

# The Effect of Management Control Systems on Employee Performance: Communication Skill as a Moderating Variable

Muhammad Dahlan\*

Department of Accounting, The University of Padjadjaran, Bandung 40132

\*Corresponding Author Email: dahlanm2004@yahoo.com

**Abstract**— This research aims to test whether if employees are monitored continuously and/or periodically, their performance can improve or, conversely, their performance can decrease. The analysis focuses on interactive control and diagnostic control as management control system models commonly used in various organizations, especially in local government organizations. 140 questionnaires were distributed to heads of budget, accounting, finance and planning divisions at West Java Provincial Government departments, agencies and offices, resulting in 71 pieces that were ready to be processed. The research results show that diagnostic and interactive supervision has a direct positive effect on performance and there is a positive relationship between the management control system and performance which is moderated by the communication variable. Then excessive supervision cannot improve performance and on the contrary adequate supervision by top management and/or higher level managers is deemed necessary to improve performance. Planning for supervision of subordinates is still needed to encourage participation and motivation in an effort to improve performance in an organization.

**Keywords**— Management Control Systems, Diagnostic Control, Interactive Control, Communication Skill, and Employee Performance.

## I. INTRODUCTION

The contingency context of MCS literature that managers pay attentions to adapt their policy would likely has been adjusted affect by environmental changes in organizations that complementary set up to fit and performed (Abernethy and Brownell, 1997; Chenhall, 2003 and Fisher, 1998). The MCS's in public sector, for example, Well-timed, Zhang (2014) introduce a model for public institutions not only for profit motives but too non-profit organizations.

Henceforth, this concepts would interested in the MCS study, new ideas and critical view the elements in the management control process for government organizations. Chowdhury and Shil (2016) were interested in a new perspective on innovation in MCS and then the importance in initiatives of the New Public Management (NPM) context. Various management control tools are said to have been introduced to improve efficiency and accountability. It seems that these introduced management controls would push some organizations to better operations. Thus, MCSs can be directed to government organizations.

MCS must be aligned with the organization's structure and closely aligned with the organization's strategies and goals (Horngren et al., 2015). For example, government organizations look good as a decentralized organization. The next study I thing good research in area of service organizations and non-profit motive but this area a little interest show there are most urgent to be confirmatory that is MCS implementation (Chenhall, 2003).

Management communication and intensive employee communication can slightly specify the fact that the uncertainty payment condition is considered in the recovery of job satisfaction and secondary performance (Nguyen et al., 2017; Abernethy et al., 2010; Dekker, 2004; and Crespo). et al., 2019). Thus, employee participation, communication channel and

organizational commitment helped ensure the achievement of their goals or performance (Pettit et al., 1997; Erben, et al., 2019; Atouba et al., 2019; and Smith, et al., 2018 ). However, managers are much more active and have a better fit between control systems and contextual or contingent variables to improve organizational (individual) performance (Fisher, 1998; Chenhall, 2003; and Henry, 2006).

The perceived of communication skill might be proposed one model for manager that 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 of communication skill aspect and MCS's design (Nguyen, et al., 2017; Vaio, et al., 2019; Kelvin-Iloafu, 2016; Luft, 2016; Beuren and Teixeira, 2014). This benefits organizational communications and leadership qualities, as the involvement of the outreach worker would lead to efficiency (Abernethy et al, 2010).

Therefore, link and match task of communication in the relationship between strategic use of management control systems and employee performance as a research focus, namely is task of communication skill as a moderator between diagnostic control & interactive control and employee performance. So, if good fit is a greaten of individual performance and bad fit is a reduce individual performance.

## II. METHOD

Referring to 42 departments and West Java Government service offices, they had the opportunity to send 142 questionnaires to department heads as the unit of analysis in this research. Researchers produced 71 ready-made questionnaires, of which 2 were declared damaged because they were incomplete and the answers did not match the research analysis unit. The questionnaire was specifically designed using a 5

Likert scale, starting from 1 = strongly disagree to 5 = strongly agree.

The management control system is measured using an instrument developed by Simon's (1995, 2014) which consists of 9 indicators, of which 5 indicators are about diagnostic control and 4 indicators are about interactive control. The aim is to see the extent to which middle level managers understand and implement procedures and operating systems for the management control system in which they are assigned. Then communication skills are measured using an instrument from Berman and Hellweg (1989) consisting of 5 indicators, for example knowledge possessed, motivation, communication skills, behavior and work effectiveness. Finally, employee performance adopts 7 indicators developed by Berney, et al (2009), namely to measure the extent to which the effectiveness of the services provided can be achieved so that they can achieve the targets that have been set.

### III. RESULTS AND DISCUSSION

Table 1 below is a descriptive statistical table and the relationship between research variables to see the qualitative data, namely:

TABLE 1

	Min	Max	Mean	Std. Dev	1	2	3	4
Employee performance	21.00	35.00	30.3803	3.57917	1			
Diagnostic control	13.00	25.00	21.0423	3.13704	.622*	1		
Interactive control	11.00	20.00	16.6338	2.42157	.641*	.553*	1	
Communication skill	15.00	25.00	20.6338	2.74217	.566*	.408*	.458*	1

\*\* Correlation is significant at the 0.01 level (2 – tailed)

TABLE 2: Validity and Reliability Levels.  
Component Matrix on Loading Factor and Reliability Statistics on Cronbach's Alpha

Employee performance		Diagnostic control
Indicator 1	0.795	0.837
Indicator 2	0.743	0.678
Indicator 3	0.794	0.801
Indicator 4	0.752	0.769
Indicator 5	0.756	0.842
Indicator 6	<b>0.626</b>	
Indicator 7	0.708	
Cronbach's Alpha	0.816	0.859
Initial Eigenvalues	54.944	62.054
Communication skill		Interactive control
Indicator 1	0.694	0.822
Indicator 2	0.797	0.802
Indicator 3	0.860	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

Table 1 above also shows the relationship between variables. In general, it shows that there is a positive and significant relationship at the 0.01 level. This means that employee performance variables, diagnostic control, interactive control and communication skills have provided relevance and effectiveness in services to the people of West Java. Then also the average score level is above the minimum, maximum and

standard deviation scores, this shows that the variables measured are appropriate using a single dimension.

Table 2 shows that the lowest factor loading is 0.626 and the others are higher. This means that all indicators of the studied variables are acceptable and valid because the reference standard is 0.424 or higher (Chenhall and Langfield-Smith, 1998). Then measure whether the level of reliability of the research results using internal reliability shows at a level of 0.60 or higher, meaning that it can be trusted and the research results can be trusted.

TABLE 3: Output Regressions and p-value.

Variable	Coefficient	value	SE	t	P-value
<b>Model 1</b>					
Constants		8.999	2.628	3.424	0.000
Diagnostic control system	0.469	0.535	0.107	5.013	0.000
Communication skill	0.374	0.488	0.122	3.996	0.000
Dv: Employee performance	R 2=0.335, Adj. R2=0.326, F=34.809, p<0.000				
Constants		-17.774	13.484	-1.318	0.192
Diagnostic control system	1.590	1.814	0.641	2.831	0.006
Communication skill	1.389	1.813	0.666	2.723	0.008
Moderating_DCSxCS	-1.801	-0.63	0.031	-2.023	0.047
Dv: Employee performance	R 2=0.335, Adj. R2=0.326, F=34.809, p<0.000				
<b>Model 2</b>					
Constants		9.181	2.606	3.523	0.001
Interactive control system	0.483	0.714	0.142	5.036	0.000
Communication skill	0.344	0.450	0.125	3.589	0.001
Dv: Employee performance	R 2=0.335, Adj. R2=0.326, F=34.809, p<0.000				
Constants		-5.384	13.080	-0.412	0.682
Interactive control system	1.064	1.573	0.769	2.046	0.045
Communication skill	0.909	1.187	0.661	1.796	0.077
Moderating_ICsxCS	-0.983	-0.043	0.038	-1.136	0.260
Dv: Employee performance	R 2=0.335, Adj. R2=0.326, F=34.809, p<0.000				

Descriptive and variables interrelationship, 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, and communication skill variable in this research. Additional judgment, the all mean score over the standard deviation, that look like an acceptable of measured variable were all single dimensions.

Validity and reliability testing shows that, the lower of loading factor is 0.626 and or above. The validity of all variables and indicators was at an acceptable level of 0.424 or higher (Chenhall and Langfield-Smith, 1998). Then, internal reliability test for Cronbach alpha coefficients that all measured variables was an acceptable level 0.60 or above (Nunnally and Bernstein, 1994). However, initial eigenvalues for all the measured variables of 54.944% or above, that is look like the single-loading factor.

Then, F-test in figure above, our concluded that communication skill was proceed in the relationship between management control systems and performance, the moderating variable, but based on t-test shows that, only diagnostic control

systems positive effect on employee performance, while communication skill as a moderating variable

MCS design that is extent to which of more intensive explore of strategic priorities in management policy will important for improve goal congruence (Chenhall, 2003 and Simons, 2014). Then, MCS study will be pro-active to be on environmental uncertainty, that are closely on contingency factors show that the assuming managers has approached to adjusted policy but pay attention the strategic outcome an intent to adapt in their organizations will be to fit and performed (Chenhall, 2003 and Simons, 2014). Leader and Employee participation in communication and generating of organization communicates pay more intention it is increase to fit relationship between contingency of using MCS design and performance (Simons, 2014; Abernethy, et al, 2010 and Langfield-Smith, 1997).

This study might be confirmatory conceptual of the contingency factor in management accounting, because only diagnostic control systems positively effect and significant on employee performance, while a communication skill have been proved as a moderating variable. Simple statement, good fitting MCS design and communication style will be improved performance, and/or poor fitting MCS design and communication style will be reduce performance.

This study explains that the performance measurement strategy does not only look at the level of achievement in accordance with the target, but it is also deemed necessary to pay attention to the suitability of the method and model of measurement and to try to increase the motivation of the subordinates first, which in the end will improve performance (Dahlan, et al, 2019; Erben, et al, 2019 and Dahlan, et al, 2020).

#### IV. CONCLUSIONS AND RECOMMENDATIONS

The results of this research illustrate that strict supervision can be interpreted as less beneficial for the organization because it can reduce performance. This can be seen if the supervision system is moderated with a communication model, it can reduce performance. However, both diagnostic and interactive supervision can increase performance one level below, if excessive supervision can also result in a negative relationship with performance. Good supervision is supervision that is relevant to the parties being supervised so that it will provide motivation to subordinates.

It is deemed necessary not only to focus on achieving targets but also to ensure that subordinates can work happily and voluntarily and that achieving targets really comes from the subordinates themselves, if they do not achieve targets they will get punishment.

#### REFERENCES

[1]. Abernethy, M. A. and Brownell, P. (1997). Management control systems in research and development organizations: the role of accounting, behaviour and personnel controls. *Accounting, Organizations and Society*, 22 (3-4): 233 – 248. [https://doi.org/10.1016/S0361-3682\(96\)00038-4](https://doi.org/10.1016/S0361-3682(96)00038-4)

[2]. Abernethy, M. A., Bouwens, J. and Lent, L. (2010). Leadership and control system design. *Management Accounting Research*, 21 (1): 2 – 16. <https://doi.org/10.1016/j.mar.2009.10.002>

[3]. Atouba, Y. C., Elizabeth J. Carlson, E. J., and John C. Lammers, J. C. (2019). Directives and dialogue: examining the relationship between

participative organizational communication practices and organizational identification among IT workers. *International Journal of Business Communication*, 56 (4): 530 – 559. <https://doi.org/10.1177/2329488416672430>

[4]. Berman, S. J. and Hellweg, S. A. (1989). Perceived supervisor communication competence and supervisor satisfaction as a function of quality circle participation. *International Journal of Business Communication*, 26 (2): 103-122. <https://doi.org/10.1177/002194368902600202>

[5]. Beuren, I. M and Teixeira, S. A. (2014). Evaluation of management control systems in a higher education institution with the performance management and control. *Journal of Information Systems and Technology Management*, 11 (1): 169 – 192. <https://doi.org/10.4301/S1807-17752014000100010>

[6]. Burney, L.L., Henle, C.A., Widener, S.K. (2009). A path model examining the relations among strategic performance measurement system characteristics, organizational justice, and extra- and in-role performance. *Accounting, Organizations and Society*, 34 (3-4), 305-321. <https://doi.org/10.1016/j.aos.2008.11.002>

[7]. Chenhall, R. H. (2003). Management control systems design within its organizational context: findings from contingency-based research and direction for the future. *Accounting, Organizations and Society*, 28 (2-3): 127 – 168. [https://doi.org/10.1016/S0361-3682\(01\)00027-7](https://doi.org/10.1016/S0361-3682(01)00027-7)

[8]. Chenhall, R. H. and Langfield-Smith, K. (1998). The relationship between strategic priorities, management techniques and management accounting: an empirical investigation using a systems approach. *Accounting, Organizations and Society*, 23(3): 243 – 264. [https://doi.org/10.1016/S0361-3682\(97\)00024-X](https://doi.org/10.1016/S0361-3682(97)00024-X)

[9]. Chowdhury, A and Shil, N. C. (2016). Innovation in public sector management control systems in the context of new public management: a case of an Australian public sector organization. *Journal of Entrepreneurship, Management and Innovation*, 12(4): 99 – 126. <https://ssrn.com/abstract=3105419>

[10]. Crespo, N. F., Rodrigues, R., Samagaio, A., and Silva, G. M. (2019). The adoption of management control systems by start-ups: Internal factors and context as determinants. *Journal of Business Research*, 101: 875 – 884. <https://doi.org/10.1016/j.jbusres.2018.11.020>

[11]. Dahlan, M., Yuliansyah, Y., Maryani, M., and Al-Shikhy, A. (2019). The effect of strategic performance measures and market orientation on a firm's performance. *Journal of Business and Retail Management Research*, 13 (4): 168 – 176. <https://doi.org/10.24052/JBRMR/V13IS04/ART-15>

[12]. Dahlan, M., Yuliansyah, Y., Fadhilah, A., Muafi, M., Al-Shikhy, A., Mohd Sanusi, Z. and Isa, Y. (2020). Interactive performance measurement systems, self-profiling, job challenge and individual performance. *International Journal of Ethics and Systems*, 36 (1): 87 - 97. <https://doi.org/10.1108/IJOES-02-2019-0037>

[13]. Dekker, H.C., 2004. Control of inter-organizational relationships: evidence on appropriation concerns and coordination requirements. *Accounting, Organizations and Society*, 29 (1), 27–49. [https://doi.org/10.1016/S0361-3682\(02\)00056-9](https://doi.org/10.1016/S0361-3682(02)00056-9)

[14]. Erben, J., Schneider, F. M., and Maier, M. (2019). In the ear of the beholder: self-other agreement in leadership communication and its relationship with subordinates' job satisfaction. *International Journal of Business Communication*, 56 (4): 505 – 529. <https://doi.org/10.1177/2329488416672431>

[15]. Fisher, J. G. (1998). Contingency theory, management control systems and firm outcome: past results and future directions. *Behavioral Research in Accounting*, 10 (Supplement): 47 – 64. <https://www.search.proquest.com>

[16]. Horngren, C. H., Datar, S. M. and Rajan, M. V. (2015). *Cost Accounting: A Managerial Emphasis*. Fifteenth edition. England: Pearson Education Limited. [www.pearsonglobal Editions.com](http://www.pearsonglobal Editions.com)

[17]. Kelvin-Iloafu, L. E. (2016). The role of effective communication in strategic management of organizations. *International Journal of Humanities and Social Science*, 6 (12): 93 – 99. <https://www.ijhssnet.com>

[18]. Langfield-Smith, K. (1997) Management control systems and strategy: a critical review. *Accounting, Organizations and Society*, 22(2): 207 – 232. [https://doi.org/10.1016/S0361-3682\(95\)00040-2](https://doi.org/10.1016/S0361-3682(95)00040-2)

[19]. Luft, J. (2016). Cooperation and competition among employees: Experimental evidence on the role of management control systems. *Management Accounting Research*, 31: 75 – 85. <https://doi.org/10.1016/j.mar.2016.02.006>

- [20]. Nguyen, T. T., Mia, L., Winata, L., and Chong, V. K. (2017). Effect of transformational-leadership style and management control system on managerial performance. *Journal of Business Research*, 70: 202 – 213. <https://doi.org/10.1016/j.jbusres.2016.08.018>
- [21]. Nunnally, J. C. and Bernstein, I. H. (1994). *Psychometric theory*. 3rd Ed. New York: McGraw Hill, Inc. <https://lcn.loc.gov/93022756>
- [22]. Pettit, J. D., Goris, J. R., and Vaught, B. C. (1997). An examination of organizational communication as a moderator of the relationship between job performance and job satisfaction. *International Journal of Business Communication*, 34 (1): 81-98. <https://doi.org/10.1177/002194369703400105>
- [23]. Simons, R. (1995). *Levers of control: how managers use innovative control systems to drive strategic renewal*. First edition. Boston, Mass: Harvard Business School Press. <http://id.lib.harvard.edu/alma/990051361020203941/catalog>
- [24]. Simons, R. (2014). *Performance measurement and control systems for implementing strategy*. First edition. England: Pearson Education Limited. [www.pearsoned.co.uk](http://www.pearsoned.co.uk)
- [25]. Smith, S. A., Patmos, A., and Pitts, M. J. (2018). Communication and teleworking: a study of communication channel satisfaction, personality, and job satisfaction for teleworking employees. *International Journal of Business Communication*, 55 (1): 44 – 68. <https://doi.org/10.1177/2329488415589101>
- [26]. Zhang, X. (2014). *Enterprise Management Control Systems in China*. First edition. Germany: Springer Verlag Berlin Heidelberg. Library of congress control number: 2014939012. <https://doi.org/10.1007/978-3-642-54715-7>