Strategic Measurement Method Using Balanced Scorecard Approach at The North Minahasa District Health Office

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ABSTRACT

The purpose of this study is to identify and analyze a series of processes to realize the strategy objectives through strategic measurement using the Balanced Scorecard approach at the North Minahasa District Health Office. The research method used was qualitative with a case study design. The results show that the Balanced Scorecard approach as a strategic management tool can improve the quality of strategy implementation, when it can clarify the size of its strategic performance. This case study contributes to the current state of knowledge and local government regarding the development and implementation of the Balanced Scorecard in the future to local governments that intend to implement it. For further research, the trial of the application of the Balanced Scorecard to local governments is an important strategic issue.

Keywords: balanced scorecard, strategic measurement, Local Government

INTRODUCTION

The challenges of paradigm change in all fields, the challenges of globalization, the demands of bureaucratic reform and various change processes have impacts in all fields and organizations both private and government. The success of each organization is reflected in its performance that is highly dependent on strategy (Sharma, 2009). The ability of the organization to clarify the measure of the success of the effectiveness of the strategy plays a role in improving the quality of the implementation of the strategy (clear measures of strategy effectiveness) (Pella, 2016: 26). The local government in the health sector in North Minahasa District has implemented a strategic management model to improve future organizational performance, but a good strategy has not been successful in overcoming health problems in the region.

The initial survey in the North Minahasa District Health Office was informed that it was facing changes in organizational structure downsizing in accordance with the demands of national bureaucratic reform. The fact explains that in North Minahasa District until now according to the regulatory and design framework the organization does not yet have a Regional Health System (Sistem Kesehatan Daerah) that should need to be followed up by the regional government referring to the National Health System (Sistem Kesehatan Nasional). This is influential in the effort to realize and implement health development in the sub-districts and villages in the region, both by the government, the community, the private sector and institutions or other related parties, synergistically, successfully and efficiently, to ensure the success of regional health development.

The success of maternal health program efforts, including can be seen from the indicator of Maternal Mortality Rate (MMR). MMR is the number of maternal deaths during pregnancy, childbirth and childbirth caused by pregnancy, childbirth and childbirth or management but not for other reasons such as accidents, falls, etc. in every 100,000 live births indicator is not only able to assess the maternal health program, moreover it is able to assess the health status of the community, because of its sensitivity to improving health services, both in terms of accessibility and quality (Kementerian Kesehatan RI - Profil 2015). This The maternal mortality rate in North Minahasa District is still high. Based on the data, the high maternal mortality rate in 2009 with a proportion of 226.2 (7/3094), in 2011 amounted to 154.7 (5/3231), in 2013 amounted to 136.6 (5/3360)., and in 2016 amounted to 142.37 (5/3512).
The fact that infectious and non-infectious disease control efforts explain that Indonesia currently includes North Minahasa District faces a burden of disease called the "Double Burden Disease and Double Burden of Nutrition Problem" related to "Undernutrition" nutritional problems (lack of nutrition, short / Stunting, skinny) and "Overnutrition" (the problem of obesity or obesity). Indonesia also faces the burden of three diseases or "Triple Burden of Disease", which is related to the problem of shifting infectious diseases towards increasing infectious diseases (heart disease, kidney failure, diabetes, cancer, etc.), emerging threats of infectious diseases new (Avian Flu, Ebola, drug resistant Tuberculosis) and the public are faced with the problem of unfinished infectious diseases (Dengue Fever, Tuberculosis, Malaria, Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome, Filariasis and Worm). The other facts obtained at the Minahasa Utara District Health Office regarding the ability of community resources to carry out technical development in the health sector were lacking, so many did not follow up on the results of coaching such as providing feedback and solving solutions problem. Health financing in North Minahasa District is still low, especially the budget through the General Allocation Fund (Dana Alokasi Umum), if the percentage is averaged this condition is still far from the mandate of Undang-Undang Nomor 39 Tahun 2009 concerning Health, which is 10% of the Regional Budget per year outside employee expenditure (Kementerian Kesehatan RI, Rencana Strategi, 2015-2019, Dinas Kesehatan Kabupaten Minahasa Utara, Rencana Strategi 2016-2020) Based on various problems, challenges and obstacles, local governments with all the existing units, including the Regional Work Units, especially the North Minahasa District Health Office should follow up on changes and developments that occur through strengthening management to adapt to the Balanced Scorecard management tools / methods. The purpose of this study is to identify and analyze a series of processes to realize the strategy objectives through strategic measurement using the Balanced Scorecard approach at the North Minahasa District Health Office.

LITERATURE REVIEW
The balanced scorecard was originally designed to measure multidimensional performance, this concept has evolved into an organizing framework for strategic management systems (Hoque, 2012; West et al, 2009). Empirical evidence from the literature confirms that the implementation of the balanced scorecard in the public sector is very important as a result of certain characteristics of modern organizations (Kaplan & Norton, 1992, 1996). Kaplan and Norton: as performance measurement tools (1992), as a link between performance metrics and strategy (1993:135), as a performance management system (1996), as a strategic performance management system (1996), as implementation guidelines (1996), as a focus tool on strategy mapping (2000), as a strategic management system and control (2000), as a strategy alignment tool (2004); Kaplan and Norton make a distinction between diagnostic measurements and strategic measurements. Diagnostic measurements monitor whether something is in control. A statistical process control chart with upper and lower limits is a good example of a diagnostic type system that can be used for controlling a process. Strategic measurements define a strategy for competitive excellence and future success. The balanced scorecard is a strategic measurement system. The objective is to balance the measurements associated with each perspective, all focused on a single strategy. These measurements should reinforce each other. Most of the measurements are both leading (drivers) and lagging (outcomes). Kaplan and Norton also emphasize that "the balanced scorecard should be used as a communication, informing, and learning system, not as a controlling system." Mapping strategies using the balanced scorecard concept can focus on organizational strategies.
to eliminate barriers to success (Sudirman, 2012). Balanced scorecard as a performance management tool (Gomes and Liddle, 2010; Sudirman, 2012). The balanced scorecard is an important mechanism for improving performance (Ramadhan and Borgonovi (2015). The Balanced Scorecard provides the foundation for a new strategic management system. This allows organizations to introduce new governance and process renewal that focuses on strategy (Isoraitė, 2008). The implementation of a strategic system of performance management, based on the balanced scorecard: improved organizational management (Bacala, 2014). The balanced scorecard is widely accepted as a performance measurement system and strategic management system (Kazi et al, 2010); Balanced Scorecard - Management polyvalent, Balanced scorecard: focus on strategy management and development / help senior managers formulate strategies and implement them ((Brudan, 2005). The implementation of the BSC can be very helpful in matters achieving organizational goals, reducing uncertainty and communicating different activity contributions for both managers and politicians, thus promoting a new means of dialogue between the organization's vision and strategy (Bolivar, 2010).

In order to build measurement system that describes the strategy, we need a general model of strategy. Balanced Scorecard menawarkan kerangka kerja seperti itu untuk menggambarkan strategi untuk menciptakan nilai. Figure 2 shows that the framework for value creation in public sector and nonprofit organizations (see the right of figure 2) is similar to the private sector framework described above, but with several important distinctions. First, the ultimate definition of success for public and nonprofit organizations is their performance in achieving their mission. Private sector organization, regardless of industry sector, can use a homogeneous financial perspective: Increase shareholder value. Public-sector and nonprofit organizations, however, span a broad and diverse set of missions and hence must define their social impact, their high-level objective, differently. The strategy map template, customized to the organization's particular strategy, describes how intangible assets drive performance enhancements to the organization's internal processes that have the maximum leverage for delivering value to customers, shareholders, and communities (Kaplan and Norton, 2004).

![Figure 2. Strategy Maps Balanced Scorecard: The simple Model of Value Creation (Source: Adapted from Kaplan and Norton, 2004, p.8)](image)

Organizations need a system that balances past financial accuracy with future performance, utilizing the power of intangible assets and helping organizations implement strategies (Niven 2006: 27). Management tools that can answer this complex challenge are the Balanced Scorecard that has been proven to be successfully used in several overseas government organizations.

Some successful overseas government sectors after implementing Balanced in the government sector (Kaplan and Norton, 2004: 410). The Royal Canadian Mounted Police (RMCP) has a performance report, focused on carrying out strategic priorities. U.S Department of Commerce Economic Development Administration as a government agency that is effective and efficient in finding and exceeding targets for opening jobs and encouraging investment in the private sector.
The U.K. The Ministry of Defense is Great Britain’s among the largest departments in the government - and the fifth largest in sending military forces around the world. Successfully improving communication and cooperation in an organization, increasing strategic decision makers. The Fulton County School Atlanta, with the Balanced Scorecard has assisted activities and local tactical implementation in the incongruity between strategy, performance measurement, and performance improvement.

METHODS
The type of research used is descriptive qualitative research with a case study approach. Research location at the North Minahasa District Health Office. The informants used are structural officials of the Head of Office, Secretary, 1 Head of Division, 1 Section Head and 1 planning staff. Data sources are used, namely: (1) primary data by conducting in-depth interviews with informants or employees of the North Minahasa District Health Office, and (2) secondary data such as documents obtained from relevant parties. Data collection techniques by conducting observations, interviews, and documentation. Methods of data analysis using coding and categorization in accordance with the principles of the balanced scorecard.

RESULTS AND DISCUSSION
Characteristics of the Research Area
North Minahasa District is one of the Districts in North Sulawesi Province. The capital of North Minahasa District is Airmadidi, about 35 km from Manado, the capital of North Sulawesi Province. North Minahasa is located at 01o18'30" -01o53'00" LU and 124o 44'00" - 125o 11'00" BT. The boundaries are as follows North side with Regency of Sangihe Archipelago, Sulawesi Sea and Maluku Sea; East side with City of Bitung; South by Kabupaten Minahasa; West side with Manado City.

Based on Peraturan Daerah Kabupaten Minahasa Utara Nomor 17 Tahun 2005 which is amended by Peraturan Daerah Kabupaten Minahasa Utara Nomor 4 Tahun 2008 about Organization and Working Procedures of North Minahasa District, North Minahasa District Health Office is an element of Local Government Executors, headed by a Head of Office and under and responsible to the Head of Region through the Regional Secretary and has the main duty to exercise authority in the field of health and other tasks assigned by the Regional Head.

This office composed by 5 administrators (Eselon 3), 14 supervisors (Eselon 4), 44 employees, at Health Office, and 414 employees spread over 10 units of technical implementers (Center for Public Health, Pusat Kesehatan Masyarakat). Due to its dimensions, it appears evident the difficulties in introducing an innovation in general: in such a reality, innovating means changing the entire organization. Furthermore, in a public administration, changes require more time than private companies, due to the minor financial resources available. Thus, the introduction of the Balanced Scorecard needs to change the mentality and the approach to work.

Based on the data study conducted, the design of the North Minahasa District Health Service strategy map is as follows:
Based on figure 4, it is known that the strategy map of the North Minahasa District Health Office consists of four balanced scorecard perspectives, and each perspective consists of one or several strategic objectives (SS), namely:

First, a financial perspective: (a) Efficient use of the budget, namely the level of achievement of budget realization in accordance with the targets set by the North Minahasa District Health Office and (b) Effective use of the budget, namely the level of achievement of the performance benchmarks of each activity in accordance with the targets set by the North Minahasa District Health Office.

Second, community perspectives which include: (a) increasing life expectancy; (b) increasing community nutritional status; (c) the decline in the number of infectious and non-communicable diseases for the lives of healthy people and the North Minahasa District.

Third, the perspective of internal processes: (a) Increasing efforts for health services through promotive and pereventif; (b) increasing efforts for community and private empowerment (partnerships) in health development; (d) the existence of policies that encourage health-minded development through the availability of clear legislation / regulations including strengthening management in carrying out the duties and functions of the government in the health sector.

Fourth, learning and growth perspectives which include: (a) Improve the quality of human resources and (b) improve the quality of facilities and infrastructure in carrying out the duties and functions of the Minahasa Utara District Health Office, namely to protect the community in the health sector, conduct health development and empower communities in the field health.

Based on the results of the analysis by looking at the data and organizational performance based on the perspectives in the balanced scorecard, the authors formulated the design of the Main Performance Indicators (KPI) and achievement targets from the North Minahasa District Health Office. The weighting of KPI itself is divided into 3 levels based on the level of validity and level of control (Degree of Controllability) of the KPI. The weighting of the KPI used is as follows: (1) based on validity (V) divided into 3 levels of weight: (a) exact (E) = 0.50; (b) proxy (P) = 0.35, and (c) activity (A) = 0.20; (2) based on the degree of controllability (C) divided into 3 levels of weight: (a) high (H) = 0.50; (b) moderate (M) = 0.35, and (c) low (L) = 0.20.

Data polarization shows the expectation of the value direction of the KPI compared to the target value consisting of: (1) maximize: The actual value / realization / achievement of KPI is expected to be higher than the target; (2) minimize: The actual value / realization / achievement of KPI is
expected to be smaller than the target, and (3) stabilize: The actual value / realization / achievement of KPI is expected in one range with the target. This data polarization is used to determine the status of KPI achievements (in Table 1 given an X notation) which generally uses the following calculations: (1) if X < 80%, or X > 120%, or X < 80% or X > 120%, then the status of KPI is RED which means that the performance is below standard; (2) if 80% ≤ X < 100%, or 100% < X ≤ 120%, or X < 90% or 120% > X > 110%, then the status of KPI is yellow which means that the performance is close to the standard, and (3) if X ≥ 100%, or X ≤ 100%, or 90% ≤ X ≤ 110%, then the status of KPI is green which means that the performance meets the standard.

Table 1. Health Office Polarization Data North Minahasa District

<table>
<thead>
<tr>
<th>Polarisasi</th>
<th>Maximize</th>
<th>Minimize</th>
<th>Stabilize</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>X &lt; 80%</td>
<td>X &gt; 120%</td>
<td>X &gt; 80% or X &gt; 120%</td>
<td>Red</td>
<td></td>
</tr>
<tr>
<td>80% ≤ X ≤ 100%</td>
<td>100% &lt; X ≤ 120%</td>
<td>80% ≤ X &lt; 90% or 120% ≥ X &gt; 110%</td>
<td>Yellow</td>
<td></td>
</tr>
<tr>
<td>100%</td>
<td>X ≤ 120%</td>
<td>110%</td>
<td>Green</td>
<td></td>
</tr>
<tr>
<td>X &gt; 100%</td>
<td>X ≤ 100%</td>
<td>X ≤ 110%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Source: Adapted from Kementerian Keuangan Republik Indonesia, 2010)

Based on Figure 2 describes the performance measurement of the results of achieving the Strategic Target Value (STV) of eight strategic objectives of the North Minahasa District Health Office for 2010-2014. The Community Perspective is described in STV 1-3. STV 1 = increased life expectancy; STV 2 = increased STV nutritional status; STV 3 = decreased morbidity of infectious and non-communicable diseases. The internal process perspective is described in STV 6-8. STV 6 = increasing health promotion efforts to achieve change and the independence of the community for healthy living; STV 7 = increasing community and private empowerment in health development; STV 8 = There are policies that encourage health development efforts through the availability of clear legislation / regulations including strengthening management. The learning and growth perspective are described in STV 4 and 5. STV 4 = guaranteeing the availability and quality of drug use; STV 5 = guarantees the availability of quality facilities and infrastructure including human resources.

It appears in Figure 2 that STV achievement fluctuates. In 2010, almost all of the strategic objectives had not reached the target except STV 1 (increasing life expectancy) by 103% in the community perspective. The value of strategic target 7 with STV is 50% and 8 (with STV (50%) for the worst internal process perspective with red. This illustrates that the local government of North Minahasa District Health Office needs to work to improve its performance in carrying out its duties and functions.

In 2011 there were four STV that had not yet reached the target, namely those obtained from the community perspective related to the nutritional status of the population which had not reached the target to be improved with STV by 87% (STV 2) and the number of infectious and non-communicable diseases that had not been reached lowered with STV by 98% (STV 3). Learning and growth perspectives related to government guarantees on the availability of drugs that do not reach the target shown in the figure are in the red diagram with STV of 70% (STV 4). In terms of the achievement of the 2011 performance, it is also still not encouraging because there are still four basic strategies that have not yet reached the target of the eight strategic targets set.

In 2012 the achievement of strategic target values mostly did not reach the target or experienced a decline unless the internal process perspective for STV 7 and 8 had reached the target of 100%, even though it was still not optimal because of the targets set for empowerment and the availability of legislation/regulations based on LAKIP (Laporan Akuntabilitas Kinerja Instansi Pemerintahan) data is still lacking. Based on the measurement of this performance illustrates the performance of the North Minahasa District Health Office, which is still very lacking, only two strategy suggestions have reached the target of the eight strategies set.
Figure 5. Results of Achieving the Value of Strategy Objectives at The North Minahasa District Health Office For 2010-2014

In 2013 the achievement of strategic target values has increased with only two strategic targets that have not yet reached the yellow target, namely STV 3 of 99% which explains that the Minahasa Utara District Health Office has not been able to reduce the morbidity rate according to the target in the community perspective. NSS 4 is 85% which explains that the Health Office of North Minahasa District has not been able to guarantee the availability of drugs as targeted in the perspective of growth and learning.

In 2014 the achievement of strategic target values has increased, but there are still three Strategic target values that have not reached the target of STV 3 of 64% which explains that the North Minahasa District Health Office has not been able to improve the community's nutritional status (community perspective) in red. STV 3 of 99% which explains the achievement of targets to reduce morbidity in North Minahasa District (community perspective) in yellow. STV 4 of 91% which explained that the North Minahasa District Health Office had not been able to reach the target in terms of ensuring the availability of medicines in North Minahasa District.

Based on the results of the achievement of the target strategy value measurement above, it can be concluded that the North Minahasa District Health Office has not reached the target to achieve the strategic target value optimally, which can explain that there is still lack of health services, health development and empowerment in the health sector. The North Minahasa District Health Office still has many things and problems that need to be addressed and improved to achieve the goals of the North Minahasa people who are independent of healthy living.

After determining the STV, the calculation of the Perspective Performance Value (PPV) for the organizational unit will be calculated. PPV is flexible in accordance with the characteristics of each organization by considering the priority perspectives that are the focus of the organization's strategy. The formulation of the PPV is as follows:

$$\text{PPV} = (\sum \text{STV} : \sum \text{ST}) \times \text{Perspective Weight}$$

For the Minahasa Utara District Health Office, the weight of each perspective is determined as follows: (1) a financial perspective of 20%; (2) customer (community) perspective of 40%; (3) internal business process perspective of 20%, and (4) learning and growth perspective (organizational capacity) 20%. The considerations for determining the weight of the balanced scorecard perspective above are as follows: (1) the perspective of the customer (community) is at most 40% because the North Minahasa District Health Office is a technical service whose policies will have a direct impact on the community. So that the customer’s perspective is a top priority in the strategy set by the North Minahasa District Health Office; (2) the internal business process perspective counts 20% of optimal service to customers depending on HR capabilities; (3) the
learning and growth perspective is calculated as 20% because the internal HR capability is an internal supporting factor of the existing business processes in the North Minahasa District Health Office, and (4) the financial perspective is set at 10% because the government is required to budget at least 10% of Anggaran Pendapatan dan Belanja Daerah (APBD)/ Anggaran Pendapatan dan Belanja Negara (APBN) for health programs.

Health is part of basic services, local governments must consistently and continuously allocate a budget of 10% of the total APBD, provision of health infrastructure (facilities and infrastructure), health personnel and drug supplies and information systems (referral). Based on data in North Minahasa District, the health budget allocation in 2013 was 5.82% and in 2014 (7.58%) LAKIP of the North Minahasa District Health Office 2013, 2014. In this case it illustrates that the North Minahasa District government has not made health a priority in supporting its development.

Performance Value The perspective of the North Minahasa District Health Office in 2010-2014. The results of performance measurement in the form of Perspective Performance Value from four perspectives namely Financial Perspective Performance Value, Community Perspective Performance Value, Internal Process Perspective Performance Value and Learning Performance and Growth Value of North Minahasa District Health Office 2010-2014. Based on the results of measurement of Perspective Performance Value (PPV) at the Minahasa Utara District Health Office in 2010-2014 are as follows. Financial Perspective, describing the status of yellow financial PPV shows the performance of the North Minahasa District Health Office in achieving the budget realization that is still not good enough, there are still some obstacles in the field which ultimately hamper the process the implementation of an activity and also the difference between the price of planning and the amount of the budget less than 10% per year illustrates that the North Minahasa District Government has not prioritized the budget for health. Community Perspective. In 2010-2014, most of the PPV has not yet reached the target (still yellow), only in 2013 was green or PPV was 103.5%. This illustrates the District Health Office still needs to improve its performance in terms of service, development and empowerment in the health sector. Development. Internal Process Perspective. In 2010-2012, it had not reached the target with yellow status and in 2013-2014 there was a slight increase with green status. Learning and growth perspective. The performance of the North Minahasa District Health Office is still lacking in achieving the target with yellow status, improvement is needed to improve performance for service, development and community empowerment in a better health sector in the future.

Table 2. Results of Achieving the Value of Strategy Objectives North Minahasa District Health Office Year 2010-2014

<table>
<thead>
<tr>
<th>Perspective</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial</td>
<td>87.8</td>
<td>84.9</td>
<td>90.9</td>
<td>90.9</td>
<td>91.5</td>
</tr>
<tr>
<td>Community</td>
<td>96.4</td>
<td>95.4</td>
<td>95.4</td>
<td>105</td>
<td>92.3</td>
</tr>
<tr>
<td>Internal Process</td>
<td>96.4</td>
<td>95.4</td>
<td>95.4</td>
<td>100</td>
<td>102.3</td>
</tr>
<tr>
<td>Learning and Growth</td>
<td>94.1</td>
<td>94.1</td>
<td>87.7</td>
<td>92.5</td>
<td>96.4</td>
</tr>
<tr>
<td>Unit Performance Value (UPV)</td>
<td>85.6</td>
<td>92.6</td>
<td>92.3</td>
<td>97.1</td>
<td>96.3</td>
</tr>
</tbody>
</table>

UPV can be concluded that the performance of the North Minahasa District Health Office is seen based on the Balanced Scorecard analysis is not working well, not as expected, where the achievement of UPV from 2010-2014 with yellow status with an average value of 92.8% expected supported by predetermined targets. UPV learning and growth perspective is still very much needed improvement and improvement of human resources quality, facilities and infrastructure, guaranteed availability of medicines. UPV’s internal process perspective in the last 2 years has increased with Green status so it needs to improve it. The perspective of the UPV of the majority of the population is yellow, only in 2013 it was green while in 2014 it returned to the status of yellow. This needs to be studied further from the existing problems and can be addressed in the next period. To improve the financial perspective of the UPV the North Minahasa District Health Office can improve community empowerment and partnerships with social institutions or other related sectors to achieve the defined vision / mission, which needs to be considered.
CONCLUSION (Implication, Future Research, Limitation)

The results show that the Balanced Scorecard approach as a strategic management tool can improve the quality of strategy implementation, when it can clarify the size of its strategic performance. This case study contributes to the current state of knowledge, strengthening the concept of balanced scorecard as a strategic measurement method to strengthen the strategic management of the local government sector in achieving its strategic objectives, by developing and implementing a Balanced Scorecard in the future for local governments who intend to implement it and become the basis for further research, the trial of the application of the Balanced Scorecard to local governments is an important strategic issue. This study has limitations. The author can not further explain about strategic measurement because in this case study related organizations have not developed and implemented the strategic measurement of the Balanced Scorecard.

REFERENCES


