Performance Measurement Through Balanced Scorecard Approach

Lukman Chalid*, Darwis Lannai2, Muhammad Syafi’i A. Basalamah
1,2,3Universitas Muslim Indonesia, Jl. Urip Sumohardjo Km. 5 Makassar, Sulawesi Selatan, Indonesia

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ABSTRACT
The purpose of this research is to assess the performance of health centers using the Balanced Scorecard (BSC) framework from four perspectives: the customer perspective, the internal process perspective, the learning and growth perspective, and the financial perspective. The BSC application is intended to measure organizational performance from a variety of perspectives, not just financial ones; there must be a balance of financial and non-financial perspectives. This means that BSC is a strategic approach to evaluating an organization’s performance that balances the interests of various stakeholders by balancing short- and long-term objectives.

INTRODUCTION
Globalization's demands for strong and rapid information flows, decentralization of policymaking, and paradigm shifts in health development necessitate rewriting health care institution policies in order to achieve quality, effective, efficient, equitable, and sustainable health services for society.

In the face of external changes, puskesmas must be able to adapt to existing changes and maintain intergracy with the internal environment in order to survive and develop in the health care industry's competitive environment. Health centers require management skills capable of accurately analyzing new environments encountered now, in the future and developing a competitive advantage in order to survive and develop in order to meet society's demands. Additionally, Health Centre requires new competencies in order to solve public health problems in their assigned areas and must constantly improve their image and quality of their services, so that the community continues to utilize health center services.

Measuring the future performance of organizations, including service organizations in the health sector such as health centers, requires a comprehensive approach. A balanced scorecard is a consolidated and comprehensive collection of performance indicators that are derived from an organization's overall strategy. The Balanced Scorecard translates a business
unit's mission and strategy into measurable goals and benchmarks through the use of four perspectives: (1) the learning and growth perspective, (2) the internal business process perspective, (3) the customer perspective, and (4) the financial perspective.

According to (Ruky, 2001), the term performance is a misnomer for the English word "Performance," which has three definitions depending on the context of the caliamat: "achievement," "performance," and "execution of tasks." According to The Scribner – Bantam English Dictionary, the term "performance" derives from the root word "to perform," which has several "entries," including the following: a) perform, run, perform, b) fulfill or execute a vow, c) carry out or perfect responsibilities, and d) do something that people or machines expect.

According to the foregoing, performance can be defined as the result of work accomplished by an individual or group of individuals within an organization in accordance with their respective authorities and responsibilities, in order to accomplish the organization's objectives legally, without violating any laws, and in accordance with morals and ethics (Prawirosentono, 1999).

This performance assessment can be used by the organization to: a) manage its operations effectively and efficiently through maximum personnel piloting; b) assist in decision-making regarding personnel awards; c) identify personnel training and development needs and provide criteria for selecting and evaluating personnel training programs; and d) provide a basis for distribution of personnel training programs. Superiors and subordinates have a strong bond (Jerome, 2001).

A balanced scorecard is a collection of integrated performance metrics derived from the organization's corporate strategy and supporting strategies (Singles, 2001). According to Atkinson, Banker, Kaplan, and Young (1997), a balanced scorecard is a collection of objectives and performance measures used to assess an organization's performance in relation to a number of critical factors.

A balanced scorecard is a concept that aids in the implementation of strategies and facilitates strategic planning (Kaplan, 2009). A balanced scorecard is a technique for implementing strategies. A balanced scorecard can assist organizations that already have an explicit strategy in implementing it more effectively and efficiently, while organizations without an explicit strategy can use the process of developing a scorecard to develop strategies for business units, as the scorecard can stimulate an intensive management dialogue to define the strategy (Tunggal, 2002).

The balanced scorecard framework is a comprehensive tool for translating vision into strategic objectives. Comprehensive goals can be developed using the balanced scorecard's four perspectives: financial, customer, internal business, and learning and growth. Financial perspective identifies financial objectives that must be met by the organization in order to realize its vision. The customer perspective provides an overview of the intended market segment and customer, as well as the demands and needs served by the organization in order to meet specific financial objectives. An internal business perspective provides a snapshot of the processes that must be developed to serve customers and meet specific financial objectives. A learning and growth mindset is a commitment to developing the personnel competencies, information system infrastructure, and work environment culture necessary to achieve financial objectives, customer satisfaction, and internal business processes (Mulyadi, 2001).

As a first step toward preparing puskesmas to meet the demands of the community's needs and expectations, it is necessary to photograph the current state of affairs in advance using the Rerangka balanced scorecard. Additionally, the results of these measurements will serve as the foundation for developing a model for improving the performance of health
centers. To accomplish this goal, three stages of activities are carried out: 1) tahap first, analyzing the profile (portrait) of puskesmas from four balanced scorecard perspectives; 2) the second stage, assessing the needs for managerial and technical medical training based on the perceptions of the heads of health centers and health workers in puskesmas; and 3) the third stage of the intervention, assessing the needs for managerial and technical medical training based on the perceptions of the heads of health centers and health workers in puskesmas

RESEARCH METHODS

Assessment of puskesmas performance is done using a qualitative approach that combines statistical methods and Delphi techniques. The standards used to evaluate the performance of health centers consider three evaluation principles in the Committee on Standard for Educational Evaluation which are also appropriate to be applied in the Health Center as a public service institution. Evaluation of puskesmas performance is carried out using a balanced scorecard consisting of four perspectives including growth and learning perspectives, internal process perspectives, customer perspectives, and financial perspectives. Objectives and Outcome Measures are four balanced scorecard perspectives.

| Table 1. Outcome measures |
|---------------------------|
| **Objectives** | **Outcomes measures** |
|------------------|-----------------------|
| **A. Perspective of learning and growth** | |
| 1. Improving the Quality Human Resources | Increasing The Quality of Human Resources (measured by the frequency of seminars and trainings that followed) |
| 2. Increase personnel motivation | a. Personnel Productivity |
| 3. Increased Personnel Commitment | b. Adequate work environment |
| 4. Increased use of technology | Decrease in the rate of personnel turnover is measured by the number of personnel who come out |
| **B. Business/internal process perspective** | |
| 1. Increasing the Quality of Organizations | a. Increasing number of trained personnel |
| 2. Increased Facilities and Infrastructure | b. Increased job satisfaction |
| 3. Understanding the needs and expectations of patients | c. Rising revenue (Boundaryless Organization) |
| 4. Improved Operational Standards and Procedures | a. Medical Equipment that is complete and quality and works well |
| **C. Costumer Perspective** | b. Non-Medical Equipment that is complete quality and works well |
| 1. Increased Patient Trust | Proper health care providers and health care utilities |
| 2. The addition of new products and services | a. Entrepreneurial products |
| 3. Increased value gained by patients | b. Types of YANKE |
| 4. Improved quality of infrastructure and facilities | a. Speed of dealing with patients |
| | b. Speed of responding to patients |
| | c. Provide convenience to patients in registering |
| | a. Medical and non-medical equipment, which is complete and quality (functioning properly) |
D. Financial perspective

1. Budget Effectiveness
   Achieving budget targets / asset use
2. Budget Efficiency
   Increased cost suppression without reducing service activity
3. Economical
   Increased cost suppression with existing equipment
4. Rising revenue growth
   Increased Budget Ceiling

Source: Data processed 2021

Data collection and Analysis techniques informant and key informant, informant is the head of Health Centre and staff of Health Centre.

RESULTS AND DISCUSSIONS

Result of interviews the four perspectives with each indicator can be seen as in the following table;

Table 2. Recapitulation of BSC Puskesmas Bira 2020

| A. Perspektif Pembelajaran | Score | Kategori |
|----------------------------|-------|----------|
| 1. Increasing Resource Quality | Increasing the Quality of Human Resources (measured from frequency of seminars and trainings followed) | 4 | Increase |
| **Average** | 4 |
| 2. Increased personnel motivation | a. Personnel Productivity | 4 | Increase |
| b. Adequate work environment | 4 | Increase |
| **Average** | 4 |
| 3. Increased Personnel Commitment | Declining turnover rate personnel (measured by the number of personnel out) | 4 | Increase |
| **Average** | 4 |
| 4. Increasing utilization of technology | increased qualified personnel and best practices | 4 | Increase |
| **Rerata** | 4 |

**B. Perspektif Business Process /Internal**

| Score | Category |
|-------|----------|
| 1. Increasing the Quality of Organizations | a. Increasing number of trained personnel | 4 | Increase |
| b. Increased Job Satisfaction | 3 | quite |
| c. Rising Revenue (Boundaryless Organization) | 3 | quite |
| **RERATA** | 3,33 |
| 2. Increased Facilities and Infrastructure | a. Medical equipment that is complete and quality and works well | 4 | Increase |
| b. Non-Medical Equipment that is complete quality and goodfunctional | 3 | enough to increase |
| **Average** | 3,5 |
| 3. Increased understanding of the needs and Patient expectations | Provision of appropriate health services and utilization of Health Centers | 4 | increase |
| **Average** | 4 |
| 4. Improved Standards, Operations and Procedures | Integrated service process to patients. Take it compilation due to misforce of procedure | 4 | enough to increase |
| **Average** | 3 |
AVERAGE BUSINESS PROCESSES

| C. Consumer Perspective | Score | Kategori |
|-------------------------|-------|----------|
| 1. Increased Patient Trust |       |          |
| a. Loyal patient | 4 | increase. |
| b. The increase of new patients | 3 | Meningkat |
| c. Reduced complaints | 4 | Reduced |
| d. Patient obedience to do control | 4 | increase |
| AVERAGE | 3,45 | INCREASE |
| 2. The addition of new products and services |       |          |
| a. Product entrepreneur | 4 | Match |
| b. Types of health care | 4 | Match |
| c. Service time | 4 | Match |
| RERATA | 4 | Sesuai |
| 3. Increased value gained by patients |       |          |
| a. Care to treat patients | 4 | Increase |
| b. Speed of responding to patients | 4 | Increase |
| c. Providing convenience to patients in registering | 5 | Increase |
| 4. Increased attention to patients |       |          |
| Patient Satisfaction | 4 | Satisfied |
| AVERAGE | 3,75 | INCREASE |

AVERAGE CUSTOMER PERSPECTIVE

| D. Financial Perspective | Score | Category |
|--------------------------|-------|----------|
| 1. Budget Effectiveness |       |          |
| achieving budget targets / asset use | 5 | very effective |
| 2. Budget Efficiency |       |          |
| increased cost suppression without reducing activity service | 5 | very efficient |
| 3. Economical |       |          |
| increased cost suppression with existing equipment. | 5 | very economical |
| 4. Rising revenue growth |       |          |
| Increased budget ceiling | 3 | enough to increase |
| Average Financial Perspective | 4,25 |          |

Source: Data processed 2021

Following a recapitulation of the value / score assigned to each perspective as detailed in table 2, Then, the performance of Health Centers is evaluated by first subjectively weighting each perspective according to the Bira health center's priority scale, which is also adjusted according to the health center's vision and mission. The weight of the indicator is determined by dividing the weight of each perspective by the number of indicators in each perspective. A weighted score is calculated by multiplying the number of indicators in each perspective (see table 3) by the indicator score in each perspective (see table 3). The sum of the weighted indicator scores for each perspective is divided by the number of question item scores for each indicator (see table 3), and the result is compared to the total weighted score to determine the Puskesmas organization's category of health degrees.

Table 3. Measurement of Bira Health Center Performance Based on BSC 2020 Perspective

| PERSPEKTIF | Number of Indicators | Weight B | Indicators Weights | Indicator Score D | The number of scores in mbang E | Score F=D*E | Weighted Score F=B*D |
|------------|----------------------|----------|-------------------|-------------------|-------------------------------|------------|---------------------|
| Finance    | 4                    | 20       | 5                 | 4,5               | 18                            | 81         | 90                  |
| Consumer   | 4                    | 30       | 7,5               | 4                 | 16                            | 64         | 119,86              |
| Business Process Growth and Learning | 4 | 25 | 6,25 | 3,45 | 13,8 | 47,6 | 86,35 |
| Total      | 100                  |          |                   |                   |                               | 256,6      | 396,19              |

Source: Data diolah 2021
The results of the calculation of the health level of the Bira Health Center organization are as follows:

\[
\text{Health level of Bira Health Center} = \frac{\text{Total Score}}{\text{Weighted total score}}
\]

\[
\frac{256.6}{396.2} = 64.76 \text{ (Check at Table 3)}
\]

The results of the calculation of the degree of health of the organization or the performance of the Bira puuskesmas amounted to 64.76% then judging from the standard criteria used;

Table 4. Standard Criteria for Organizational Health Assessment

| CONDITION       | CATEGORY | TOTAL SCORE |
|-----------------|----------|-------------|
| Very Healthy    | AAA      | 95          |
|                 | AA       | 80 < TS < 95|
|                 | A        | 65 < TS < 80|
| Less Healthy    | BBB      | 50 < TS < 65|
|                 | BB       | 40 < TS < 50|
|                 | B        | 30 < TS < 40|
| Unhealthy       | CCC      | 20 < TS < 30|
|                 | CC       | 10 < TS < 20|
|                 | C        | TS < 10     |

Source: Data processed 2021

These can be concluded that the Balanced Score Card (BSC) approach results indicate that bira health center falls into the category of very healthy organizations, specifically category A.

After evaluating the organizational performance of the BIRA Health Center, the next stage is determining the coordinated point of the health center's existence by categorizing the four perspectives into two categories, namely internal and external factors. Internal factors include a perspective on learning and development as well as a perspective on business processes. External assets include financial viewpoints and customer/patient viewpoints. Each perspective score is converted to a scale of 2>41, as are internal factors associated with business process and learning growth perspectives. Scores are then totaled on the same scale (see table 5).

Table 5. Strategy Coordinates on the SWOT Matrix Based on the BSC Perspective

| Consumer Perspective | Score | Conversion Scale |
|-----------------------|-------|------------------|
| Internal (X)          |       |                  |
| 1. Business Process   | 3,45  | +1               |
| 2. Learning Needs     | 4     | +2               |
| AVERAGE               |        | (+1,5)           |
| Eksternal (X)         |       |                  |
| 1. Consumer/Patient   | 4     | +2               |
| 2. Financial          | 4,5   | +2               |
| AVERAGE               |        | (+2,0)           |

Source: Data processed 2021

From the conversion results of each perspective, the coordinate point in the matrix diagram can be determined as seen in figure 1 below.
According to figure 1, the coordinated point of the Bira Health Center's existence is in the quadrant indicating the strength and opportunity that the Puskesmas has as a strategic position at the moment. These circumstances necessitate that the Bira Health Center make the most of the opportunities that exist. There are numerous alternative strategies that Puskesmas Bira can pursue in these circumstances, including expanding the business, adding new types of health services, and increasing the capacity of health services. Based on the findings of this study, the Balanced Score Card (BSC) approach revealed that Puskesmas Bira has made significant progress toward improving performance, including:

CONCLUSION

Based on the findings of the research and discussion of the performance of Bira City Health Center makassar, it can be concluded that Puskesmas Bira's performance through four perspectives, namely a financial perspective with indicators of efficiency, effectiveness, and revenue growth, demonstrates a marked improvement in performance. From a customer perspective, the following indicators have increased: patient trust, variation in health services, value obtained by patients, and attention to patients. Business process perspectives, which include organizational quality, facilities and infrastructure, patient needs comprehension, and the application of standard operating procedures, are considered to be quite increasing. Then, the perspective of growth and learning, as measured by indicators of resource quality, employee motivation and commitment, and technology utilization, revealed improved performance.

(Rangkuti, 2015) concluded that the performance of Puskemas Bira falls into the category of very healthy organizations after analyzing the balanced score card (BSC) and organizational health standards.

From the study's findings and conclusions, several suggestions are possible. According to the previously stated BSC performance metrics, Bira Health Center is positioned in quadrant 11 of the BSC SWOT Matrix, indicating the center's opportunities and strengths. The Health Center's strategy could be to use force to seize opportunities. In this case, various

Figure 1. Bira Health Center Strategy Matrix Based on 4 BSC Perspectives
options are available, including expanding health services in terms of both quantity and quality.

REFERENCE
Atkinson, A. A., Balakrishnan, R., Booth, P., & Cote, J. M. (1997). New directions in management accounting research. *Journal of management accounting research*, 9, 79.

Charter, O. (2015). Okanagan Charter: An international charter for health promoting universities and colleges. In *International Conference on Health Promoting Universities & Colleges: Kelowna, BC, Canada*.

Rangkuti, F. (2015). *Personal SWOT analysis*. Gramedia Pustaka Utama.

Jerome, Paul J. (2001). *Mengevaluasi Kinerja Karyawan*. Penerbit PPM: Jakarta.

Kaplan, R. S. (2009). Conceptual foundations of the balanced scorecard. *Handbooks of management accounting research*, 3, 1253-1269.

Mulyadi, J. S. (2001). Sistem perencanaan dan pengendalian manajemen. *Yogyakarta: Aditya Media*.

Newton, J., Dooris, M., Wills, J. (2016). Healthy universities: an example of a whole-system health-promoting setting *IUHPE – Global Health Promotion Vol. 23, No.1*

Prawirosentono, S. 1999. Kebijakan Kinerja Karyawan. BPFE UGM, Yogyakarta

Ruky, A. S. (2002). *Sistem manajemen kinerja*. Gramedia Pustaka Utama.

Tunggal, A. W. (2001). *Memahami Konsep Economic Value Added (EVA) dan Value Based Management (VBM)*. Jakarta: Harvarindo, 1.