



## **Performance Analysis of Grhasia Mental Hospital Training and Installation Development with Balanced Scorecard Method**

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### **ABSTRACT**

*The Education Research and Development Installation of Grhasia Mental Hospital (RSJ) have never implement a performance measurement, then it is not known what extent the success of financial and non-financial management in achieving organization vision and goals. This research was conducted to analyze the performance of Training and Development Installation of RSJ Grhasia through balanced scorecard (BSC) method with 4 perspectives, called finance, customers, internal business processes, then learning and growth. This research is a descriptive research which is analyzed descriptively analytic. The quantitative data were obtained from secondary data and survey results from internal (employees) and external customers (practice students). The research results from financial perspective shows poor results for income level and effectiveness ratio. On the other hand, it shows good results for Cost Recovery Rate/CRR. Customer perspective that shows satisfied results on employee satisfaction level and good results on student satisfaction level with education and training installation services.*

**Keywords:** *Balanced Scorecard, Performance Analysis, Training and Development*

## INTRODUCTION

A hospital is a public health service institution influenced by advancements in health science, technological progress, and the socio-economic life of the community. Its role is to improve the quality and accessibility of services for society. The aim of the hospital plan is to rationalize and modernize existing hospital facilities while better aligning the geographical distribution of acute services with the apparent needs (Jones, 2015). Hospitals must respond quickly to changes in government policies and customer needs (Buathong & Bangchokdee, 2017). The rapid development of health services presents challenges for hospitals in facing increasing competition (Kundariyah et al., 2021).

Performance refers to an organization's ability to operate within a specific time frame according to predefined standards (2020). Performance has key characteristics such as quantity, quality, and comprehensiveness (Diab, 2015). Hospital performance measurement is crucial for identifying issues through both financial and non-financial metrics (Cheng & Humphreys, 2016). Organizational performance is often measured solely by its budget, without using other analytical approaches (Alvarez et al., 2019).

Performance analysis drives the improvement of health services. Catuogno (2017) developed the Balanced Scorecard (BSC) theory, integrating financial and non-financial metrics to align an organization's vision and mission with tangible goals, actions, and performance measures (Alsharari et al., 2019). The BSC evaluates the organization's status and potential regarding specific goals and measures (Alharbi et al., 2016). It functions as a control tool, strategic management framework, and mechanism for communication, quality management, benchmarking, and budgeting (Kollberg & Elg, 2011). The BSC looks at organizations from four perspectives: finance, customers, internal business processes, and learning and growth (Janis Rupita & Kurnianto Tjahjono, 2018). The customer's perspective is assessed through service quality dimensions (Nurhasnah & Eliza, 2017).

Grhasia Mental Hospital is a Class A Mental Health Hospital with plenary accreditation, also serving as an Affiliated Teaching Hospital since April 29th, 2020. The Education, Training, Research, and Development Installation (Diklatlitbang) is a key unit contributing to housing income and supporting business development within the RSJ Master Plan, with the goal of providing optimal and efficient services.

However, many hospitals have not yet implemented the BSC or have delayed its adoption (Tegar Fadeli Arrahma, 2022). A hospital's success can be assessed based on the alignment between its strategic plan and its implementation (Nur Hidayah et al., 2021). Performance measurement has never been applied in the Training and Development Installation at Grhasia Mental Hospital (RSJ). Therefore, it is unclear how successful financial and non-financial management

has been in achieving the hospital's vision and goals. Additionally, there is a lack of research on the Balanced Scorecard in hospital work units, particularly in education and training services.

The core idea of performance measurement is to balance both financial and non-financial aspects (Tegar Fadeli Arrahma, 2022). With the implementation of the Balanced Scorecard, Grhasia Mental Hospital's Education, Research, and Development services are expected to enhance service quality, in line with the hospital's vision to "create complete, high-quality, ethical mental health and drug services," as outlined in the second goal of Grhasia Mental Hospital: "to establish the hospital as a center for learning, research, and development in mental health and drug treatment."

Research shows an increase in the use of the Balanced Scorecard for decision-making and strategic planning (Nielsen, 2015). The BSC has become an innovative tool in measuring the strategic performance of the healthcare sector (Gao & Gurd, 2020). Its application improves planning effectiveness and communication (Brown, 2017). The Balanced Scorecard is an effective strategic management tool, often formulated into software programs (Koumpouros, 2013). There is a clear relationship between the completeness of the performance measurement system and organizational effectiveness. The Balanced Scorecard has proven to be successful in contributing to organizational strategy implementation (Lucianetti et al., 2019).

Human resources are valuable assets in management, as they impact all other organizational resources (Ferry et al., 2021). In today's competitive environment, high-performing and competent human resources are essential (Mardiyah, 2019). The Balanced Scorecard application provides feedback in every educational service to promote individual growth and enhance organizational performance (Patro, 2016). Performance measurement plays a strategic role in organizational processes, helping managers understand the organization's position (Tjahjono, 2015).

This research aims to analyze the performance of the Training and Development Installation at Grhasia Mental Hospital using the Balanced Scorecard method. The benefit of this research is to improve the performance, accountability, and transparency of health services at Grhasia Hospital, especially in the Education and Mental Health Research and Development services. It will assist in the hospital accreditation process and provide feedback for the improvement and development of the Training and Development Installation.

By measuring its performance, the Diklatlitbang Installation can enhance the quality of its services, particularly in education, training, research, and development, in line with the hospital accreditation process.

## RESEARCH METHODOLOGY

This research is descriptive in nature, using both quantitative and qualitative approaches through analytical descriptive analysis. The data type helps establish the relevance of an idea or confirm a hypothesis. It assists in identifying a claim and determining whether it is true or false (Omair, 2015). The research was conducted at the Training and Development Installation of Grhasia Mental Hospital Yogyakarta, located on Jl. Kaliurang Km 17, Sleman Yogyakarta, in March 2022.

Data collection for the Balanced Scorecard from the customer perspective was done using a Google Form questionnaire to assess hospital employee satisfaction with Diklatlitbang services, with 81 respondents. Students' satisfaction was also evaluated through interviews with 3 students. The growth learning perspective was assessed using secondary data and interviews with 3 Diklatlitbang managers, as well as the financial perspective and growth learning perspective, also through secondary data.

Additionally, the Balanced Scorecard measurement was carried out by evaluating the performance drivers' results. The outcome measures are calculations that indicate the success rate of achieving strategic goals by assessing 11 variables from 4 perspectives, measuring overall performance by comparing targets with actual results, calculating performance scores to evaluate work performance, and assessing the aspects of the Balanced Scorecard. Performance boosters are calculated by analyzing the causes of the results achieved using an analysis plan table or a "dummy" table.

## RESULT AND DISCUSSION

### Financial Perspective

The financial perspective monitors the financial performance of the Training and Development Installation in 2021. There are three variables evaluated from a financial perspective: income level, effectiveness ratio, and cost recovery rate (CRR) or efficiency ratio. These financial variables are used to measure the effectiveness and efficiency of the program, activities, and organizational performance (Halim, A & Kusufi, 2012).

### Income level

The income level is determined by comparing the income difference between 2021 and 2020 relative to the revenue in 2020. Companies typically focus on two main aspects when designing financial strategies: revenue growth and productivity.

The results show that the income level in 2021 decreased by IDR 49,461,000, or 20.49%, compared to 2020, which places it in the 'less' category. This indicates that hospital management and R&D education and training

managers need to develop strategies and innovations to increase their revenue.

### **Ratio Effectiveness**

The effectiveness ratio is derived from comparing the actual income with the revenue target set by the Training and Development Installation in 2021. The research findings show that the effectiveness ratio of the Diklatlitbang Installation in 2021 reached 51.87% of the revenue target of IDR 370,000,000, which falls under the 'less' category. The income target was not met due to the impact of the COVID-19 pandemic, which reduced face-to-face services, including student practices. This highlights the need for the education training and development manager to formulate a strategy by reviewing the training rates, which have not been updated for some time. It is hoped that student services will return to normal practices once the pandemic ends.

### **Cost Recovery Rate (CRR)**

The Cost Recovery Rate (CRR), or efficiency ratio, is derived from comparing the large costs incurred to generate revenue with the income realization in 2021. The research results indicate that the effectiveness ratio of the Training and Development Installation in 2021 is 68.89%, which falls into the 'good/efficient' category. This shows that the realized expenditures for the Training and Development Installation are smaller than the income, meaning that the management only needs to maintain spending efficiency.

### **Customer Perspective**

The customer perspective refers to the customer's evaluation of the Education and Training Installation service by assessing the satisfaction levels of internal customers (employees) and external customers (students) concerning the specific performance of products and services. There are three variables evaluated from the customer perspective: employee satisfaction level, student satisfaction level, and student satisfaction.

### **Employee Satisfaction Level**

The level of employee satisfaction refers to an employee's perception of the services provided by the Diklatlitbang Installation in the implementation of internal training (in-house training) using five dimensions that determine service quality, known as the SERVQUAL concept, which consists of tangible (physical/real), empathy, reliability, responsiveness, and assurance. The service quality dimensions proposed by Zeithaml, Parasuraman, and Berry have been tested in measuring service quality performance (Nurhasnah & Eliza, 2017).

The results showed that the level of employee satisfaction with the Education and Training Installation service in 2021 was 4.10 (82%) or in the "satisfied" category. This indicates that employee satisfaction with the services of the Training and Development Installation has improved by following up on

suggestions and feedback from the questionnaire.

### **Student Satisfaction Level**

The level of student satisfaction reflects their perception of the Training and Development Installation services during the implementation of Clinical Practice at Grhasia Mental Hospital. This is measured using a Community Satisfaction Survey questionnaire, which has been adapted to align with the Minimum Service Standards of Grhasia Mental Hospital.

The results indicated that the level of student satisfaction with the Training and Development Installation services in 2021 was 78.4, which falls under the 'Good' category. This suggests that student satisfaction with the education and training services has been maintained and improved by addressing suggestions and feedback provided in the questionnaire's open-ended questions.

### **Student Responsibility**

The satisfaction of students in charge refers to the perception of students regarding the implementation of student practice at Grhasia Mental Hospital, and whether it aligns with the needs of educational institutions. Based on the research results, it was found from 3 (three) informants interviewed that all of them were very satisfied with the services at the Diklatlitbang Installation, which falls under the 'good' category. Five themes were presented, including the need to improve libraries and supporting facilities for students, satisfactory room facilities, satisfactory service, the need to re-socialize ethical clearance management, systems, and procedures for smooth and satisfactory operation, as well as the need to increase research and innovation collaboration, student education, and competent and satisfactory clinical supervisors. This highlights that suggestions and input from those in charge of students need to be followed up as an effort to improve and develop the service quality at the Diklatlitbang Installation.

### **Internal Business Process Perspective**

The Internal Business Process Perspective refers to the sequence of service processes for the Education, Research, and Development Department, starting from the receipt of applications for educational activities, employee training, and student practice permits, to their implementation in an efficient, timely, and standardized manner that yields positive financial outcomes. Three key variables are evaluated in this perspective: the education and training service system and procedures, the completeness of education and training service facilities, and the innovation process in education and training.

### **Training and Development Service Systems and Procedures**

The Diklatlitbang innovation process involves identifying the current and future needs of both internal and external customers and developing solutions based on those needs.



Research findings indicate that the Training and Development Installation's innovation process includes at least one type of innovation considered in the agency's performance evaluation. In 2021, ten types of innovations were developed, exceeding the target (250%) and meeting the standard (>80%), placing them in the "very good" category.

The interview revealed two main themes: innovations in Education, Research, and Development services, and organizational development within the Education, Research, and Development Installation. These findings suggest that hospital management should consider providing rewards for innovation development while also supporting and facilitating their implementation.

### **Completeness of Training and Development Service Facilities**

The completeness of training and development service facilities refers to the availability of resources used to provide services to employees and students. Research findings indicate that out of 12 standard service facility types, 11 (91.67%) are already available at the Training and Development Installation, placing them in the "good" category. Interviews revealed two key themes: improving work and student service facilities within the Training and Development Installation and enhancing staff training. This suggests that hospital management can enhance facilities by collaborating with educational institutions through grant programs to meet standard requirements.

### **Training and Development Innovation Process**

The Diklatlitbang innovation process involves identifying the current and future needs of internal and external customers and developing solutions based on those needs.

Research findings indicate that the Training and Development Installation carries out at least one type of innovation as part of the agency's performance assessment. In 2021, a total of 10 innovations were developed, exceeding the target by 250% and meeting the standard of >80%, placing them in the "very good" category.

Interviews revealed two key themes: innovation in Education, Research, and Development services, and organizational development within the Education, Research, and Development Installation. These findings highlight the need for hospital management to consider providing rewards for innovation development, as well as supporting and facilitating their implementation.

### **Growth and Learning Perspective**

The Growth and Learning Perspective represents the hospital management's efforts to enhance HR performance quality, ensuring employees can effectively manage their work. This perspective evaluates two key variables: employees' education level and the number of Diklatlitbang employees receiving training.

**Employee Education Level**

The education level of employees refers to the highest formal education attained by employees of the Diklatlitbang Installation, legally recognized in personnel administration and in compliance with regulations.

The research findings indicate that 80% of employees meet the Yogyakarta Governor Regulation standards, placing them in the "good enough" category. Specifically, out of five employees in the Training and Development Installation, four (80%) have at least a associate degree education, while one does not meet the required standard.

This suggests that employees with only a high school education should either pursue further studies to obtain a associate degree or be reassigned and replaced by employees with at least a associate degree qualification. Additionally, hospital management should provide opportunities for employees to continue their education through study assignments or study permits.

**Number of Diklatlitbang Installation Employees Who Received Training**

Training for Diklatlitbang Installation employees is expected to enhance their competence in providing services such as training, technical guidance, and seminars, with a minimum of 20 hours per year.

Research findings indicate that out of five employees, only one participated in more than 20 hours of training in 2021. This means that only 25% of employees met the training requirement, which falls into the "less" category. This percentage is still below the Ministry of Health's standard, which requires at least 60% of employees to complete 20 hours of training annually.

This highlights the need for hospital management to ensure that all employees receive a minimum of 20 hours of training per year. To achieve this, management should incorporate training targets into strategic goals and conduct a Training Needs Assessment (TNA).

**Results of Training and Development Installation Performance**

The Training and Development Installation's achievements in both quality and quantity align with the standards set by Grhasia Mental Hospital using the Balanced Scorecard method. Performance is measured through four perspectives: finance, customers, internal business processes, and learning & growth.



The performance assessment results for the Training and Development Installation at Grhasia Mental Hospital, evaluated using the Balanced Scorecard method, compare targets with actual achievements for each perspective and variable, as shown in the following table.

**Table 1.** The Results of 2021 Training and Development Installation Performance

Perspective	Variable		Target	Results	
Finance	1	Income level	Positivevalue (+)	- 20.49%	Not enough
	2	Effectiveness Ratio	100%	51.87%	Not enough
	3	Cost Recovery Rate	< 100 %	68.89%	Well
Customer satisfaction	4	Employee satisfaction level	□4	4.10	Satisfied
	5	Student satisfaction level	□81.26	78.4	Well
	6	Student responsibility	Satisfied	Satisfied	Well
Internal Business Process	7	Training and development service systems and procedures	80%	80%	Well
	8	Completeness of training and development service facilities	80%	91.67%	Well
	9	innovation process, research and development	100%	250%	Very good
Learning and Growth	10	Employee education level	> 80 %	80%	Enough
	11	Number of training and education installation employees who received training	60%	20%	Not enough

Source: Processed Data by Researchers

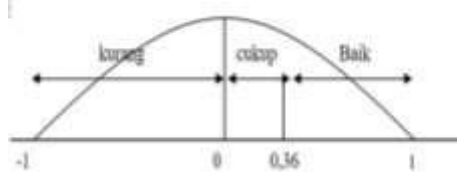
Based on the performance results, a performance score is determined by evaluating 11 variables from four perspectives. A score of -1 indicates a lower achievement level, meaning it falls below the standard. A score of 0 signifies an adequate level, meaning it meets the standard. Meanwhile, a score of 1 represents a good level, indicating that the achievement exceeds the standard.

**Table 2.** The Results of 2021 Training and Development Installation Performance Score

Perspective	Variable		Performance Results	Score	□
Finance	1	Income level	Not enough	-1	-1
	2	Effectiveness Ratio	Not enough	-1	
	3	<i>Cost Recovery Rate</i>	Well	+1	
Customer satisfaction	4	Employee satisfaction level	Satisfied	+1	3
	5	Student satisfaction level	Well	+1	
	6	Student responsibility	Well	+1	
Internal Business Process	7	Training and development service systems and procedures	Well	+1	3
	8	Completeness of training and development service facilities	Well	+1	
	9	innovation process research and development	Very good	+1	
Learning and Growth	10	Employee education level	Enough	0	-1
	11	Number of training and education installation employees who received training	Not enough	-1	
Total score				4	4

Source: Processed Data by Researchers

From the table above, it can be seen that total hospital score weight is 4 from the total standard weight, then the average score is  $4/11$ , or 0.36. The following is a description of Grhasia RSJ Training and Development Installation performance:

**Figure 1.** The Overview of Training and Development Installation Performance

Source: Processed Data by Researchers

Based on the total score calculation of the Diklatlitbang installation performance, the value is 0.36, which is considered 'sufficient' out of 11 performance parameters. This aligns with previous research, such as the study on the Outpatient Polyclinic of Surya Husadha General Hospital Denpasar, which obtained a performance score of 0.55, also categorized as 'sufficient.' Another study conducted at RSUD Dr. Zainoel Abidin Banda Aceh reported an overall performance in the 'good' category, with a score of 0.88 (Martunis et al., 2020). A comparison of the various aspects of the balanced scorecard perspective is shown in the table below:

**Table 3.** Balanced Scorecard Comparison

No	Aspect Comparison		Score	Quantity	Explanation
A	The comparison of internal and external aspects				
1	Interfinal	Internal business processes	3	2	There is a balance between internal and external aspects
		Lessons & partum buhhan	-1		
2	external	Finance	-1	2	
		Customer	3		
B	The comparison of process and people aspects				
1	Process	Internal business processes	3	2	There is a balance between process and people aspects
		Finance	-1		
2	Person	Lessons & partum buhhan	-1	2	
		Customer	3		
C	The comparison of financial & non-financial aspects				
1	Finance	Finance	-1	-1	There is an imbalance between financial and non-financial aspects where the R&D Training Installation focuses more on non-financial aspects
2	Non- financial only	Internal business processes	3	5	
		Learning & growth	-1		
		Customer	3		

Source: Processed Data by Researchers

Based on the table above, there is a balance between internal and external aspects as well as between process and people aspects. However, there is an imbalance between financial and non-financial aspects, and therefore, the financial aspect needs improvement. The performance booster measure is a calculation that explains the cause of the results achieved through an analytical plan table, also known as a 'dummy table.' The dummy table is a design with selected parameters, which are either chosen or derived from a data set. This table is used as an implementation tool in research on performance quantification through the balanced scorecard at the Nutrition Installation of Panembahan Senopati Hospital, Bantul (Purnamasari, 2015).

**Table 4.** Performance Analysis of the Balanced Scorecard for the 2021 Training and Development Program

Perspective and Variable		Strategic Goals/Aims	Size & Target	Facts/Performance Boosters	Performance Results		Score	Initiative
A	Finance							
1	Income Level	The realization of increased revenue and cost efficiency	Income level increases or positive value (+)	Income level in 2021 decreased by 20.49% compared to 2020	-20.49%	Not Enough	-1	Management and education and training managers need to formulate strategies and innovations to increase revenue, with the expectation that student service practices will return to normal once the pandemic is over.
2	Ratio Effectiveness		Effectiveness ratio 100% (Realized revenue is at least equal to the revenue target)	The income target was not achieved due to the influence of the Covid-19 pandemic which reduced face-to-face services, including student practices	51.87%	Not Enough	-1	The education and training manager develops a strategy by reviewing the education and training rates, which have not been updated for a long time (the last adjustment was made in 2016, and the current rates are considered too low).
3	Cost Recovery Rate		Cost Recovery Rate	2021 expenses = IDR	68.89%	Good/Efficiency	+1	The actual expenditure for the Training

	(CRR)		(CRR)/efficiency ratio <100%	132,211,116 does not exceed realized income = IDR 191,910,000 (68.89%)				and Development Installation is already lower than the income, so management only needs to maintain spending efficiency.
<b>B</b>	<b>Customer</b>							
4	Employee Satisfaction Level	Increased Customer Satisfaction	Average employee satisfaction with the Servqual method 4 (good)	The level of employee satisfaction with the Training and Development Installation service in 2021, including the satisfied category	4.10	Satisfied	+1	Employee satisfaction with the Diklatlitbang Installation service is improved by following up on suggestions and input in the questionnaire
5	Student satisfaction level		Average student satisfaction through the Community Satisfaction Survey/SKM 81.26 (very good)	Overall, the level of student satisfaction with the Education and Research and Development Installation services in 2021, including the good category	78.4	Well	+1	Student satisfaction with the Diklatlitbang Installation services is maintained and improved by addressing the suggestions and feedback provided in the questionnaire (open-ended questions).

6	Student responsibility		The student in charge expressed satisfaction	The informant in charge of the student expressed satisfaction & gave suggestions for improvement	Satisfied	Well	+1	Suggestions and feedback from the informants in charge of students are followed up as an effort to improve and enhance the quality of services at the Training and Development Installation.
<b>C Internal Business Process</b>								
7	Training service systems and procedures	Improving the quality of services, infrastructure facilities in line with standards, and promoting innovation in education and training services.	Compliance with standard systems and procedures, specifically 80%.	Out of 20 types of standard procedures, 15 types (80%) are already owned by the Training and Development Installation.	80%	Well	+1	The education and training manager should update the standard procedures and conduct regular benchmarking/comparative studies with other hospital training services.
8	Completeness of Training and Development		The compliance with the standards of service	Out of the 12 types of standard service facilities,	91.67%	Well	+1	The hospital management aims to enhance facilities and may

	ment Service Faciliti es		facilities is 80%.	11 types (91.67%) are already available.				collaborate with educational institutions through grant programs.
9	Innovat ion process , research h, and develop ment		A minimum of four types of innovatio ns per year must be uploaded to the monitori ng applicati on, with an activity evaluatio n achievem ent of 100%.	In 2021, ten types of innovatio ns were reported in the activity evaluation monitorin g applicatio n.	250 %	Very good	+1	The hospital management is considering offering rewards to encourage innovation development while also providing support and facilitating its implementatio n.
<b>D Growth and Learning</b>								
10	Employ ee Educati on Level	Improv ing the quality and compet ence of human resourc es managi ng Diklat, R&D	Educatio n level accordin g to standard (minimu m D3) > 80%	Among the five employee s in the Training and Developm ent Installatio n, one has only a high school education, which does not meet the Yogyakarta	80%	Enough	0	1. High school employees should continue their education to the D3 level or be transferred and replaced by employees with at least a D3 education. 2. Provide opportunities for employees to continue their education through study assignments or



				a Regional Regulatio n standard requiring a minimum of a bachelor's degree (S1).				study permits.
1 1	Numbe r of Diklatli tbang Install ation employ ees who receive d training .		Diklatlitb ang employee s receive at least 20 hours of training per year, with a target achievem ent of 60%.	The number of Diklatlitb ang Installatio n employee s receiving training does not yet meet the Ministry of Health's standards, which require at least 60% of employee s to complete 20 hours of training per year.	20%	Not Enough	-1	The hospital management aims for a minimum employee training duration of 20 hours per year and incorporates it into strategic goals. Additionally, a training needs analysis (Training Need Assessment/T NA) will be conducted.
<b>Total Score</b>								4

Source: Processed Data by Researchers

## CONCLUSION

Based on the balanced scorecard assessment using 11 variables across 4 perspectives, the performance of Grhasia Mental Hospital and its Development Installation is considered 'adequate' with a score of 0.36. There is an imbalance between the financial and non-financial aspects, indicating that attention is needed to improve the financial performance.

Using the balanced scorecard method provides a better performance measurement than relying solely on the Hospital Minimum Service Standards indicators. It allows for evaluation from four different perspectives for the Training and Development Installation.

Recommendations from this research include that the Education and Research, along with the Development Manager and hospital management, should follow up on performance results that do not meet the standard, specifically regarding income levels, effectiveness ratio, and the number of Diklatlitbang employees who receive at least 20 hours of training per year.

Future research could focus on performance analysis using the same method but with different variables and work units, and integrating the results into an information technology system to streamline calculation and performance appraisals, which would support the employee reward system.

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