THE STRATEGIC USE OF MANAGEMENT CONTROL SYSTEMS AND IT'S PROMPTING TO OPERATIONAL PERFORMANCE

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ABSTRACT

This study exploring the influence strategic use of Management Control Systems (MCS) on performance. That are Diagnostic Control System (DCS) and Interactive Control System (ICS) as well mediates variable as the relationship between Communication Skill (CS) and Task Uncertainty (TU), and operational performance for government organization. We were distributed questionnaire to collect data of 42 institution of public services, that are population were draw in West Java, Indonesia period of June – November, 2019. From the 42 public service, the names of 140 middle-level managers random was used their perception what cause and effect the extent to which of the management control systems implementation in order to subordinate level and their employees working departmental and that gained of 71 usable responses for final data. Path-analysis software was used to test the hypothesis. The analysis indicated that TU and CS have a positive influence on operational performance both directly and indirectly, throughout adoption of MCS. In other words, there is a positive relationship between TU and CS and operational performance which is fully mediated by DCS and ICS. Adoption of MCS as well as contingent based factor could be increased subordinate motivation and performance. We also find that use of MCS package, while employees themselves participate in their own departmental performance measures will improve performance were put to use. The MCS package will be reducing of TU and encourages of employee's CS. That has been generated employee hard working and getting their target and increase performance, and that has been increase manager performance and their subordinates level, that's will be impact to organizational level. The West Java Institution is join approach of strategic use between the DCS and ICS for subordinate level, that are extent to which for encourages of employee motivations and performance. These findings too implications for practice and public policy manner. This study enriches MCS literature, especially respect in TU and CS to management control in public sector services. Prior studies have found difficulties analyzing the influence of contingent based factor in order MCS design to studies including government organizations context specifically.

Keywords: Strategic Use of Management Control Systems, Communication Skill, Task Uncertainty, Operational Performance and Government Organizations

INTRODUCTION

The Management Control Systems (MCS), that explain how control operated and how it relates to other firm or organization mechanisms and contingent variables, is closely needed and further development (Fisher, 1995). Simon's said, student of management was taught that accounting is the language of business and managers rely on accounting systems to produce information useful to their decision-making and control functions, and how can accounting information and control systems help to formulate, implement and control business strategies?". Strategy necessarily involves how a company will compete and what types of opportunities employees should be encouraged to exploit (Simons, 2014). MCS design that is extent to which of more intensive explore of strategic priorities in management policy will important for improve goal congruence (Dahlan et al., 2020).

Managers regularly encounter situations for which the rules are not well defined and thus must use their best judgment in deciding what actions to take, such as management control (Anthony & Govindarajan, 2007). Contingency-based research has approached the study of MCS assuming that managers act intent to adapt their organizations to changes in contingencies in order to attain fit and enhanced performance (Chenhall, 2003). Because, the contingent factors may have little correlation and giving rise the more conflicting contingencies (Fisher, 1998).

Merchant & Van der Stede (2003) has been question "What is it about the employees on whom the organization must rely that creates the need to implement MCS?". That cause for management control can be classified into three main categories: lack of direction, motivational problem, and personal limitations. Management control managers taking steps to ensure that the employees do what is best for the organization. This is important function needed to the organization who make thing and that management controls are help against the possibilities that people will do something in the organization good them to do or fail they should do. That is makes little focus to talk about in the research.

MCS must be aligned with an organization's structure and closely aligned with the organization's strategies and goals (Horngren et al., 2015). An organization with decentralized structure will have different issues to consider when designing its MCS than a firm with a centralized structure. Government organizations in order look like of an organization with decentralized. Beyond for the researchers, there is a need for more research into service and non-for-profit organizations as these entities become increasingly important within most economies (Chenhall, 2003).

That is a relevant extent to which of this research in order in public sector services and/or government organizations, about of an organization with decentralized structure. Government organizations, those types of services provided vary widely and operated for public benefit (Merchant & Van der Stede, 2003). Many government organizations face legal constraints that are more extensive than those other organizations (Merchant & Van der Stede, 2003). And its control implication may be compensation packages of employees with those offered at for-profit organizations are not competitive. When employee quality is diminished, that one the main control problem, personal limitations, may be more salient. By the way, MCS in government institutions are often not as well developed as are those in other organizations. In order, government organizations and/or services organizations is difficult to control of quality, because a service organization cannot judgement product quality until the moment the service is rendered (Anthony & Govindarajan, 2007; Merchant & Van der Stede, 2003).

As the rate of change increases, organizations are able to devote less of their resources to managing their current operations efficiency, and need to devote more to adapting their operations to new circumstances (Otley, 1994). Management under uncertainty conditions will require the active involvement of more organizational participants, and the current move towards empowerment of subordinate level will involve of self-control to put use and group accountability. A better match between the control systems and the contextual contingency variable is hypothesized to result in increased organization (individual) performance (Fisher, 1998). Furthermore, Merchant & Van der Stede (2003) said, uncertainty has some powerful effects on MCSs and les abilities to predict the future reasonably accurately, so that generally higher the farther one tries to look into the future. That has implication for high uncertainty tends to have some broad effects on organization structures and decision-making and communication patters, and these effects increase the complexity of the management task. However, information is the necessary final ingredient to complete the control loop (Otley, 1999). The tasks undertaken in such organizations are likely to include some which are relatively extreme in terms of tasks uncertainty (Abernethy & Brownell, 1997). Hence, good fit means enhanced performance, while poor fit implies diminished performance (Chenhall, 2003).

THEORETICAL DEVELOPMENT

A MCS usually repetitious way of carrying out a set of activities, and that the process by which managers influence other members of the organization to implement the organization's strategies (Anthony & Govindarajan, 2007). The contingency-based research has focused on a variety of aspect of MCS and has evolved over one focusing on the provision of more formal, financially quantifiable information to assist managerial decision making to one that embraces a much broader scope of information (Chenhall, 2003).

The MCS means of using information to aid and coordinate the planning and control throughout an organization to guide the behavior of its managers and other employees (Horngren et al., 2015). The relevance of MCS - contingency-based research, scholars will need to focus their attention on contemporary dimensions of MCS, organizational context and social outcomes (Chenhall, 2003).

The managers and other organizational participants use of control activities in order to help ensure the achievement of their goals and the goals or their organizations (Otley & Berry, 1994). That is encompasses formal control systems as well as informal personal and social control (Simons, 2014). That help managers ensure their organization's strategies and plans are carried out or, if condition warrant, that they are modified (Simons, 2014; Merchant & Van der Stede, 2003). For example, interactive budget use and strategic performance measurement associates on performance (Yuliansyah, et al., 2018; Dahlan, et al., 2019).

Managers involved use of MCS in designing, implementing and must consider a large situation factors that, individually and that affect either the effectiveness of management controls or their features (Merchant & Van der Stede, 2003). Management control is a central policy to develop of management practices that are matching the needs of contemporary organizations context and impact to performance (Otley, 1994).

Task uncertainty is defined as the difference between the amount of information required to perform the task and the amount of information already possessed (Galbraith, 1973). Emphasis on task uncertainty in information processing, Galbraith (1973) states that, the greater the task uncertainty, the greater the amount of information that must be processed among decision makers during task execution in order to achieve a given level of performance and the degree of task uncertainty is the greater impact to the number of different input resources, and the level of goal difficulty. Managers operating in high task uncertainty situations may not have all the information needed to perform the task (Chong, 1996; Soobaroyen & Poorundersing, 2008). That is condition might be involved and matching on the MCS design and/or contingency of MCS will that processed (Otley, 1999; Malmi & Brown, 2008; Fisher, 1998).

Based on the descriptions above, we would like formulate the MCS design and contextual variables of the research model to extent to which as the research objectives as follow:
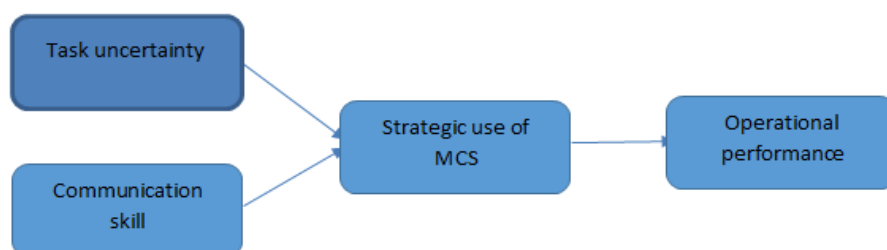

FIGURE 1
CONCEPTUAL FRAMEWORK

Leadership communication and employee communication intensive may some patter for elaborate that the condition of uncertainty pay consider for recovery job satisfaction and

subordinate performance (Agbejule, 2006; Marginson, 2002; Nguyen et al., 2017; Dekker, 2004; Crespo, et al., 2019). Hence, employee participation, communication channel, and organization commitment has been to help ensure that the achievement of their goals or their performance (Pettit et al., 1997; Erben et al., 2019; Atouba et al., 2019; Smith et al., 2018). However, managers will be much initiative and better match between the control systems and the contextual or contingency variable in order toward result were increased organization (individual) performance (Fisher, 1998; Davila et al., 2009; Chenhall, 2003; Reimer et al., 2016; Henry, 2006). Extent to which that, interactive use of performance measurement systems and management accounting information systems that consider to management effectiveness will effect on performance (Dahlan, 2019; Dahlan et al., 2020).

The MCS design depend on the contingency-factors (contextual variables and organizations context) has proposed by the researcher (e.g. Fisher, 1994, 1998; Otley, 1994, 1999; Langfield-Smith, 1997; Chenhall, 2003; Agbejule, 2006; Abernethy et al., 2010; Brownell & Dunk, 1991). An empirical research has been interested and tenet for discussion about the relationship among of organizations contextual, MCS implement and performance (Abernethy & Brownell, 1997; Bisbe & Otley, 2004; Chong, 1996; Soobaroyen & Poorundersing, 2008).

The perceived of task uncertainty and communication skill might be proposed one model for manager that extent to which will generate and matching on between the MCS designing and organization contingency, thus that is in order toward increase performance. Previous researcher has done, link and match between task uncertainty and MCS's design (Davila et al., 2009; Crespo et al., 2019; Dekker, 2004; Agbejule, 2006; Soobaroyen & Poorundersing, 2008; Henry, 2006). Because, MCS could be reduced of task uncertainty (Merchant & Van der Stede, 2003). Then, association of the communication skill aspect and MCS's design (Nguyen et al., 2017; Vaio et al., 2019; Marginson, 2002; Kelvin-Iloafu, 2016; Luft, 2016; Beuren & Teixeira, 2014). That is beneficiary of organization communication and leadership characteristic will importance as a reach employee's participation would lead to job satisfactions.

The MCS's in public sector, for example, Zhang (2014) the best job offers detail about the effects of economic reforms on management control in enterprises and the links between management control, management, accounting, and system theory. Well-timed, Zhang's introduce a model of management control in various different types of enterprise not only for special enterprises and small to medium enterprises and too for non-profit organizations. Henceforth, that wills important themes and the evolution of theory in MCS, new ideas and critical view the elements in the management control process for government organizations. Chowdhury & Shil (2016) the new perspective of innovative in MCS and then importance on New Public Management (NPM) context initiatives were interested. It is argued that adopted various management control tools to improve performance and accountability. It appears from that these adopted of management control tools would be forced some organization towards better performance. Hence, that has stated, MCS's could be implied in the government organizations.

According to previous-research, our concluded like that the foregoing discussion suggest to capture of good fit means enhanced performance and poor fit implies diminished performance for government organizations within Simon's lever of control systems as a little study, the following hypothesis is tested:

H1: The perceived of task uncertainty and communication skill, the more positive effect on the extent to which use of diagnostic control systems and interactive control systems design, that will prompting enhance performance.

METHODOLOGY AND MEASUREMENT OF VARIABLES

A total of 42 institutions of public services, that are population were draw from public service in West Java, Indonesia. From the 42 public service, the names of 140 middle-level managers randomly were used their perception what cause and effect the extent to which of the

management control systems implementation in with the subordinate level and/or their employees working the day by day, in this research. The questionnaires to be returned directly to the researchers. Each participant was sent a questionnaire together with a cover letter and a prepaid self-addressed envelope. After two weeks, researcher come direct to public services if some where enable non-respondents to traced and follow up to be executed. The respondents have control systems responsibilities. This resulted in 115 middle-managers for inclusion in the sample. A total of 83 questionnaires on November 2019 were returned, which yielded a response rate of 72%. Twelve responses were non-usable as the questionnaires were not fully completed. Therefore, this leaves our study with 71 usable responses for final data and analysis to test the hypothesis.

Strategic Use of Management Control Systems

We adopt by Simon's (1995, 2014) nine-item, including of five items for diagnostic control systems and four items for interactive control systems and then was used five-point Likert-type scale instrument. The scale ranges from 1 (strongly disagree) and to 5 (strongly agree). The objective of this instrument is to assess the extent to which managers perceived what cause and effect of the management control systems implementation in with the subordinates and/or their employees working days and subordinate ability in the organizations to adopted of procedures and systems approach, that is management control systems guidance.

Task Uncertainty

Task uncertainty is the difference between the amount of information required to perform the task and the amount of information already processed (Galbraith, 1973; Soobaroyen & Poorundersing, 2008). The measure variable construct of task uncertainty was adopted from Soobaroyen & Poorundersing (2008) follow four items, that are extent to which of definition, thinking, knowing, and understanding of job and task introducing by managers to subordinate level. We were used five-point Likert scale and scale ranges from 1 (very small extent) and to 5 (very large extent).

Communication Skills

Berman & Hellweg (1989) said, from the internal side of the individual concerned, his/her communication skills are constructs including the elements of knowledge, motivation, skills, behaviour, and effectiveness. The five items instrument from Berman & Hellweg (1989) was adopted and used five-point Likert scale. The scale ranges from 1 (strongly disagree) and to 5 (strongly agree).

Operational Performance

Burney, et al., (2009) said, employee performance is a task (operational) performance, that are seven items performance measurement. Who instrument they are, we adopted the seven items instrument from Burney, et al., (2009) and used five-point Likert scale. The scale ranges from 1 (strongly disagree) and to 5 (strongly agree). Operational performance was measured by self-rated from managers perceive to subordinates level. The objective of this measure is to assess the extent to which managers perceived their subordinate level achievement of services and effectiveness would like attains to target and standard of the individual performance and that as a Strategic Performance Measurement System (SPMS) departmental. Because, characteristics of the SPMS has associated with perceived organizational fairness.

RESULTS AND DISCUSSIONS

Table 1 shows that, the inter-correlations among the all measured variables were all revealed that was positively correlated, that all significant at the 0.01 level. Therefore, the most suitable pattern of employee performance, diagnostic control system, interactive control system, communication skill and task uncertainty variable in this research. Additional judgment, the all mean score over the standard deviation, that look like an acceptable of measured variables were all single dimension.

	Min	Max	Mean	Std. Dev	1	2	3	4	5
Table 1 **DESCRIPTIVE STATISTICS AND VARIABLES INTERRELATIONSHIP**									
Employee performance	21	35	30.3803	3.57917	1				
Diagnostic control	13	25	21.0423	3.13704	0.622**	1			
Interactive control	11	20	16.6338	2.42157	0.641**	0.553**	1		
Communication skill	15	25	20.6338	2.74217	0.566**	0.408**	0.458**	1	
Task uncertainty	33	55	46.4789	5.23412	0.938**	0.579**	0.682**	0.569**	1
** Correlation is significant at the 0.01 level (2 – tailed)									

Table 2 shows, the lower of loading factor is 0.626 and or above. That all variables and indicators validity were all at an acceptable level (0.424 or above, Chenhall & Langfield-Smith, 1998). In addition, the Cronbach alpha coefficients for the internal reliability for all the measured variables were all at an acceptable level (0.60 or above, Nunnally & Bernstein, 1994). However, initial eigenvalues for all the measured variables of 54.944% or above, that is look like the single-loading factor.

Table 2 **VALIDITY AND RELIABILITY LEVEL**			
Component Matrix on Loading Factor and Reliability Statistics on Cronbach's Alpha			
Employee Performance		**Diagnostic Control**	**Task Uncertainty**
Indicator 1	0.795	0.837	0.707
Indicator 2	0.743	0.678	0.842
Indicator 3	0.794	0.801	0.872
Indicator 4	0.752	0.769	0.806
Indicator 5	0.756	0.842	
Indicator 6	0.626		
Indicator 7	0.708		
Cronbach's Alpha	0.816	0.859	0.817
Initial Eigenvalues	54.944	62.054	65.416
Communication skill		Interactive control	
Indicator 1	0.694	0.822	
Indicator 2	0.797	0.802	
Indicator 3	0.86	0.776	
Indicator 4	0.713	0.656	
Indicator 5	0.736		
Cronbach's Alpha	0.765	0.836	
Initial Eigenvalues	58.115	58.755	

The next result view point in the table 3 show, we have two scenario extent to which the strategic use of management control systems in term of diagnostic control systems and

interactive control systems, and then traditional multiple regression analysis as additional testing. Therefore, we were concluded that as a research findings including.

The first model strategic use of management control systems in order about implement of diagnostic control systems. Table 3 show that; task uncertainty direct and positive effect on diagnostic control systems (p-value=0.000), communication skill direct effect and positive effect on diagnostic control systems (p-value=0.000), and through diagnostic control systems direct and positive effect on employee performance (p-value=0.000). Therefore, that is very important result. Fitting of diagnostic control design could be reduced of task uncertainty as a contextual factor as in government organizations and leadership competent (e.g. communication satisfaction) would be relay on reinforce to rise the relationship between managers and subordinates level. Consequently, uncertainty will low and job satisfaction has higher then beginning task. So, the variable of diagnostic control systems positive and significant effect on employee performance. That is good fit means enhanced performance, manager's and employee's will become proficient.

Variable	Coefficient	value	SE	t	p-value
Table 3 THE FIRST MODEL STRATEGIC USE OF MANAGEMENT CONTROL SYSTEMS					
Constants	bo	4.911	2.751	1.785	0
Task uncertainty	b1	0.347	0.059	5.9	0
Dv: Diagnostic control system	R^2=0.335, Adj. R^2=0.326, F=34.809, p<0.000				
Constants	bo	11.366	2.627	4.326	0
Communication skill	b1	0.467		3.715	0
Dv: Diagnostic control system	R^2=0.167, Adj. R^2=0.155, F=13.802, p<0.000				
Constants	bo	15.448	2.288	6.752	0
Diagnostic control	b1	0.71		6.598	0
Dv: Employee performance,	R^2=0.387, Adj. R^2=0.378, F=43.537, p<0.000				
Constants	bo	15.448	2.288	6.752	0
Task uncertainty	b4	0.71	0.108	6.598	0
Dv: Employee performance,	R^2=0.387, Adj. R^2=0.378, F=43.537, p<0.000				

Thereby, according to H1 state, exclude the interactive control: the perceived of task uncertainty and communication skill, the more positive effect on the extent to which use of diagnostic control systems design, that will prompting enhance performance, is partial support.

Variable	Coefficient	value	SE	t	p-value
Table 4 THE SECOND MODEL STRATEGIC USE OF MANAGEMENT CONTROL SYSTEMS					
Constants	bo	1.96	1.904	1.029	0
Task uncertainty	b1	0.316	0.041	7.755	0
Dv: Interactive control system	R^2=0.466, Adj. R^2=0.458, F=60.135, p<0.000				
Constants	bo	8.263	1.975	4.183	0
Communication skill	b1	0.404	0.095	4.274	0
Dv: Interactive control system	R^2=0.209, Adj. R^2=0.198, F=18.269, p<0.000				
Constants	bo	14.621	2.295	6.37	0
Interactive control	b1	0.947	0.137	6.937	0
Dv: Employee performance,	R^2=0.411, Adj. R^2=0.402, F=48.120, p<0.000				

Constants	bo	15.084	2.708	5.571	0
Communication skill	b1	0.738	0.13	5.697	0
Dv: Employee performance,		$R^2=0.320$, Adj. $R^2=0.310$, F=32.462, p<0.000			
The traditional strategic use of management control systems					
Constants	bo	-0.341	1.395	-0.245	0.807
Diagnostic control	b1	0.141	0.059	2.379	0.02
Interactive control	b2	-0.059	-0.086	-0.685	0.496
Communication skill	b3	0.048	0.065	0.739	0.462
Task uncertainty	b4	0.597	0.043	13.84	0.000?
Dv: Employee performance,		$R^2=0.891$, Adj. $R^2=0.884$, F=134.529, p<0.000			

The second stage, view point of simple regression analysis results in order research objective shows that in table 4. Hypothesis statistic test has introduced, variables of task uncertainty and communication skill direct and positive effect on interactive control systems, and will be too interactive control systems direct and positive effect on employee performance. These finding were good tenet for government organizations or public sector services. Elaborate of interactive control design within task uncertainty and channel of communication satisfaction well involve.

Task uncertainty face to meaningless within manager's and their subordinates level, but the difference between the amount of information required to perform the task and the amount of information already processed. Hence, top manager would be as soon as control systems design to fit on the organization context. Control systems will involve producing information and formal mechanism for management practice could support decision making in the management task. By the way, we suggestion based on table 3 in order for H1 was fully supported.

Effectiveness of MCS implement that is depend on central may intensively affect by some contextual of organizations (Fisher, 1998; Otley, 1999; Chenhall, 2003). That are tenet would like for other literature (e.g. Agbejule, 2006; Abernethy et al., 2010; Henry, 2006; Nguyen et al., 2017). In this study, closely that consider to the previous researched. According to table 3, that results look like to confirm which on that findings, our result suddenly goodness that previous literatures (e.g. Chowdhury & Shil, 2016; Zhang, 2014; Marginson, 2002; Atouba et al., 2019).

That the MCS's including of management accounting information systems and strategic performance measurement systems will that support to decision making and reduce of task uncertainty, that will be leading of leader communication satisfaction. In term of MCS designing more intensive and affect by contingence factor could be minimized. Therefore, in this study was expectations that to recovered of performance require in order into manager task and their subordinates level will achieve of performance, if that condition may uncertainty and accompanying previous findings were supported. The existence of management control packages, surpassing this studies that continually changing and developing need studies that changes and seek how to explain the mechanisms, but not only to test hypothesis formulates that are observed to be deployed. For example, including of MCS package that the introducing of performance measurement systems model in public sector organizations, would like management performance in organizations thus depends both on contractibility and how the system should be improved of control activities is being used by managers and that have important implications their organizations for subordinate level of department measurement and towards performance measurement systems in the institutions (Spekle & Verbeeten, 2014).

Closing analyst for the traditional strategic use of management control systems, while MCS design and contingent factors poor fit implies diminished performance in government organizations, which ones do you want Simon's lever of control systems as a widely acclaimed study.

The research has done and complete tested in the public sector services area taken into base study for MCS implement and effect of contextual variables on employee performance by the manager perception on their subordinate level as a subject to researched. That is recent to the hypothesis testing extent to which of MCS design effect on performance would like fully supported. Some bias may imply likely that to the tasks undertaken in such organization are likely which are relatively loos and less to include of research limitations. May cause by not at all of element Simon's level of control would use in the study and from the 42 public service, the names or only of 140 middle-level managers randomly were used their perception what cause and effect the extent to which of the management control systems implementation in with the subordinate level. However, the evidence on the use of more contemporary and more sophisticated MCS typologies and intensively use in the round the world.

A review of conceptual and empirical-based MCS literatures by previous research, that the literature study may consistence within our result, summarized in table 3. Previous findings have been stated in need to imply of MCS be at all organizations type. Contingence of factor more powerful effect and intensively may central of those interactions in any organization or management process.

CONCLUSIONS

This article comparable literature including on the contingency theory of management accounting for the information processed that critically outlines some of the major themes explored, that could be important for MCS design and use of performance measurement systems. That argues a mechanistic approach that will develop of MCS into a predictive mechanism for the design of optimal control systems. The existence of management control packages in public sector because that continually changing and developing need studies that changes and seek how to explain MCS do the mechanisms continually studies that are observed to be deployed. Several reasons, most notably MCS design including their department measurement more important implication on public sector services or government organizations that the rapid task of change or amended systems at a faster than the coordination process can develop, because more intensive studies that last decades. That the narrow view point of contingency of MCS that relies on responses to generally questionnaires needs to be replaced approach that takes into account the context, for example look like of specific organizations.

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