Measurement of Hospital Performance in the Border Region of Timor Leste through Customer Satisfaction Aspects

Pengukuran Kinerja Rumah Sakit di Wilayah Perbatasan Timor Leste melalui Aspek Kepuasan Pelanggan

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Abstract
Kefamenanu Regional General Hospital is the only government hospital in North Central Timor Regency (TTU) as a provider of health services in Kefamenanu City which is a border area. The current presence of the Leona Private Hospital in the district directly forces the Kefamenanu Hospital to improve services so as not to lose credibility in the community. Kefamenanu General Hospital must strive to provide quality health services for the community by formulating a vision, mission, goals, objectives and indicators of success as outlined in a strategic plan. In this article the discussion focuses on aspects of customer satisfaction. The results of the study show that from the perspective of customer satisfaction, it is in the “Satisfied” interval so that the performance of Kefamenanu Hospital can be said to be “Good”.

Keywords: Balanced Scorecard Approach, Border Region, Customer Satisfaction Perspective, Hospital Performance.

Info Artikel

Abstrak
RSUD Kefamenanu merupakan satu-satunya rumah sakit pemerintah di Kabupaten Timor Tengah Utara (TTU) sebagai penyelenggara pelayanan kesehatan di Kota Kefamenanu yang merupakan daerah perbatasan. Kehadiran RS Swasta Leona saat ini di kabupaten tersebut secara langsung memaksa RSUD Kefamenanu untuk meningkatkan pelayanan agar tidak kehilangan kredibilitas pada masyarakat. RSUD Kefamenanu harus berupaya memberikan pelayanan kesehatan yang bermutu bagi masyarakat dengan merumuskan visi, misi, tujuan, sasaran dan indikator keberhasilan yang dituangkan dalam rencana strategis. Pada artikel ini pembahasan berfokus pada aspek kepuasan pelanggan. Hasil penelitian menunjukkan bahwa dari perspektif kepuasan pelanggan berada pada interval “Puas” sehingga kinerja RSUD Kefamenanu dapat dikatakan “Baik”.

INTRODUCTION

Global economic progress impact on competition service industry, so all service companies should pay attention to the service quality that they sell (Harfikah & Abdullah, 2017). Each institution has advantages and disadvantages, both in terms of facilities, concepts, even service to patients. This matter will be considered for patient, the better the quality services provided (Surya, 2014). Hospitals as service providers in the health sector are also required to provide patient satisfaction. Kefamenanu Regional General Hospital (RSUD) is the only government hospital in North Central Timor (TTU) Regency as a health service provider in Kefamenanu City which is a border area. The presence of Leona’s private hospital in TTU Regency directly forces the Kefamenanu General Hospital to improve services so as not to lose credibility from the community. RSUD Kefamenanu can provide quality health services for the community by formulating a vision, mission, goals, objectives and indicators of success which are completed in the form of a strategic plan.

Indicators of success are not only financial but also with other indicators such as customers, internal business as well as learning and growth which are then used as material to control the direction and quality of health services. In doing so, the vision that has been set can actually be realized (Burney & Swanson, 2010). Hospital performance is measured based on performance standards set nationally, one of which is performance evaluation exclusively from a financial perspective (Anggraini & Nuraina, 2014). The balanced scorecard approach (BCS) offers companies a promising and valuable tool for implementing a strategic performance management system (Papenhausen & Einstein, 2006). The BSC concept is suitable not only for corporate use, but also for commercial and non-commercial hospital use (Handayani, 2011). The emphasis in the balanced scorecard approach lies in continuous improvement which is not only to achieve specific goals in the form of profit. If an entity does not make continuous improvement, then the entity the organization will probably lost the competition. To sum up, the managerial implication is that using an BSC, which is a formal control tool, should be complemented by relying on informal controls, such as cultural and administrative (Mio et al., 2022). For this reason, performance should be measured using the BSC.

This performance measurement tool covers all aspects, grouped into four main perspectives, that is: (1) financial perspective; (2) growth and learning perspective; (3) internal business processes perspective; and, (4) customer perspective. The ultimate goal is to create services that provide superior value to targeted customers (Kaplan & Norton, 2000). RSUD Kefamenanu must be able to provide adequate medical services for patients referred from public health center (Puskesmas) located in the border area of Timor Leste. Based on these reasons, it is necessary to examine how the performance of the hospital from the aspects of customer satisfaction.

LITERATURE REVIEW

Balance Scorecard Concept

Balanced concept is defined as personnel performance, namely employee performance that is measured in a balanced manner and is viewed from two aspects, namely financial and non-financial, long-term and short-term as well as from internal and external aspects. The balanced scorecard is a financial and non-financial measurement (Bose & Thomas, 2007), and represents the translation of the business unit's strategy into measures of long-term strategic objectives and mechanisms for achieving and obtaining feedback on those goals. These operational objectives and measures are then
stated in four perspectives, namely financial perspective, customer perspective, internal business process perspective, and learning & growth perspective.

Performance measurement systems need to measure important aspects or differences in an organization's performance in order to achieve important goals (Givan et al., 2021). The advantage of a good performance measurement system is that it connects performance to customer expectations; motivate employees to serve as part of their customer chain and internal suppliers; identify various types of waste and encourage efforts to reduce waste (waste deduction); almost vague strategic goals are set to accelerate the learning process of the organization; and, build consensus to make a difference by rewarding expected behavior. With the advent of various new paradigms that require businesses to operate in a customer-centric manner, effective performance measurement systems are based on each activity and the characteristics of the organization itself from the customer, so at least with prerequisites (Givan et al., 2021). The performance measurement must be perspective, and evaluate different activities using customer-validated performance metrics. It aligns with all aspects of service delivery that affect clients and provides a comprehensive assessment, and provides feedback to help all members of the organization identify any issues that may be fixed (Papulová et al., 2021).

**Balanced Scorecard from Customer Perspective**

The customer perspective shows the company's ability to achieve strategic goals in terms of customers and markets (Krylov, 2019). The steps required in the customer's perspective are to provide the services requested by the customers (Alimudin, 2017). The basic core of measurement includes customer satisfaction and customer acquisition. These steps will explain to managers who their customers are, how to maximize the profits from customers. Its main goal is to create services that provide superior value to targeted customers (Mulyadi, 2018). The customer perspective is the source of the revenue component of the financial objective. This perspective defines and selects the customers and market segments in which the company decides to compete.

The main objectives of the perspective are increasing market share, increasing customer retention, increasing new customers, increasing customer satisfaction, and increasing customer profitability. The main measures that used by the customer perspective are market share (percentage of market), percentage of business growth from existing customers and percentage of customers who repurchase, number of new customers, level of customer satisfaction surveys, and individual and segment profitability. Activity based costing is a key tool in customer profitability assessment. This measure is important, because it emphasizes the importance of the right customer. What's the point of having customers if they're not profitable? There is a difference between customer focus and customer obsession.

Measures are also needed to drive customer value creation to drive key results. Customer value is the difference between realization and sacrifice, where realization is what the customer receives and sacrifice is what is delivered. Realization includes, among others, are product function (features), product quality, delivery reliability, delivery response time, image and reputation. Sacrifices include product price, time to learn product use, operating costs, maintenance costs and disposal costs. According to Mulyadi (2018), based on the customer value strategy paradigm, strategic goals from the customer perspective are formulated as follows. First, products/services compete in the global market on the basis of the content of knowledge contained in them. The content of knowledge contained in the products/services becomes a factor of global competitiveness. Knowledge is
incorporated into products/services through three main channels, that is: (1) tools; (2) jobs; and, (3) knowledge.

Second, products and services are combined into one in an offer to determine what output is produced by the company in order to be able to exceed customer expectations. Third, products/services are produced through an organizational network. Development of an organizational network whose members consist of various companies that have certain core competencies in the value chain of the product manufacturing process and service delivery. Through this organizational network, customers get the best value because each product/service value chain is carried out by companies that have core competencies in their respective fields.

Fourth, products/services are provided for customers with high mobility, organizations need to design information systems that allow customers to access information about products/services and make purchases of their products/services from anywhere, anytime, to be sent anywhere according to customer requests. Fifth, the quality of the relationship is a multiplier of the value received by the customer. Nowadays, information technology is an enabler in building quality relationships, which is: (1) between employees and managers; (2) between functions within the organization; (3) between companies and suppliers and business partners; and, (4) between companies and customers.

**METHOD**

Customer satisfaction is a condition where the desires, expectations, and needs of customers are met. Measurement of customer satisfaction is an important element in providing better, more efficient and more effective services (Rustiyanto, 2010). This indicator shows the extent to which customers are satisfied or not with the company's products and services (Dodangh et al., 2010). The level of customer satisfaction in the study was measured by a customer satisfaction survey by distributing questionnaires to customers to determine the level of customer satisfaction.

Customer satisfaction refers to the quality of services provided by the hospital. Service quality can be evaluated by the five characteristic dimensions that can be used to evaluate service quality (Rahayuningsih, 2015; Kotler & Keller, 2013; Zeithaml et al., 1994), which is: (1) Tangibles or direct evidence includes physical facilities, equipment, employees and communication facilities; (2) Reliability in this dimension relates to the ability to provide services as soon as possible and satisfy as promised; (3) Responsiveness or capturing power in this dimension relates to the staff's desire to help customers and provide responsive service; (4) Assurance in this dimension includes the ability, courtesy, and trustworthiness of the staff, free from danger, risk or doubt; and, (5) Empathy in this dimension includes ease in making relationships, good communication, and sincere attention to customer needs.

The source of data in this study is primary data, namely data obtained directly from the source of the research location or without going through an intermediary. The primary data used in this study was obtained from the results of distributing customer and employee satisfaction questionnaires to determine the level of customer and employee satisfaction at Kefamenanu General Hospital. This data is in the form of qualitative data which is converted into quantitative by giving a score to each answer choice with an ordinal scale containing five levels of answers with choices in the form of numbers 1-5 which means as follows (Sartika, 2010). The level starts from a score of 1 for the answer option "Very dissatisfied" that reflects the very bad category to a score of 5 for the answer option "Very satisfied" which reflects the very good category.
Table 1. Research Instrument on Customer Satisfaction

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicator</th>
<th>Number Question</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Satisfaction</td>
<td>1. Guarantee</td>
<td>1, 2, 3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>2. Responsiveness</td>
<td>4, 5, 6</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>3. Empathy</td>
<td>7, 8</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>4. Reliability</td>
<td>9, 10</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>5. Direct Evidence</td>
<td>11, 12, 13, 14</td>
<td>4</td>
</tr>
</tbody>
</table>

Number of Questions: 14

Source: Sari, 2015 (processed).

Table 2. Customer Satisfaction Index Table

<table>
<thead>
<tr>
<th>Level of Satisfaction</th>
<th>Score Interval</th>
<th>Assessment Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Dissatisfied</td>
<td>1.400 - 2.520</td>
<td>Very Not Good</td>
</tr>
<tr>
<td>Dissatisfied</td>
<td>2.521 - 3.641</td>
<td>Not Good</td>
</tr>
<tr>
<td>Quite Satisfied</td>
<td>3.642 - 4.762</td>
<td>Good Enough</td>
</tr>
<tr>
<td>Satisfied</td>
<td>4.763 - 5.883</td>
<td>Good</td>
</tr>
<tr>
<td>Very Satisfied</td>
<td>5.884 - 7.004</td>
<td>Very Good</td>
</tr>
</tbody>
</table>

Source: Ghozali, 2011 (processed).

Table 3. Customer Perspective through Customer Satisfaction Level in 2022

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Number</th>
<th>Questions</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guarantee</td>
<td>1</td>
<td>Quality of service at Kefamenanu Hospital if compared to other hospitals</td>
<td>392</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Speed &amp; timeliness of services provided hospital.</td>
<td>369</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Security in the hospital</td>
<td>378</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>4</td>
<td>Information on examination results provided by the hospital</td>
<td>439</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Rates given by the hospital</td>
<td>382</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>The method of payment determined by the hospital</td>
<td>374</td>
</tr>
<tr>
<td>Empathy</td>
<td>7</td>
<td>The condition of the room available in the hospital</td>
<td>374</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>Allowance of payment time set by the hospital</td>
<td>359</td>
</tr>
<tr>
<td>Reliability</td>
<td>9</td>
<td>Settlement of your complaint/complaint by Kefamenanu Hospital.</td>
<td>384</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>How hospital employees work</td>
<td>403</td>
</tr>
<tr>
<td>Direct Evidence</td>
<td>11</td>
<td>Quality of equipment available in hospitals seen in terms of completeness.</td>
<td>326</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>Quality of equipment available in the hospital seen in terms of cleanliness.</td>
<td>413</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>Neatness and cleanliness of hospital employees.</td>
<td>408</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>Cleanliness of Kefamenanu Hospital</td>
<td>328</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>5,329</td>
</tr>
</tbody>
</table>

Source: Primary data, 2022 (processed).

To determine the level of employee satisfaction, the minimum and maximum satisfaction index is determined first by multiplying the score of each item, number of questions, and number of respondents (Febr尼亚蒂 & Widийяти, 2019). From the calculation, it will produce intervals of employee and customer satisfaction levels (Sugiyono, 2017), as shown in Table 1 and Table 2.

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The population in this study were all employees and patients/families of Kefamenanu General Hospital patients in 2021. According to Sugiyono (2017), the sample is part of the number and characteristics possessed by the population, if the population is very large and the researcher is not likely to study all that population. The sample used in this study will use the non-random sampling method, namely the incidental sampling technique. Incidental sampling is a sampling technique based on chance, that is, anyone who coincidentally or incidentally meets a researcher can be used as a sample, if it is deemed that the person who happened to be met is suitable as a data source (Sugiyono, 2017). Based on the technique, the sample size used is 100 respondents.

RESULTS

Customer perspective measurement is through a questionnaire distributed to 100 visitors or patients. Respondents were randomly selected and they were inpatients and outpatients. Based on the results summarize in Table 3, it can be concluded that the level of customer satisfaction obtained is a score of 5,329 where this score is in the "Satisfied" interval, namely 4,763-5,883. The question item with the lowest score is for question item number 11 relating to the quality of the equipment available at the hospital in terms of completeness which the score is 326 and the second lowest score is question number 14 related to the cleanliness of the Kefamenanu Hospital with a score of 328. The results of the lowest scores on the two questions can be concluded that the Kefamenanu Hospital customers are not satisfied with the quality and completeness of medical equipment and hospital cleanliness aspects.

The result of the lowest score calculation is question number 11 with a total score of 326 relating to the quality of the equipment available at the hospital in terms of the second lowest completeness, namely question number 14 with a total score of 328 relating to hospital cleanliness; meaning that Kefamenanu Hospital customers are not satisfied in terms of the quality of the equipment available at the hospital in terms of the completeness and cleanliness of the hospital. The level of customer satisfaction achieved by the Kefamenanu Hospital reached a score of 5,329, thus the hospital's performance from the customer's perspective seen from the level of satisfaction can be said to be "Satisfied" which means good. This is because the score of 5,329 is in the "Satisfied" interval, namely 4.763-5,883 so that the performance can be said to be "Good".

Discussion

The customer perspective analysis shows the company's ability to achieve strategic goals in terms of customers and markets. The steps required in the customer perspective are to provide the services requested by the customer (Surya, 2014; Krylov, 2019). The basic core of measurement includes customer satisfaction and customer acquisition. These steps will explain to managers about who their customers are, how to maximize the profits derived from customers. The main goal is to create services that provide superior value to targeted customers (Kaplan & Norton, 2000). Customer perspective is the source of the revenue component of financial goals. This perspective defines and selects the customers and market segments in which the company decides to compete (Abdurrachman et al., 2022; Givan et al., 2021). Khalid et al. (2019) present the different ways to integrate sustainability within the BSC based on the organisation strategy. They highlight that companies can choose between different integration levels based on the strategy pursued and recognise that environmental performance measurement is mainly dependent on the organizational environmental strategy.
The results of Yasa & Suwendra’s (2012) previous study regarding performance measurement with the balanced scorecard concept at Parama Sidhi Singaraja General Hospital. Test results on internal business perspective, the hospital's performance is considered good because it is able to provide services to patients. From the perspective of internal business processes, home performance the hospital is said to be good because it is capable of developing the new service and can afford to continue reduce the number of complaints about the services provided as soon as possible. Fathoni & Kesuma’s (2011) study results regarding the effect of implementing the balanced scorecard approach on performance at the Rumah Sakit “ABC” shows that the implementation of the approach has a positive effect on performance with using four perspectives (i.e.: financial perspective, customer perspective, internal business perspective, and growth perspective) where there is an optimal increase in the performance of the "ABC" hospital from all variables from the four perspectives measured.

In line with the balanced scorecard concept and previous research, the performance of the Kefamenanu General Hospital looks quite good when viewed from the aspect of customer satisfaction which is supported by obtaining the predicate of plenary accreditation. This should be a driving force for hospitals to be able to improve better services in several aspects such as improving health facilities, handling patients and providing information (Anggraini & Nuraina, 2014; Harfikah & Abdullah, 2017). Good performance, especially in the form of satisfactory service for customers, or in this case that patients will certainly have a big impact on the prospects of the Kefamenanu Hospital as a hospital located in the border area. Of course, by improving the quality of the services, it can also become a referral hospital for patients/communities in the region, especially villages around the Timor Leste border. Different authors documented that an increasing number of organisations recognise the importance of sustainability dimensions, which should be integrated into strategies and management models, and the need for assessing performance along the economic, environmental and social dimensions through a systematic and balanced process (Silvestre & Fonseca, 2020; Givan et al., 2021; Khalid et al., 2019; Bharata et al., 2019).

Based on the balanced scorecard approach, the purpose of a business unit is not only expressed in a financial measure, but further elaborated into the measurement of how the business unit creates value for existing and future customers, and how the business unit must improve its internal capabilities including investments in people, systems, and procedures needed to obtain better performance in the future (Katarina et al., 2021; Putrayasa, 2011; Dodangh et al., 2010). Through the approach, it is expected that financial and nonfinancial performance measurements can be part of the information system for all employees and levels in the organization. Balanced scorecard has advantages that make today's strategic management system significantly different from strategic management systems in traditional management (Papulová et al., 2021; Sugiantono et al., 2021; Astawa et al., 2020).

CONCLUSION

Hospital performance measurement in terms of customer satisfaction shows good results. This perspective is also supported by the acquisition of accreditation scores by the assessment team which took place almost simultaneously at the time the research was carried out. The results of the assessment obtained by the Kefamenanu General Hospital are plenary, meaning that the services provided have increased from previous years.

Along with improving the services provided by the Kefamenanu Hospital, it is still necessary to continue to improve the quality of services to achieve better performance, for example by using a
patient registration system with a more modern method. Good performance, especially in the form of satisfactory service for customers, the patients will certainly have a big impact on the prospects of the Kefamenanu Hospital as a hospital located in the border area. Of course, by improving the quality of hospital services, it can also become a referral hospital for patients/communities in the region, especially villages around the Timor Leste border.

The limitations in this study are related to the sampling technique, in which the number of respondents did not reach 25 percent of the population. In future studies, it is recommended to use other sample collection techniques so that the number of samples used is larger and can be more representative of the population.

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