

The Impact of Management Control System on Managerial Performance of Gmim's Hospitals in North Sulawesi Province, Indonesia

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Abstract

ASEAN Economic Community (AEC) era which aims towards free trade, has affected the hospital industry. The competition level in the industry is increasing. The increase of competition level must be anticipated by the hospital management by formulating strategy to endure and win the competition. This research aims to analyse the impact of management control system towards managerial performance of Gereja Masehi Injili di Minahasa's (GMIM) hospitals in North Sulawesi province. A survey is conducted on 160 hospital employees who have roles related to revenue and cost management on 5 GMIM's hospitals. Data is collected through questionnaires distribution and linear regression data analysis tool is used in the research. This study finds RS Pancaran Kasih Manado are the best performer in achieving better managerial performance. The other 4 GMIM's hospitals must take example from the RS Pancaran Kasih management. Management control system significantly influences the managerial performance. A better management control system will result in higher managerial performance level. GMIM's hospitals have to improve its planning and evaluation system so it can have higher managerial performance.

Keywords: hospital, management control system, managerial performance.

1. Introduction

AEC has given the opportunity among ASEAN countries to collaborate in strengthening its economic capacity. The collaborations include the exchange of labour, professional recognition and capital assistance. Nevertheless, AEC also presents great challenge for the countries in the region, which is the creation of free competition. With the birth of AEC, goods and services are free to be trade in the region, and the professional labour also acquires the same recognition, thus labour has freedom to find work across the region. The same case is also occurred to investors that have been given the freedom to invest in the region. On one side, AEC gives the opportunity of collaboration to increase economic capacity, but on the other side if the country is not prepared AEC can become a threat for the country where it will only become a spectator for economic prosperity occurring in the ASEAN region.

AEC gives a significant impact on many sectors, including hospital industry. The increasing of economic growth in ASEAN region gives influence to the welfare. The raise of welfare will create demand for a better healthcare service and the people can choose the best alternative healthcare service all over the ASEAN region. The advance technology will make it easier for people to acquire excellent healthcare service anywhere. This will result in high competition on healthcare services such as hospital and other healthcare service facility.

AEC era which leads to free trade also influences the hospital industry. The competition in hospital industry will increase. Higher competition must be anticipated by the hospital management by formulating strategy to endure and win the competition. Although hospital main purpose is not to generate profit as most of corporations, it cannot be denied that hospital must be manage effectively and efficiently. The effectiveness and efficiency in managing the hospital can only be achieved if the management carries out the management process well. Management process is the series of activities which conducted by the management to achieve organizational goal, either in short or long term. Hospital operational expense for many years depends on the local government financing. GMIM's Hospitals are hospital own by GMIM stands for Gereja Masehi Injili di Minahasa (Indonesian: Christian Evangelical Church in Minahasa). With the limited financing of local government, it is expected that GMIM's hospitals as units that generate healthcare service retribution can be manage professionally. The performance is observed based on measurement which is suitable with the hospital operational characteristics. To find out if this thing has been achieved or not, it will need an accurate evaluation that aims towards the hospital management so the managing process is running according to the hospital's vision and missions.

The most effective way to achieve this goal is by applying management control system to boost the

managerial and financial performance in order to increase the quality and innovation in this AEC era. General local hospital that has applied management control system has the ability to deliver good quality services. Some researches related to management control system on hospital and public organisation has been conducted before. Syed Amin Tabish, Ajaz Mustafa, and Rangrez RA's (2001) research which titled: "Hospital Accounting Based Cost Studies: Indian Experience", stated that in a developing country (India), there is so much of expenditures in healthcare sector are wasted because of misallocation, the inefficiency of the management and operation in the hospital.

Mitra Lagerstrom's (2002) research titled: "Performance Measurement and Management Control Systems Profit-Oriented Corporation Versus Non-Profit Organizations", stated that management control system in public organization can be applied in budgeting, accounting systems, auditing, project controls, information report, and performance report. The result from interview conducted by the researcher on managers in non-profit organization in the USA, International Red Cross Committee, Save the Children, and SIDA (Swedish International Cooperation Agency) concludes that the application of management control system on budgeting department of non-profit organization (especially funding) is more intensive than the business organization.

Budget allocation of Health Department of North Sulawesi Province in 2017 for direct purchasing (18 programs) is about Rp. 19.891 billion and indirect purchasing at Rp. 76.770 billion or total budget allocation at Rp. 96.662 billion. The realization of *APBD* (budget for regional government income and expenditure) in 2016 for direct purchasing is Rp 44.982 billion (98.07) and indirect purchasing Rp. 13.716 billion (87.89%). The *APBN* (budget for national government income and expenditure) in 2016 was set at Rp. 53.261 billion with the budget realization of Rp. 52.126 billion (97%). The budget allocation for North Sulawesi Health Department in 2017, included the 6 program in the *APBN*, is about Rp. 35.868 billion. With these funds the management of GMIM's hospitals is demanded to enhance its performance. But still there are many complaints from customers because of the limited service it performed. The main problem faced by the hospital management is the slow disbursement of budget funds together with the strict financial management of the hospitals.

Based on this background, the purpose of this research is to analyse the impact of management control system towards managerial performance of GMIM's hospitals in North Sulawesi.

2. Literature Review

2.1 Control Theory

Control theory has become the basis of modelling, analysis, and design to receive feedback from the management system. Feedback is used as guide for company to survive uncertain changes and disruptive systems (Zhu et al., 2009). Control theory helps company to provide effective and better management policies (Loehle, 2006). In this case, the management control system meets the specifications of the control theory of being a system that provides information from feedback based on evaluation of company's performance. Management control system is also used by company to assist managers in making effective and efficient decisions (Jamil et al, 2013). Therefore, control theory becomes one of the foundation to use management control system in a company.

2.2 Management Control System

According to Hared, Abdullah and Huque (2013) there is a shiftment of management control system from onlu focusing on economic transaction in organization to social constructed. Anthony and Govindarajan (2004: 17) discussed the system used by management to control the activities of an organization is called management control system. Management control is the process by which managers influence other member of the organization to implement the organization's strategies (Quleh, Qader and Ibrahim, 2013). Related to the theory, Horngren et al. (2000: 788) states that a management control system is a mean of gathering and using information to aid and coordinate the process of making planning and control decisions throughout the organization and to guide the behaviour of its managers and employees. Maciariello (1994: 5) defines that a management control system attempts to bring unity of purpose of the diverse efforts multitude of organizational sub units so as to steer the overall organization and its manager toward its objectives and goals. A management control system of a structure and process. These opinions state that the management control system is strived to unify the goals of various businesses, sub-unit organization and management which consist of structure and process. Barth and Landsman (2010 cited by Al-Halabi 2013:148) reveals that the management controls system is supported by an economic perspective to representing policies and procedures for stakeholder wealth growth and employee participation in order to achieve organizational goals by monitoring contractual agreements with related parties, based on transparency and accountability standards. The management control system in achieving organizational goals is concerned with how managers can really use planning and control systems to guide them in achieving organizational goals (Lekatompessy, 2012).

The purposes of management control according to Blocher et al. (2001: 899) are: a) motivate managers to create a high level of effort to achieve top management objectives, b) provide the right incentives for managers

to make decisions consistent with top management objectives, and c) fairly determine the rewards the managers make for their efforts and skills based on their effective decision-making.

Management control structures are centred on variety of responsibility. A responsibility centre is established to achieve individual goals which in turn are expected to help achieve the goals of an organization as a whole that are decided in the strategic planning process.

2.3 Managerial Performance

Managerial performance is the ability of manager when running the management functions, Mahoney (1963). The managerial performance indicators are planning, investigation, organizing, evaluation, monitoring, staffing, delegating, and negotiation.

3. Methodology

This research is a descriptive research through survey, the data is collected using questionnaire. This research uses statistical analysis, which is the regression analysis. The object of this study is the employees associated with the budgeting process at GMIM's hospitals in North Sulawesi province.

Interval scale from 1-8 is applied as the measurement technique to convert qualitative data from the questionnaire into quantitative data. The population of this study is all GMIM's hospitals staff spread in North Sulawesi province. This research uses purposive sampling method and as many as 160 employees in 5 districts and cities in North Sulawesi is included in the sample.

4. Result and Discussion

This research uses regression analysis to explain the influence of management control system towards managerial performance. There are 2 regression analysis used as the models. The first one is simple linear regression and the second one is regression with dummy variables that identify each hospital.

Table 1. Model Summary (Model 1)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.593 ^a	.351	.347	1.02988
2	.684 ^b	.468	.450	.94488

a. Predictors: (Constant), Management Control System

b. Predictors: (Constant), Management Control System, Kalooran Amurang, Pancaran Kasih Manado, Siloam Sonder, Tonsea Airmadidi

In the first model management control system variable has 59.3% correlation with the managerial performance of GMIM's hospitals. This high correlation can be the foundation to consider that management control system affects the hospitals' managerial performance. The coefficient determinant of the first model is 0.351, it means that the control management system can explain 35.1% variation that occurred in the managerial performance. The second model where dummy variable is included to identify each hospital shows a better value of coefficient correlation and determinants. The correlation value is 68.4% and the second model can explain 46.8% of the variation occurred in the management control system.

Table 2. Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.132	.307		3.685	.000
	Management Control System	.737	.080	.593	9.245	.000
2	(Constant)	2.480	.493		5.033	.000
	Management Control System	.465	.098	.373	4.760	.000
	Pancaran Kasih Manado	.511	.243	.161	2.109	.037
	Kalooran Amurang	-.636	.263	-.200	-2.416	.017
	Siloam Sonder	-.697	.283	-.219	-2.464	.015
	Tonsea Airmadidi	-.862	.297	-.271	-2.903	.004

a. Dependent Variable: Managerial Performance

From the regression analysis two equations can be state as:

$$1) MP = 1.132 + 0.737MCS$$

$$2) MP = 2.2480BT + 2991PKM + 1.884KA + 1.783SS + 1.618TA + 0.465MCS$$

MP = Managerial Performance

MCS = Management Control System
BT = Bethesda Tomohon hospital
PKM = Pancaran Kasih Manado hospital
KA = Kalooran Amurang hospital
SS = Siloam Sonder hospital
TA = Tonsea Airmadidi hospital

Based on the coefficients table, management control system variable is showed to be significant, as the significant level of this variable for both of the model is below 5% level. In the first model the coefficient of this variable is 0.737 but in the second model the coefficient value declines to 0.465, this condition is caused by the dummy variables included in the model. In the second model the baseline for the dummy variable is the RS Bethesda Tomohon. This variable is showed as constant with the coefficient of 2.480. This mean even when there is no management control system in the hospital the managerial performance of this hospital will still be at the level of 2.480, assuming other things held constant. The only hospital with better coefficient score than RS Bethesda Tomohon is RS Pancaran Kasih Manado. As seen from the table, the dummy variable of this hospital shows the score of 0.511 or the hospital will have 0.511 more score of managerial performance level than the baseline dummy variable when there is no management control system variable, assuming other constant. In this case RS Pancaran Kasih Manado will have managerial performance at the level of 2.991. RS Tonsea Airmadidi is identified to have the lowest coefficient of the dummy variables, with the score of -0.862 or its managerial performance will still be at the level 1.618 even when there is no management control system variable. RS Kalooran Amurang and RS Siloam Sonder will consecutively have the managerial performance at the level of 1.844 and 1.783 when there is no management control system variable.

Based on the dummy variables coefficient, the managerial performance of each hospital can be compared. The analysis result shows that RS Pancaran Kasih Manado is the top performers among these GMIM's hospitals with the highest coefficient score. In the second rank is RS Bethesda Tomohon, followed by RS Kalooran Amurang, RS Siloam Sonder and RS Tonsea Airmadidi. Albeit RS Bethesda Tomohon is the biggest GMIM's hospital, the managerial performance of this hospital as the result suggested is still below RS Pancaran Kasih Manado. Bigger size hospital will be more difficult to manage and control as it will have more complex work environment and higher number of workers. These thing could create overcapacity for the management. The hospital management may not have the necessary skills to deal with this large workforce and haven't yet created a suitable system to accommodate the complex work environment. These condition will in turn decrease its managerial performance. More unfortunate condition occurred to the 3 smaller hospitals. RS Kalooran Amurang, RS Siloam Sonder, and RS Tonsea Aermadidi are all below RS Bethesda Tomohon as seen from the coefficients. All of these 3 smaller hospital are still lack behind the 2 bigger hospital. According to the analysis result RS Kalooran Amurang, RS Siloam Sonder and RS Tonsea Aermadidi, if there is no management control system or the value of this variable is 0, these hospitals will consecutively have managerial performance value of 1.884, 1.783, and 1.618, assuming *ceteris paribus*. These 3 hospitals together with RS Bethesda Tomohon will have to take example from RS Pancaran Kasih Manado management as it is the better performer among all these hospitals.

As seen from the second model, the coefficient of management control system is 0.465. Management control system has positive impact to the managerial performance. Assuming *ceteris paribus*, the increase in 1 point of management control system will increase the hospital managerial performance by 0.465. The first regression model suggests an even larger coefficient of management control system variable, which is at 0.737. The management control system variable is considered significantly affects managerial performance for the significant level in both of the regression models is below 5% level.

5. Conclusion

High competition in the new AEC era will force industries especially hospital industry, to be more competitive and efficient. Hospital customers with the AEC establishment, now have wide array of choices and the better performing hospital will likely to be chosen by these customers. In order to enhance the performance of general hospitals, North Sulawesi government allocates billions of rupiah from *APBD* (budget for regional government income and expenditure). GMIM's hospital are among the hospitals in North Sulawesi which receive this fund from the government to support their operation. The 5 GMIM's hospitals are expected to enhance its managerial performance and deliver a better healthcare services.

RS Pancaran Kasih Manado as the result suggested is the top performer among 5 GMIM's hospitals in achieving higher managerial performance. The 4 other GMIM's hospitals must take example from the of RS Pancaran Kasih Manado management so they can enhance the managerial performance. One of the way to achieve a better managerial performance is by applying management control system. The analysis result of this research suggests that GMIM's hospitals management control system is significantly and positively influence the managerial performance. GMIM's hospitals are recommended to improve its management control system so it

can result in better managerial performance. This improvement can be done through better planning and evaluation system.

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