Formatting Strategy and Management Control System : Evidence from Indonesia

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Abstract

This study is to examine the relationship between strategy with the used of Management Control System (MCS). This study is based on Structural Equation Modeling (SEM) as its multivariate analyses instrument. AMOS Software 16 program is used as an additional instrument to resolve the problem in SEM modeling. Sample in this study is upper middle manager of manufacturing company. The findings of this study posit that there is positive relationship between intended strategy and interactive control system. There is positive relationship between intended strategy and diagnostic control system. There is positive relationship between emergent strategy and. Emergent strategy and diagnostic control system shows that there is no impact. These findings consistent with contingence theory. MCS is influenced by a context in which MCS operate and it needs to be adjusted with the organization's needs and condition.

Keywords: strategy, management control system, manufacture

1. Introduction

At the time a strategy is implemented, it usually happens that the strategy itself needs a changing or an adaptation in line with the changing that occurs in company's environment. Therefore, the formed strategy may be realized as it planned before or it may be realized in a modified form in line with the situation, or even it may be realized differently as it planned before. Both big companies or the small ones, have their own strategy to manage their business. It can be said that the arranged strategy in a company is an implementation of a vision belongs to this company to be realized. Generally, a vision in each company is to survive and develop its own core business in the future.

In today's business environment, characterized by a rapid changing in consumer's preference, technology and competition, a company needs to renew itself, so it can not only keep up with the quick changing but also improve its strategy (Daneels, 2002). To make a company sustainable and enhanced, Management Control System is explicitly made to support its strategy (Dent, 1990; Simons, 1987, 1990). Basically, the purpose of Management Control System (MCS) is to give a useful and valuable information in an organization's decision making process, planning and evaluation process (Merchant & Otley, 2006). MCS becomes an instrument to create a cooperation both collectively and individually in each organization unit and it also becomes the channel for many efforts and works which have been done to reach the specific aim of an organization (Ouchi, 1979).

Up to now there are many literatures that have explored the strategy effect on MCS. There are two researches that emphasize the effect of a strategy on MCS. First, strategy is conceptualized on strategy choices level which takes strategy as a content approach. Second, strategy is conceptualized as a process. Strategy that is conceptualized as a content approach can be: (a) niche, cost leadership versus differentiation (Bruggemen & Stede, 1993; Govindrajan & Fisher, 1990); (b) strategy pattern, a company which has an offensive strategy or defensive strategy (Abernethy & Guthrie, 1994; Simons, 1987); (c) strategy mission to build, hold, and harvest (Govindrajan & Gupta, 1985; Chenhall & Langfield Smith, 1998; Ittner et al., 2003); (d) strategy priority: customization, quality, flexibility etc (Chenhall & Langfield-Smithy, 1998; Ittner et al., 2003).

Chenhall (2005); Mintzberg & Waters (1985) stated that the content of a strategy is likely related with the result of a strategy process.

It means that strategy is closely related with what a company should do to reach an optimum company's performance and to limit the view of a strategy that becomes the company's aim. Meanwhile the conceptualization of MCS in this line research is to follow the structural approach, in which the perspective is considered as a static perspective, and the focus of this study is directed to the problems whether there are specific system and technical design or not.

Research on the second line is emphasized to the effect of a strategy on MCS by strategy conception as a process approach (Roberts, 1990; Kober et al., 2007). The used conceptualization of MCS is the usage of MCS with the strategy conceptualization as the formation process. Kober et al. (2007) found that MCS would adjust itself with strategy in each company. A research with an analogous result as the result from Kober et al. (2007), had also been done by Roberts (1990). Specifically, interactive control system will adjust itself with the formation process.

The researchers who investigate the relationship between strategy formation process and MCS have conceptualized the strategy formation process into two parts (Chenhall, 2005). First, emergent strategy, it emerges from a process or a development of a strategy and it also has a quick response against the sudden changing. Second, intended strategy, it becomes a strategy which is formulated in the beginning phase of a company by top management, and this kind of strategy may not be used if an unexpected changing occurs.

Many researchers which have been mentioned above state that the result of MCS and strategy relationship based on research view is still ambiguous and sometimes contradictive (Langfield-Smith, 1997). The result is still ambiguous, since there are too many definition, conceptualization and operationalization of strategy and MCS (Kald et al. 2000; Langfield-Smith, 1997; Simons, 1990). The ambiguity is also rooted from the lack attention that is given to strategy formation process approach (Kober et al., 2007). Current research examined the relationship between strategy formation process namely, intended strategy and emergent strategy with the use of MCS. Based on Simons' framework (1995), there are four forms use of MCS practice, such as: (a) Belief system controls the core value of a firm, its function is to provide a momentum and guidance to opportunistic behavior; (b) Boundary system controls risk that must be avoided, and its function is to develop the individual creativity in a well defined freedom limitation; (c) Diagnostic control system controls critical performance variables, and its function is to provide motivation, source and information to ensure that strategy and the aim of the firm will be achieved; (d) Interactive control system controls strategic uncertainty, and its function is to focus the organization's attention on strategic uncertainty and learning process, so it can rapidly boost new initiative and new strategy. The focus in this study is the usage of interactive control system and diagnostic control system.

Although, past researchers have examined the relationship between strategy formation process and the usage of MCS (Roberts, 1990; Kober et al., 2007), yet they have not given a result that can be generalized to any other result. Some former researches had been done to investigate the relationship between strategy formation process and the usage of MCS, such as study from Kober et al.(2007). They said that MCS was deeply influenced by strategy. Both study done by Kober et al. (2007) and Roberts (1990) used a qualitative method in their case study. The investigation using case study enables us to get a more detailed analyses that derives from a strategy changing process. The usage of case study approach is supported by many researchers (Dent, 1990). But there is still a weakness on the generalization capability from the result, since there are too many specific organization's characteristics. Curernt study explains a causal relationship between strategy and MCS by using a quantitative method, so the result from this study can be generalized to any other study's result.

2. Literature Overview

2.1 Formatting Strategy

Researchers on strategy management have investigated the shifting way in conceptualized strategy and they all have explored the relationship between strategy and MCS since the mid 1990's (Langfield-Smith, 2007). A process when strategy is formed has attracted many researches to investigate it more deeply. Bhimani and Langfield-Smith (2007, p. 3-4) stated that literature which discussed strategy management had indicated a lot of variety in nature and form of strategy process that occurs in an organization.

One characteristic from strategy formation process is a currently developed taxonomy by Mintzberg (1978, 1987, 1994) ; Mintzberg & Waters, (1985). There are two independent process and they work simultaneously in a strategy formation process (Mintzberg and Waters, 1985).

First, intended strategy, in its taxonomy, this strategy is viewed as a proactive and formal statement and it has been planned before a final decision is taken or before an action is done. Having finished the strategy formation process, it will be followed by an implementation phase (Langfield-Smith, 1997). This kind of strategy is called by intended strategy. Intended strategy is a plan that becomes the aim of a firm and it is expected to be the most suitable action to reach the aim of the firm (Mintzberg, 1978). If the situation in a firm is considered appropriate with its needs, maneuver, trick or things like that will be used to threat or prevent competitor enter the same market (Mintzberg, 1978). Basic concept of this strategy is that all action must be planned well in advance. In this view, intended strategy explains a bottom up plan in a firm.

The second strategy formation process is called emergent strategy, this kind of strategy is the result of cumulative influence from day to day decision made by middle manager, engineer, sales person, and finance personnel. The decision made by them usually has a tactical characteristic, and it is not structured as a strategic decision. Emergent strategy is a strategy that comes out to give a response on external threat and it is not predicted earlier, via try out or trial and error (Mintzberg, 1994). This kind of strategy is showed up from business' daily activities and sometimes it is produced from an unpredictable idea from the lower until higher position in a company. Emergent strategy is the result of manager's daily response to resolve a problem or unpredictable opportunity and they involve themselves in the formation process of intended strategy when the top management in a firm make analyses and planning.

2.2. The Use of MCS

2.2.1. Interactive Control System

Interactive control system is a formal system which is used by top manager to regularly and personally involve in decision making activities done by subordinate in a firm (Simons, 1987; Simons, 1994; Simons, 1995; Simons, 2000). Interactive control system is used to stimulate and enhance a dialogue or head to head conversation in order to build an information bridge among the hierarchy, functional department and profit center. Diagnostic control system can be interactive by continuing and paying attention persistently to management's request. Interactive control system is used by top management in a firm to guide the formally strategy formation process through personal involvement decision, intimation or closeness with a problem and committee (Mintzberg, 1987).

A system will be classified as an interactive system, if the top manager in the firm reports that the system is frequently used personally and regularly. And it also becomes the priority both for top manager or for the subordinate. This system is used in directly routine engagement with subordinate and the third party to review data and produce an action planning (Simons, 1990).

Top manager must decide which aspects from management control systems that will be used interactively and will be the firm's program (Simons, 1987). The management control becomes an interactive control when the business manager uses planning procedures and control procedures who actively monitors and intervenes decision making activity and it happens continually from subordinate of a firm (Simons, 1990).

By using interactive control system which has function as a controller to strategic uncertainty, the top management will express their value and reference to each individual in an organization, which gives input to decision making process. Observation or monitoring is a measure to search many unpredictable things, interactive management control will give a complete guidance to each member in an organization who search and collect this kind of intelligence information (Simons, 1990).

2.2.2 Diagnostic Control System

Diagnostic control system is a formal feed back system to monitor and supervise the outcome of an organization and to fix any deviation happened in performance (Simons, 1994). Diagnostic control system will be explained by business and budget plan (Simons, 1994). This feed back system is used to track all variance in an established target with an exception. The analysis on critical performance variable will give an influence on diagnostic control system (Simons, 1994).

The existed system will be classified into diagnostic system if the top manager reports a little personal involvement in this system, and the operational delegation system to staff and management is in lower level, it depends on the third party to give information when interest to this system is trivial (Simons, 1990);

This system also reports information on important achievement factors which enable manager to focus their attention based on organization's direction. It also needs to be continually monitored to know the intended strategy of the firm.

There are two important reasons why manager use diagnostic control system (Simons, 2000: p. 209), that is: to effectively implement strategy and save the manager's attention. Most manager interested in supervising diagnostic control system which reports any deviation of critical performance variables, in which these factors must be achieved (Simons, 1994). Critical performance variable is related with the performance's incentive, and it becomes variables which: (a) can influence the possibility of achievement in implementing strategy; (b) can provide the biggest efficiency (Simons, 2000: 233). Based on the explanations above, it can be concluded that diagnostic control system in firm's strategy application will be a plan on how a firm perform a job well.

2.3 Framework and Construct Measurement.

Intended strategy process and emergent strategy process which are used in this study is the result of a decision making behavior (Mintzberg, 1978). A firm must place itself in a stable business environment and it may not be necessary for the firm to reevaluate which proper strategy for them. If the business environment in which the firm exist is unstable, it will destroy even the best planning in a firm. It can take place because there are no possibilities to predict which future prospect for this organization. Response which comes after the inconsistency or inequity in an environment like this will make strategic changing pattern will continually alter and it will never be constant. The practice of MCS becomes an instrument for the manager to be used in forming and implementing preferred strategy (Simons, 1994; Anthony &Govindrajan, 2004). Kober found that strategy formation will influence the use of MCS. The practice of MCS by Kober et al. (2007) meant the usage of interactive control system. Empirical modeling is illustrated below:
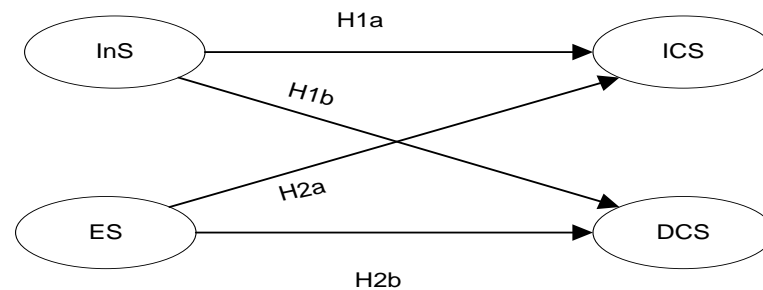
Figure 1: Empirical Modeling

On above figure, it can be explained that the use of MCS is deeply influenced by strategy, in other words MCS will be adjusted itself into strategy formation process. Strategy with process approach in this study consist of, intended strategy (InS) indicators which are used to measure constructs adopted by Boyd and Reuning-Elliot (1998), such as: Mission statements (ins1); Trend analysis (ins2); Competitor analysis (ins3); Long term goal (ins4) Annual goal (ins5); action plans (ins6); On going evaluation (ins7). Emergent strategy (ES) indicator, which are used to measure constructs adopted by Mintzberg and Waters (1985) and Marginson (1999), such as: opportunistic strategy (es8), bottom up strategy (es9), intuitive strategy (es10). Meanwhile the usage of interactive control system indicators (ICS), which are used to measure constructs adopted by Simons (1995) and Henri (2006), such as: establish a meeting with top management, subordinate and peer (ics11), establish a confrontation and argument based on the assumption data and action planning (ics12); provide general view in the organization (ics13), commitment to the organization (ics14), focus on the main problem (ics15), focus on the achievement factors (ics13), establish general words in a organization (ics17). Last construct which is used in this study is diagnostic control system (DCS) indicators, developed by Simons (1995), Henri (2006) such as; progress tracking (dcs 18); result monitoring (dcs19); comparison between actual result and the expected result (dcs20); and exploration the key achievement measures (dcs21)

2.4 Hypothesis Development

Formerly, the relationship between strategy and MCS was seen in a passive form. It means that MCS is the final result of an organization's strategy (Kober, 2007). A study talks about strategy changing in a bulb factory. Robert (1990) conducted a research for three years, from the entry of a competitor in a market when it was accompanied by acquisition in a conglomerate company. It becomes a vital matter to change the existed strategy in an organization, thus the organization can give a quick response on strategy changing, and MCS also needs to be adjusted with the organization's strategy. The result of this study highlights on how the relationship from both the strategy formation and implementation will give an influence on how to use MCS.

The concept of emergent strategy formation process (Mintzberg, 1978; 1987, 1999; Mintzberg and Waters, 1985) together with the result from Simons (1990, 1991, 1994, 1998) investigate the practice of diagnostic control system and the interactive control system. Simons (1990, 1991, 1994, 1995) supports theoretically and empirically on how the practice of diagnostic control system (DCS) and interactive control system (ICS) in a firm. DCS will help an organization to attain the formed strategy, and ICS will help the organization to communicate its strategic agenda and direct the organization's attention on the uncertainty feature which probably emerges from the process of strategy development. Simons (1995) examine that ICS will support the dialogue and changing in longer time period. ICS will also create the competitive nature in an organization to have innovation and adaptation (Simons, 1996). Based on the explanations above, ICS will be adjusted itself in a spontaneous emergent strategy.

The changing in a traditional relationship between strategy formation process, strategy implementation, and MCS evaluation, have been asserted by other researchers who examined the similar relationship. For example Marginson (2002), who found that managerial perception in MCS practice will be adjusted itself into strategy formation or strategy implementation. It means that, strategy will deeply influence MCS. Kober (2007) found that interactively used MCS mechanism will facilitate a strategy changing. When the change in strategy happens, the MCS mechanism will also change and adjust itself with the process of a strategy.

Simons (1994) found that diagnostic control system will help an organization to direct its strategy, and interactive control system will help an organization to communicate critical achievement factor. Based on the result from Simons (1994), Chenhall and Morris (1995), they found that organic decision making process has analogous form with interactive control system and it will be effectively evidenced when it is combined with diagnostic management control system (Henri, 2006). Simons (2000, p. 305) summarize the relationship between diagnostic system and interactive system (Henri, 2006) by stating that information and learning process is produced by interactive system which attached in strategy and aim of a company, so it can be monitored or supervised by diagnostic control system. Widener (2007) argues that company will simultaneously use both interactive and diagnostic control system. The larger top manager relies on interactive control system, the larger their reliance on diagnostic control system, so as to enable the interactive control system works well.

According to the result from Mintzberg (1978), he further distinguishes intended strategy that becomes the purpose of a company and emergent strategy that becomes spontaneous formed strategy in a company. Conventional wisdom of the relationship between strategy and MCS said that strategy formation and its implementation will give a significant influence on how the control system will be used. It is consistent with contingence theory which explained that MCS need to be matched with organization's strategy. It will direct us to the following hypothesis below:

H1a: Intended strategy will be positively related with interactive control system
H1b: Intended strategy will be positively related with diagnostic control system
H2a: Emergent strategy will be positively related with interactive control system
H2b: Emergent strategy will be positively related with diagnostic control system

2.5 Methodology

2.5.1 Sample and Data Collection Procedure

Sample in this study is upper middle manager of manufacturing company in Banten Province, DKI Jakarta Province and West Java Province with at least two years experience.

The reasons why those three provinces above are selected is because 60% of manufacturing industry in Indonesia is centrally localized in those three areas. Our sample are companies which have prospector typology, or a company which actively search opportunity with a continuous innovation will have a creative behavior (Langfield, 1997). The ownership of patent and other things alike will come from their creativeness inside the company, and it proves that personnel in this company is very creative.

2.5.2 Type and Data Collection Procedure

Data for this study is primary data in a form of respondent's perception, and it is collected by direct mail to each respondents. Total amount of sent questionnaires is 429, there are 113 respondent which can not be met because of their busy schedule. Of the 316 questionnaires, there are 29 unusable questionnaires, since the questionnaires are completed with non target respondents (respondents are lower manager not the upper middle manager as requested in this study). As a result, the usable questionnaires in this study is 287 questionnaires (429-113-29). In other words the response rate of the questionnaires is 74% and the usable response rate is 66,9%.

3. Finding and Discussion

3.1 Structural Equation Model

This study uses structural equation modeling as its multivariate analysis instrument which enables the author to test the relationship among complex variables and to get a complete and clearer description on the whole model. SEM is considered as the most useful static tools for many researchers in social science. SEM has become a must for non experimental research, in which the testing method has not entirely developed. This study uses AMOS 16 Software program as its additional tool to resolve the problem in SEM.

In confirmatory factor analysis, it is shown that intended strategy construct, interactive control system construct and diagnostic control system construct must be modified by removing some indicators which have loading value below 0,5 that is ins1, ins3, ins5. The indicators of ics11, ics15, ics16 and dcs18 are used to measure more than one construct, therefore these four indicators must be removed from the model.

3.2 Model Assumption Testing

3.2.1 Normality Testing

Normality testing is done by using critical ratio criteria as ± 2,58 with significant level as 0,01. If the critical value from this study is bigger than its ratio, it can be concluded that data distribution is abnormal. The result of Structural Equation Modeling in assessment of normality part, at the multivariate critical ratio column (CR) is as big as 2,49, and it means that it is lower than ± 2,58. As a result, the result of normality testing for all data in this study fairly meet the requirements to be categorized as multivariate normal.

3.2.2 Outlier Testing

The evaluation of multivariate outliers will be done by using mahalanobis distance for each variables. The mahalonobis distance shows the distance from each variables of all variables in a multidimensional space (Byrne, 2010). The mahalonobis distance is based on chi square value in distribution table χ^2 at freedom degree as well as the amount of variables used in this study. The study uses 21 variables in p < 0.001 that is (21: 0,001) = 46,80. Therefore, data value has bigger mahalonobis distance than 46,80 and it is considered multivariate outliers. The data with subsequent number as 61, 26, 32, 58, 34, 40 and 8 has value above 46,80 so it can be removed.

3.2.3 Multicollinearity Testing

To see whether there is multicollinearity or not in a variable combination, we need carefully observe the determinant of covariance matrix. AMOS program 16.0 will automatically gives a warning if the covariance matrix is singular. The indication of multicollinearity can be seen if the correlation value between each construct is > 1 (Byrne, 2010). Since the analysis in here does not give any warning and there is no correlation value among constructs >1, so it can be concluded that covariance matrix is non singular and can be analyzed.

3.3 Goodness of fit

From the figure 2 below, goodness of fit index shows a proper model fit. By means of GFI as 0.949, AGFI as 0.923, TLI as 0.990, CFI as 0.992, NFI as 0,982 and RMSEA as 0,049. The whole criteria shows a good acceptance (fit) (Byrne, 2010).
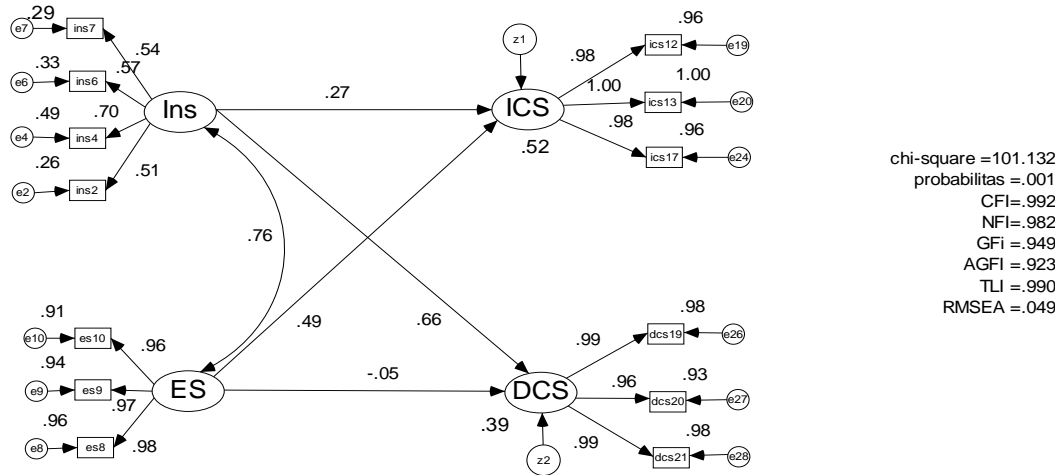
Figure 2: Out put Full Model

3.4 Testing and Hypothesis Discussion

Confirmatory analysis calculation and structural equation modeling testing will include constructs: Intended Strategy (InS), Emergent Strategy (ES), Interactive Control System (ICS), Diagnostic Control System (DCS). The next phase is to test proposed hypothesis, and the result can be seen from the value of critical ratio and the probability in output regression weight (Table 1).

Table 1: Regression Weights

			Stand.Estimate	S.E.	C.R.	P	Label
ICS	<---	Ins	.27	.21	2.86	.00	par_4
DCS	<---	Ins	.66	.30	4.48	***	par_5
ICS	<---	ES	.49	.07	5.95	***	par_8
DCS	<---	ES	-.05	.09	-.44	.66	par_9

Hypothesis 1a show that Intended Strategy will be positively related with Interactive Control System (ICS). The result of the testing on parametric estimation between Intended Strategy (InS) and Interactive Control System (ICS) shows that there is a significant influence on critical ratio (CR) as 2,86. Critical ratio is above the critical value as 2,00 with significant rate as 0,05 (5%). As a result, hypothesis 1a is supported. It is consistent with contingence theory which said that Management Control System (MCS) needs to be adjusted with the organization's strategy. In other words, the result of this study is empirically in line with hypothesis 1a and it is consistent with Kober et al. (2007); Roberts (1999) and Marginson's (2002) study which said that the strategy forming consist of intended strategy and emergent strategy (Mintzberg, 1978; Chenhall, 2005) will be followed with the interactively practice of MCS.

From the result explained above, there is a logical connection which said that a company can be sustainable if it can adjust itself in consumer's preference changing, high competitiveness and dynamic business environment. This changing will give significant influence to company's strategy, as a result management in the company needs to develop and renew its long period target, and the target itself needs to be adjusted continually with the changing in its environment. The changing and renewal in long period target will produce a serious argument, as a result the company needs not only an accurate and complete information but also the quick one. High commitment from each personnel in a company is also a vital matter to reach the established long period target. The renewal of long period target (ins4) is an indicator of intended strategy construct which gives the biggest loading estimation (0,70). This commitment and argument based on data, assumption and action planning will be the best indicator of interactive control system.

Hypothesis 1b said that Intended Strategy (Ins) will be positively related with Diagnostic Control System (DCS). The result of parametric estimation (by regression weight) between Intended Strategy (Ins) and Diagnostic Control System (DCS) shows that there is a positive and significant impact with critical ratio as 4,48. The rate of Critical ratio is above the critical value as 2,00 with significance rate as 0,05 (5%). According to this explanation, hypothesis 1b is supported. This is consistent with contingence theory (1995) which stated that Management Control System needs to be adjusted with the organization's strategy. According to Merchant & Otley (2006) consideration one of the influenced variables in Management Control System practice is organization's strategy. The empirical result on hypothesis 1b is supported by Kober et al. (2007), Marginson (2002), Simons (1994), and Archer and Otley (1991) which said that control system is designed to support the strategy in an organization. This finding is also consistent with Simons (1994) who stated that to help a company reach its target, this company must use diagnostic control system.

Reasoning to explain this finding said that a sustainable company is a company which is able to adjust itself with consumer's preference changing, high competitiveness and dynamic business environment. These changing and renewal will absolutely influence the organization's strategy, as a result management in this company needs to develop and renew its established long period target., moreover the next phase must be conducted by company is continuous monitoring activity on the achieved result, such as comparing between expected and actual result from the established changing and also review on which most needed key factors to reach the long period target. Renewal on long period target (ins4) is an indicator of intended strategy construct which has the biggest loading estimation (0,70). Monitoring on the achieved result and reviewing on the main key factor are indicator for diagnostic control system.

Hypothesis 2a said that Emergent Strategy (ES) will be positively related with Interactive Control System (ICS). The result of this parametric estimation (by regression weight) between Emergent Strategy (Es) and Interactive Control System (ICS) shows that there is a positive and significant impact with critical ratio as 5,95. The rate of Critical ratio is above the critical value as 2,00 with significance rate as 0,05 (5%). According to this explanation, hypothesis 2a is supported. This is consistent with Otley's contingence theory (1995) which stated that Management Control System will adjust with the organization's strategy.

This finding states that spontaneous emergent strategy needs a control which can support prolonged dialogue and argument. Dialogue and argument are parts of the interactive practice of Management Control System. This empirical finding on hypothesis 2a is supported by the Kober's study (2007). He said that emergent strategy process will influence the mechanism of MCS practice. Specifically, the practice of MCS in here is meant by interactive control system.

There is a logical connection in emergent strategy process and interactive control system relationship which said that a company can be sustainable if it can adjust itself in the consumer's preference changing, high competitiveness and dynamic business environment. To anticipate this quick changing and win the hard business competition, a company needs to develop and reach the strategy based on spontaneous opportunity seeker. These spontaneous strategy and idea will simultaneously emerge from all level in a company.

Top management will chose the only strategy which has the highest certainty. Of course, when the strategy information is accepted by upper management, they will need information which is based on data, assumption and urgent action planning. Data about information and strategy planning are not only based on one division, but also from all division in a company which include the upper level management. As a result, the best action planning and strategy will be generated from the solid argument and at all management level. Opportunistic and spontaneous strategy (es8) are indicators of emergent strategy construct which have the biggest loading estimation (0,98). Argument based on data, assumption and planning will be the best indicator of interactive control system.

Hypothesis 2b said that Emergent Strategy (ES) will be positively related with Diagnostic Control System (DCS). The result of parametric estimation (by regression weight) between Emergent Strategy (ES) and Diagnostic Control System (DCS) shows that there is no impact with critical ratio as -0,44. The rate of Critical ratio is far below the critical value as 2,00 with significance rate as 0,05 (5%). This finding rejected Simons' study (1990), which said that opportunistic emergent strategy needs a diagnostic control. In other words, the more frequent emergent strategy which showed up, the higher diagnostic control practice to control excessive investment behavior.

Explanation of the rejected hypothesis above is that personnel in each company with strategy prospector typology, or a company which actively search opportunity with a continuous innovation will have a creative behavior (Langfield, 1997). Creative people is likely to refuse any control from diagnostic control (Langfield, 1997; Henri, 2006), since diagnostic control system will constraint their creativeness. Derived from its typology, companies which are included in our sample are companies which have prospector typology, since these companies have high inovativeness. The ownership of patent and other things alike will come from their creativeness inside the company, and it proves that personnel in this company is very creative. Innovation and other things alike are sometimes produced by unplanned condition (Mintzberg, 1978). Based on the explanations above, it can be concluded that emergent strategy in a dynamic situation will push personnel in a company to be more creative and they likely refuse the practice of Management Control System. In other words company with prospector typology will reject the diagnostic control system practice.

4. Conclusion

The result from the hypothesis testing in H1a shows that intended strategy will be positively and significantly related with interactive control system. The result from the hypothesis testing in H1b shows that intended strategy will be positively and significantly related with diagnostic control system. The result from the hypothesis testing in H2a shows that emergent strategy will be positively and significantly related with interactive control system The result from the hypothesis testing in H2b shows that Emergent Strategy (ES) and Diagnostic Control System (DCS) shows that there is no impact. These four findings are consistent with Merchant & Otley (1995) which said that MCS is influenced by a context in which MCS operate and it needs to be adjusted with the organization's needs and condition. One of the influenced variables in deciding management control system is the environment, technology, firm' size, and organization's strategy (Otley, 1995).

Empirical model in this study only uses one way relationship between strategy process and MCS. Qualitative results from the study done by Kober (2007) and Roberts (1990) show that there is a relationship between strategy and MCS in two way relationship or mutual relationship. Therefore, the drawback in this study will give an additional chance to conduct an impending quantitative research that consider the mutual relationship between strategy and MCS.

Empirical model in this study only uses interactive control system and diagnostic control system. In Simons' framework on levers of control (1995), there are four practices of control system: belief system, boundary system, diagnostic control system and interactive control system. As a result, the weakness in this study will give an impending additional opportunity to conduct a study that consider the relationship between strategy and the four practices of MCS.

Acknowledgment

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