The influence of information technology and organizational culture on the quality of management accounting information systems

Gun Gunawan Rachman1, Muhamad Iqbal Adrian[2], Hennie Husniah[3]

[1,2]Accounting Study Program, Faculty of Economics and Business
[3]Industrial Engineering Study Program, Faculty of Engineering Langlangbuana University, Bandung.
[1]Email: gunawan.rachman74@gmail.com
[2]Email: miqbala07@gmail.com
[3]Email: hennie.husniah@gmail.com

Abstract

This research aims to study information technology and culture on the quality of management accounting information systems in the Bandung city government cooperative. This research uses descriptive verification research method by using the PLS (Partial Least Square) test. Data collected through a questionnaire distributed to employees of the Bandung city government cooperative. The results of this study are expected to be a solution to the problem of technology and organizational culture in the cooperative of Bandung city government employees. The results of this study refer to: information technology relating to the quality of management accounting information systems, and organizational culture related to the quality of management accounting information systems.

Keywords: Information technology; organizational culture; quality of management accounting information systems

INTRODUCTION

Information technology system basically does not only cover physical matters such as computer tools and printer tools but also includes things that do not look like software. And information technology can dikatan has entered all fields and various layers of society. (Kadir & Triwahyuni 2013: 7). Organizational culture shows how workers look at the characteristics of organizational culture, not whether they like and basically organizational culture refers to a system of various meanings that are done by all members who will give different organizations from other organizations. (Robbins & Judge 2016: 356).

That management accounting information systems provide information needed to meet certain management needs, management accounting information systems are not tied to any formal criteria that defines the nature and process, input (output) in output (Sjahrial and Purba et al. 2017: 1).

The results of this study indicate that information technology influences the characteristics of management information systems. (Fratiwi 2017).

Information technology has a significant effect on the quality of management accounting information systems (Rosmiati 2017). And other research according to (Firdaus and Yazid 2017) that information technology has a significant effect on the use of management accounting information systems (SIAM). According to (Aditya 2017) states that organizational culture has a significant influence on the quality of management accounting information systems. (Widyaningsih 2017) states the results of this study indicate that organizational culture and information technology provide, (Ramadan and Purnama, 2017. that the conclusion obtained is that organizational culture has a significant effect on the quality of management accounting information systems.

The phenomenon of management accounting information systems conveyed by states that PT Bank Bukopin Tbk carried out a number of activities to change a number of financial reports in the last three years, in 2015, 2016 and 2017. And it turns out that the steps implemented by the bank that has the code or has the identity of the BBKP seizes the attention of the relevant authority which is none other than the Indonesia Stock Exchange or can be called (IDX) and the financial services authority or called (OJK), and the central bank always states that it will see and monitor activities on payment system, including found strange and awkward activity.

Including if there are irregularities in the Bank Bukopin credit card business. Head of the BI Payment System Policy Department Onny Widjanarko gave a statement, the division which was specifically monitoring activities that were indeed odd from the payment system, namely the Financial System Surveillance Department.

This study aims at the method of what is achieved in the study and always writes what you want to achieve in the formulation of the problem (Sujarweni. 2015) So according to the formulation of the problem related to this study aims as follows: To find out the magnitude of the influence of Information Technology on the Quality of Management Accounting Information Systems, at Bandung City Government Cooperative employees. find out the magnitude of the influence of Organizational Culture on the Quality of Management Accounting Information systems, in Bandung City Government Cooperative employees.

METHOD

This study uses descriptive verification method, because it is in accordance with the purpose of this study, namely research using descriptive verification to determine the value of each variable, either one variable or more.

Independent Variable (Independent Variable)

Then the dimensions of independent variables, information technology, namely: According to (Sutarman 2012: 18-19): Capture (capture), Produce (processing),

Generating (generating), Storing (storage) Looking back (retival), Transmission

The other independent variables, namely organizational culture, have the following dimensions: (According to Robbin 2016: 355) the dimensions of organizational culture include: Innovation and courage to take risks ,Pay attention to details, Orientation to results, Orientation to the team, Orientation to people, Aggressiveness, Stability.

Dependent Variable (Related Variable)

States that "the dependent variable is a variable that affects or results, because of the existence of independent variables". then the dimensions of the management

accounting information system. According to (Heidmann 2008: 87) management

accounting systems can be said to have quality based on nine characteristics, namely as follows: broad scope, timeliness, format (formation), accuracy (accuracy), integrity, flexibility (flexibility), Accreditation (accsebility), formalization, media wealth (media richness).

Sources and Methods of Data Collection

Primary data Data collected and processed by an organization or individual directly from the object. The data collection was conducted specifically to address the

research problems being studied.Secondary Data Data obtained in finished form has

been collected and processed by other parties, usually in the form of publication. This kind of data has been collected by other parties for specific purposes not for the specific needs of research currently being carried out by researchers. Population explains that: population is a collection of individuals with quality and characteristics that have been set. The quality or characteristic is called the variable. A sample is part of the population. Sample survey is a procedure where only a portion of the population is taken and used to determine the desired characteristics and characteristics of the population. The population used in this study were employees of the Bandung City Government Cooperative. Sample the sample is part of a number of characteristics possessed by the population used for research. If the population is large, researchers will not take everything for research, for example due to limited funds and time

Test validity and reliability

Validity test validity is the main criterion of scholarship, a validity study shows whether the results of the study are accepted by the audience with certain criteria (Abdilah and Jogiyanto 2015: 71) Test reliability The reliability test is a measure of the stability and consistency of respondents in answering things related to the constructs of questions which are dimensions of a variable and arranged in a questionnaire form (Sujarweni 2015: 110).

RESULTS AND DISCUSSION

Descriptive Analysis of Information Technology Based on the calculation of the total

score and the mean score (average) the value of the information technology variable can be concluded that the information technology variable is categorized well with a

score of 3.82 The grand mean is 3.83 or equivalent to 76.6%, which means that

information technology in the bandung city government employee cooperative has been running well and accordingly. Judging from the assessment of indicators by respondents that IT has been implemented in accordance with procedures and functions. When compared to the ideal score that is numbered (100%) IT still has problems. GAP between the ideal score and the actual score is 23.4%, to minimize this GAP, it is necessary to control and improve the performance of information technology in the company so that any deficiencies in this IT variable can be improved so that it can achieve an ideal score on company that is 100% or can be interpreted as all respondents can answer the score in number 5.Descriptive Analysis of Organizational Culture Based on the calculation of the total score and mean score (average) the value of the variable organizational culture can be concluded that the variable organizational culture is categorized well with a score of 3.87.Grand mean is 3.99 or equivalent to 57%, which means that the organizational culture of the cooperative in Bandung city government employees has been running properly, well and accordingly. Judging from the assessment of indicators by respondents that BO has been carried out in accordance with the procedures and functions. When compared to the ideal score that is numbered (100%) IT still has problems. GAP between the ideal score and the actual score is 43%, to minimize this GAP, it is necessary to need internal control and performance improvement in the organizational culture of the company so that all deficiencies in this BO variable can be improved so that it can achieve ideal scores on the company namely 100% or it can be interpreted that all respondents can answer the score in number 5.Descriptive Analysis of the Quality of Management Accounting Information Systems Based on the calculation of the total score and the mean score (average) value of the variable quality management accounting information system can conclude that the variable quality management accounting information system is categorized well with a score of 4.02. Grand mean 4.02 or equivalent to 80.4%, which means that the quality of management accounting information systems in Bandung city government employee cooperatives has been running properly,

The influence of information technology and organizational culture on the quality of management accounting information systems;

Gun Gunawan Rachman, Muhamad Iqbal Adrian, Hennie Husniah

good and appropriate. Viewed from the assessment of indicators by respondents that KSIAM has been carried out in accordance with the procedures and functions. When compared to the ideal score that is numbered (100%) IT still has problems. GAP between the ideal score and the actual score is 19.6%, to minimize this GAP, it is necessary to need internal control and performance improvement on the quality of management accounting information systems for the company so that all deficiencies in the KSIAM variable can be improved so that they can score ideal for companies that is 100% or can be interpreted as all respondents can answer the score in number 5.

Analysis of the Effect of Information Technology and Organizational Culture on the Quality of Management Accounting Systems This analysis aims to obtain the results of the study of the model that has been examined so that it can be seen and known how much influence the variables X1 and X2 have on variable Y. the purpose is to use the Partial Least Square (PLS) method that the variable used in this study is a latent variable (not directly measurable) that can be measured based on the indicator- indicator (manifest variable), and together involves a level of error measurement. So that the writer can analyze in more detail the indicators of latent variables that reflect the strongest and weakest latent variables that include the level of errors, and that another goal of PLS (Partial Least Squares) is software that helps researchers to get values from each variable through the indicator. In this PLS there are two types of models that are formed, namely the measurement model specifications and structural model specifications. The measurement model specifications explain the definitions of latent variables contained in the study, namely TI (X1), BO (X2), and KSIAM (Y). Through this measurement model, it will be known which indicators are more dominant in forming latent variables.

After going through the measurement model specification phase for each latent variable, it will then be made a structural model that will examine the effect of each

independent latent variable on the latent variable. In structural equation modeling

(PLS) there are two types of models formed, namely measurement models and structural models. The measurement model explains the variance proportion of each variable (indicator) which can be explained in latent variables. Through the measurement model it will it is known which indicators are more dominant in the formation of latent variables. After the measurement model of each of the latent variables described hereinafter will be used as a structural model that will examine the effect of each independent latent variable, there is an endogenous latent variable.

The measurement model is used as the goodness of fit for the outer model. Where in the suitability test this model is explained in both convergent validity and

discriminant validiy, convergent validity in the form of a loading factor that explains

the variance proportion of each manifest variable (dimensions / indicators) which can be explained in latent variables. Through the measurement model it will be known which indicators are more dominant in reflecting latent variables. Dimensions that have less than 0.5 loading factor should be removed from the model. Besides that, it is obtained that the bigger t-value 1.96 means that the manifest variable is known as average variance (AVE), and composite reliability (CR) as a match test for the menifest variable that is able to reflect other variables. Good Composite reliability is giving a value greater than 0.7 (CR> 0.7) while good avarage variance extracted (AVE) is the one that gives a value greater than 0.5 (AVE> 0.5).
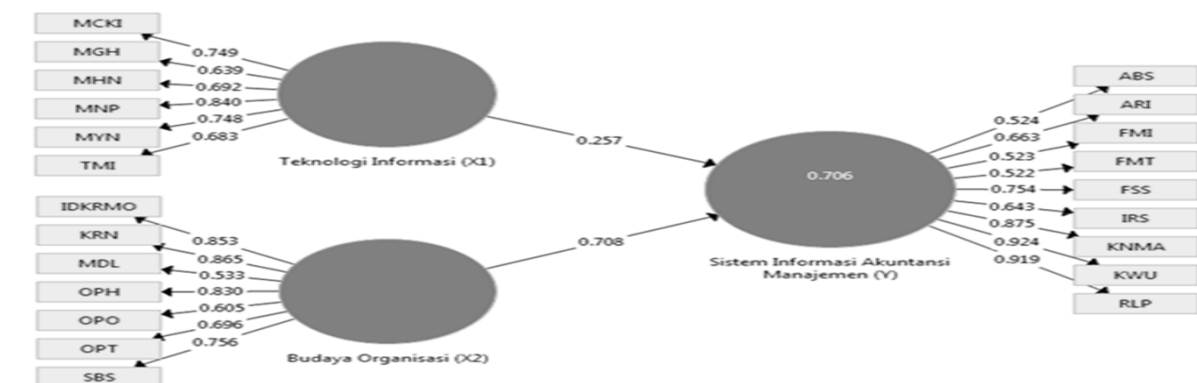

Figure 1. Factor loading line diagram

Information technology Measurement Model Specifications Information technology variables measured using 6 dimensions, namely capture (capture), processing (procesing), generating (generating), storing (storage), l looking for (retival), transmission (transmission).
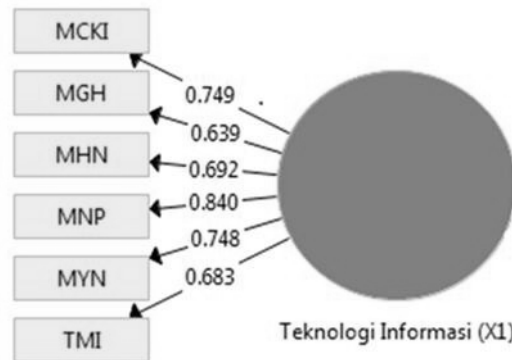

Figure 2. Information Technology Path Diagram

Outer loading and reflective constructs of information technology measurements are all worth above 0.50. The capture / capture dimension has a loading value of 0.840, above the threshold of 0.50 and significant (p = 0,000) at the 5% real level. This dimension has a reliability indicator (0.814). Then the processing / processing dimension has a loading value of 0.639, above a threshold of 0.50 and significant (p= 0,000) at a real level of 5%. This dimension has a reliability indicator (0.611). Generating / generating dimensions have a loading value of 0.692, above the 0.50 threshold and significant (p = 0,000). This dimension has a reliability indicator (0.646). Storing / storage dimensions have a loading value of 0.748, above the threshold of 0.50 and significant (p = 0,000) at a real level of 5%, this dimension has a reliability indicator (0.741). Then the Retention Dimension has a loading value of

0.749, above the threshold of 0.50 and significant (p = 0,000) at the real level of 5%, this dimension has a reliability indicator (0.710) and the Transmission / transmission dimension has a loading value of 0.683, above the threshold limit of 0.50 and significant (p = 0,000) at the real level of 5%, this dimension has a reliability indicator (0.632) The AVE value of 0.530 is above the average value of 0.50. Likewise the composite reliability value of the construct value above looks to have a value of 0.870 above the minimum value of 0.80. This means that this dimension has been declared very good.

Specifications for Measurement of Organizational Culture Model Organizational cultural variables measured using 7 dimensions, namely innovation and courage to take risks, pay attention to details, orient the results, orient people, orient the team, aggressiveness and stability.
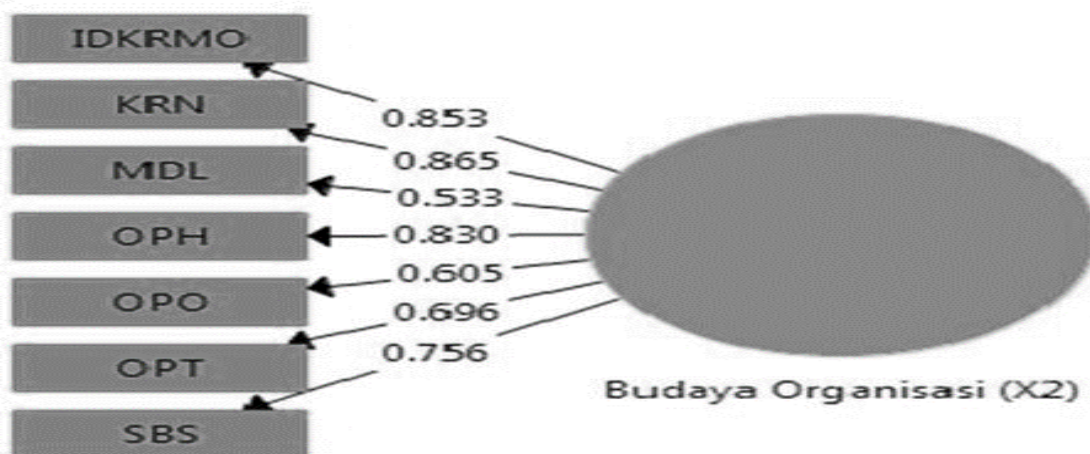

Figure 3. Diagram of the organizational culture path

Outer loading and reflective constructs measuring organizational culture are all valued above 0.50. The dimensions of innovation and courage to take risks have a loading value of 0.853, above the threshold of 0.50 and significant (p = 0.000) at the 5% real level. This dimension has a reliability indicator (0.850). Then the dimension of attention to detail has a loading value of 0.533, above the threshold of 0.50 and significant (p = 0.000) at the real level of 5%. This dimension has an indicator of reliability (0.529). The results orientation dimension has a loading value of 0.830, above the 0.50 threshold and significant (p = 0,000). This dimension has a reliability indicator (0.831). The orientation dimension in people has a loading value of 0.605, above a threshold of 0.50 and significant (p = 0,000) at a real level of 5%, this dimension has a reliability indicator (0.571). Then the orientation dimension on the team has a loading value of 0.696, above the threshold of 0.50 and significant (p= 0,000) at the real level of 5%, this dimension has a reliability indicator (0.666) and the aggressive dimension has a loading value of 0.865, above the 0 threshold, 50 and significant (p = 0,000) at the real level of 5%, this dimension has a reliability indicator (0.862) and the stability dimension has a loading value of 0.683, above the threshold of 0.50 and significant (p = 0,000) at a real level of 5%, dimension it has a reliability indicator (0.632) The AVE value of 0.533 is above the average value of 0.50. Likewise the composite reliability value of the construct value above looks to have a value of 0.894 which is above the minimum value of 0.80. This means that this dimension has been declared very good.

The specification of the model for measuring the quality of management accounting information systemsQuality variables of management accounting information systems measured using 9 dimensions, namely, scope (broad scope), timeliness (timeline), format (formation), accuracy (accuracy), integration (integration), flexibility (fleksbillity). aksebilitas (accsebillity), media wealth formalization (media richness)
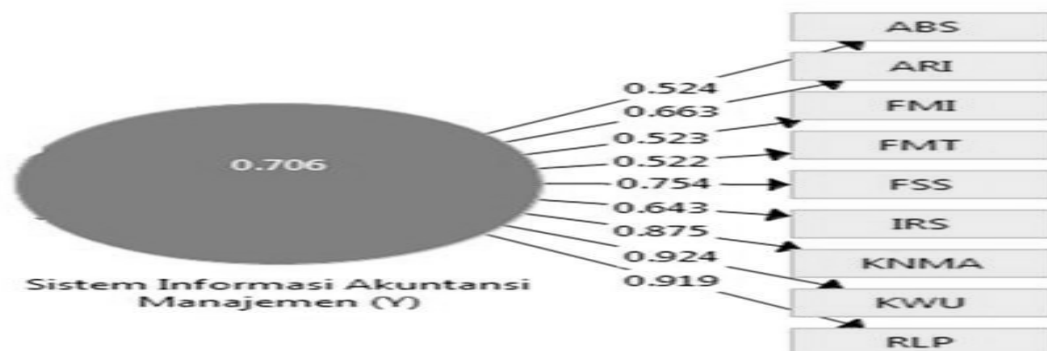

Figure. 4 KSIAM path diagrams

Outer loading and reflective constructs measuring the quality of management accounting information systems are all valued above 0.50. Broad scope has a loading value of 0.919, above the threshold of 0.50 and significant (p = 0.000) at the 5% level. This dimension has a reliability indicator (0.921). Then the timeliness / timeline dimension has a loading value of 0.924, above the threshold of 0.50 and significant (p = 0,000) at the real level of 5%. This dimension has a reliability indicator (0.927). The format / formation dimension has a loading value of 0.522, above the 0.50 threshold and significant (p = 0,000). This dimension has a reliability indicator (0.514). The Accuracy / Accuration dimension has a loading value of 0.663, above the threshold of 0.50 and significant (p = 0,000) at a real level of 5%, this dimension has a reliability indicator (0.639). Then the Integration Dimension / integrity has a loading value of 0.643, above the threshold of 0.50 and significant (p= 0,000) at the real level of 5%, this dimension has a reliability indicator (0.636) and imensions Flexibility / flexibility has a loading value of 0.754, above the threshold 0.50 and significant (p = 0,000) at the real level of 5%, this dimension has a reliability indicator (0.757) and the Accuracy / Accreditation dimension has a loading value of 0.524, above the threshold of 0.50 and significant (p = 0.000) at the real level 5%, this dimension has a reliability indicator (0.508), then Formalization / dimensional formalization has a loading value of

0.523, above the threshold of 0.50 and significant (p = 0,000) at a real level of 5%, dimension This has a reliability indicator (0.509) and the last dimension Wealth media / richness media has a loading value of 0.875, above the threshold of 0.50 and significant (p = 0,000) at a real level of 5%, this dimension has a reliability indicator (0.879). The AVE value of 0.523 is above the average value of 0.50. Likewise the composite reliability value of the construct value above looks to have a value of 0.904 which is above the minimum value of 0.80. This means that this dimension has been declared very good.

Evaluation of structural models the structural model presents the relationships between latent variables. In this study the structural model is related to two research hypotheses that signal the quality relationship between latent variables. The structural model in this study involves two exogenous latent variables (information technology, organizational culture) and one endogenous latent variable (management accounting information system quality).
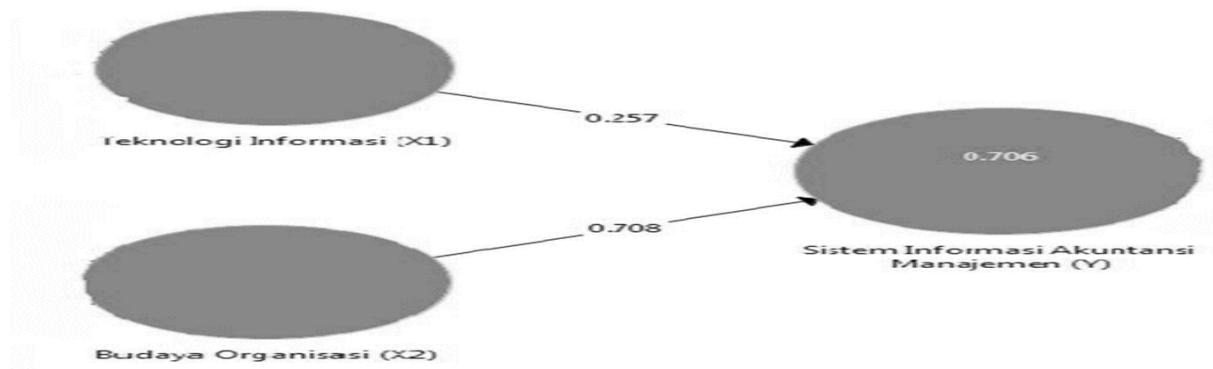

Figure 5. Standardized structural coefficients

Hypothesis 1 Testing Results Based on the table above, it can be seen that the value of the information technology variable (2,339) is greater than the critical (1.96) which means that the hypothesis 1 is H0 rejected, the statistical conclusion is that information technology significantly influences the quality of management accounting information systems .Hypothesis 2 Testing Results Based on the table above, it can be seen that the value of the variable organizational culture variable (7.735) is greater than tkritical (1.96) which means that the results of hypothesis 1 testing are H0 rejected, then the statistical conclusion is that organizational culture significantly influences the quality of management accounting information systems.

RESULT AND DISCUSSON

Effect of information technology on the quality of Management Accounting Information Systems. Based on the results of research that has been done, that information technology on the quality of management accounting information systems amounted to 0.257 and included in the large category. This coefficient shows that the variable quality of management accounting information system is explained by the information technology reflected by capture, processing, generating, storing, retrieving, transmitting. Seen from the path diagram of loading factor, the capture dimension has a 0.840 loading factor that contributes very large compared to the other dimensions, while the dimension of processing (proceing) has a loading factor of 0.639, generating has a loading factor of 0.692, and saving (storage) has a loading factor of 0.748, then for the dimensions of searching (retival) has a loading factor of

0.749 and the last transmission dimension has a factor loading of 0.683 With this, information technology provides a change in the quality of the accounting information system if the information system can assist in providing information as a decision in a condition effectively and efficiently. As well as information systems that are accurate, precise and have good capacity in terms of storing data. Research findings above information technology show that information technology is in a very good category, but not yet perfect. This is due to the following: Capture (capture) has shown that the accuracy of the data and meaning of data in the cooperative employees of the city government of Bandung is good, but not fully perfect, this is due to the existence of technical obstacles in its implementation, such as connectivity, hardware constraints that can reduce data accuracy and data meaning. Because

information technology is very dependent on data speed and available connectivity. Processing (procesing) is not fully good in processing and processing input data received to be information, not yet fully replicated the dimensions of processing (processing) in Bandung city government employee cooperatives, due to existing system limitations, not all of them know how soflware works existing, needed updating of components so that it can run the processing properly Generating (generating) has shown that the conversion of information into forms that are useful in cooperative employees of Bandung city government is good, but not completely perfect, because not all employees of cooperative employees of the city government of Bandung have the ability to process information, such as tables and graphs . which is made into a report. Storing (storage) is not fully good at Bandung city government cooperatives this is due to not enough good storage component, lack of storage media capacity, in need of other tools besides computerization, such as storing data and information into other media, for example stored to hard disk , tape, caompatc dist etc. to encourage better and more efficient performance. Looking back (retival) in reviewing the cooperatives of Bandung city government employees has not been fully good, this is caused by technical factors there is on connectivity and capacity, to be able to optimize the need for periodic renewal. and good maintenance is needed.

Transmission in the activity of sending data from one location to another via a computer network in Bandung city government cooperatives is good, but not perfect this is caused by connectivity problems between divisions may be caused by weak connectivity, technical disturbances such as exposed to malware, the internet network is weak and so on. Thus the results of the study show that the cooperative in Bandung city government employees on information technology significantly affects the quality of management accounting information systems, so if the higher or lower information technology is used then increase or lower the quality of management accounting information systems. Effect of Organizational Culture on the Quality of Management Accounting Information Systems Based on the results of the research that has been done, that the organizational culture of the quality of management accounting information systems is 0.708 and is included in the large category. This coefficient shows that the variable quality of management accounting information system is explained by organizational culture reflected by innovation and courage to take risks, pay attention to details, orientation to results, orientation to people, orientation to the team, aggressiveness and stability Viewed from the loading factor path diagram, the dimension of aggressiveness has a 0.865 loading factor that contributes very large compared to the other dimensions, while the dimensions of innovation and courage to take risks have a 0.853 loading factor, attention to detail has a factor loading of 0.533, and the orientation of the results has a loading factor of 0.830, then for orientation dimensions in people has a factor loading of 0.605 and orientation dimensions on teams have a loading factor 0.696 and finally the stability dimension has a factor loading of 0.756. Research findings on organizational culture show that organizational culture is in good category but not yet 100%. This is due to the following: Innovation and courage to take risks, not yet said to be perfect In motivating employees and encouraging due to lack of time in motivating employees and lack of encouragement to be more creative, but already in the good category. Paying attention to details shows that it is not fully good In clear and detailed communication regarding work, due to lack of communication and more accuracy in work must be increased, but it has been in a good category. Orientation on results shows that it is not fully good. In emphasizing the results and emphasis on effectiveness due to lack of attention to the process but already in the good category. Orientation in people shows that it is not fully good and perfect in completing work according to company procedures due to lack of suitability of reports on work results but already in good category. Orientation to the team shows that a good team has a cooperative relationship with other work units that are already in line and will not be as optimal as possible, due to lack of cooperative relationships, lack of good teamwork but already in good category. Aggressiveness shows that it is not fully optimal in showing achievement in work, due to lack of showing achievement but already in good category. Stability shows that it is not fully good In maintaining the status quo that contrasts with growth is how KPKB employees can maintain their trademark with the challenges of rapid growth and increasingly sophisticated technology, due to lack of cooperation and mutual respect for existing conditions but already in good.

REFERENCES

Abdilla, W & Jogiyanto. (2015). Partial Least Square. Yogyakarta: Andi Offset

Aditya, I. (2017). "The influence of organizational commitment and organizational culture on the quality of accounting information systems ". Journal of accounting information systems and auditingVol.1. No.1-10.

Firdaus & yazid. (2017)." The Influence of Information Technology, Intensity, Business Strategy and

Management Accounting Information Systems on Company Performance ". JRA Tirtayasa

Accounting Research Research. Vol.2. No.1. 17-40.

Fratiwi. (2017). "The Influence of Information Technology and Organizational Culture on the Characteristics of Management Accounting Information Systems Study at the Center for Pulp and Paper ". Services (Journal of Accounting, Information Systems and Auditing.Vol.1.No.1.34-40

Heidman, M. (2008). The Role of Management Accounting Systems in Strategic Sensemaking. Dissertation

European Business School: Oestrich-Winkel.

Hery. (2014). Knowledge And Management Approach. Jakarta: Grasindo.

Kadir, A & Triwahyuni, T.Ch. (2013). Introduction to Information Technology. Jakarta : Grasimdo

Luthans, F.(2006). Organizational Behavior.

Yogyakarta: Andi.Offset.

Nazir, M. (2014). Research methodology. Bogor: Ghalia Indonesia.

Purnama, R & Rudy, F.(2017). "he Influence of Organizational Culture On Information Quality With

Accounting Information Systems As Variable Modernization ". Scientific Journal of Economic

Accounting Students. Vol.1, No.4, 1-16.

Robbins, P. S & Judge, T. A. (2016). Organizational behavior. Jakarta: Salemba Empat. Rochaety, E. (2017). Management information system. Jakarta: Mitra Wacana Media.

Rosmawati, I. (2017). "The Influence of Information Technology and Organizational Culture on the Quality of Management Accounting Information Systems ". Journal of accounting information systems and auditing. Vol.1. No.3.46-65.

Siregar, B, Et al. (2013). Management Accounting. Jakarta: Salemba Empat.

Sjahrial, D, Djahotman & Gunawan. (2017). Management Accounting. Jakarta: Mitra Wancana Media Sujarweni, V. W. (2015). Business & Economic Research Methodology. Yogyakarta: Andi.Offset Sutabri, T. (2014). Introduction to Information Technology. Yogyakarta: CV Andri Offset.

Sutarman. (2012). Introduction to Information Technology. Jakarta: Bumi Aksara.

Widyaningsih. (2017)." The Influence of Organizational Culture and Information Technology on the Quality of Management Accounting Information Systems ". Journal of accounting information systems and auditing Vol.1.No.3. 126-137.