namely 8,202.

#### **Direct Effect of User Ability on the Success of the Implementation of Computer-Based Accounting Information Systems**

The results of hypothesis testing H4, prove that there is a significant positive influence of the ability of users to the success of CBAIS implementation. This means to increase the Success of CBAIS Implementation, it can be done by first increasing the user's ability. The results of this study are consistent with research (Puspitawati, 2015) which proves that the ability of users has a significant positive effect on the successful implementation of CBAIS, which is proxied by user satisfaction, at the West Java Regional Tax Service Office I. The results of this study are also consistent with research (Meiryani, 2014); (Wibowo & Darmanto, 2019) which states that the user's ability can produce a quality accounting information system so that it can assist management in carrying out its functions and responsibilities in planning, directing, monitoring and decision making to achieve company goals and reduce financial fraud. So the ability of users has an effective influence on the quality of accounting information systems. Likewise (Haleem, Low, & Teng, 2018) who conducted research in the banking sector in Sri Lanka stated that many banks increase the application of CBAIS therefore CBAIS users in an organization must be motivated to be responsive in order to have the ability to adapt, and flexibility.

User ability is very necessary in the successful implementation of CBAIS. User ability concerns the knowledge and skills of CBAIS users. The ability of CBAIS users is related to the capacity of individuals in using CBAIS to carry out various tasks in a job in accordance with the responsibilities entrusted. The ability of CBAIS users can be measured from their knowledge of CBAIS, understanding of tasks and work as CBAIS users, the ability to run CBAIS, and the ability to do the tasks for which they are responsible.

#### **The indirect effect of management's role on the successful implementation of computer-based accounting information systems through user participation**

The indirect effect of management's role on the success of CBAIS implementation through user participation is evidenced by the acceptance of the H2 and H5 hypotheses. This shows that User Participation is a semi-intervening variable that mediates the effect of Management's Role on the Success of CBAIS Implementation. Statistically, the magnitude of the indirect effect of Management's Role on the Success of CBAIS Implementation through User Participation is shown by the product of  $\beta_5 = 0.603 \times \beta_2 = 0.119 = 0.072$ . The results of multiplying  $\beta_5$  with  $\beta_2$  are smaller than the value  $\beta_1 = 0.181$ , this shows that the indirect effect of Management's Role on the Success of CBAIS Implementation through User Participation is less effective than the direct effect of Management's Role on the Success of CBAIS Implementation. In other words, User

Participation is less effective in mediating the influence of Management's Role on the success of CBAIS Implementation.

#### **The indirect effect of management's role on the successful implementation of computer-based accounting information systems through user training**

The indirect effect of management's role on the success of CBAIS implementation through user training is evidenced by the acceptance of hypotheses H3 and H6. This shows that User Training is a semi-intervening variable that mediates the influence of Management's Role on the Success of CBAIS Implementation. Statistically, the magnitude of the indirect effect of Management's Role on the Success of CBAIS Implementation through User Training is shown by the results of multiplication  $\beta_6 = 0.604 \times \beta_3 = 0.417 = 0.252$ . The result of multiplication of  $\beta_6$  with  $\beta_3$  is greater than the value of  $\beta_1 = 0.181$ , this shows that the indirect effect of Management's Role on the Success of CBAIS Implementation through User Training is more effective than the direct effect of Management's Role on the Success of CBAIS Implementation. In other words, User Training effectively mediates the influence of Management's Role on the Success of CBAIS Implementation.

#### **The indirect effect of management's role on the successful implementation of computer-based accounting information systems through user capabilities**

The indirect effect of Management's Role on the Success of CBAIS Implementation through User Ability is evidenced by the acceptance of hypotheses H4 and H8. This shows that User Capability is a semi-intervening variable that mediates the influence of Management's Role on the Success of CBAIS Implementation. Statistically, the magnitude of the indirect effect of Management's Role on the Success of CBAIS Implementation through User Ability is shown by the product of  $\beta_8 = 0.104 \times \beta_4 = 0.243 = 0.025$ . The result of multiplication of  $\beta_8$  with  $\beta_4$  is smaller than the value of  $\beta_1 = 0.181$ , this shows that the indirect effect of Management Role on the Success of CBAIS Implementation through User Ability is less effective than the direct effect of Management's Role on the Success of CBAIS Implementation. In other words, the ability of the User is less effective in mediating the effect of Management's Role on the Success of CBAIS Implementation.

#### **The indirect effect of user training on the successful implementation of computer-based accounting information systems through user capabilities**

The indirect effect of User Training on the Success of CBAIS Implementation through User Capability is evidenced by the acceptance of hypotheses H4 and H7. This shows that User Ability is a semi-intervening variable that mediates the effect of User Training on the Success of CBAIS Implementation. Statistically, the magnitude of the indirect effect of User Training on the Success of CBAIS Implementation through User Ability is shown by the result of multiplication  $\beta_7 = 0.891 \times \beta_4 = 0.243 = 0.217$ . The result of multiplying  $\beta_7$  with  $\beta_4$  is smaller than the value  $\beta_3 = 0.417$ , this shows that the indirect effect of User Training on the Success of CBAIS Implementation through User Ability is less effective than the direct effect of User Training on the Success of CBAIS Implementation.

## **V. Conclusions**

From the results of hypothesis testing it can be concluded that the successful implementation of CBAIS in cooperatives in the city of Semarang is partially influenced by Management's Role, User Participation, User Training and User Capability. User Training is able to mediate the effect of Management Role on the Success of CBAIS Implementation, but User Participation and User Capability is less effective in mediating the effect of Management Role on the Success of CBAIS Implementation.

The test results also prove that the ability of the User is less effective in mediating the effect of User Training on the Success of CBAIS Implementation.

Future research should broaden the scope of the study area, so that the results can be generalized more broadly.

## **Reference**

- [1]. Artanaya, P., & Yadnyana, I. (2016). Pengaruh Partisipasi Pemakai Terhadap Kinerja Sistem Informasi Akuntansi Dengan Kemampuan Pemakai Sebagai Variabel Moderasi. *E-Jurnal Akuntansi*, 15(2), 1482–1509.
- [2]. Ayu, I. G., & Damayanthi, E. (2018). Pengaruh Pelatihan, Dukungan Manajemen Puncak, Kejelasan Tujuan, Kemampuan Teknik Personal Pada Penggunaan Sistem Informasi Akuntansi. *E-Jurnal Akuntansi*, 22, 138–157.
- [3]. Barki, H., & Hartwick, J. (1994). Measuring user participation, user involvement, and user attitude. *MIS Quarterly: Management Information Systems*, 18(1), 59–79. <https://doi.org/10.2307/249610>
- [4]. Choe, J.-M. (1996). The Relationships among Performance of Accounting Information Systems, Influence Factors, and Evolution Level of Information Systems. *Journal of Management Information Systems*, 12(4), 215–239.
- [5]. DeLone, W. H. (1988). Determinants of Success for Computer Usage in Small Business. *MIS Quarterly*, Vol. 12(No. 1), 51–61.
- [6]. George H. Bodnar, F. A. U., & William S. Hopwood, F. A. U. (2013). *Accounting Information Systems, 11th Edition*.
- [7]. Graha, A. (2006). Pengaruh Pelatihan Terhadap Kemampuan Karyawan Dan Dampaknya Terhadap Kinerja Karyawan (Studi Pada Karyawan PT. Gatra Mapan Malang). *Jurnal Ekonomi Modernisasi*, 1.



- [8]. Haleem, A., Low, K., & Teng, L. (2018). Impact of User Competency on Accounting Information System Success: Banking Sectors in Sri Lanka. *International Journal of Economics and Financial Issues*, 8(6), 167–175.
- [9]. Kharisma, I. A. M., & Juliarsa, G. (2017). Pengaruh Keterlibatan Pemakai, Kemampuan Pemakai, Pelatihan Dan Pendidikan Pemakai Terhadap Kinerja Sistem Informasi Akuntansi. *E-Jurnal Akuntansi Universitas Udayana ISSN: 2302-8556*, 19(3), 2527–2555.
- [10]. Lahuddin, H., Modding, H. B., Semmaila, H. B., & Lamo, H. M. (2017). Effect of management support and user participation on implementation of information systems success and undergraduate programs performance. *The International Journal of Engineering and Science (IJES)*, 6(12), 82–96.
- [11]. Lovita, E., & Andriyani, A. (2019). Influence of Information Technology, Training and Participation of Users towards the Effectiveness of Accounting Information Systems in the Supply Chain Management. *Advances in Economics, Business and Management Research*, 73(Aicar 2018), 10–13.
- [12]. Meiryani. (2014). Influence Of User Ability On The Quality Of Accounting Information System. *International Journal of Economics, Commerce and Management, United Kingdom*, II(8), 1–13.
- [13]. Nurhayati, N., & Mulyani, S. (2015). User participation on system development, user competence and top management commitment and their effect on the success of the implementation of accounting information system (. *European Journal of Business and Innovation Research*, 3(2), 56–68.
- [14]. Pardani, K. K., & Damayanthi, I. G. A. E. (2017). Pengaruh Pemanfaatan Teknologi, Partisipasi Pemakai, Manajemen Puncak dan Kemampuan Pemakai Terhadap Efektivitas Sistem Informasi Akuntansi. *E-Jurnal Akuntansi Universitas Udayana*, 19(3), 2234–2261.
- [15]. Puspitawati, L. (2015). The Influence of User Ability to Effectiveness of Accounting Information Systems : Research on the Tax Office ( LTO ) in West Java Regional Office. *Research Journal of Finance and Accounting*, 6(12), 135–146.
- [16]. Raghunathan, B., & Raghunathan, T. S. (1988). Impact of Top Management Support on Information System Planning. *Journal of Information Systems*, 15–23.
- [17]. Rahadian, G., Amir, P., & Murtini, H. (2014). Faktor-Faktor Yang Mempengaruhi Kinerja Sistem Informasi Akuntansi (Studi Kasus Pada Lingkungan Pemerintah Kabupaten Temanggung). *Accounting Analysis Journal*, 3(1), 9–17.
- [18]. Romney, M. B., & Steinbart, P. J. (2012). *Accounting Information Systems*. Pearson Prentice Hall.
- [19]. Shiryan, S., Shee, H., & Stewart, D. (2012). Employee Training Effectiveness in Saudi Arabian SME Performance. *International Journal of Business and Social Science*, 3(14), 46–52.
- [20]. Sukmawati, Thoyib, A., Setiawan, M., & Surachman. (2010). Pengaruh Dimensi Organisasi, Kepemimpinan, Motivasi terhadap Transfer of Knowledge dan Daya Saing Organisasi (Studi pada ank Niaga Makasar). *Jurnal Aplikasi Manajemen*, 8(2), 513–522.
- [21]. Utami, S. C., Astuti, D. S. P., & Sunarko, M. R. (2016). 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(2), 208–220.
- [22]. Wibowo, A., & Darmanto, S. (2019). Improvement Quality of Financial Report Model by Good Governance , Utilization of Information Technology and Internal Control, 10(4), 9–17. <https://doi.org/10.9790/5933-1004020917>
- [23]. Wilkinson, J. W. (2009). *Sistem akuntansi dan informasi*. (M. Sinaga, Ed.). Jakarta: Erlangga.

Agung Wibowo. “The Role of Management in the Successful Implementation of Computer Based Accounting Information Systems (Study on Cooperatives in Semarang City, Indonesia)”. *IOSR Journal of Economics and Finance (IOSR-JEF)*, vol. 10, no. 6, 2019, pp. 57-65.