

The Influence of Organizational Culture on Quality of Accounting Information Systems Management

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Abstract: Organizational culture is one factor that can support the establishment of quality management accounting information system. The phenomenon that occurs in several organizations in Indonesia showed that the accounting information system of quality management yet. This study was conducted to seek the truth through testing that proves the influence of organizational culture on quality management accounting information systems. The data used in this study were obtained through a survey by distributing questionnaires to 80 insurance companies in Indonesia. Testing data using SEM-PLS. The research method used explanatory research method. The results showed that the problem is not management accounting information systems caused by organizational culture is not entirely good as expected.

Key words: Organizational culture and quality of accounting information systems management, distributing, questionnaires, SEM-PLS, expected

INTRODUCTION

Accounting information systems companies can be classified into 2 subsystems, the system of financial accounting information and accounting information systems management (Boockholdt, 1999; Wilkinson *et al.*, 1999; Hansen and Mowen, 2007; Susanto, 2008; Meiryani, 2016). Both systems are distinguished on the users where the information system of financial accounting intended for external users companies (Kieso *et al.*, 2011) while the system of management accounting information intended for internal users of the company such as managers, executives and employees in decision making (Hansen and Mowen, 2007). In fact, management accounting information system used in some institutions still have some concerns, as expressed by Usman Abdhali that the Indonesian Government has not been able to integrate the assets and wealth of the country adversely impact the state's revenues and lead to waste of the State budget. So, also the problems that occur in the company Vivera Group, namely inter-division system is not yet, fully integrated company, consequently affect the effectiveness of the division of work between the slower, as disclosed by Rochimat (2012). The next problem occurs in the transportation industry as proposed by Vijay (2012) that

the information system and the airline has not been able to quickly and easily collect and analyze passenger data in order to provide the best service for customers. The next major issue occurred in the insurance industry, Julian Noor states that 80% of the total 81 companies have management accounting information systems that are not integrated. To support the system of management accounting information is used, the insurance company to make changes by establishing a culture of customer centrics organization but can not be done completely as did this culture involves employees (human resources) on the upper level to the lower level and take a long time as happened in Indonesia Cigna Insurance Company (Christine, 2013).

Based on the problems that arise in the field and the theory used, one of the factors that can affect the quality of accounting information system management is the organizational culture (Laudon *et al.*, 2014; Kendall and Kendall, 2008; Romney and Steinbart, 2012; Stair and Reynolds, 2010; Stair and Reynolds, 2011; O'Brien and Marakas, 2010). An organizational culture serves as a means of uniting the activities of the member companies, consisting of a collection of individuals with different backgrounds (Kreitner and Kinicki, 2003). Organizational culture is a manifestation of the assumption held, implicitly accepted by the group and determine how these

groups feel, think and react to its environment that is diverse (Kreitner and Kinicki, 2003). The presence of computer technology as part of a system component management accounting information brought changes from previous culture to the new culture, so that, any changes in the accounting information system management as a new and positive has forced every member of the organization to do something different than usual but many people feel disappointed because doing something positive and look for any attempt to push for management accounting information system that long persisted (Susanto, 2008; Meiryani, 2017). Thus, the organizational culture and management accounting information systems related to mental problems of Human Resources (HR) in the organization (Susanto, 2008).

Theory which states that the organizational culture is one of the factors that can affect the quality of management accounting information system has been proven in research conducted Grey (1988), shows that organizational culture affects the development of accounting systems. This is confirmed Busco and Scapens (2011) which proved to public sector organizations that organizational culture influences the development of management accounting information systems. In the practice of management accounting information systems, Bhimani (2003), Etemadi *et al.* (2009) and Erserim (2012) found similar results where the organizational culture influence on management accounting information systems. Bhimani (2003) conducted a study on a division of the Siemens company, while Etemadi *et al.* (2009) find empirical evidence on some multinational companies in Iran and Erserim (2012) proved it on several industrial enterprises in Turkey. Based on the phenomenon, the literature used and the results of research that has been done before, the problems will be addressed in this study is how big the influence of organizational culture on quality management accounting information systems.

Review of literature

Organizational culture: The concept of culture in a broad sense and common can be defined as a pattern of behavior, beliefs, groups (organizations) and all the thinking that characterizes some values that are shared and are likely to survive the group members have changed (Luthans, 2008). Culture in relation to the organization it will give a different sense in which the organizational culture is a manifestation of the assumption held, implicitly accepted by the group and determine how these groups feel, think and react to the enriched environment (Kreitner and Kinicki, 2003; Susanto and Meiryani, 2018). The same opinion was expressed by Schein (2004) which

states that the organizational culture as a common understanding of basic assumptions, values and beliefs, as well as artifacts and creations that can drive organizational behavior. Furthermore, Robbins and Judge (2014) argues, "Organizational culture refers to a system of shared meaning held by members that distinguishes the organization from other organizations".

The same definition was also delivered by Jones which states, organizational culture is the set of shared values and norms that control organizational members interactions with each other and with people outside the organization. Value of general criteria, standards or guiding principles that use to determine the which types of behaviours, events, situations and outcomes are desirable or undesirable. Norms or styles standards of behavior that are considering acceptable or typical for a group of people. Likewise with McShane and von Glinow (2010) defines organizational culture as "Values and assumptions are disseminated within the organization".

Based on the expert opinion of the above it can be said that the organizational culture is a pattern of behavior and thinking that characterize the values are embraced and accepted together in an organization that will be a characteristic that differentiates one organization to another. Cultural organizations can serve as a tool for determining the direction of the organization, directing what they can do and what not to do how to allocate resources and manage organizational resources and also, as a tool for dealing with problems and opportunities of the internal and external environment. Organizational culture can also, be understood from certain dimensions or characteristics closely related and interdependent. Dimensions used to measure the organizational culture in this study refers to the dimensions or characteristics proposed by Robbins and Coulter, Robbins and Judge (2007, 2014), Susanto and Meiryani (2018) and McShane and von Glinow (2010) are: Innovation and risk taking, attention to detail, outcome orientation, team orientation and aggressiveness.

Quality of accounting information systems management:

Generally Horngren *et al.* (2008) mentions the "Management accounting information system is a formal mechanism for gathering, organizing and communicating information about an organization's activities. "So, also with Burns *et al.* (2013) states, "Management accounting information systems: the hardware and software the which facilitates the collation of the data and the processing of information. "Next Bouwens and Abernathy (2000) states, "Management accounting information system is a formal system designed for providing information to managers.

“Kaplan and Atkinson (2005) added”, management accounting information system provide information to assist managers in their planning and control activities. “Atkinson *et al.* explains, “Management accounting information systems provide information, both financial and nonfinancial to managers and employees inside and organization”.

Specifically, Belkoui (2002) states, “Management accounting information system may be defined as the set of human and capital resources within an organization that is responsible for the production and dissemination of information deemed relevant for internal decision making. “More Hansen and Mowen (2007) states that: “Management accounting information system is an information system that produces output using inputs and process needed to satisfy specific management objectives”. Likewise with Heidmann (2008): “Management accounting information systems are the formal systems to prepare and provide information from the internal and external environment that helps managers to monitor organizational performance. This is in line with the opinion of Hoque (2003) that the management accounting information is the information generated from the process of identifying, collecting and measuring the data, useful for managers in planning, control and decision making.

Hansen and Mowen (2007) explains further that: “The management accounting information system Provides information needed to satisfy specific management objectives”. Based on the above, the intended system of management accounting information in this study is a collection of system components related and cooperate with each other by utilizing the resources to process data into financial and non-financial information to meet the specific objectives of management. In general, the quality of management accounting information system can be defined as a form of statements about the conditions in which management accounting information system can generate management accounting information useful for managers in performing process management (Hoque, 2003). Management accounting information quality is a reflection of the results of the processing of accounting information system of quality management (Heidmann, 2008).

DeLone and Mclean (1992 and 2003) uses the term successes to show the quality of the information system. While Stair and Reynolds (2010) shows the quality in terms of user satisfaction. Quality is a matter of paramount importance in today’s business world, especially if associated with information systems (Post and Anderson, 2003). DeLone and McLean (2003) shows the success or quality of the information systems that focus on efforts to

produce quality information. In line with Rani and Kidane states that in implementing systems of quality management accounting information it is very important to do focusing on how to produce quality management accounting information. Thus, based on the above description is a system quality management accounting information in this study is the integration of the system components associated with and cooperate with one another by utilizing resources to process data into information of financial and non-financial in order to meet the specific objectives of management. The dimensions used to measure the quality of SIAM in this study were: Integration (Heidmann, 2008), flexibility (Post and Anderson, 2003; DeLone and McLean, 2003; Meiryani, 2018; Stair and Reynolds, 2010), accessibility (Heidmann, 2008), formalization, media richness.

Theoretical framework

Influence of organizational culture on the quality of accounting information systems management:

Organizational culture is a component in the organization has a strong influence on information systems (Laudon *et al.*, 2014). Laudon and Laudon, shows that each organization has a unique culture which is a set of assumptions, values and ways of doing things which is accepted by almost all members of the organization (Laudon *et al.*, 2014). Kendall and Kendall (2008) confirm that the organizational culture is an important factor affecting the use of information systems. Romney and Steinbart (2012) states that organizational culture influences the design of accounting information systems. This is in line with the opinion of Susanto (2008) and Meiryani (2017) that organizational culture and accounting information system (a hybrid system of financial accounting information and accounting information systems management) associated with mental problems of Human Resources (HR) in the organization.

Susanto (2008) confirms the presence of computer technology as a part of the components of information systems bring changes from previous culture to the new culture, so that, any changes in the information system as a novelty and a positive has forced every member of the organization to do something different from the usual. Many feel discouraged because doing something positive and look for any attempt to push for the old information system persists (Susanto, 2008). Stair and Reynolds (2010), further revealed, “Organizational culture can also have a positive effect on the successful development of new information systems” Stair and Reynolds (2011) adds: “The use of information systems to add value to the organization is strongly influenced by organizational structure, culture and change. “So, we can say that

organizational culture has a strong influence on information systems (Stair and Reynolds, 2010). Further O'Brien and Maracas (2010) states that the success of information systems is influenced by several factors, one of which is the organization's culture. By identifying and understanding the meanings, norms and power (power) in the organization is an important consideration in the success of information systems.

Hirsch and Maurice (1994) also, states that organizational culture has a very strong influence on the behavior of individuals and the organization as a whole because the information system is a major component of the organization, information systems can be affected substantially by the culture of the organization. Lots of information systems failure, simply, the cause is a system of information did not match the organizational culture where the information systems are designed. The opinions of the above experts, supported by the results of research conducted Grey (1998) which shows that organizational culture affects the development of accounting systems. This is confirmed Busco and Scapens (2011) which proved to public sector organizations that organizational culture influences the development of management accounting information systems. In the practice of management accounting information systems, Bhimani (2003), Etemadi *et al.* (2009) and Erserim (2012) found similar results where the organizational culture influence on management accounting information systems. Bhimani (2003) conducted a study on a division of the Siemens company, while Etemadi *et al.* (2009) find empirical evidence on some multinational companies in Iran and Erserim (2012) proved it on several industrial enterprises in Turkey. Based on the above it can be concluded the organizational culture affects the quality of accounting information systems management.

MATERIALS AND METHODS

Study model and hypotheses

Study model: Based on the description in the framework it can be formulated paradigm linkages between organizational culture and quality of accounting information system management study of the models, as shown in the following figure:

Hypothesis: Based on the framework described earlier, then the hypothesis that can be formulated in this study: the organizational culture affects the quality of accounting information systems management.

RESULTS AND DISCUSSION

The method used in this research is explanatory. Hypothesis testing is done by using structural equation modeling (Structural Equation Model-SEM) approach Partial Least Square (PLS). Methods of data collection is done by sending a questionnaire to the operational managers in the 80 insurance companies (the result of random sampling). Number of questionnaires distributed 400 copies. The number of companies that returned the questionnaire as many as 62 companies (203 copies). Furthermore, the data were analyzed in this study corresponds to the number of companies who returned the questionnaire, namely 62 companies.

Results of testing the influence of organizational culture on quality management accounting information system shows t_{count} greater than the value t_{kritis} namely $2.002 > 1.96$ then the error rate of 5% was decided to reject H_0 . So, based on the test results it can be concluded that organizational culture affects the quality of accounting information systems management. The study provides empirical evidence that the better the culture of the organization will improve the quality of accounting information systems management. Furthermore, the survey results revealed the magnitude of f^2 value of 0.115 indicates that organizational culture influence of moderate /medium on the quality of management accounting information systems. Not quite high influence of organizational culture on quality management accounting information systems can be explained by the description of the results of research that when viewed from an average score of respondents based dimension, innovation and risk taking are included in the category enough. The results of this study different from the results of research Hirsch and Maurice (1994) which shows that the use of information systems to be strongly influenced by the culture of the organization. However, other studies state that organizational culture influence the use of management accounting information system (Busco and Scapens, 2011). So is the Grey (1998) states that organizational culture influences the development of management accounting information systems.

This study was to answer the problem of organizational culture that emerged in the insurance company such as the insurance company Cigna Indonesia, namely the difficulty of establishing a culture of customer centrics organization because the organizational culture is expected of all individuals in the organization have the same understanding of client/insured, this culture also, involve employees (human resources) on the upper level to the lower level and take a long time, so, it can not fully support the successful

implementation of management accounting information systems, especially in improving the integration of information system components (including human resources as brain-ware). Thus, prior to the application of management accounting information system, preferably in the design/design of the system must be understood first customer culture centrics this organization to improve the quality of accounting information systems management, especially in terms of integration of information system components. Centrics customer organizational culture can be built with dimensions of innovation and risk taking, attention to detail, team orientation, outcome orientation, aggressiveness (McShane and Glinow, 2010).

CONCLUSION

Based on the phenomenon, the formulation of the problem, hypothesis and research results, the authors conclude that: organizational culture affects the quality of accounting information systems management. Not to berkualitasnya management accounting information system caused by a culture of innovation and risk-taking culture also, aggressiveness that goes far has not run as expected.

REFERENCES

- Belkoui, A.R., 2002. Behavioral Management Accounting. Quorum Books, London, England, ISBN: 1-56720-443-0, Pages: 261.
- Bhimani, A., 2003. A study of the emergence of management accounting system ethos and its influence on perceived system success. *Accounting Organiz. Soc.*, 28: 523-548.
- Bookholdt, J.L., 1999. Accounting Information Systems: Transaction Processing and Controls. 5th Edn., McGraw-Hill Education, Singapore, Asia, ISBN: 9780071160988, Pages: 922.
- Bouwens, J. and M.A. Abernethy, 2000. The consequences of customization on management accounting system design. *Accounting Organiz. Soc.*, 25: 221-241.
- Burns, J., M. Quinn, L. Warren and J. Oliveira, 2013. Management Accounting. 1st Edn., McGraw-Hill Education, New York, USA.,.
- Busco, C. and R.W. Scapens, 2011. Management accounting systems and organisational culture: Interpreting their linkages and processes of change. *Qual. Res. Accounting Manage.*, 8: 320-357.
- Christine, S., 2013. Masukan customer become ingredients product innovation cigna insurance. Southwest Airlines, Dallas, Texas, USA. <http://swa.co.id/swa/ceo-interview/masukan-customer-menjadi-bahan-inovasi-produk-asuransi-cigna>.
- DeLone, W.D. and E.R. McLean, 2003. The DeLone and McLean model of information systems success: A ten-year update. *J. Manage. Inform. Syst.*, 19: 9-30.
- DeLone, W.H. and E.R. McLean, 1992. Information systems success: The quest for the dependent variable. *Inform. Syst. Res.*, 3: 60-95.
- Erserim, A., 2012. The impacts of organizational culture, firm's characteristics and external environment of firms on management accounting practices: An empirical research on industrial firms in Turkey. *Procedia Social Behav. Sci.*, 62: 372-376.
- Etemadi, H., Z.D. Dilami, M.S. Bazaz and R. Parameswaran, 2009. Culture, management accounting and managerial performance: Focus Iran. *Adv. Accounting*, 25: 216-225.
- Grey, S.J., 1988. Towards a theory of cultural influence on the development of accounting systems internationally. *J. Accounting Finance Bus. Stud.*, 24: 1-15.
- Hansen, D.R. and M.M. Mowen, 2007. Managerial Accounting. 8th Edn., South-Western Cengage Learning, USA.
- Heidmann, M., 2008. The Role of Management Accounting Systems in Strategic Sensemaking. Deutscher University Verlag, Wiesbaden, Germany, ISBN: 978-3-8350-0633-1, Pages: 228.
- Hirsch, J. and L. Maurice, 1994. Advanced Management Accounting. 2nd Edn., Southwestern Publishing Group, Nashville, Tennessee.,.
- Hoque, Z., 2003. Strategic Management Accounting: Concepts, Process and Issues. 2nd Edn., Spiro Press, Great Britain, UK., ISBN: 9781904298731, Pages: 395.
- Horngren, C.T., G.L. Sundem, W.O. Stratton, D. Burgstahler and J. Schatzberg, 2008. Introduction to Management Accounting. 14th Edn., Pearson Education, Upper Saddle River, New Jersey, USA., ISBN: 978-81-317-2571-9, Pages: 831.
- Kaplan, R.M. and D.P. Saccuzo, 2004. Psychological Testing, Principles, Applications and Issues. 6th Edn., Wadsworth Publishing Company, Belmont, California, ISBN: 0-534-63308-0, Pages: 747.
- Kaplan, R.S. and A.A. Atkinson, 2005. Advanced Management Accounting. 3rd Edn., Prentice-Hall Inc., New Jersey.

- Keitner, R. and A. Kinichi, 2003. *Organization Theory and the New Public Administration*. Allyn & Bacon, Boston, Massachusetts.
- Kendall, K. and J. Kendall, 2008. *Systems Analysis and Design*. Pearson Education, Inc., Upper Saddle River, New Jersey.
- Kieso, D.E., J.J. Weygandt and D.T. Warfield, 2011. *Intermediate Accounting*. 14th Edn., John Wiley & Sons, Hoboken, New Jersey, Pages: 1583.
- Laudon, K.C., J.P. Laudon and M.B. Elizabeth, 2014. *Management Information Systems: Managing the Digital Firm*. 7th Edn., Pearson Education, England, UK., ISBN:9780133156843, Pages: 552.
- Luthans, F., 2008. *Organizational Behavior*. 11th Edn., McGraw Hill, Singapore, ISBN:978-007-125930-9.
- McShane, S.L. and M.A. von Glinow, 2010. *Organizational Behavior*. 5th Edn., McGraw-Hill, Boston.
- Meiryani, 2016. Influence of uncertainty and risks on the information system. *Intl. Bus. Manage.*, 10: 1575-1580.
- Meiryani, 2017. The influence of business process and management support on accounting information system. *J. Eng. Appl. Sci.*, 12: 7416-7421.
- Meiryani, 2018. The factors that affect the quality of accounting information system empirical testing in the state-owned enterprises. *J. Theor. Appl. Inf. Technol.*, 96: 1858-1867.
- O'Brien, J.A. and G.M. Marakas, 2010. *Introduction to Information Systems*. 15th Edn., McGraw-Hill Companies, New York, USA., ISBN: 9780070167087, Pages: 592.
- Post, G.V. and D.L. Anderson, 2003. *Management Information Systems Solving Business Problems with Information Technology*. 3rd Edn., McGraw-Hill, New York, USA., ISBN-13: 978-0072823752, Pages: 640.
- Robbins, S. and T. Judge, 2007. *Organizational Behavior*. Prentice Hall, Upper Saddle River, NJ.
- Robbins, S.P. and T.A. Judge, 2014. *Essentials of Organizational Behavior*. 13th Edn., Pearson Education, Upper Saddle River, New Jersey, USA., ISBN:9780133920819, Pages: 362.
- Robbins, S.P., 2003. *Organizational Behaviour*. 10th Edn., Pearson Education, New Jersey, USA., ISBN:9780131000698, Pages: 675.
- Rochimat, D., 2012. Integrate business processes, vivera group use ERP solutions. Southwest Airlines, Dallas, Texas, USA. <http://swa.co.id/swa/capital-market/corporate-action/integrasikan-proses-bisnis-vivere-group-pakai-solusi-erp>.
- Romney, M.B. and P.J. Steinbart, 2012. *Accounting Information Systems*. 10th Edn., Pearson Education Inc., Upper Saddle River, NJ., Pages: 718.
- Schein, E.H., 2004. *Organizational Culture and Leadership*. Wiley, New York, ISBN-13: 9780787975746, Pages: 450.
- Stair, R.M. and G.W. Reynolds, 2010. *Principles of Information Systems*. 9th Edn., Course Technology, Boston, Massachusetts, USA.,
- Stair, R.M. and G.W. Reynolds, 2011. *Fundamentals of Information Systems*. 6th Edn., Cengage Learning, Boston, Massachusetts, USA., ISBN:9780840062185, Pages: 496.
- Susanto, A. and Meiryani, 2018. The influence of business process and risk management on the quality of accounting information system. *J. Theor. Appl. Inf. Technol.*, 96: 176-183.
- Susanto, A. and Meiryani, 2018. The quality of accounting information system and its impact on the quality of accounting information: User ability and top management support. *J. Eng. Appl. Sci.*, 13: 384-387.
- Susanto, A., 2008. *Accounting Information Systems Structure Control Risks Development*. 1st Edn., Lingga Jaya, Bandung, Indonesia.,
- Vijay, A., 2012. Airlines passenger data processing else. Southwest Airlines, Dallas, Texas, USA. <http://swa.co.id/swa/trends/technology/maskapai-penerbangan-pun-perlu-pengolah-data-penumpang>.
- Wilkinson, J.W., M.J. Cerullo, V. Raval and B. Wong-On-Wing, 1999. *Accounting Information Systems-Essential Concepts and Applications*. 4th Edn., John Wiley & Sons, Hoboken, New Jersey, ISBN:9780471253525, Pages: 608.