The Measuring Health Clinic Success: A Balanced Scorecard Approach to Improve Performance and Service

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ABSTRACT

A health clinic is a primary healthcare facility (PHF) that provides health services with organized professional staff and comprehensive medical facilities to deliver continuous care, including diagnosis and treatment of patients' illnesses. As a service company in the healthcare sector, this clinic plays an important role in providing medical services to the community. This study aims to evaluate the performance of a Health Clinic using the Balanced Scorecard (BSC) approach. Within the BSC framework, there are four main perspectives used to assess performance: 1) Financial Perspective; 2) Customer Perspective; 3) Internal Business Processes Perspective; and 4) Growth and Learning Perspective. The type of research conducted is descriptive qualitative, with primary and secondary data sources collected from 2021 to 2023. The use of BSC in this study is expected to provide knowledge management, skills, and systems that support the development of employee creativity and management, thereby increasing efficiency, consistency, and timeliness in service delivery. As a result, the services provided can offer benefits and improve customer satisfaction, ultimately contributing to increased company profits. The research findings indicate that the clinic's performance across the four perspectives shows varied results: the financial perspective, with indicators such as ROI and Debt to Asset Ratio, shows suboptimal results; the customer perspective, with customer acquisition indicators, shows good results, but customer satisfaction levels are still lacking; the internal business process perspective indicates that outpatient waiting times are still insufficient, while emergency department waiting times are rated good; and the growth and learning perspective shows positive results in employee retention and productivity.

1. INTRODUCTION

A company's performance is a key factor determining the success and sustainability of its operations. The same holds true for clinics, where achieving optimal performance is crucial for providing quality healthcare to the public (Ningrum, 2020). However, assessing clinic performance often presents challenges, particularly in determining relevant indicators and integrating various aspects of that performance. Therefore, a comprehensive and systematic method is needed to effectively assess clinic performance.

One method that can be used to assess organizational performance is the Balanced Scorecard (BSC) approach. Developed by Kaplan and Norton, this approach aims to measure an organization's overall performance by considering both financial and non-financial aspects such as customer satisfaction, internal processes, and learning and growth. Implementing the BSC in clinics has significant potential to improve overall management and operations. Clinics can identify and monitor performance indicators from each perspective to achieve strategic targets more effectively through this approach. Furthermore, this method also helps clinics identify areas that need improvement and design appropriate steps to continuously improve performance.

The Balanced Scorecard is used as a measuring tool that attempts to balance financial and non-financial assessments, particularly those related to customer satisfaction. Customer satisfaction will increase if the clinic's internal performance is good, and internal performance itself depends on the continuous learning and development process of the entire workforce .

The urgency of this research arises from the growing need for health clinics to ensure service quality while simultaneously maintaining financial sustainability and operational efficiency. As primary healthcare facilities, clinics are expected to deliver fast, accurate, and patient-centered services in an increasingly competitive healthcare environment . However, performance measurement in many clinics remains fragmented and tends to focus mainly on service quality indicators, without adequately considering financial performance, internal processes, and human resource development. Such partial evaluations limit management's ability to identify systemic weaknesses and formulate strategic improvements.

The Balanced Scorecard (BSC) offers a comprehensive framework that integrates financial and non-financial performance dimensions, including customer satisfaction, internal business processes, and learning and growth (Kaplan & Norton, 1996; Hidayat, 2006). In the healthcare sector, where service outcomes are closely linked to operational efficiency and staff competence, this holistic approach is particularly relevant. Nevertheless, the clinic examined in this study had not previously implemented the Balanced Scorecard as a formal performance measurement system and relied mainly on service quality indicators. Therefore, this research is urgent as it provides empirical evidence on how the Balanced Scorecard can be applied at the clinic level to support managerial decision-making, improve service delivery, and enhance long-term organizational sustainability.

Although the Balanced Scorecard has been widely applied in hospitals and large healthcare institutions, empirical studies focusing on health clinics as primary healthcare providers are still limited. Previous research tends to emphasize financial performance or service quality separately, rather than integrating multiple performance perspectives into a single evaluative framework (Rahayu et al., 2019; Elvaretta, 2023). As a result, there is limited understanding of how financial outcomes, patient satisfaction, internal operational efficiency, and employee development interact within clinic-level organizations.

In addition, many existing studies rely on cross-sectional data, providing only a snapshot of performance at a particular point in time. This approach does not adequately capture performance dynamics or the impact of managerial interventions over time. The role of digital transformation—such as electronic medical records and online registration systems, in improving internal processes and customer satisfaction has also received limited attention within Balanced Scorecard-based clinic studies (Menna & Temesvari, 2022). This study addresses these gaps by applying the Balanced Scorecard comprehensively over a three-year period (2021-2023), thereby offering longitudinal insights into clinic performance and demonstrating the practical relevance of the BSC in a primary healthcare context.

In the context of healthcare, clinics play a crucial role in providing medical services to the community. However, maintaining optimal performance amidst complex challenges is no easy feat. Clinics must not only focus on financial aspects but also be able to provide quality services, manage internal processes efficiently, and continuously adapt to environmental changes. The Balanced Scorecard approach can be an effective solution to address these challenges. As a healthcare service company, clinics provide services covering various units such as emergency, outpatient, inpatient, and maternity units, supported by organized professionals and comprehensive medical infrastructure to ensure continuous service from diagnosis to treatment.

A health clinic is a service business providing medical services that are essential to the community. Its primary revenue comes from outpatient care, inpatient care, maternity care, and other sources of income. Clinics continually strive to improve the quality of their services by upgrading facilities, utilizing the latest technology, and developing the competencies of medical personnel, including doctors, nurses, and other healthcare professionals . These performance improvement efforts aim to increase public trust in the services provided, as trust is a key factor in the sustainability of a clinic's business. With increased public trust, it is hoped that clinic revenues will increase and overall performance can continue to improve.

Currently, health clinics have not implemented the Balanced Scorecard approach as an official performance measurement tool. Current measurements have focused solely on service quality. However, clinic management requires more comprehensive information on financial performance, as

well as other indicators such as customer and employee satisfaction levels, which can serve as benchmarks for assessing whether the clinic's performance is good or needs improvement.

This study aims to evaluate and analyze the performance of a health clinic using the Balanced Scorecard (BSC) approach as a comprehensive performance measurement framework. Specifically, the objectives of this research are:

1. To measure the financial performance of the health clinic using financial indicators within the Balanced Scorecard framework, including Return on Investment (ROI) and Debt to Asset Ratio.
2. To evaluate customer-related performance, particularly patient acquisition and patient satisfaction levels, as indicators of service effectiveness and clinic competitiveness.
3. To analyze internal business process performance by assessing operational efficiency indicators such as emergency room response time and outpatient waiting time.
4. To assess learning and growth performance, focusing on employee retention and employee productivity as indicators of human resource sustainability and organizational development.
5. To determine the overall performance level of the health clinic by integrating financial and non-financial perspectives through the Balanced Scorecard approach, and to identify areas requiring improvement to support service quality enhancement and organizational sustainability.

2. **METHOD**

The method used in this research is a quantitative descriptive approach. This means that data collection was carried out through interviews and observations. Observations were conducted by collecting various data related to the research object, such as field notes, document review results, and other official documents. Interviews, meanwhile, were conducted through in-depth question-and-answer sessions with various relevant sources to obtain useful information. Quantitative descriptive data analysis included data collection from observations, interviews, and documentation. These data were then analyzed comprehensively to identify patterns, themes, and underlying meanings of the phenomena or events being studied.

This study used two types of data: primary and secondary. Primary data was obtained from interviews with clinic managers and general administration staff. Secondary data, in the form of financial reports, patient visit data, service quality reports, customer satisfaction data, and human resources data at the clinic, served as additional sources of information. The steps in the data analysis process carried out by researchers include:

a. Conducting a survey at the Health Clinic.
b. Conduct interviews with the person in charge of the clinic and the administration department.
c. Collect relevant data according to the four perspectives in the Balanced Scorecard.
d. Grouping and evaluating the collected data.
e. Analyze each perspective, namely financial, customer, internal business processes, and growth and learning.
f. Draw conclusions and provide suggestions based on the results of the analysis that has been carried out.

3. **RESULT AND DISCUSSION**

Results

The Balanced Scorecard has four perspectives, namely the financial perspective, customer perspective, internal business process perspective and learning and growth perspective.

Financial Perspective Analysis

This financial perspective uses two indicators to measure performance for 2021–2023, based on the Clinic's financial report. These two indicators are:

a. Return on Investment (ROI)

ROI aims to measure the increase in net profit generated by a Health Clinic in 2021–2023 by

comparing operating profit with total assets. The calculation is as follows:

$$2021 = \frac{Rp\ 21.626.510}{Rp\ 3.085.730.113} \times 100\% = 0.7\%$$

$$2022 = \frac{Rp\ 22.425.875}{Rp\ 2.927.532.200} \times 100\% = 0.7\%$$

$$2023 = \frac{Rp\ 22.885.265}{Rp\ 2.697.462.102} \times 100\% = 0.8\%$$

Based on these calculations, it can be seen that the ROI value from 2021 to 2023 has increased every year. From 2021 with a net profit of 21,626,510 and total assets of 3,085,730,113, the ROI result was 0.0070085553 (0.7%). In 2022, the Health Clinic's net profit was 22,425,875 and total assets of 2,927,532,200, the ROI result was 0.0076603342 (0.7%). And in 2023 with a net profit of 22,885,365 and total assets of 2,697,462,102, the ROI result was 0.0084840358 (0.8%). This indicates that the Health Clinic's Return on Investment (ROI) has increased, but remains below 10%, which could be considered "insufficient." The standard ROI is 10% (Mita & Stevanus, 2023).

b. Debt to Asset Ratio

The Debt-to-Asset Ratio is used to measure the extent of assets financed by creditors. The higher the debt ratio, the greater the amount of borrowed capital used to generate profits for the company. The Debt-to-Asset Ratio is calculated by comparing total debt to total assets. The calculation is as follows:

$$2021 = \frac{1.227.549.250}{3.085.730.113} \times 100\% = 39.8\%$$

$$2022 = \frac{1.100.567.391}{2.927.532.200} \times 100\% = 37.6\%$$

$$2023 = \frac{1.001.980.188}{2.697.462.102} \times 100\% = 37.1\%$$

Based on the calculations above, it can be seen that the Debt to Asset ratio value at the Health Clinic from 2021 - 2023 has decreased annually. The decrease in the Debt to Asset ratio indicates that the company can reduce its dependence on debt to finance assets. From the processed data, the total liabilities of the Health Clinic in 2021 were 1,227,549,250. In 2022, liabilities decreased to 1,100,567,392 and in 2023 decreased again to 1,001,980,188. The total assets owned by the Health Clinic decreased annually, starting in 2021 with total assets of 3,085,730,113, in 2022 it was 2,927,532,200 and in 2023 the total assets were 2,697,462,102. After calculations, the Debt-to-Asset Ratio was 39.8% in 2021, 37.6% in 2022, and 37.1% in 2023. This indicates that the Health Clinic's Debt-to-Asset Ratio has decreased annually, but according to the standard, a good Debt-to-Asset Ratio is generally 35% (Arsita, 2021). Therefore, a Health Clinic's Debt-to-Asset Ratio from 2021 to 2023 below 35% is considered "insufficient."

Customer Perspective Analysis

Customer perspective, in this case, refers to the patient. This perspective measurement is conducted to determine patient response to the Health Clinic. Two indicators are used:

a. Customer Acquisition

This indicator measures the clinic's success in attracting new patients. The more new clients a health clinic attracts, the higher its customer acquisition rate. This is calculated by comparing the total number of new patients to the total number of visits as follows:

$$2021 = \frac{9.867\ orang}{54.902\ orang} \times 100\% = 17,9\%$$

$$2022 = \frac{10.840 \; orang}{57.568 \; orang} x100\% = 18,8\%$$

$$2023 = \frac{11.360 \; orang}{58.785 \; orang} x100\% = 19,3\%$$

Based on the calculations above, it can be seen that the customer acquisition rate increased annually from 2021 to 2023. From 2021 to 2022, the increase was 0.9% (18.8% - 17.9% = 0.9%), and from 2022 to 2023, it only increased by 0.5% (19.3% - 18.8% = 0.5%). This indicates that the Health Clinic's customer acquisition performance is considered "good," as it is able to attract new customers annually.

b. Customer Satisfaction

This indicator aims to measure the Clinic's ability to meet patient needs. Customer satisfaction surveys are conducted by Clinic staff twice a year by distributing questionnaires according to the number of respondents. Respondents are drawn based on the number of patients (population) at the end of the previous year using Morgan sampling. From 2021 to 2023, the number of patient visits (population) was >40,000. According to Morgan sampling, the number of samples used for the customer satisfaction survey was 380 patients, followed by data processing. The Ministry of Health's standard is ≥95%.

Table 1. Results of the Health Clinic Customer Satisfaction Survey

Year	2021	2022	2023
Customer Satisfaction Survey	80.3%	87.9%	95.9%

Source: clinical quality report

The Table 1 above shows that the customer satisfaction survey at the Health Clinic is considered "poor" because in 2021 the customer satisfaction survey results were 80.3%, meaning customer satisfaction had not yet reached the target of ≥95%. Likewise, in 2022, the results were 87.9%. After analysis, the lowest result in the processed questionnaire was the Service Time indicator (U3). In 2021, the questionnaire data processing results showed that (U3) Service Time had an average value of 2.1, and in 2022, the questionnaire data processing results obtained (U3) Service Time with an average value of 2.6. This is because in 2021 and 2022, the Health Clinic still conducted offline registration (coming directly to the clinic) and still used manual Medical Records (books), which required a lot of time for registration staff to find patient medical records, and for nurses and doctors to write patient anamnesis/complaints and prescriptions. In 2023, customer satisfaction has reached the target of ≥95% because the Health Clinic has started using Electronic Medical Records where registration officers do not need to look for patient medical records and medical staff (nurses and doctors) do not write but input anamnesis/complaints and drug prescriptions in the electronic medical record.

Internal Business Process Perspective Analysis

In this perspective, we will use Operational Process measurements which are divided into 2, namely:

a. Emergency room waiting time

The emergency room wait time, or emergency room response time, measures how quickly staff respond to patients arriving until they receive medical attention (in minutes), or how quickly staff respond to emergency patients, from arrival to receiving medical attention (in minutes). The standard wait time is ≤5 minutes (Minister of Health Regulation No. 129 of 2008).

Table 2. Emergency Room Response Time Measurement

Indicator	Year

	2021	2022	2023
UGD response time	≤5 minutes	≤5 minutes	≤5 minutes

Source: clinical quality report

The Emergency Room (Table 2) response time table shows that the Emergency Room response time at the Health Clinic has reached the target from 2021 to 2023, with a result of ≤5 minutes. This means that security guards, administrators, and nurses are responsive in receiving emergency patients. The standard waiting time is ≤5 minutes (Minister of Health Regulation No. 129 of 2008). The Emergency Room wait time at the Health Clinic is "good" because it has reached the target of ≤5 minutes.

b. Outpatient Waiting Time

Outpatient waiting time, or doctor response time, is the time it takes for staff from the time a patient registers until the patient is seen by a doctor. The standard waiting time is ≤60 minutes (Minister of Health Regulation No. 129 of 2008).

Table 3. Outpatient Response Time Measurement

Indicator	Year		
	2021	2022	2023
Outpatient response time	≥60 minutes	≥60 minutes	≤60 minutes

Source: clinical quality report

The Table 3 above shows that the Outpatient Response Time at the Health Clinic has reached the target in 2023 and has not reached the target in 2021-2022. This is because in 2021-2022 registration is still one way, namely patients come directly to the clinic to register. Also, patient medical records still use folders/paper where nurses and doctors will write anamnesis, actions up to prescriptions. In 2023, the Outpatient Response Time has reached the target because in 2023 registration can be done online using the JKN Mobile application and patient medical records have used electronic medical records, namely Profaskes. So it can be said that the company's performance from a learning and growth perspective in terms of outpatient waiting time can be said to be "poor".

Learning and Growth Perspective Analysis

In this perspective, we will use employee retention and employee productivity measurements.

a. Employee Retention

Employee retention measures the Clinic's ability to maintain positive relationships with employees. This indicator is measured by comparing the number of employees who leave to the number of employees retained during the current period. The calculation is as follows.

$$2021 = \frac{1-1}{\frac{1}{2}(46+46)} x 100\% = 0\%$$

$$2022 = \frac{5-5}{\frac{1}{2}(46+46)} x 100\% = 0\%$$

$$2023 = \frac{3-3}{\frac{1}{2}(46+46)} x 100\% = 0\%$$

The employee retention calculation above shows that employee retention at the Health Clinic remained at 0% from 2021 to 2023, with no increase or decrease. This is because the Clinic's management has calculated a HR analysis (workload analysis) based on the profession. If an employee leaves, management will immediately open a vacancy to fill the position to prevent it from remaining vacant for too long. Therefore, the company's performance from a learning and growth perspective in terms of employee retention can be considered "good" because the result is <10%.

b. Employee Productivity

Employee Productivity is used to measure employee productivity increases by comparing operating profit with the number of employees during the observation period. The calculation is as follows.

$$2021 = \frac{Rp\ 2.761.206.350}{Rp\ 60.026.225} = 46\ people$$

$$2022 = \frac{Rp\ 2.985.307.800}{Rp\ 64.897.996} = 46\ people$$

$$2023 = \frac{Rp\ 3.318.315.603}{Rp\ 72.137.296} = 46\ people$$

The calculation above shows that Employee Productivity at the Health Clinic increases every year, in 2021 employee productivity was Rp. 60,026,225 and in 2022 employee productivity was Rp. 64,897,996, an increase of Rp. 4,871,771 (64,897,996 - 60,026,225 = 4,871,771). And in 2023 employee productivity was Rp. 72,137,296, an increase of Rp. 5,741,514 (72,137,296 - 64,897,996 = 7,239,300). So it can be said to be "good". This is in accordance with the business feasibility assessment where performance is said to be good if the level of employee productivity increases and is said to be quite good if it is constant, and is considered less if it decreases.

Company Performance Analysis Using the Balanced Scorecard Approach

Table 4 shows the Health Clinic's performance results, with eight assessment indicators, four of which met the established standards: customer acquisition, emergency response time, employee retention, and employee productivity. Four indicators failed to meet the standards: ROI, Debt-to-Asset Ratio, Customer Satisfaction Survey, and Outpatient Response Time.

Table 4. Health Clinic Performance Results Using the Balanced Scorecard Approach

Indicator	Analysis results	Score
Financial Perspective		
1. ROI	Not enough	0
2. Debt to Asset Ratio	Not enough	0
Customer Perspective		
1. Customer Acquisition	Good	1
2. Customer Satisfaction Survey	Not enough	0
Internal Business Process Perspective		
1. Emergency Room Waiting Time	Good	1
2. Outpatient Waiting Time	Not enough	0
Learning and Growth Perspective		
1. Employee Retention	Good	1
2. Employee Productivity	Good	1
Total Score		4

So, the total percentage of performance achieved by the Health Clinic is as follows:

$$Total\ Persentase\ Kinerja = \frac{4}{8} x100\% = 50\%$$

Calculation of the total percentage of performance achieved by the Health Clinic, then the standard is set and the standard used here is the standard used by (Nurjannah 2015) in research by Deni S, 2021. The standards used are as follows:

Very Good = 80–100% of the established standard
Good   = 60 – 80% of the established standard
Enough   = 40 – 60% of the established standard
Not enough   = 20 – 40% of the standardset
Not Good = 0 – 20% of the established standard

Based on the results of the total performance percentage calculation above, it can be seen that the performance percentage achieved by the Health Clinic using the Balanced Scorecard (BSC) approach is 50%. This result indicates that the Health Clinic's overall performance is "Sufficient."

Discussion

The results of this study indicate that the overall performance of the health clinic, as measured using the Balanced Scorecard approach, is categorized as "sufficient," with an achievement level of 50%. This finding suggests that while the clinic has demonstrated strengths in certain areas, several performance dimensions still require improvement. From the financial perspective, Return on Investment (ROI) showed a consistent increase from 2021 to 2023, indicating gradual improvement in profitability. However, the ROI values remained below the commonly accepted benchmark of 10%, suggesting that asset utilization and revenue generation were not yet optimal (Arsita, 2021). Similarly, although the Debt to Asset Ratio declined over the study period, it remained above the recommended standard, indicating continued reliance on debt financing.

From the customer perspective, the clinic showed good performance in customer acquisition, reflecting its ability to attract new patients and maintain market presence. However, customer satisfaction levels in 2021 and 2022 did not meet the Ministry of Health standard, primarily due to long service times during registration and outpatient services. This finding is consistent with previous studies that identify waiting time as a critical determinant of patient satisfaction in healthcare facilities (Rahayu et al., 2019; Saputra, 2021). The substantial improvement in customer satisfaction in 2023 demonstrates the positive impact of implementing electronic medical records and online registration systems, which enhanced service speed and efficiency.

The internal business process perspective revealed mixed performance outcomes. Emergency room response times consistently met regulatory standards, indicating effective coordination and responsiveness among clinical staff. In contrast, outpatient waiting times exceeded acceptable standards in 2021 and 2022, reflecting inefficiencies associated with manual administrative processes. The achievement of acceptable waiting times in 2023 underscores the importance of process innovation and information system adoption in improving operational performance (Elvaretta, 2023).

From the learning and growth perspective, employee retention remained stable at 0%, indicating effective workforce planning and immediate replacement of departing employees. Employee productivity increased annually, suggesting improved operational efficiency and effective utilization of human resources. These findings support the argument that employee stability and productivity are key drivers of sustainable organizational performance in healthcare institutions (Suma, 2022; Jelalu, 2023).

Overall, the findings confirm that the Balanced Scorecard is an effective tool for identifying performance strengths and weaknesses in health clinics. While the clinic performed well in customer acquisition, emergency services, and human resource management, improvements are still needed in financial performance and outpatient service efficiency. The Balanced Scorecard provides a structured foundation for management to align operational improvements with strategic objectives and enhance overall clinic performance.

3.   **CONCLUSIONS**

This study evaluates the performance of a health clinic using the Balanced Scorecard (BSC) approach and finds that overall clinic performance is categorized as "sufficient." The results indicate uneven performance across the four BSC perspectives. From the financial perspective, Return on Investment (ROI) showed a gradual annual increase but remained below the recommended standard, indicating suboptimal profitability. The Debt-to-Asset Ratio declined over time, reflecting reduced reliance on debt, although it remains above the ideal benchmark.

From the customer perspective, customer acquisition achieved good results, demonstrating the clinic's ability to attract new patients. However, customer satisfaction was initially low, mainly due to long service times, although improvements were observed following service efficiency enhancements. The internal business process perspective shows strong performance in emergency room response

times, which consistently met established standards. In contrast, outpatient waiting times were below expectations in earlier years but improved after the implementation of more efficient registration and medical record systems.

From the learning and growth perspective, employee retention and productivity both showed good results, indicating effective human resource management. Overall, the Balanced Scorecard proves to be a valuable tool for identifying performance strengths and areas requiring improvement. To enhance future performance, clinic management should continue improving financial efficiency, maintain service quality gains, strengthen operational processes, and support continuous employee training to ensure sustainable organizational performance.

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