THE APPLICATION OF THE BALANCED SCORECARD AS A PERFORMANCE MEASUREMENT METHOD
(Case Study RSUD Lawang)

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ABSTRACT

This study aims to determine the hospital performance using the balanced scorecard by utilizing it to develop the expected financial and non-financial aspects in conducting performance appraisals. So that, the hospital will become ideal and able to provide customers satisfaction. Data in this research were collected in three years from 2015 to 2017 by using descriptive analysis. The researcher evaluated the hospital performance between the periods and compare them with the previous target, and then give score according to the criteria. Data were obtained through library research and the secondary data was obtained from Lawang Regional hospital (RSUD Lawang). Financial performance measurement was viewed from the achievement of revenue and cost changes, the customer perspective views of customer acquisition, customer retention, customer satisfaction, internal business process perspective include innovation, operational process, and response times. Meanwhile, for learning and growth perspective was viewed from employee retention and employee training. In conclusion, four assessment perspectives are considered good enough. The balanced scorecard is suitable to be applied to Lawang Hospital because it can provide illustrations that are more structured, comprehensive and complete so that they can present accurate information that can later be used for decision-making.

Keyword: Performance, Balanced Scorecard, Hospital

Penelitian ini bertujuan untuk menentukan kinerja rumah sakit menggunakan balanced scorecard dengan memanfaatkannya untuk mengembangkan aspek keuangan dan non-keuangan yang diharapkan dalam melakukan penilaian kinerja. Sehingga, rumah sakit akan menjadi ideal dan mampu memberikan kepuasan pelanggan. Data dalam penelitian ini dikumpulkan dalam tiga tahun dari 2015 hingga 2017 dengan menggunakan analisis
I. Introduction

Performance measurement is one of the most important factors for business organizations. In a management control system of business organization, performance measurement is an attempt by the management to evaluate the results of activities that have been implemented by each responsibility center compared to the predefined benchmarks.

Performance measurement is essential for the company because the measurement of performance is an attempt to arrange strategy to achieve specific targets.

Performance measurement systems can be used as an organizational control tool because performance measurement is strengthened by setting reward and punishment systems (Ulum, 2009).

Performance measurement system in traditional management is emphasized on the financial aspect because financial measure is easy to detect, so the personal performance measured is only related to the financial aspect.

Performance measurement systems on the financial aspects are common; there are some advantages and disadvantages in traditional measurement systems that focus on the financial aspects. The advantage is its orientation to short-term profits, and it will encourage more managers to improve short-term corporate performance. The disadvantage is time limitation, report real financial achievements without being followed by an explanation of the factors that led to the achievement itself and the inability to measure the performance of intangible assets and the intellectual property of the firm.

With these weaknesses, the idea of measuring nonfinancial performance emerged. Performance appraisal using non-financial data, includes the size of market share and growth rate, the ability of the company to produce products favored by consumers, development and assessment of employees; including employee turnover, corporate image in the society, the level of timeliness of the company to keep the schedule which has been established, the percentage of damaged goods during production, the number of customer complaints and the guarantee of the customer.
Such situation encouraged Kaplan and Norton to design a more comprehensive performance measurement system called the balanced scorecard. Kaplan and Norton (1993) stated that balanced scorecard provides executives with a comprehensive framework that translates a company’s strategic objectives into a coherent set of performance measures.

From the statement above, it can be seen that the balanced scorecard provides the organization's strategic goals into a set of interconnected performance benchmarks. Balanced scorecard is a performance measurement method that reflects not only the financial performance, but also non-financial performance. The non-financial aspect gets serious attention because the improvement of financial performance comes from the non-finance aspect, so if the company does multiplication of performance, the focus of company attention will be directed to non-financial performance improvement, because that is the source of finance.

The balanced scorecard provides a framework for management to translate organizational mission and strategy into goals and measures that can be seen from four perspectives (Kaplan and Norton, 1996). These four perspectives are intended to explain the appearance of an organization from the following four points of view (Kaplan and Norton, 1992).

- **Financial Perspective**, to answer the question: in order to achieve financial success, which organization's financial performance should be demonstrated to the organization's owner?

- **Customer Perspective**, to answer the question: how does the organization look in the eyes of the customer?

- **Internal Business Process Perspective**, to answer the question: to satisfy the owners of the organization and customers, which business process should be featured?

- **Learning and Growth Perspective**, to answer the question: how does the organization maintain its capabilities so that the organizations change for the better?

The development of balanced scorecard in both public and private sectors is intended to provide
customers satisfaction. The differences can be seen from the goals as well as the parties concerned. The implementation of balanced scorecard in the business sector is intended to increase competition (competitiveness), while for the public sector give more emphasis on mission and value (mission, value, effectiveness).

From the financial aspect, the business sector will prioritize profit, growth, and market share while the sector publicly intended for productivity measurement and efficiency levels. Likewise, with interested parties, the business sector will give priority to shareholders, buyers, and management, while for the public sector will include taxpayers, service users, and legislatures.

The balanced scorecard is considered suitable for public sector organizations because the balanced scorecard emphasizes not only the quantitative-financial aspect but also the qualitative and nonfinancial aspects. It is in line with the public sector that places not only profit as the key performance measure, but also services that tend to be qualitative and nonfinancial (Mahmudi, 2007).

The regional public hospital is one of the local government agencies engaged in the public sector especially in health services. Business activities of regional public hospitals are not just economic but also social, which prioritizes the best health services for the society. Local public hospitals are one of the government agencies that should be able to provide accountability both financially and non-finance to local governments and communities as service users. Therefore, it is necessary to have a performance measurement covering all aspects. Balanced scorecard is the right choice to execute performance measurement from both financial and non-financial aspect. RSUD Lawang is one of the hospitals under the auspices of the Government of Malang district. In recent years, hospitals in Malang have shown good progress. It can be seen from the high level of community satisfaction index, and then the increasing number of patients’ visit, both inpatient and outpatient, also the growth of income. Performance
measurement is still based on the national standard of service that has been determined by the government. If the percentage of performance obtained by the hospital is still within the national standard, then the hospital's performance is considered to be good. Meanwhile, there are other factors that can be used as performance measurement whether it is good or bad. For this reason, performance measurement is needed by using the Balanced Scorecard, where the measurement tools are grouped into four main perspectives, namely: financial perspective, growth and learning perspective, internal business process perspective, and customer perspective. Companies that are adopting the balanced scorecard concept shows many significant changes, including more customer-oriented management, faster response time to customers, improved product quality, teamwork emphasis, time for new product launches, and management more oriented towards the future.

On this basis, the author wants to apply elements of balanced scorecard to measure various aspects of finance, customer aspects, internal business aspects and aspects of learning and growth-based vision, mission and goals described in corporate strategy and after non-financial aspects is measured, it is expected to make performance measurement in RSUD Lawang better than the existing ones. With the background explained above, the author is interested in Discussing "The Application of the Balanced Scorecard as a Benchmark of Performance Measurement (A Case Study on RSUD Lawang)."

II Literature Review
2.1 Understanding of Performance and Performance Measurement

Performance is an achievement achieved by a person or organization in carrying out a task that is charged according to the standard and a predetermined criterion. Meanwhile, performance measurement is a method to find out whether the performance performed is as expected or not.

Novella Aurora (2010) stated that performance measurement is a process of assessing the progress of achieving the goals and objectives set by the organization to support the achievement of the organization's
mission, which means assessing the efficiency and effectiveness of organizational activities.

The main objective of performance appraisal is to motivate employees to achieve organizational goals and to comply with predetermined behavior standards in order to produce the desired actions and results.

2.2 Definition of Public Sector Performance Measurement Systems

The public sector performance measurement system is a system that aims to help public managers assess the achievement of a strategy through financial and non-financial instruments. Performance measurement systems can be used as an organizational control tool because performance measurement can be strengthened by setting reward and punishment (Mardiasmo, 2002:121).

Public sector performance measurement is carried out to fulfill three purposes. First, measuring public sector performance is intended to improve government performance. The performance measure is intended to be able to help the government focus on the goals and objectives of the work unit program. It will ultimately improve the efficiency and effectiveness of public sector organizations in the delivery of public services. Second, measures of public sector performance are used to allocate resources and make decisions. Third, a measure of public sector performance is intended to create public accountability and improve customer communication.

2.3 Concept of Traditional Performance Measurement

The traditional concept is a performance measurement concept that only evaluates the performance of the financial sector and often used by the company because it is easy to assess.

2.4 Vision, Mission, and Strategy

Vision is the state of the organization that is expected to materialize in the future. The vision directs the organization, what the organization wants to be in the future. Defining it as "an overview of the organizational conditions that will be realized in the future" vision will direct the organization at this
time to go towards the goal it aspires to.

The mission is a unique goal that the organization has that distinguishes from other similar organizations. Furthermore, the organization's mission will reflect the scope of the organization of activities/operations of the organization concerned.

The strategy is the way chosen by top management to realize the organization's vision through a mission. A good strategy is the existence of functional actions, not providing a detailed description of what must be done in each situation and contingency.

2.5 Hospital as a Service Company

The company is a production activity unit that processes economic resources to provide goods and services for the community to obtain profits and in order to satisfy the community needs.

There are several types of companies. First, manufacturing companies are companies whose main activity is manage raw materials into finished goods, and then the company sells the finished goods. Second is a trading company, which is a company whose main activity is to buy finished goods and sell them again without processing. Third, service companies are companies that provides services.

Service is an appearance performance, intangible, and quickly lost, more perceived than owned, and more customers can actively participate in the process of consuming the services. Services are any actions or actions that can be offered by a party to another party, which are intangible (physical) and do not produce appropriate ownership.

According to Law No. 44 year 2009, Chapter I of Article 1 Point 1 states, "Hospitals are health service institutions that carry out individual health services in plenary that provide inpatient, outpatient, and emergency services."

According to Law No. 44 of 2009 chapter II article 3 states that the rules for the organization of hospital objectives are:

1. Facilitate public access to health services
2. Provide protection for the safety of patients, the community, the hospital environment, and human resources in the hospital
3. Improve quality and maintain hospital service standards
4. Provide legal certainty to patients, society, hospital human resources, and hospitals

According to Law no.44 year2009 chapter III, article 5 stated that "To carry out the tasks referred to in Article 4, the Hospital has function to:

1. The implementation of medical treatment and recovery services in accordance with hospital service standards
2. Maintain and improve individual health, through second and third level full-time health services according to medical needs.
3. Organizing education and training in human resources in order to increase capacity in the provision of health services.
4. Organizing research and development as well as screening technology in the field of health in order to improve health services by paying attention to the ethics of science in the field of health.

2.6 Balanced Scorecard

The balanced scorecard is an approach to measure performance that will assess financial performance and non-financial performance. The idea of the balanced scorecard is to measure performance and target companies from four different angles.

There are four perspective in balanced scorecard namely:

2.7 Framework

III. Research Method

This research is a case study that is collecting and examined data by taking several elements; the conclusions are drawn only apply to the elements investigated. This research was carried out in Lawang Hospital with data elements in performance measurement with the Balanced Scorecard concept.

This study uses measures contained in all four perspectives of the Balanced Scorecard, namely: financial perspective, customer
perspective, internal business perspective, growth and learning perspective.

The data used in the study includes secondary data by analyzing written data on performance measurement and performance planning of the general description of the organization and organizational policies relating to the measurement of its performance.

IV. DATA ANALYSIS AND RESEARCH RESULTS

4.1 Growth and learning perspective

The training included Basic Cardiac Life (BCLS), Advanced Cardiac Life (ACLS), Basic Trauma Life (BTLS), Advanced Trauma Life (ATLS), General Emergency Life (GELS), Comprehensive Emergency Obstetric Neonatal Services (PONEK), and Emergency First Aid (PPGD).

Of the total 333 employees, almost all employees have received basic training in accordance with their respective jobs, but only about 80 employees who have carried out advanced training and most of them are doctors and nurses.

There were 29 employees who stopped working from 2015-2017 with several reasons including marriage, moving to another hospital, retirement, exhausted employment contract, resignation, and firing.

From 29 employees, there are 12 people who stopped working because of marriage, resigned, and firing. Moreover, none of the 12 people were doctors, most of them were workers who worked in the fields of administration, nurses, and security guards. The complete data can be seen in the appendix.

4.2 Internal business perspective

4.2.1 Innovation

In carrying out the innovation process of the hospital, paying attention to diseases that is often experienced by the community such as dengue fever, heart failure, and hypertension.

<table>
<thead>
<tr>
<th>IGD</th>
<th>CODE</th>
<th>CASE OF DISEASE</th>
<th>NUMBER OF CASES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>R50</td>
<td>OBSERVASI FEBRIS</td>
<td>914</td>
</tr>
<tr>
<td>2</td>
<td>R11</td>
<td>VOMITING</td>
<td>366</td>
</tr>
<tr>
<td>3</td>
<td>I64</td>
<td>CVA INFARK</td>
<td>366</td>
</tr>
<tr>
<td>4</td>
<td>J44.9</td>
<td>COPD</td>
<td>332</td>
</tr>
<tr>
<td>5</td>
<td>I10</td>
<td>HYPERTENSION</td>
<td>319</td>
</tr>
<tr>
<td>6</td>
<td>I50.9</td>
<td>HEART FAILURE</td>
<td>285</td>
</tr>
</tbody>
</table>
As shown by the table above, *observasi febris* is the most common problem faced by the hospital, then followed by vomiting which is a symptom that can branch out into several types of diseases like typhus, and this disease is often experienced by children under 10 years old.

To deal with this problem, the hospital made several innovations such as a clinic dedicated to treating children with enough resource to handle it. The hospital also often carries out counseling on hygiene, especially the importance of maintaining the cleanliness of drinking water because diseases originate from food and beverages contaminated with bacteria.

### Hospitalization

<table>
<thead>
<tr>
<th>No</th>
<th>CASE OF DISEASE</th>
<th>NUMBER OF CASES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DM TYPE II</td>
<td>331</td>
</tr>
<tr>
<td>2</td>
<td>PNEUMONIA</td>
<td>256</td>
</tr>
<tr>
<td>3</td>
<td>DIARE</td>
<td>253</td>
</tr>
<tr>
<td>4</td>
<td>TYPHOID FEVER</td>
<td>231</td>
</tr>
<tr>
<td>5</td>
<td>STROKE</td>
<td>209</td>
</tr>
<tr>
<td>6</td>
<td>HEART FAILURE</td>
<td>185</td>
</tr>
<tr>
<td>7</td>
<td>URINARY TRACT INFECTION</td>
<td>87</td>
</tr>
<tr>
<td>8</td>
<td>CEREBRAL INFRACTION</td>
<td>82</td>
</tr>
<tr>
<td>9</td>
<td>COPD</td>
<td>81</td>
</tr>
<tr>
<td>10</td>
<td>NEWBORN AFFECTED BY CESAREAN</td>
<td>78</td>
</tr>
</tbody>
</table>

From the two tables above, it can be seen that diabetes is the most common problem; this is not surprising because Indonesia itself has problems with diabetes. Then, it is followed by heart failure and hypertension.
The three diseases are closely related to unhealthy lifestyles, especially poor diet. The hospital will recommend patients to consume more fibrous foods and exercise to increase the body's metabolic.

The hospital conducts several programs that invited the public to be more active in exercising and maintaining their diet, such as morning exercise on Friday in front of the hospital for patients and people living around the hospital were advised to join the morning exercise together. The hospital also seeks to increase public awareness by working with puskesmas on the outskirts to conduct counseling on diabetes in particular and lifestyle in general.

4.2.2 Operational

4.3 Respond Time

<table>
<thead>
<tr>
<th>Question</th>
<th>Satisfied</th>
<th>Not Satisfied</th>
<th>Score</th>
<th>Satisfaction Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed of Service</td>
<td>412</td>
<td>182</td>
<td>69.36</td>
<td>Good</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Service Quality</th>
<th>Very Good</th>
<th>Good</th>
<th>Poor</th>
<th>Very Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>81.26-100.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>62.51-81.25</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>43.76-62.50</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25.00-43.75</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From the table above it can be seen that the speed of service in hospitals is quite good at 69.36, but there is still room for improvement.

4.3 customer perspective

The aim of this perspective is for companies to be able to maintain the number of customers achieved last year and try to attract new customers. Therefore, the company must pay attention to customer satisfaction.

4.3.1 Customer retention

Customer retention is the level of a company's ability to retain its customers. If the number of company customers from year to year remains or even increases, the
company can retain its customers. In the case of a hospital, the author cannot ascertain the name or identity of each patient because the confidentiality of the patient is protected by law. Nevertheless, by looking at the number of patients, the author believes that the data is sufficient to represent the hospital's condition for customer retention.

By looking at the three tables above which show an increase in the number of patients who are quite large and stable, the authors can conclude that customer retention in the hospital is going well.

### 4.3.2 Customer acquisition

Customer acquisition is the company's ability to acquire new customers. This acquisition is measured by comparing the number of customers from year to year. If there is an increase in the number of customers, the company can obtain new customers.

From the table above, it can be seen that the hospital managed to obtain 10,000 new patients for three consecutive years, in 2017 the hospital got the lowest number which of course must be considered by the hospital. However, in general, the hospital showed a very positive trend.

### 4.3.3 Customer satisfaction

<table>
<thead>
<tr>
<th>Service Quality</th>
<th>Very Good</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>50-59.9</td>
<td>33.33%</td>
<td>50%</td>
<td>16.67%</td>
<td>0%</td>
</tr>
<tr>
<td>40-49.9</td>
<td>33.33%</td>
<td>50%</td>
<td>16.67%</td>
<td>0%</td>
</tr>
<tr>
<td>25-39.9</td>
<td>33.33%</td>
<td>50%</td>
<td>16.67%</td>
<td>0%</td>
</tr>
<tr>
<td>&lt;=24.9</td>
<td>33.33%</td>
<td>50%</td>
<td>16.67%</td>
<td>0%</td>
</tr>
</tbody>
</table>
From the table above, it can be said that the hospital has succeeded in providing optimal services to patients; of course, there is still room to be better, especially in the speed of service and employee discipline. Nevertheless, even now, the score is very satisfying.

4.4 financial perspective
4.4.1 Income Growth

From the table above, it can be seen in 2015 that the hospital has not been able to reach the predetermined target, but in the following years, the hospital succeeded in exceeding the target. All of this thanks to the factors described earlier. It shows an increase in public confidence in the quality of the hospital and the ability of hospitals to meet targets.

4.4.2 Cost Change

The data below shows that RSUD Lawang is able to manage its expenses as efficiently as possible. It is indicated by the large amount of hospital spending each year which is not exceeding from what has been targeted by the government. Although hospitals are more efficient in managing their expenditures, it does not mean that hospitals reduce the quality and quantity of existing health equipment and services.
4.4.3 Assessment Using the Balanced Scorecard

After the data is presented, the next step is to assess whether the company's performance is good or not. The hospital's performance is measured by comparing it from year to year and set targets. Weighting uses interval size. The interval size is used to sort objects based on an attribute. The same interval/distance on the interval scale is seen to represent the same interval/distance on the object being measured. The number of items measured is 10 items, the total score of "lacking" is -10 score, the total score of "sufficient" is 0 score, and the total score of "good" is 10 scores.

The next step is to make a scale to assess the total score so that the company's performance can be said as "lacking", "sufficient", and "good".

After that, it needs to determine the "lacking", "sufficient", and "good" boundaries. "Lacking" is less than 50% (score 0), the performance is said to be "good" if it is more than 80%, and it is assumed that 80% is equal to 0.6. The rest are "sufficient" areas, namely between 0-0.6

4.4 The Relation of Four Perspectives to the Balanced Scorecard
In the perspective of growth and learning, hospitals get a score good enough. In terms of employee training, there is still room for improvement, but the current capacity is capable of carrying out their duties properly. The hospital must spur this aspect because the quality of employee skills is very influential on the quality of hospital services itself. Employee’s retention is still categorized as tolerable. It is shown by the absence of a crisis of employee shortages.

In the internal business perspective, the hospital gets a pretty good score. Hospital innovation has done several things, but it still feels less effective. There is still much room for improvement that can help the hospital improves. In terms of operational processes, the collected data shows satisfactory results and the response time also shows a good trend.

In the customer's perspective, all aspects such as customer retention, customer acquisition, and customer satisfaction are very satisfying for the number of new patients and the ability of the hospital to maintain quality which results in strong community loyalty and trust in hospital services.

Moreover, the financial perspective shows a very good trend. The income that continues to increase with certainty and also good financial management shows that the hospital can maintain its financial factors which at the end will have a positive effect on the quality of services provided.

V. CONCLUSION & SUGGESTIONS

5.1 Conclusions
RSUD Lawang allows to apply the balanced scorecard because with the balanced scorecard, all aspects can be measured. The application of the balanced scorecard is possible because the hospital has formulated its vision, mission, and strategy. Moreover, the results of the research show that the hospital performance is said to be very good by using the balanced scorecard.

5.2 Research Limitation
1. Hospital management performance measurements are carried out by comparing performance with those that have been targeted first.
2. Lack of information obtained from the hospital management due to
some previous year's informations that were not recorded in the data that the hospital has.

5.3 Suggestions
1. The hospital should use the balanced scorecard concept to implement and integrate hospital strategic planning.
2. Hospitals should continue to improve the perspective of the growth and learning process, especially to improve capabilities by providing training to all employees equally.
3. Hospitals should add and renew their information systems in order to improve service and facilitate hospital activities.

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