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The Influence of Knowledge Accounting Function and Organizational Commitment on Management Accounting Information System and Its Implication on Managerial Performance

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Abstract

It is commonly accepted that management accounting information system is one of the most influential factor that determined managerial performance. However, the driver of management accounting information system itself is still unclearly revealed.

Some studies found out that knowledge of accounting function influenced management accounting information system, whereas other studies found out that organizational commitment also influenced management accounting information system. Both, knowledge of accounting function and organizational commitment, are known as individual differences. However, there is almost no study ever done that integrates these two constructs in one integrated framework. This study integrating these two construct in one framework in an attempt to analyze the influence of individual differences on management accounting information system, and its implication on managerial performance. The unit analysis of this study are individuals, which are top manager, production manager, and marketing manager of manufacturing firms listed in Indonesian Stock Exchange (BEI). Data were collected through mail survey with the sample of 204 managers. Structural Equation Modeling is used to test the research hypotheses. The result of this study shows that all of the manifest variables are reflecting their latent variables. This study also found that managerial performance would be better if individual differences fit with expectation and management accounting information system relevant with the needs of management.

Keyword:

individual differences, knowledge of accounting function, organizational commitment, management accounting information system, managerial performance.

INTRODUCTION

Previous studies in the field of management accounting information system (MAIS) found out that MAIS have a significant relationship with performance (Chenhall & Morris, 1986; Gull, 1991). MAIS can be designed to provide sophisticated information to facilitate decision making. Cooper and Slagmulder, (2004) argued that advanced MAIS provide not just number of traditional accounting (cost and profitability), it also provides extensive information relating to the quality, timing, and accuracy of the information.



Some scholars believed that factors such as organizational characteristics, environmental characteristics, job characteristics, and personal characteristics determined the success of the development of information system (Ives, & Olson, 1984; and Lucas, 1978). In line with this argument, Zmud (1979) supported previous findings that revealed the impact of personal characteristics or individual differences on information processing and decision behavior.

This study aimed to explain the influence of knowledge of accounting function and organizational commitment on MAIS, and its implication on managerial performance. Individual differences are conceptualized following the definition explained by Endler & Magnuson (1976). However, this study is not operationalized all the characteristics explained by Endler & Magnuson (1976), but used only two characteristic which are skill and ability, and attitude. Furthermore, this study conceptualized skill and ability as knowledge of accounting function, and attitude as organizational commitment.

The selection of these two characteristics is based on the fact that the uniqueness' of individual knowledge and expertise, and his/her access to information of the uncertainty, are suspected to be related with his/her ability in dealing with the problem/s (Waterhouse & Tiesen, 1978). Basu, Hartono, Lederer, and Sethi, (2002) argued that the commitment is one aspect of the project of information system, and is widely believed to affect the success of the project by providing the facility for solving problems.

Studies that combining the knowledge and organizational commitment to explain the variation of MAIS is very limited. Although limited, some researchers have investigated this issue by using one or a combination of various individual differences (Fisher, 1996; Basu,et al.; Suhairi, 2004; Phua, 2007).

LITERATURE REVIEW

Knowledge of Accounting Functions

Knowledge is the result of the process of seeing, hearing, feeling, and thought which determine human being attitude and their act (Indriantoro & Supomo, 2002). Meanwhile, according to Zikmund (2003), knowledge is a mixture of information, experience and insight to prepare a framework that can be used as a consideration when assessing new information or evaluate the relevant circumstance.

Some theories on how to acquire the knowledge distinguish between declarative knowledge and procedural knowledge, those are critical to performance (eg Anderson 1982; and Winograd 1975). Declarative knowledge is knowledge of facts and concepts in a domain (Anderson 1990; Waller and Felix 1984), whereas procedural knowledge is knowledge of carrying out the work (Anderson 1987; Bonner and Penington 1991; Waller and Felix 1984). Declarative knowledge on basic auditing is generally acquired through formal education, and procedural knowledge acquired during his/her professional career (Walter and Felix, 1984).

The concept of knowledge in this study focused on the knowledge of the accounting function. Accounting functions in this study include organizational functioning, social-



political function, and individual functions, such as those studied by Covaleski and Dirsmith (1983, 1986).

Organizational Commitment

Researchers tend to define this concept as a combination of attitudes and behavioral intentions (Ferris & Aranya, 1983; Mowday et al., 1979; Alpander, 1990). Organizational commitment when viewed from the attitudinal standpoint can be defined as the power of individuals' identification to identify with/and engagement in a particular organization (Porter et al., 1974). Organizational commitment when viewed from the behavioral standpoint can be defined as a function of individuals' behavior, and the workers are considered to be committed to the organization through their actions and choices all the time (Becker, 1960).

Meyer and Allen (1984. 1991) based on the work of Porter, Steer, Mowday, & Boulian (1974) extends the meaning of organizational commitment, and introduce a comprehensive conceptualization of commitment. They argued that organizational commitment can be better understood as a multi-dimensional concept which includes affective, continuance and normative commitment. This conceptualization is used in this study.

Management Accounting Information System

Management Accounting Information system (MAIS) is intended to establish and maintain records of the relevant events that can be used to measure the earnings and financial position, assessing performance in accordance with the goals, and preparing management incentives in accordance with such performance. The system is also intended to preparing data for managers to control costs, identify problems, and determine alternatives for solving problems and selecting solutions which will be applied. (Sweiringa & Wieck, 1987; Otley, 1980.)

Basically, the previous description suggests that the role of MAIS facilitate decision-making through the information generated and prepared for management decisions (Chong and Eggleton, 2003). Management accounting information is intended to improve the quality of decision making, which produce a better choice of action (Sprinkle, 2000)

Changes in the business world, such as increased market competition, the development of modern production technology, loose management model, and changes in customer behavior, not only makes the need for increased MAIS, but it should have been better in terms quality and sophistication (Agbejule, 2005; Chenhall & Morris, 1986; Chong & Eggleton 2003). Previous research supports the view that when a high degree of uncertainty occurs, this advanced MAIS will very useful to support management to perform their responsibilities (Chenhall & Morris, 1986; Gordon & Narayanan, 1984; Gull, 1991; and Gull & Chia, 1994) Chenhall and Morris (1986) tried to improve the understanding of the characteristics of the MAIS which are potentially useful for managers. They argued that the information needed to make a decision can be expressed in the general characteristics of information. They propose



that each information item has the following characteristics: scope, timelines, the level of integration, and the level of aggregation.

Previous studies of MAIS - performance, focus on one or two characteristics of the MAIS, such as the broad scope (Chong & Chong, 1997), aggregation and broad scope (Gull & Chia, 1994), the broad scope and timeliness (Tsui, 2001), while Gull (1991) in his study using a composite measurement of MAIS. In this study used the four characteristics of MAIS as used by Chenhall & Morris (1986).

Managerial Performance

Managerial performance is a factor that can enhance organizational effectiveness. According to Mahoney et al. (1963) managerial performance is the performance of the individual members of the organization in managerial activities, such as: planning, investigation, coordination, supervision, staffing, negotiation and representation. According to Russel (1994) managerial performance is defined as the systematic integration that includes business, financial monitoring and performance evaluation of employees in explicit terms that relate to company goals.

Asks employees to assess themselves (self-rating) can be a useful technique, if the purpose of evaluation is to develop themselves further. There are several reasons to use self assessment include: the opportunity to participate in the performance of process control, especially when combined with the determination of objective assessment (management by objectives), increase motivation and reduce rejection during the assessment interview (Simamora, 2002) The main focus of attention in this study is the managerial performance. The main idea of the theoretical framework is that an adequate knowledge of accounting functions along with high organizational commitment can be used to select or use management accounting information systems in accordance with the needs of managers of the information for decisions making. Finally managers will have a good performance.

The Relationship between Knowledge of Accounting Function with Management Accounting Information System

According to Klein, Dansereau & Hall, (1994) MAIS an organization set up the same information for all managers can explain the variation in the performance of the individual, if there are individual differences such as knowledge managers. It was also found by Holmes and Nicholls (1988) and McMahon and Holmes (1991) factors affecting the use of accounting information on small and medium enterprises, among others, accounting knowledge. Wichman (1984) found an accounting problem in small companies due to limited managers' knowledge of accounting, The same thing was found by Peacock (1985).

The same situation applies in Indonesia. The limited managers' knowledge of accounting, causing an understanding of the accounting function is also limited. This will lead to the provide and use of accounting information is also limited (Benjamin, 1989). To overcome these weaknesses of management who were directly involved in the use of



accounting information for decision making requires education and training in this field (Benjamin, 1989; McMahon & Holmes, 1991; Peacock, 1985; Wichman, 1984).

The Relationship between Organizational Commitment and Management Accounting Information System

Research on the impact of organizational commitment to information systems planning ever undertaken by Basu, et al. (2001), which suggests that when organizational commitment increases, the success of information systems planning will go up to the maximum level. In the more specific terms (eg, associated with the output of management accounting) Nouri and Parker (1996) conducted a study to look at the impact of the organization's commitment to the participation of the budget and the budget gap, the study found that the higher the organizational commitment, would decrease the budget gap.

The effectiveness of MAIS as a means of control is not only determined by the content of the information itself but also determined by how the use of such information systems (Bries and Hierst, 1990). Which means that the effectiveness of the accounting information system, will also be influenced by organizational commitment, because individuals who have a high commitment to be bound by his actions and through this action is believed that he would retain activity involving him (Salancik, 1977).

The Relationship between Management Accounting Information Systems and Managerial Performance

The importance of including performance on managerial or organizational level in the study of management accounting information systems has been emphasized among others by the Merchant and Simon (1986), Otley and Wilkinson (1988). Research conducted by Chong and Chong, (1977) found that information from the MAIS which is broad scope is an important antecedent to the performance of the SBU, is in line with research conducted by Abernethy and Guthrie (1994).

The main goal of MAIS is to prepare the accounting information will be used to facilitate decision making by managers. Previous studies (Chong, 1996, 1998; Mia, 1993; Mia and Chenhall, 1994) proved empirically that the role of SIAM to facilitate decision-making can improve managerial performance, according to the contextual variables such as environmental uncertainty, and design of MAIS. Chenhall and Morris (2003) found that the use of a variety of MAIS's dimension, help managers deal with uncertainty, thereby increasing performance.

The Relationship between Knowledge of Accounting Function, Organizational Commitment and Management Accounting Information System and its' implication on Managerial Performance

Klein, et al., (1994) said that an organization's management accounting system is set up similar information for all individual managers, can explain the variation in the performance of the individual only if there are differences in the individual managers (eg. knowledge, and



preferences) that causes them to respond differently to management accounting information. So the knowledge of individuals is to consider the use of an information system, in order to produce optimal performance.

Based on the theory proposed by Cyert and March (1963), Entrialgo, Fernandez, and Vazques (2000a) states that the relationship of personality (individual differences) with the performance of the company can apply indirectly. Previous studies have defined that accounting is critical to achieving organizational success, and a limited knowledge of accounting results in limited use of accounting in decision making (Holmes and Nicholls, 1988; Peacock, 1985, and Wichman, 1984). To achieve success, managers will make decisions based on relevant information so as to result in success. This study aimed to explore the relationship of individual differences (knowledge of accounting functions, and organizational commitment) manager with management accounting information systems and its implications on the performance of managers.

HYPOTHESIS

Based on the description of the constructs in this study as well as the nature of the relationship between variables, then the hypothesis can be arranged as follows H₁: Knowledge of accounting functions have significant effect on management accounting information systems

H₂: Organizational commitment have significant effect on management accounting information systems

H₃: Management accounting information systems have a significant effect on managerial performance

H₄: Knowledge of accounting and organizational commitment have a significant effect of management accounting information systems as well as significant implications for managerial performance.

DATA AND METHODOLOGY

The data of this study is the primary data, obtained by distributing questionnaires to 453 managers (top, production and marketing) manufacturing industries are listed on the Indonesia Stock Exchange. The data can be processed as many as 204 questionnaires. This study uses explanatory in order to explain the relationship between variables.



FINDING / DISCUSSION

The results of this study describes the perceptions of managers regarding knowledge of accounting functions, organizational commitment, management accounting information systems and managerial performance are as follows.

The table below illustrates that the perception of managers of the company's manufacturing industry is only slightly above the average score, indicating the managers perceive enough knowledge about the function of accounting, organizational commitment, management accounting information systems and managerial performance

Table 1 Perceptions Managers of KAF, OC, MAIS and MP

No	Variable	Mean
1	Knowledge of accounting function	4.89
	Organizational knowledge	5.03
	Social politic knowledge	4.87
	Individual knowledge	4.77
2	Organizational commitment	5.58
3	Management accounting information	4.89
	system	4.95
	timeliness	4.75
	integration	4.68
	broadscope	4.75
	aggregation	
4	Managerial performance	5,59

Structural Equation Modeling (SEM) which is operated by using the LISREL 8.70 software used to test the hypothesis in this study. The model has a match of three point of view that is an absolute measure of fit, incremental fit measures and parsimonious fit measures. Thus the model fit to the data as a whole is good.

The measurement model is needed to describe the indicators to measure the accuracy of its latent variables. Validity and reliability analysis is used to test the suitability of the measurement model. The test results showed that the all dimensional of four variables are valid and reliable. (factor loading greater than 0.90 and R² greater than 1.95). The results of hypothesis testing indicate that,



Table 2 The Influence of KAF and OC on MAIS

Influence of exogen variable on endogen variable	Weight	t statistic	Description
Influence of KAF on MAIS	0.23	3.12	Significant
Influence of OC on MAIS	0.09	1.40	Not significant

The above table shows that the exogenous variables, knowledge the in accounting accounting function can the variation explain information systems management by 23%. While the exogenous variable, organizational commitment was not significant relationship with the endogenous variables of management accounting information systems.

Table 3 The Influence of KAF, OC, and MAIS on MP

Influence of exogen variable on endogen variable	Weight	t statistic	Description
Influence of KAF on MP	0.14	2.39	Si <mark>g</mark> nificant
Influence of OC on MP	0.29	3.83	Significant Significant
Influence of SIAM on MP	0.52	4.77	Significant Significant

The above table shows that the exogenous variables have a significant impact on the endogenous variables of managerial performance. Knowledge of accounting functions could explain the variation in managerial performance by 0.14. While the organizational commitment variable, can explain the variation in managerial performance by 0.29.

MAIS has a significant influence on managerial performance. It can be seen from the t value by 4.77, which is bigger than t table 1.95, and MAIS can explain the variation in managerial performance by 52%.

In addition to the direct influence of individual differences on managerial performance, also can be seen the magnitude of indirect effects of individual differences on managerial performance by MAIS. The amount of indirect influence and the magnitude of the total effect shown in the following table:



Table 4 Direct, Indirect, and Total Effect of Exogenous Variable on Managerial Performance

Influence of exogen variable on	Direct	Trought MAIS	Total
endogen variable			
Influence of KAF on MP	0.14	0.12	0.26
Influence of OC on MP	0.29	-	0.20

DISCUSSION

The Relationship between Knowledge of Accounting Function and Organizational Commitment with Management accounting Information System

The results of this study indicate that knowledge of the accounting function can explain the variation in management accounting information system. This relationship explains that managers with good knowledge of accounting functions will be more relevant in selecting or using management accounting information system in carrying out its responsibility to support the implementation of management functions. The study's findings are consistent with research conducted by Klein et al., (1994), Libby (1993), and Spilker (1995). It is said also by Spilker (1995) that a person with declarative knowledge will be able to choose relevant keywords. It can also mean someone with the declarative knowledge of accounting functions will be able to choose the characteristics of management accounting information systems relevant to the purpose.

The results of this study indicate that knowledge of accounting functions of managers in manufacturing industries company listed on the Indonesian Stock Exchange is quite good, and therefore able to explain the variation of the MAIS is used. The results are consistent with research conducted by Benjamin (1989) and Suhairi (2004) in Indonesia that showed a significant relationship between knowledge of accounting with the use of accounting information systems, although they do research on small firms. It is also consistent with the conceptual analysis conducted by Zmud (1979) that intelligence and special knowledge possessed by a person will affect the shape and application of MAIS.

The accounting problems at small companies due to limited knowledge of accounting were found by Holmes and Nicholls (1988). McMahon and Holmes (1991) also found that low-accounting knowledge is one of the causes have not been much use of accounting information in many companies. This study found that although 40% of managers of manufacturing industrial firms listed on the Indonesian Stock Exchange have not the educational background of management and accounting but has knowledge of the accounting function relatively well. The research findings also showed that 64% of managers have attended training of accounting, meaning 36% of them know the function of accounting is based on experience in carrying out their work. Based on the findings above, the managers of industrial companies listed on the Indonesian Stock Exchange manufacture should need to



improve knowledge of the accounting function in order to be able to use the MAIS relevant to their work in supporting the implementation of decisions. For example, the determination of cost of goods or services, and a plan both short and long term.

This study found that organizational commitment is not significant effect on the MAIS. Means that the study was not in line with research conducted by the Basu, et al. (2002) who found when the organization's commitment increase the success of information systems planning will go up. Similarly, a study by Zmud (1979) who found that the general attitude (as well as organizational commitment) the user of management information system is positively related to the success of management information systems.

Research that links between organizational commitments by management accounting information system is not yet widely applied. Usually carried out in more specific terms such as the budget, which is the output of management accounting information systems, such as research conducted among others by Nouri and Parker (1996); Winwin Yadiati (2005) that links it with the managerial performance.

The Relationship between Knowledge of Accounting Function and Managerial Performance

This study found that the exogenous variables, knowledge of accounting functions significant effect on managerial performance. Managerial performance is the performance of individual members of the organization in managerial activities includes: planning, investigation, coordination, evaluation, supervision, staffing, negotiations and representations (Mahoney et al., 1963). This study shows that the higher knowledge of the accounting functions of the managers are increasingly able to explain the variation in managerial performance. The results are consistent with research conducted by Bonner and Lewis (1990), Bonner et al. (1992), Holmes (1986), Holmes and Nicholls (1989) and Peacock (1985). Although the studies mentioned above use different measures of knowledge, but the measures of knowledge are relevant to their research.

Bonner and Lewis (1990) uses three types of knowledge, one of which is knowledge of basic accounting and GAAP models, Bonner et al. (1992) used to measure knowledge in tax issues. Meanwhile, Benjamin (1989), Holmes (1986), Holmes and Nicholls (1988, 1989), Peacock (1985), and Suhairi (2004) uses management's accounting knowledge. Whereas in this study using knowledge of accounting functions that are declarative only.

Benjamin (1989), Holmes (1986), Holmes and Nicholls (1988, 1989), and Peacock (1985), conducting research on small firms and they found that many small companies that have failed due to limited knowledge of accounting. The difference with this study, the research is done on large companies and found that the managers have knowledge of accounting functions quite well.

Based on the above description then if the company's manufacturing industries are listed on the Indonesian Stock Exchange wants to have a good level of performance it should be the managers have to know the accounting function. Knowledge of accounting functions in addition can also be obtained from the experience gained from training.



The Relationship between Organizational Commitment and Managerial Performance

This study found that organizational commitment affect managerial performance. This shows the higher the commitment the organization will get better performance manager. Some researchers found a strong relationship between commitment to effective performance eg Angle and Perry (1981); Harrison and Hubbard (1998); Mathieu and Zajac (1990) and Mowday et al. (1979). Means the research is in line with the studies referred to earlier.

The linkage of management's emotional with organizational, it is very important because in term of psychology it is one's feelings toward the organization, which is reflected on such person's level of internalizing or adopting characteristics or perspectives of the organization, thus the person will identify and involve themselves with organizations that will ultimately affect performance (O 'Reilly and Chatman (1986). It is said also by Al-Ummaj (2000) individuals who commit, tend to be larger effort in his work, as a consequence of its performance would be effective.

The Relationship between Management Accounting Information Systems and Managerial Performance

This study found that management accounting information system is able to explain variation in managerial performance. This suggests that the more relevant management accounting information systems in helping each management function, the higher managerial performance. The results support previous studies which, among others, conducted by Abernethy and Guthrie (1994), Chong and Chong, (1977), Chong (1996, 1998); Mia (1993); Chenhall and Morris (2003), Mia and Chenhall (1994). This study is also consistent with research Soobaroyen & Poorundesing (2008), who found that the four characteristics of management accounting information system significant effect on managerial performance, their study was also conducted in developing countries, as in this study.

The study also found that MAIS of manufacturing companies listed on the Indonesian Stock Exchange, according to the perceptions of managers is quite adequate when viewed from the average score of responses to questionnaires. MAIS dimension of broad scope relatively little good, the timeline dimension that is relatively good, the integration dimension that is relatively better. While the aggregation dimension is relatively the most favorable characteristics compared to other dimensions. In essence, management accounting information system, produce and prepare information to facilitate management decisions (Chong and Eggleton, 2003). Sprinkle (2000) said that the management accounting information is intended to improve the quality of decision making that produces a better choice of action.

Based on the above explanation, the manufacturing industry companies need to increase the availability of management accounting information system that is broadscope, timeline, integration, and aggregation that can help management to take decisions on any management function. Managers of manufacturing companies listed on the Indonesian Stock



Exchange must obtain a correct understanding of management accounting information systems to improve performance effectively.

The Relationship between Knowledge of Accounting Function, Organizational Commitment and Management Accounting Information System and its Implication on Managerial Performance

The results of this study can be interpreted: if individual differences in line with expectations and management accounting information system produce information that are relevant to the needs of management in decision making, then the performance of managers, will be good. The results are consistent with the study Klein et al. (1994) that the management accounting information system of an organization set up the same information for all individual managers. Management accounting information systems can explain the variation in the performance of the individual only if there are differences in the individual managers (eg, knowledge, and preferences) that causes them to respond differently to management accounting information, and will ultimately impact on their performance.

A similar study was also conducted by Anthony (1965) and Caplan (1971) which recognizes the importance of focusing on the mutual relationship between MAIS with organizational variables and behavioral variables. It is undeniable that the success of a system depends on one's individual differences include such preferences, knowledge, personality and perception. As noted by Lawler (1977) that organizational effectiveness is a function of the combination of individual behavior is modified by the organizational structure and control system used to coordinate their behavior. Expressed also by, Dermer (1973), and Ferris & Haskins (1989), that MAIS will be ineffective if it does not fit with the user desires.

Based on the explanation above, the manufacturing industry companies should pay attention to the design of MAIS that will be used by managers in carrying out its responsibilities to manage the company. MAIS be designed in such a way as to correspond with individual differences of managers, thus MAIS will be effective, and the subsequent performance of the manager, would be good.

Theoretically in order managers can take decisions properly, MAIS is needed, so the performance is good. In fact, if viewed from directly or indirectly influence the results of this study, managers of manufacturing industry are still less use of MAIS. This is likely because most managers have a background rather than management. This background causes the managers have preferences other than accounting information.



CONCLUSION / LIMITATION

Based on the results of research, discussion, and problem solving, as well as the theories that have been presented, the authors conclude as follows.

- 1. The managers of manufacturing companies listed on the Indonesian Stock Exchange perceive that their companies have MAIS that is relevant and adequate. Knowledge of accounting function is clearly the foundation for managers in order have the ability to choose or use of MAIS that suits their needs. While individual differences variables that are not able to explain the variation in MAIS is organizational commitment.
- 2. Among individual differences variables, organizational commitment are better able to explain the variation in managerial performance, compared to the knowledge of accounting functions. Managers have a feeling of attachment to the organization, namely their commitment to the organization, affecting their performance better than the managers who do not feel have ties to the organization. Managers with high organizational commitment is a person who wanted to stay in the organization encountered many difficulties, care of the regular work day, protecting corporate assets and together achieve corporate objectives. Knowledge of accounting function has a relatively small contribution to the managerial performance. This is understandable because it is more specific knowledge about the tools that can help management, namely the accounting function.
- 3. MAIS has a great ability to explain variation in managerial performance. It shows that for a decision does need the support of information systems, which are able to produce relevant information for management. The results of descriptive analysis showed that MAIS sufficient perceived by the managers of manufacturing industries are listed on the Indonesian Stock Exchange. Especially dimensional aggregation, which means the availability of information in various forms, including aggregation in time and aggregation within the function. Dimensional MAIS, who perceived sufficient in the second is the integration, the managers felt that in terms of coordinating and mutual relations between the subunit, MAIS is sufficient. The next dimensions of perceived adequate, is timeliness, which means that according to their perceptions, accounting information systems management in a timely enough in the availability of the requested information, and frequency of reports of systematic collection of information. The last MAIS dimensional is broad scope. This dimension suggests that MAIS also provides external information, non-financial information, and orientation of the future. Given the importance of management accounting information systems in solving the problems faced by companies manufacturing industry, it needs to be pursued to improve the availability of relevant information from MAIS.
- 4. Efforts to increase the availability of MAIS, which have implications on managerial performance can be done with strategic and operational approach that includes one of the main things contained in the manager individual differences in terms of increasing knowledge of accounting functions,



SUGGESTION

Based on the findings and troubleshooting of this study, some suggestions can be formulated as follows.

- 1. Given the importance of individual differences, either in development or selection of MAIS and the effectiveness of managerial performance, then at the election of office manager needs to be emphasized in individual differences variables that have a dominant influence
- 2. MAIS that produce information for management to carry out its responsibilities in managing the company need attention. The existence of MAIS, which can produce information that is broadscope, timeliness, aggregation and integration, will make effective managerial performance.
- 3. This study emphasizes only individual differences on two variables only, may need to be explored further in future studies such as the ability and expertise, both declarative and procedural knowledge, family background, and self esteem.
- 4. In the future studies could use the contingency variables, such as job design, leadership, reward and sanction. Organizational structure in this study is a contingency variable; this variable does not meet the variability, then the variable is ignored.
- 5. This research was cross section which captures the perception of just at a time, however, that in future studies could be done the research that is longitudinal.
- 6. The research was conducted only on the manufacturing industries are listed on the Indonesian Stock Exchange only, in future studies can be done in the service industry, and finance.



REFERENCE

- Abernethy, M. A., and Guthrie, C. H., 1994, An empirical Assessment of the "Fit" Between Strategy and Management Information System Design, *Accounting and finance*, p. 49-66
- Agbejule, A., 2005, The Relationship between Management Accounting Systems and Perceived Environmental Uncertainty on Managerial Performance: A Research Note, *Accounting and Business Research*, vol. 35, No. 4, p. 295-305
- -----, and Burrowes, A., 2007, Perceived Environmental Uncertainty, Supply Chain Purchasing Strategy, and Use of MAS Information, An Empirical Study of Finnish Firms, *Managerial Auditing Journal*, Vol. 22, No.9, p. 913-927.
- Alpander, G.G, 1990, Relationship between Commitment to Hospital Goals and Job Satisfaction: A Case Study of a Nursing Department, *Health Care Management Review*, 15, 51 62
- Al Ummaj, F.H., 2000, An Investigation of Leadership Style and Organizational Commitment Among Saudi Public Employees, Dissertation, The Faculty of Mississippi State University.
- Anderson C. R., 1977, Locus of Control, Coping Behaviors and Performance in Stress Setting: A Longitudinal Study, *Journal of Applied Psychology*, 62, 446 451.
- -----, 1982, Acquisition of Cognitive skill, *Psychological Review* 89, (July): 391 412.
- Angle, H.L., and Perry J.L., 1981, An Empirical Assessment of Organizational and Organizational Effectiveness, *Administrative Science Quarterly*, 26, 1–14.
- Anthony, R.N., 1965, *Planning and Control Systems: A Framework For Analysis*, division of Research, Graduate School of Business Administration, Havard University.
- Basu, V., E. Hartono, A.L. Lederer, and V. Sethi, 2002, The Impact of Organizational Commitment, Senior management Involvement, and Team Involvement on Strategic Information System Planning, *Information and Management*, 39, 513 524.
- Becker, H.S., 1960, Note on the Concept of Commitment, *American Journal of Sociology*, 66, 32 40.
- Benjamin, W. P., 1989, Laporan Keuangan Perusahaan Kecil, Dalam IAI (1989). Pembahasan Berbagai Masalah Akuntansi. Jakarta, Indonesia.



- Bonner, S. E., J. S. Davis and B. R. Jackson, 1992, Expertise in Corporate Tax Planning: The issue identification stage. *Journal of Accounting Research*, 30 (Supplement): 1 28
- -----, and B Lewis, 1990, Determinants of Auditor Expertise, *Journal of Accounting Research*, 28 (Supplement): 1-20
- Briers, M and Hirst, M, 1990, The Role of Budgetary Information in Performance Evaluation, *Accounting Organization and Society*, 15(4), 373-398.
- Caplan E.H., 1971, Management Accounting and Behavior Science, Addison Wesley.
- Chenhall. R.H. and Morris, D. 1986, The Impact of Structure, Environment, and Interdependence on the perceived usefulness of Management Accounting Systems, *Accounting Review*, 61, 16-35.
- -----, 2003, Management Control System Design Within its Organizational Context: Findings From Contingency-Based Research and Direction For The Future, *Accounting*
- -----, 2003, Management Control System Design Within its Organizational Context: Findings From Contingency-Based Research and Direction For The Future, Accounting Organization and Society, 28, 127 168
- Chong, V. K., 1996, Management Accounting System, Task Uncertainty and Managerial Performance: A Research Note, *Accounting Organization society*, 415-421.
- -----, dan Chong K.M. 1997, Strategic Choices, Environmental Uncertainty and SBU Performance: A Note on the Intervening Role of Management Accounting System, *Accounting and Business Research*, vol. 27 No. 4, 268-276.
- -----, dan Eggleton, R. C., 2003, The Decision-Facilitating Role of Management Accounting Systems on Managerial performance: The Influence of Locus of Control and Task Uncertainty, *Advances in Accounting*, Vol. 20, 165-197.
- Cyert, R. M., & March, J. G. (1963). A behavioral theory of the firm. Dalam Entrialgo, M., Fernandez, E, & Vazquez, C.J. (2000a), *Psychological characteristics and process: the role of entrepreneurship in Spanish SMEs*. European Journal of Innovation Management, 3(3), 137-149.
- Cooper, R. dan R. Slagmulder, 2004, Interorganizational Cost management an Relational Context, *Accounting Organization and Society*, Vol. 29, 1 -26.
- Covaleski, M.A, dan Dirsmith, M.W., 1983, Bugeting as a Means for Control and Loose Coupling, *Accounting Organization and Society*, Vol. 11(3), hal. 193-214.



- -----, dan -----, 1986, The Budgetary Process of Power and Politics, *Accounting Organization and Society*, Vol. 29, 1-26.
- Dermer, JD., 1973, Cognitive Characteristics, and Perceive Importance of Information, *The Accounting Review*, July, 511-519.
- Endler, N.S., dan D. Magnuson, 1976, Toward an Interactional Psychology of Personality, *Psychological Bulletin*, 83, 959 974.
- Entrialgo, M., Fernandez, E., & Vazquez, C. J. (2000a). Psychological characteristics and process: the role of entrepreneurship in Spanish SMEs. *European Journal of Innovation Management*, *3*(*3*), 137-149.
- Escobar, B., Gonzales, J.M., dan Lobo, A., 2008, Organizational Control System in a Continuous Improvement Environment: special Reference to the Role of Management Accounting. *Journal of Accounting business & management*, 15, 1-32.
- Ferris, K.R. dan N. Aranya, 1983, A Comparison of two Organizational Commitment Scale, *Personnel Psychology*, 36, 87 98.
- -----, dan Haskins, M. E., 1988, Perspectives on Accounting Systems an Human behavior, *Accounting, Auditing, and Accountability journal*, 3-18
- Fisher, Caty 1996, The Impact of Perceived Environmental Uncertainty and Requirements: A Research Note, *Accounting, Organization and Society*, Vol. 21 No. 4, 361-369.
- Gordon, L.A. dan Miller, 1976, A Contingency Framework for the Design of Accounting Information System, *accounting Organization and Society*, 59-69.
- -----, dan Narayanan, V. K., 1984, Management Accounting System, Perceived Environment Uncertainty and Organization Structure: an Empirical Investigation, *Accounting Organization Society*, 33-47.
- Gorry G., dan M. Scott Morton, 1971, A Framework for Management Information Systems, *Sloan Management Review*, hal. 55 70.
- Grandlund, M, dan Lukka, K, 1998, It's Small World in Management Accounting Practices, Journal of Management Accounting Research, Vol. 10, 153-79.
- Gul, F.A. 1991, The Effect of Management Accounting System and Environmental Uncertainty on Small Business Manager's Performance, *Accounting and Business Research*, vol. 22, No. 85. 57-61.



- -----, and Chia, Y.M., 1994, The Effect of Management Accounting System, Perceived Environmental Uncertainty, and Decentralization on Managerial Performance: A Test of Tree-way Interaction, *Accounting Organization and Society*, 19 413-426.
- Harrison, J.K., dan Hubbers, R., 1998, Antecedent to Organizational Commitment Among Mexican Employees of a US Firm in Mexico, *The Journal of Social Psychology*,
- Holmes, S. (1986). The role of practising accountants, accounting information and small business owner/manager. *Australia*, 259-284.
- -----, dan -----, (1989). Modeling the accounting information requirements of small businesses. *Accounting and Business Research*, 19 (74), 143-150.
- Indriantoro, N. & Supomo, B., 1999, *Metodologi Penelitian Bisnis*; *Untuk Akuntansi & Manajemen*. Yogyakarta, Indonesia: BPFE.
- Ives, B., dan Olson, M., 1984, User Involvement and MIS Success: A Review of Research, *Management Science*, 30, 5, 586-603.
- Klein K.J., Dansereau, F., & Hall, R.J., 1994, Levels Issues In Theory Development, Data Collection and Analysis, *Academy of Management Review*, 19, 195 229.
- Lawler, E.E III, 1977, Adaptive Experiments: An Approach to Organizational Behavior Research, *Academy of Management Review*, 576 585.
- Libby, R. 1995, The Role of Knowledge and memory in Audit Judgment, *Judgment and Decision-making Research in Accounting and Auditing*, Cambridge: Cambridge University Press.
- Lucas, H.C., Jr., 1978, The Evolution of an Information System: From Key-Man to Every Person, *Sloan Management Review*, Winter, 39-52.
- Mahoney, T.A., T.H. Jerdee, dan S.J. Carrol, 1963, *Development of Managerial Performance A Research Approach*, Southwestern Publishing.
- Mathieu, J.E., dan Zajac, D., 1990, A Review Meta Analysis of the Antecedents, Correlates, and Consequences of Organizational Commitment, *Psychological Bulletin*, 108, 171-194.



- McKeen D, James, Gummares and Weterbe, James, D. 1994, The Relationship User Participation and User Satisfaction: An Investigation of Four Contingency Factors, *Management Information System Quarterly, December*.
- McMahon, R. G. P., & Holmes, S. (1991). Small business financial management practices in North America: A literature review. *Journal of Small Business Management, April*, 19-29.
- Merchant, dan R. Simon, 1986, Research and Control in Complex Organization: An Overview, *Journal of Accounting Literature*, hlm. 183 203.
- Meyer, J.P, 1991, A Three Component Conceptualization of Organizational Commitment, Human Resource Management Review, 1, 61-89.
- -----, 1997, Commitment in the Work Place Theory, Research and Application, Thousand Oaks: Sage Publication,
- Mia, L., (1993). The role of MAS information in organizations: An empirical study. *British Accounting Review*, 25, 269-285
- -----, dan Chenhall, R.H., 1994, The Usefullness of Management Accounting Systems, Functional Differentiation and Managerial Effectivenes, Accounting, Organizations and Society, Vol.19, No. 1, hlm. 1 13
- Mowday, R., R. Steers, dan L. Porter, 1979. The Measurement of Organizational Commitment, *Journal of Vocational Behavior*, 14, 224-247
- Nouri, H., dan R. J. Parker, 1996, The Effect of Organizational Commitment on Relation Between Budgetary Participation and Budgetary Slack. *Behavior Research in Accounting*, 8, 74-89.
- Phua, Florence, T.T., 2007, Does Senior Executives' Perception of Environmental Uncertainty Effect the Strategic Functions of Construction Firms?

 International Journal of Project Management, (Article in Press)
- O'Reilly, C.A., dan Chatman J., 1986, Organizational Commitment and Psychological Attachment: The Effect of Compliance, Identification, and Internalization on Prosocial Behavior, *Journal of Applied Psychology*, 71, 492 -499.
- Otley, D.T., 1980, The Contingency Theory of Management Accounting Achievement and Prognosis, *Accounting, Organizations and Society*, Vol.5, No. 4, hlm. 413 428



- -----, dan C. Wilkinson, 1988, Organizational Behavior: Strategy, Structure and Environment, di dalam K.R. Ferris (ed) *Behavior Accounting Research: A Critical Analysis*, Century Publishing Co., hlm. 147 -170
- Peacock, R. W. (1985). Finding the causes of small business failure. *Management Forum*, 11 (2), 77-89.
- Porter, L. W., R. M. Steers, R. T. Mowday dan P. V. Boulian, 1974, Organizational Commitment, Job Satisfaction and Turn Over Among Psyatric Technician, *Journal of Applied Psychology* 59, 603-609
- Russel, 1994, Performance of Management Global Tool for Renewal, Monash University.
- Salancik, G., 1977, Commitment is Too Easy, Organizational Dynamics, 6, 62-58.
- Simamora, H, 2002, Akuntansi Manajerial, ed.5, Jakarta: Salemba Empat
- Simon, H.A, Guetzkow, H., Kozmetzky, G., dan Tyndall, G., 1954, *Centralization vs* Simon, H.A., 1991, Bounded Rationality and Organizational Learning, *Organization Science*, 2, 125 134.
- -----, 1991, Bounded Rationality and Organizational Learning, Organization Science, 2, 125 134
- Soobaroyen, Poorundersing, 2008 The Effectiveness of Management Accounting System Evidence from Functional Managers in A Developing Country, *Managerial Auditing Journal*, vol 23, no. 2, hlm. 187 219
- Sprinkle, G.B., 2000, The Effect of Incentive Contracts on Learning and Performance, *The Accounting Review*, 75, 299-326.
- Suhairi, 2004, Pengaruh Pengetahuan Akuntansi dan Kepribadian Wirausaha Terhadap Penggunaan Informasi Akuntansi Dalam Penggunaan Informasi Akuntansi, SNA, Desember .
- Swieringa, R. J. dan R. H. Moncur, 1972, The Relationship Between Managers' Budget-Oriented Behavior and Selected Attitude, Position, Size and Performance Measures.
- Tsui, J. S., 2001, The Impact of Culture on the Relationship Between Budgetary Participation, Management Accounting Systems, and Managerial Performance: An Analysis of Chinese and Western Managers, *The International Journal of Accounting*, 36, 125-146.
- Waller, W. S. dan W.L Felix, 1984, The Auditor and Learning from Experience: Some Conjectures, *Accounting Organization and Society*, 9: 383-403



- Waterhouse, J.H. dan P.A. Tiessen, 1978, A Contingency Framework for Management Accounting system research, *Accounting Organization and Society*, vol 3 No.1, 207-234
- Wichmann Jr., H. (1984). International small enterprise review; U.S.A. Accounting and marketing identified as key small business problems. *Management Forum*, 10 (1), 5-12.
- Winograd, T., 1975, Frame Representations and Declarative-Procedural Controversy, In *Representation and Understanding: Studies in Cognitive Science*, edited by D. Bobrow and P. Collins 185 210.
- Zikmund, W.G., 2003, Business Research Methods, Ohio: South-Western
- Zmud, R.W., 1979, Individual Differences and MIS Success: A Review of the Empirical Literature, *Management Science*, Vol. 25, No.10,

