

BALANCED SCORECARD : PERFORMANCE MEASUREMENT FOR E-GOVERNMENT

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ABSTRACT

The country and cities in the world started to implement e-government. Implementing E-Government should be measure. Because E-Gov aims to give services to citizen effectively. This research conduct to describe implemented e-government in Ministry religion province South Sulawesi, Indonesia. The survey result shows that the implementation of e -government at the ministry of religion for the customer perspective has on average 3.23 , Financial get mean 3.23 , Internal processes get mean 3.40 and Growth and Learning get mean 3.15. This research suggest to create the strategy, determine the objective until the step how to build the strategy map. The objective that needed for this organization are Provide convenience in service, Provide required information society, Improve intimacy with consumer, Reducing costs, Optimalize resource, Simplifying procedures, Improving productivity, Sharing information , more responds and Improving e –literacy. Of course, importantly how the organization to execute the strategy map.

Keywords: *E-Government, Balanced Scorecard, Indicators, Performance Measurement, Perspective*

1. INTRODUCTION

Since the conference in Geneva, Swiss, country and cities in the world started to implement e-government. According to the World Bank, E-government refers to the use by government agencies of information technologies that have the ability to transform relation with citizens, businesses, and other arm of government. E-government are a system of government services to the people, to create transparency, effectively, efficiency and so on.

As a system, e-government must be evaluated or need performance measurement to determine whether the increased organizational performance or fail. Measurement very important for an organization because without measurement , the organization would move aimlessly. And the organization will not know how far it moves or how far they had fallen from another organization.. Measurement was as fundamental to managers as it was for scientists. If companies were to improve the management of their intangible assets, they had to integrate the measurement of intangible assets into their management systems [1]. Measure performance aims to rise in the demand for accountability, it works [2].

It is therefore important to evaluate e-government. Because e -government is a form of government services to the community so that the shape of these services should always be evaluated the government is to provide maximum service.

During this time, the majority of private organizations, public, and nonprofit measure their success with the financial benchmark. Critics suggest financial measures are not consistent with today's environment, and that they lack predictive power, reinforce functional silos, may sacrifice long-term thinking, and are not relevant to many levels of the organization [3]. The use of ROI measurement rated not describe the real condition and future for the organization. Financial measure isn't consistent with today's business realistic. So as to measure the performance of an organization must balance the financial factor and nonfinancial as well as take advantage of all aspects of the organization.

Currently, there are many measure performance is used to evaluate the performance of the nonprofit organization such E-Govsqual , E-Govstat, Balanced e-government, etc. But existing Performance Measurement , can't balance all factor that exist within the organization. So, is needed Performance Measurement that can balance all



factor to increased the tangible and intangible assets in the organization.

The Balanced scorecard is different to any system performance measurement. The Balanced scorecard framework tries to bring a balance and linkage between the financial and the non-financial indicators, tangible and the intangible measures , internal and the external aspects and leading and the lagging indicators [4]. The Balanced scorecard (BSC) was develop as a performance measurement that added strategic non-financial performance measures to the traditional financial metrics to give managers and executives a more balanced view of organizational performance [5]. In addition, BSC isn't only used as a performance measurement for the organization, but the Balanced scorecard can be a strategic management system and communication tool for organization.

1.1 Scope of Research

Scope of this research is focused in Ministry Religion because people really needed the service in this government.

In addition, measurement performance is used in this research is Balanced Scorecard because Balanced Scorecard framework can balance and linkage between the financial and the non-financial indicators, tangible and the intangible measures , internal and the external aspects and leading and the lagging indicators.

1.2 Formulation of Research

Formulation of this research are :

1. How is implementation e-government in Ministry Religion ?
2. What should be done that the implementation of the government in South Sulawesi religious ministry can be increased?

2. RESEARCH METHOD

Implementing E-Government should be measure. Because E-Gov aims to give services to citizen effectively. So that, organization who implement E-Gov should always evaluate their services to their constituens. This research conducted to know how implementing E-Gov in Ministry Religion South Sulawesi, Indonesia, using the Balanced Scorecard.

This research method is descriptive cualitative-cuantitative . This research aims to describe implemented e-government in Ministry religion province South Sulawesi, Indonesia. Descriptive cualitative research conducted to collect information about the actual situations present while it lasted. While the primary data collection techniques using observation the ministry of religious sites South Sulawesi, secondary data obtained from studies literature.dan survey.

The survey was conducted to obtain results about the condition of the implementation of e-government at the ministry of religion . In this study, the sampling technique used is simple random method . Sample used was an engineering student studying informatics web design with a sample size of 50 students . Based on the 50 questionnaires distributed , only 40 questionnaires were returned , or about 80 % . So that 's 40 people who were respondents in this study.

Firstly, survey was did by distributed questionnaires to collect information about implementing E-Gov in this organization. And then, step by step The Balanced Scorecard develop for Ministry Religion.

Many performance measurement can be used to evaluated. E-Govsqual have 6 dimension to evaluate , that is Ease of use, Trust, Functionality of the interaction environment, Reliability, Content and appearance of information, Citizen support [6]. E-Govsqual just measure and evaluate the quality of e-gov services but haven't strategic management system to develop the quality of services. E-Govstat using 5 dimension to evaluate namely Utility, Reliability, Efficiency, Customization, and Flexibility. A general model of e-government satisfaction— EGOVSAT—was devised and then applied in the domain of Advanced Travel Information Systems (ATIS), a form of government-to-citizen information service. ATIS provides real-time transportation network information and traveler information such as route guidance or destination information, provided over advanced technologies[7]. The EGOVSAT model has been formulated with the aim of providing a scale by which government-to- citizen web-based initiatives can be evaluated - in terms of satisfaction derived by citizens [8]. While Balanced e-government have 5 dimension to measure the quality of e-government services are Benefit, Efficiency, Transparency, Participation, Change management. The balanced e-government scorecard served in the recording and evaluation of the various dimensions of e-democracy and e-government services. Scorecards permit the

uniform checking of different objectives within the framework of a higher order strategy [9]. Such E-govsqual, E-govstat and Balance e-government just measure the quality of services but haven't strategic management for the organization.

2.1 Balanced Scorecard (BSC)

David Norton and Kaplan was introduced the Balanced Scorecard in a 1992 *Harvard Business Review* article. In first time, Balanced Scorecard was used for performance measurement for profit organization. Balanced Scorecard have four perspective are perspective Financial, Customer, Internal Business Process, Learning and Growth. In profit organization, BSC retains financial perspective as the ultimate outcome measure for organization success from three additional perspective-customer, internal process, learning and growth.

In the Financial Perspective, for profit domain, the measures in this perspective tell us whether our strategy execution is leading to improved bottom line result. In the nonprofit and public sector, financial measures ensure that we're achieving our result, but doing so in an efficient manner that minimizes cost. When choosing measure for the customer perspective of the scorecard, organization must answer two critical questions: "Who are our target customers?" and "What is our value proposition in serving them?"

In the Internal Processes Perspective at which the organization must excel in order to continue adding value for customers. The measure in the Learning and Growth perspective of the Balanced Scorecard serve as the enabler of the other three perspectives [10].

But now, the Balanced Scorecard was develop to nonprofit and public sector enterprises (NPSEs). The performance of nonprofit and public sector enterprises cannot be measured by financial indicators. Their success has to be measured by their effectiveness in providing benefits to constituents [11].

For nonprofit and public sectors, the organization must translating vision and strategy, then remain vision and strategy at the center of the Balanced Scorecard system. The mission of organization moves to the top of Balanced Scorecard. And Customer perspective is elevated to be ultimate of the Balanced Scorecard system. Financial perspective is still needed. Internal processes, Learning and Growth perspective

provides the foundation for a well-constructed Balanced Scorecard. It shown in figure 1.

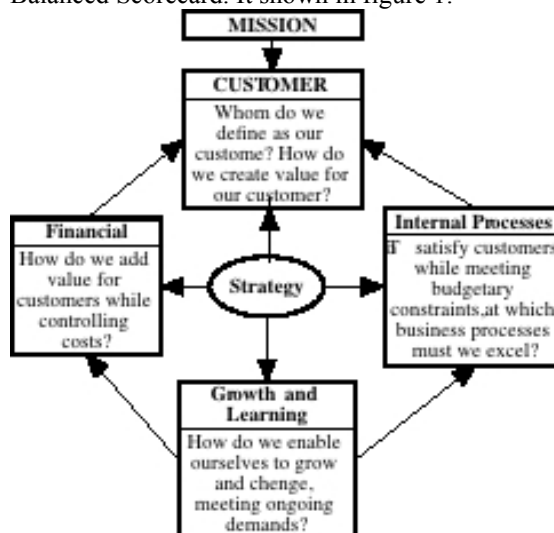


Figure 1 : Balanced Scorecard for the Public and Nonprofit Sector

3. RESULT AND ANALYSIS

In Ministry Religion Province South Sulawesi have 14 kinds of public service ,they are :

1. Information Departures
2. Application process Haji
3. Permitting the religion ministry.
4. SIMKA .
5. News clippings.
6. LPSE
7. E-MPA
8. E-mail .
9. Employee information system
10. Lecturer certification info
11. Zakat Calculation.
12. Calculation of Inheritance.
13. E-dokument
14. Time schedule of pray.

The vision is " Create Indonesian religious community , Harmony, Intelligent and prosperous birth inner self. " (Religion Ministerial Decree No. 2 of 2010)

The Mission are

1. Improving the quality of religious life .
2. Improving the quality of religious harmony .
3. Improving the quality of Raudhatul RA , madrasas , religious colleges , religious education and religious education .
4. Improving the quality of the organization of the pilgrimage.

5. Realizing governance clean and respectable (Religion Ministerial Decree No. 2 of 2010)

The Strategy is Customer satisfaction and convenience.

3.1 Implementing e-government

Implementing e-government in Ministry religion can currently be seen through the results of a survey conducted on 40 respondents using the criteria in each perspective.

Giving rating based on the scale of the graph, namely:

5	very good
4	good
3	Enough good
2	bad
	Very bad

The results of the total number of each perspective divided by the number of respondents and the number of the criteria.

$$\text{Mean} = \text{Total} / (n \times c)$$

Information:

n = the number of respondents

c = the number of criteria for each perspective

In order to obtain such results in the table below:

Table 1: Survey result perspective Customer

Customer	5	4	3	2	1
1. Web Performance	6	26	5	3	-
2. Quality of service	3	25	9	2	1
3. Service coverage	5	4	25	4	2
4. Easiness	9	7	10	14	-
5. Connecting to other portal	19	4	6	9	2
6. Information update	10	15	11	4	-
7. File a complaint	7	2	12	7	12
8. Communication forum	9	5	9	8	9
9. Community Involvement	3	3	15	7	12
10. Status application	7	7	12	3	11
Total and Mean	1295 / 400 = 3.23				

Table 2: Survey result perspective Financial

Financial	5	4	3	2	1
Budget allocation	7	6	16	8	3
Optimalize resource	9	8	14	5	4
Total and Mean	259 / 80 = 3.23				

Table 3: Survey result perspective internal processes

Internal Processes	5	4	3	2	1
Control and Monitoring	7	15	11	2	5
Staff involvement in service	4	15	14	5	2
Staff Motivation	1	17	14	7	1
Quality of software and database	6	19	9	4	2
Total and Mean	544 / 160 = 3.40				

Table 4: Survey result perspective Growth and Learning

Growth and Learning	5	4	3	2	1
1. e- literacy staff	2	20	11	5	2
2. Training for staff	12	6	13	6	3
3. Use of ICT	7	5	20	7	1
4. Long-term strategy	18	6	10	1	5
Total and Mean	504 / 160 = 3.15				

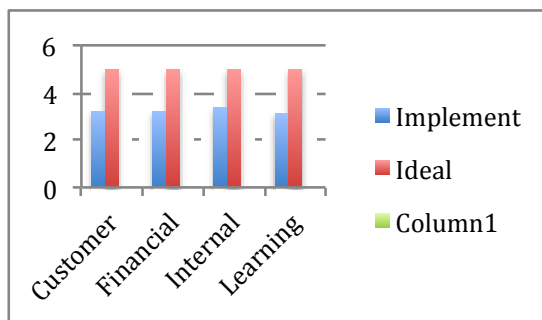


Figure 2: Comparison implementing e-government

From the survey, we can see the implementation of e-government at the ministry of religion shows that the customer perspective has on average 3:23, Financial get mean 3:23, Internal processes get mean 3.40 and Growth and Learning get mean 3.15.

3.2 Develop Balanced Scorecard

According to Paul R Niven, nonprofit and public organization who develop Balanced Scorecard for their organization should be:

1. Making the vision and strategy as the core of Balanced Scorecard system. (it shown in figure 1)
2. Placing the mission on the top of Balanced Scorecard system. (it shown in figure 1)
3. Placing the perspective customer as ultimate than other perspective (it shown in figure 1)
4. Determine the objective for each perspective
5. Determine lag and lead indicators
6. Develop cause-effect



7. Develop strategy map

Determine objective for each perspective, the organization should create aims for each perspective.

Customer perspective

In Customer perspective, there is two questions must be answered :

- *Who are our targeted customers?*
Who become a customer in this perspective are the people who need service on religion ministry about the Haji departure information, licensing, lecturer certification info and so on. The aims is that people could access services easily and conveniently.
- *How do we “ add value” for our customer?* Add value in this perspective is Customer Intimacy. Michael Treacy and Fred Wiersema articulated in their book *The Discipline of Market Leaders*, three value disciplines. They are Product Leadership, Customer Intimacy, Operational Excellence. So that the objective needed include Provide convenience in service, Provide required information society, Improve intimacy with consumer.

Financial perspective

In nonprofit and public organization, the perspective financial aims isn't reach profit. Perspective financial must support the goals of the perspective customer to provide satisfaction and convenience in service, the objective is used in this perspective financial are Reducing costs and Optimize resource

Internal processes perspective

The Internal processes perspective sheds light on the critical processes at which must be excel as an organization in order to continue adding value for customers. So, objective that is required are Simplifying procedures and Improving productivity

Growth and Learning perspective

This perspective is the basis for the organization to grow and develop. “What skills and competencies will be required in the years ahead?” Or “what is the organization climate conducive to success?” So, objective that is required are Improving e –literacy and Sharing information , more responds. On table 5 show the objective for each perspective.

Table 5: Objective for each perspective

Customer	Provide convenience in service	Provide required information society	Improve intimacy with consumer
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Financial	Reducing costs	Optimize resource	
Internal Processes	Simplifying procedures	Improving productivity	
Growth and Learning	Sharing information , more responds	Improving e –literacy	

After determining each objective perspective , then the next step is to determine the objective for each indicator are Lag and Lead. Paul R Niven at his book, *Balanced Scorecard Step-by-step for Government and Nonprofit Agencies*, explained that Lag indicators generally represent past performance. Typical examples might include customer satisfaction or revenue. While these measures are usually quite objective and accessible, they normally lack any predictive power. Lead indicators, in contrast, are the performance drivers that lead to the achievement of the lag indicators. They often include the measurement of processes and activities. Response time might represent a leading indicator for the lagging measure of customer satisfaction [12]. The Balanced Scorecard should contain a mix of lag and lead indicators. The relationship between objective and indicator can be seen in the table below:

Table 6: Indicator for each perspective

Perspective	Objective	Indicator
Customer	Provide convenience in service	Lead
	Provide required information society	Lag
	Improve intimacy with consumer	Lag
Financial	Reducing costs	Lead
	Optimize resource	Lag
Internal Processes	Simplifying procedures	Lead
	Improving productivity	Lag

Growth and Learning	Sharing information , more responds	Lag
	Improving e - literacy	Lead

	to be reduced	15 %	
Provide required information society	Information given assortment	In 2017, the amount of information increases 10 %	Introducing new products
Improve intimacy with consumer	The number of consumers increased	In 2017, The number of consumers rise 20%	Interactive email

Cause- effect

Balanced Scorecard should describe the strategy through the objectives and measures that have been chosen. Measures should link together in a chain of cause and effect relationship from the Growth and Learning perspective through to improved customer outcomes as reflected in the Customer perspective. Figure 3 show how the measure of Growth and Learning perspective, are employee training can reduce the time of processes. If the time of processes reduced, will result low cost and of course the numbers of customers will increased.

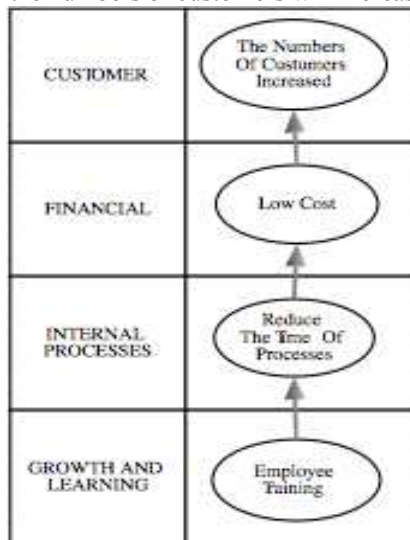


Figure 3: Cause – Effect Ministry Religion

Strategy Map

Strategy map usually used as a communication tool. A Balanced Scorecard complements the strategy map by once again outlining the objectives, but it also provides the measures, targets and initiatives used to gauge success on the objective.

Table 7: Cascading Customer Perspective

Customer			
Objective	Measure	Target	Initiative
Provide convenience in service	The time needed for the process	In 2017, subsidies cycle time	Be “one stop shop”

Table 8: Cascading Financial Perspective

Financial			
Objective	Measure	Target	Initiative
Reducing costs	Low cost	2017, subsidies 10%	Reduce process costs
Optimize resource	Using resource effectively	2017, up 15%	Using resource effectively

Table 9: Cascading Internal Processes Perspective

Internal Processes			
Objective	Measure	Target	Initiative
Simplifying procedures	The time needed for the process to be reduced	In 2017 , cycle time subsidies 15 %	Introducing new products
Improving productivity		In 2017, up 10 %	Introducing new products

Table 10: Cascading Growth and Learning Perspective

Growth and Learning			
Objective	Measure	Target	Initiative
Sharing information , more responds	Intense communication between employees , employees with	In 2017 , communication up 20 %	Call center, Interactive email

	community		
Improving e-literacy	Employee training	In 2017 Skill employees increased 30 %	4x training held in one year

Based on all the objective, measure, target and initiative, then a organization can develop a strategy map. With the Strategy Map , an organization has more focused strategy and how organization must execute the strategy.

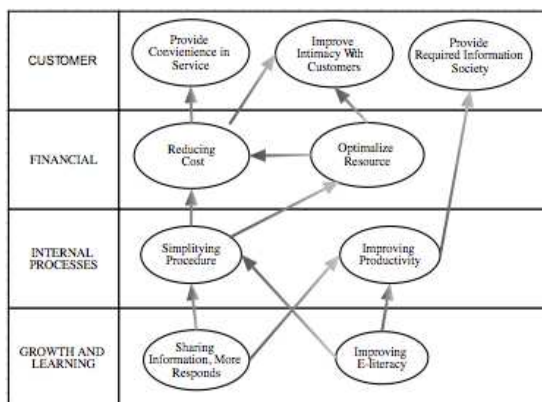


Figure 4: The Strategy Map of Ministry Religion

In figure 4, we can see the strategy map of Ministry Religion. To provide convenience in service, the organization should reducing cost. And the cost will be reduced if this organization simplifying procedure and optimalize resource. Sharing information, more responds and improving e- literacy should be done to built simplifying procedure and improving productivity.

To Improve intimacy with customers can be reached by optimalize the resource and reducing the cost. And to optimalize resource can be reached by simplifying procedure and of course should improving e-literacy.

To Provide required information society, can be reached by improving productivity and of course by improving e-literacy and sharing information, more responds.

4. CONCLUSION

In this research, the survey result show that the performance measurement of the Ministry Religion isn't good, actually on Growth and Learning

perspective. So that, to increased the implementation e- government in the Ministry Religion, this organization should develop Balanced Scorecard step by step such in this research. Start from create the strategy, determine the objective until the step how to build the strategy map. The objective that needed for this organization are Provide convenience in service, Provide required information society, Improve intimacy with consumer, Reducing costs, Optimalize resource, Simplifying procedures, Improving productivity, Sharing information , more responds and Improving e-literacy. Of course, importantly how the organization to execute the strategy map.

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