Strategy for Improving Public Services Based on Balanced Scorecard in the Department of Transportation of West Bandung District

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ABSTRAK

Penelitian ini bertujuan untuk menganalisis implementasi Balanced Scorecard di Dinas Perhubungan Kabupaten Bandung Barat sebagai alat strategis untuk mengukur dan mengelola kinerja organisasi di sektor publik. Dalam menghadapi tantangan untuk memastikan akuntabilitas dan kualitas layanan, penelitian ini menyoroti permasalahan inefisiensi kinerja pada layanan transportasi publik. Metode penelitian yang digunakan adalah kualitatif dengan pendekatan studi kasus, yang memanfaatkan data sekunder berupa laporan kinerja, dokumen kebijakan, dan survei kepuasan masyarakat. Melalui analisis empat perspektif utama balanced scorecard—keuangan, pelanggan, proses internal, serta pembelajaran dan pertumbuhan—kajian ini menunjukkan bahwa penerapan balanced scorecard dapat meningkatkan efisiensi dan efektivitas pelayanan publik. Dari sisi finansial, Dishub KBB dapat mengoptimalkan pengelolaan anggaran dan alokasi sumber daya untuk mendukung infrastruktur transportasi dan subsidi angkutan umum. Perspektif pelanggan menyoroti pentingnya mengukur kepuasan masyarakat terkait ketepatan waktu, keamanan, dan kualitas layanan. Efisiensi dalam proses internal memungkinkan identifikasi dan perbaikan hambatan operasional. Terakhir, pembelajaran dan pertumbuhan menunjukkan bahwa inovasi dan pengembangan sumber daya manusia merupakan kunci untuk menghadapi tantangan dan meningkatkan kualitas layanan. Penelitian ini memberikan kontribusi yang signifikan terhadap pengembangan model manajemen kinerja di sektor publik.

ABSTRACT

This study aims to analyze the implementation of Balanced Scorecard in the West Bandung Regency Transportation Agency as a strategic tool to measure and manage organizational performance in the public sector. Amid challenges in ensuring accountability and service quality, this research addresses the problem of performance inefficiency in public transportation services. The research method used is qualitative with a case study approach, which utilizes secondary data from performance reports, policy documents, and public satisfaction surveys. Through the analysis of four main perspectives of balanced scorecard —finance, customer, internal process, and learning and growth—this study shows that the implementation of balanced scorecard can improve the efficiency and effectiveness of public services. From a financial perspective, Dishub KBB can optimize budget management and resource allocation to support transportation infrastructure and public transportation subsidies. The customer perspective highlights the importance of measuring public satisfaction related to punctuality, safety, and service quality. Efficiency in internal processes allows for the identification and improvement of operational bottlenecks. Finally, learning and growth show that innovation and human resource development are key to facing challenges and improving service quality. This study makes a significant contribution to the development of performance management models in the public sector.

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INTRODUCTION

Public service is a crucial element in government that reflects the quality of effective and efficient governance. In the context of the West Bandung Regency Transportation Agency, the challenge of improving the quality of public services is increasingly pressing along with the increasing demands of the community for transparent, accountable, and responsive services. This is in line with the spirit of bureaucratic reform and decentralization that have been implemented in Indonesia since the implementation of Regional Autonomy. Decentralization allows for more local decision-making, which can result in more individualized and efficient public services, as officials and citizens at the local level better understand the unique needs and challenges in their communities (Elliott, 2023; Krisnadi & Arifin, 2023).

The West Bandung Regency Transportation Agency has a strategic responsibility in regulating transportation and traffic infrastructure. The quality of service provided by this agency not only impacts the safety and comfort of the community, but also the smooth access to transportation which is very important for community welfare. Research shows that good quality public services can increase public satisfaction and public trust in the government (Lanin & Hermanto, 2019; Amin et al., 2023). Therefore, it is important for the Transportation Agency to commit to high service quality standards, including reliability, fairness, and recovery in service (Rochmansjah, 2019). In addition, clear information delivery and accountable practices in public services are fundamental in meeting public demands for good governance.

Nevertheless, performance management in public institutions still faces challenges such as suboptimal officer performance, inefficient administrative systems, and poor resource utilization. These issues often result in service delays, limited accessibility, and public dissatisfaction (Endrian & Lanin, 2022; Salam, 2023). Moreover, while Indonesia has made significant progress in digital governance, the integration of technology in local public service institutions like transportation agencies is still uneven. This hinders consistent service improvements across regions (Pareek & Sole, 2022; Mosimanegape et al., 2020).

To address these challenges, the Balanced Scorecard (BSC) is used as the analytical framework in this study. The BSC offers a structured and strategic approach by integrating financial and non-financial performance indicators across four perspectives: financial, customer, internal process, and learning and growth (Kaplan & Norton, 1996). Unlike traditional performance evaluation models that focus solely on financial outcomes, the BSC allows for a more holistic assessment that aligns daily activities with strategic objectives—particularly important for public agencies whose goals go beyond profit (Muhammadiah, 2011; Rana et al., 2019). Alternative approaches, such as Total Quality Management (TQM) or Management by Objectives (MBO), tend to emphasize process improvement or goal setting in isolation, while BSC provides a balanced integration of both outcome and process perspectives. This makes BSC especially suitable for public service institutions seeking strategic alignment and measurable impact.

Although the BSC has been widely applied in various sectors, studies examining its implementation in local government agencies in Indonesia—especially in the transportation sector—remain limited. Previous research has largely focused on central government institutions or healthcare services, leaving a gap in understanding how BSC functions in subnational public service settings (Supriyanto, 2023; Endrian & Lanin, 2022; Spencer et al., 2017). This study aims to fill that gap by providing insights into the operational and strategic implications of BSC within a local transportation agency.

Based on this background, the research seeks to answer the following questions: (1) How is the Balanced Scorecard implemented in the West Bandung Regency Transportation Agency to

improve service quality? and (2) What are the main challenges and opportunities associated with the BSC implementation in the context of public sector performance management?

The importance of this research is also emphasized by the fact that public services, especially in the transportation sector, have a direct influence on community mobility and regional economic growth. West Bandung Regency, with its rapid development and increasing transportation demands, requires responsive and integrated transportation services. Without an effective performance management system, the agency may struggle to provide timely, accessible, and high-quality services that support social and economic activities. Therefore, optimizing agency performance through the BSC approach is not only strategic but also urgent. In this study, BSC is applied as a framework for identifying service gaps, improving internal processes, and supporting sustainable performance improvement. This research is expected to offer concrete policy recommendations and contribute to the development of more adaptive and strategic performance management models in the public sector, which are not only effective and efficient but also aligned with the evolving needs of the community.

Literature Review

Balanced Scorecard in Public Service Management

The Balanced Scorecard (BSC), introduced by Kaplan and Norton in the early 1990s, is a comprehensive performance management framework designed to measure an organization's performance from multiple perspectives: financial, customer, internal processes, and learning and growth (Balaji et al., 2021; Voelker et al., 2001). In the context of public organizations, such as the West Bandung Regency Transportation Agency, BSC enables a more structured approach to translating strategic goals into measurable actions, providing valuable insights into areas that require improvement to enhance service quality (Wisniewski & Ólafsson, 2004).

BSC's holistic approach facilitates better alignment between strategic objectives and day-to-day operations, fostering a results-oriented organizational culture. By integrating financial and non-financial measures, public organizations can improve transparency, accountability, and efficiency in service delivery (Northcott & Ma'amora Taulapapa, 2012; Edward et al., 2011). or example, research has demonstrated that BSC implementation in public sectors, including healthcare, leads to improved service quality and customer satisfaction, indicating its applicability to other sectors such as public transportation (Weiss & Downar, 2013; Mutale et al., 2013).

The four key perspectives of BSC offer distinct yet interconnected insights that can drive comprehensive improvements within public service organizations. The customer perspective focuses on measuring public satisfaction, which provides direct feedback to refine service delivery (Clausen et al., 2020). A clear understanding of customer needs and expectations has been shown to enhance the effectiveness of public services (Torugsa & Arundel, 2016; Utkin, 2021). The internal process perspective supports the identification of inefficiencies in organizational workflows, enabling the implementation of process improvements that can enhance service delivery (Mättö, 2019; Pūlmanis, 2021). Additionally, the **learning and growth perspective** emphasizes the development of employee skills and knowledge, fostering a culture of continuous improvement and innovation (Orazi et al., 2013). Studies indicate that investing in employee competency development directly correlates with improved organizational performance and service quality (Gasik, 2018).

Thus, the BSC framework not only provides a structured approach to enhancing public services but also helps build public trust by improving the overall transparency and responsiveness of government agencies. For the West Bandung Regency Transportation Agency, adopting BSC could significantly contribute to improving organizational performance, aligning with the principles of good governance, and fostering sustainable public service improvements.

RESEARCH METHODS

This study uses a qualitative method with a case study approach to explore the measurement and management of organizational performance at the West Bandung Regency Transportation Agency (Dishub KBB) based on four Balanced Scorecard (BSC) perspectives, namely finance, customers, internal processes, and learning and growth. This method was chosen to gain an indepth understanding of how the implementation of performance strategies is carried out at Dishub KBB in supporting optimal public services.

1. Research Approach

This research is descriptive explorative. This approach is used to explore information related to the implementation of the Balanced Scorecard in the context of managing the performance of public organizations. By exploring the four main perspectives of the BSC, this study will identify the challenges, opportunities, and results obtained from the implementation of performance measurement strategies at the KBB Transportation Agency. The case study was chosen to directly observe practices in the field and analyze official documents related to organizational performance.

2. Data Sources

This study will use two main types of data sources, namely primary data and secondary data:

- a. Primary Data: Obtained through semi-structured interviews with selected informants. The criteria for choosing informants include (1) direct involvement in strategic planning and performance management, (2) functional roles related to each BSC perspective, and (3) minimum tenure of one year at Dishub KBB to ensure contextual understanding. Informants include budget officers (finance), frontline officers and service evaluators (customers), operations and licensing managers (internal processes), and HR development and IT staff (learning and growth).
- b. Secondary Data: Includes official documents such as annual performance reports, budget documents, internal memos, SOPs, government transportation regulations, and citizen satisfaction survey results. These documents complement interview data and provide context for the implementation of the BSC strategy.

3. Data Collection Techniques

The study employs two main data collection techniques:

a. Semi-Structured Interviews: Interviews were conducted with individuals responsible for each BSC perspective: (1) Financial Perspective: Budget officers and financial managers provided data on budget allocation, infrastructure development funding, and subsidy programs; (2) Customer Perspective: Service evaluators and public relations staff shared insights on citizen satisfaction, derived from regular surveys and complaint management records; (3) Internal Process Perspective: Operational supervisors and traffic management officers provided information on workflow

- efficiency, licensing procedures, and infrastructure maintenance; (4) *Learning and Growth Perspective*: HR staff and IT coordinators were interviewed about employee training, innovation programs, and digital adoption.
- b. Documentation Study: Analysis of official documents that have been published or available at related agencies, such as annual performance reports, financial reports, SOPs, and internal evaluation documents. This documentation study aims to identify documented performance management patterns and compare them with actual practices found through interviews.

4. Data Analysis Techniques

The collected data will be analyzed using thematic analysis, where researchers will group the data into main themes related to the four Balanced Scorecard perspectives. The stages of analysis carried out include:

- a. Data Reduction: Data from interviews and documentation studies will be simplified and organized based on main categories, namely finance, customers, internal processes, and learning and growth.
- b. Coding: Each relevant data will be coded based on the themes that emerge from the four BSC perspectives. For example, codes for budget use in supporting transportation infrastructure or employee competency development.
- c. Theme Identification: After coding, researchers will identify the main themes that are relevant to performance measurement and management at the KBB Transportation Agency. These themes will include challenges, strategies, and successes in implementing the BSC.
- d. Interpretation: Organized data will be interpreted to explain the relationship between organizational performance elements and how they contribute to improving public services.

5. Data Validity Test

To ensure the validity and reliability of the data, this study will use several validity test techniques:

- Data Triangulation: Data obtained from interviews will be compared with data from official documents (secondary data) to ensure consistency of information and reduce bias.
- b. Member Check: The results of the interviews will be reconfirmed to the informants to ensure that the researcher's interpretation is in accordance with the intent conveyed by the informant.
- c. Audit Trail: The process of data collection and analysis will be documented in detail so that each step of the research can be traced and accounted for.

RESULTS AND DISCUSSIONS

This discussion will focus on the analysis of the implementation of the Balanced Scorecard (BSC) in measuring and managing performance at the West Bandung Regency Transportation Agency (Dishub KBB) based on four main perspectives: finance, customers, internal processes, and learning and growth. Each perspective will be discussed based on data that has been collected through interviews and document analysis to assess the extent to which the performance of Dishub KBB is in line with the organization's strategic objectives in providing quality public services.

1. Financial Perspective

From a financial perspective, one of the main objectives of the West Bandung Regency Transportation Agency (Dishub KBB) is to optimize budget utilization in supporting public services related to transportation infrastructure and public transportation subsidies. As a public sector organization, Dishub KBB operates with a budget allocated from the APBD (Regional Revenue and Expenditure Budget), so that the efficiency and effectiveness of budget utilization are very important in achieving the organization's strategic goals. In this context, the financial perspective in the Balanced Scorecard (BSC) measures how well Dishub KBB manages the funds it has to create value for the community.

Based on secondary data analysis and in-depth interviews with several related officials, it was found that although Dishub KBB has allocated a significant budget for the development of transportation infrastructure and subsidies, there are several challenges that still need to be overcome, especially in terms of budget management efficiency and the quality of public transportation subsidy management.

Challenge 1: Budget Management Efficiency

One of the main indicators in the financial perspective is budget management efficiency. This efficiency includes how the available budget is used to achieve maximum results in providing transportation services. In this case, Dishub KBB has an important role in the development and maintenance of transportation infrastructure, such as road repairs, construction of traffic facilities, and procurement of public transportation fleets. In addition, Dishub KBB is also involved in providing subsidies for public transportation, which aims to improve transportation accessibility for the community. However, from the findings of the study, there are still several challenges in terms of budget management that lead to increased project costs and delays in project implementation. Some transportation infrastructure projects, for example, have been delayed due to a lack of careful planning and effective supervision. This indicates that project management at the KBB Transportation Department needs to be improved, especially in terms of risk management and resource allocation.

In the literature on public sector financial management, one of the relevant concepts is value for money (VFM), which emphasizes the use of the budget efficiently, effectively, and economically. Value for money in this context means that every rupiah spent by the KBB Transportation Agency must provide optimal results in the form of quality public services. According to (Bovio et al., 2017), the concept of New Public Management (NPM) emphasizes the importance of efficiency and accountability in financial management in the public sector. The KBB Transportation Agency must ensure that every budget allocated for infrastructure development and subsidy programs is optimized to maximize benefits for the community, without any waste.

In addition, other studies show that in government budget management, challenges that often arise are bureaucratic constraints and fragmentation of authority, which can slow down the project implementation process (Harkin, 2018). Therefore, increased coordination between departments and stakeholders in the KBB Transportation Department is urgently needed to ensure that infrastructure projects run according to plan and that the allocated budget can be used efficiently.

Challenge 2: Management of Public Transportation Subsidies

In addition to the budget for infrastructure, public transportation subsidies are also an important component in a financial perspective. This subsidy aims to provide affordable public transportation services for the community, especially for low-income groups. However, the results of interviews with the public and employees of the KBB Transportation Department revealed that the distribution of subsidies has not been completely evenly distributed and there are still shortcomings in its implementation.

Some of the challenges in managing public transportation subsidies include:

- a. Inaccuracy of Targets: The subsidies distributed have not fully reached the groups of people who need it most. This can be caused by the lack of accurate data related to public transportation users and suboptimal distribution mechanisms. Public transportation subsidies should be designed to support the most economically vulnerable communities, such as low-income workers, students, and the elderly. However, in its implementation, this subsidy has not been on target, which has led to budget leakage.
- b. Lack of Transparency: Public transportation subsidies require stricter oversight to ensure that allocated funds are used for their intended purpose. In subsidy management, transparency is very important so that the public and related parties can see how the budget is used. According to a study by (Bovens, 2006), transparency in public sector budget management is a key factor in building public trust and ensuring accountability.

In addition, monitoring the use of subsidies also needs to be strengthened. Based on the theory of public financial management, monitoring and evaluation are important stages in the budget cycle to ensure that the funds allocated really have a positive impact on the community (Allen & Tommasi, 2001). The KBB Transportation Department needs to increase monitoring through more comprehensive internal audits and involve external stakeholders to ensure that subsidies are managed properly.

Recommendations for Improving Financial Perspective

Based on the findings of the research, there are several strategic steps that the KBB Transportation Department can take to improve financial performance, especially in terms of budget efficiency and management of public transportation subsidies:

- 1. *Improved Project Management*: The KBB Transportation Department must improve its project management capabilities by focusing on more careful planning, stricter supervision, and better risk management. Thus, delays and cost overruns can be minimized.
- 2. Strengthening the Monitoring and Evaluation System: The KBB Transportation Department needs to develop a more transparent and comprehensive monitoring and evaluation system to measure the success of the use of the budget, especially in transportation infrastructure projects. Internal audits conducted regularly can ensure that the use of the budget is in accordance with the original objectives.
- 3. Optimization of Public Transportation Subsidies: The KBB Transportation Department must review the distribution mechanism of public transportation subsidies to be more targeted. In addition, there needs to be increased transparency in the management of subsidies so that the public can know how subsidies are allocated and used. The application of information technology, such as a digital monitoring system for subsidy distribution, can help improve accuracy and efficiency in subsidy management.

Strengthening Monitoring System Monitoring and Evaluation Optimization of System Subsidies Public Transportation Improved Project Subsidies Management Budget Management Efficiency Recommendations Challenges

Figure 1. Challenges and Recommendation for Financial Perspectives of BSC in Dishub KBB

Source: Author Processed

Financial Perspective Conclusion

From a financial perspective, the KBB Transportation Department has made various efforts to improve public services through significant budget allocations in the development of transportation infrastructure and public transportation subsidies. However, the efficiency of budget management is still a challenge that requires more attention, especially in terms of project management and subsidy distribution. By improving the system of supervision, transparency, and accountability in the use of the budget, the KBB Transportation Department can ensure that the managed budget provides optimal benefits to the community.

2. Customer Perspective

The customer's perspective in the implementation of the Balanced Scorecard (BSC) at the West Bandung Regency Transportation Office (Dishub KBB) is very important because the performance of a government organization is ultimately measured by the extent to which it has succeeded in meeting the needs and expectations of the community. This perspective measures the quality of services provided by the KBB Transportation Agency, including punctuality, transportation safety, and service quality that is directly felt by users. In the context of the KBB Transportation Department, people who use public transportation services, vehicle licensing services, and traffic management services are the main customers that must be considered.

This study shows that although the KBB Transportation Department has made various efforts to improve public services, there are still some areas that need improvement to be more effective in meeting customer expectations and satisfaction. This customer perspective is measured by key indicators such as service timeliness, transportation safety, and the overall quality of public transportation services.

Challenge 1: Timeliness of Service

Punctuality in public transportation services is one of the key factors that affect customer satisfaction. People want public transportation services that are not only affordable, but also reliable in terms of schedules and punctuality. Based on the results of interviews with several public transportation users in West Bandung Regency, it was found that the punctuality of public transportation is often a source of complaints. Many public transportation is behind schedule, causing uncertainty for people who rely on this mode of transportation, especially workers and students who need timely services for daily activities.

Punctuality issues can be affected by several factors, including heavy traffic conditions, inadequate fleet maintenance, and a lack of an effective scheduling system on the part of transportation operators. The availability of infrastructure such as representative bus stops and terminals also affects this timeliness. One of the literature related to transportation management states that reliability of service is a key factor in building public trust in public transportation (Grönroos, 2007). If the KBB Transportation Department can improve the reliability of transportation services, especially in terms of punctuality, then the level of customer satisfaction will increase significantly.

To overcome this problem, the KBB Transportation Department needs to:

- a. Integrate technology-based transportation information systems, such as real-time tracking for public transportation that can be accessed by the public. This system will help public transport users monitor the arrival of transportation more accurately, so they can adjust their travel plans.
- b. Better scheduling: The KBB Transportation Department needs to evaluate existing public transportation schedules, as well as ensure that transportation operators follow these schedules with discipline. Supervision of operator compliance in executing schedules should be tightened, and penalties may be imposed on operators who frequently violate schedules.

Challenge 2: Transportation Safety

In addition to punctuality, transportation safety is another aspect that is very crucial in increasing customer satisfaction. People want to feel safe when using public transportation services and when interacting with traffic as a whole. Based on secondary data and accident reports analyzed, although the KBB Transportation Department has made efforts to improve safety, such as the installation of traffic signs and improper vehicle control, the accident rate in some areas is still quite high.

Transportation safety involves a variety of elements, including:

- a. Vehicle condition: Public transportation that is not roadworthy is often the cause of accidents. In this case, the KBB Transportation Department must be more decisive in conducting routine supervision of the feasibility of public vehicles. Every public vehicle must go through a feasibility test (KIR) process periodically, and the Transportation Department must ensure that vehicles that do not meet the requirements are not allowed to operate.
- b. Driver discipline: In addition to the condition of the vehicle, driver behavior is also a determining factor in transportation safety. Drivers who do not obey traffic rules or drive recklessly can endanger passengers and other road users. Therefore, the KBB Transportation Department needs to improve the training and certification program for public transportation drivers, as well as ensure that only drivers with a good track record are allowed to drive public transportation.

According to (NTSB, 2015), continuous training and monitoring of driver behavior is an important step in improving transportation safety. The safety of public transportation users is not only related to drivers, but also adequate supporting infrastructure (NTSB, 2015). The KBB

Transportation Department can improve safety infrastructure, such as increasing traffic signs at accident-prone points, as well as repairing roads that have the potential to cause accidents.

Challenge 3: Overall Quality of Public Transportation Services

Overall service quality is also an important indicator in the customer's perspective. This quality covers various aspects, ranging from the availability of an adequate fleet, comfort on the way, to service from transportation officers. The community wants comfortable and safe services, as well as clean and well-maintained public transportation facilities.

However, based on the results of the interview, it was found that in several areas in West Bandung Regency, the quality of public transportation services is still far from public expectations. The limited fleet leads to a low frequency of travel, so people have to wait longer at bus stops or terminals. Fleet comfort is also an issue, with many public transportation lacking adequate amenities, such as comfortable seating or air conditioning, especially for long-distance travel. This makes the experience of using public transportation unpleasant, which ultimately reduces customer satisfaction levels.

According to the SERVQUAL theory (Thi Hai Yen et al., 2020), service quality is measured based on five dimensions: tangibles, reliability, responsiveness, assurance, and empathy. In the context of the KBB Transportation Agency, these dimensions can be applied to evaluate the quality of public transportation services. For example, tangibles refer to the physical condition of the fleet and supporting facilities such as bus stops and terminals, while reliability is concerned with the operator's ability to provide consistent and timely transportation services. The KBB Transportation Department must improve services in all these dimensions to increase overall customer satisfaction.

To improve the quality of services, the KBB Transportation Department can take the following steps:

- a. Addition and rejuvenation of public transportation fleets: The KBB Transportation Department must ensure that the public transportation fleet is updated regularly to maintain the comfort and safety of passengers. The addition of a new fleet is also needed to overcome existing limitations, especially in areas that are still underserved.
- b. Improvement of supporting facilities: Facilities such as bus stops, terminals, and special lines for public transportation must be improved so that people feel more comfortable when using public transportation services. The construction of more representative bus stops with seating facilities, schedule information boards, and protection from the weather should be a priority.

Recommendations for Improved Customer Perspective

From the perspective of customers, the KBB Transportation Department needs to make several strategic efforts to increase community satisfaction, including:

- 1. Development of Transportation Information Systems: Developing technology-based applications that allow people to track the whereabouts of public transportation in realtime. This will not only improve punctuality, but also provide a sense of security and comfort for users.
- 2. Improving Safety Education Programs: Increasing public and driver awareness of safety through more intensive education campaigns, especially in areas with high accident rates.

 Fleet and Facilities Rejuvenation: The addition of a more modern and comfortable public transportation fleet as well as the improvement of bus stop and terminal facilities will greatly affect the public's perception of the quality of the KBB Transportation Department's services.

Timeliness of Service Addressing delays and improving service punctuality. 1 **Transportation Safety** Enhancing safety measures for passenger well-being. 2 **Overall Quality** Elevating service standards **Development of** Information System Creating a system for real-time transportation updates Improving Safety **Education Program** 6 Implementing comprehensive safety education initiatives. Fleet and Facilities Reiuvenation Modernizing vehicles and upgrading transportation facilities.

Figure 2.Enhancing Public Transportation Services in Dishub KBB Based on BSC

Source: Author Processed

Customer Perspective Conclusion

From the perspective of customers, the KBB Transportation Department has made efforts to provide affordable and safe transportation services. However, there are still some areas that need to be improved, especially in terms of timeliness, safety, and overall quality of transportation services. With improvements in the transportation management system, fleet rejuvenation, and facility improvements, the KBB Transportation Department can better meet the expectations and satisfaction of the community as the main customer.

3. Internal Process Perspective

The perspective of internal processes in the implementation of the Balanced Scorecard (BSC) at the West Bandung Regency Transportation Office (Dishub KBB) focuses on the efficiency and effectiveness of operational processes that support transportation services. In the context of public organizations, the efficiency of internal processes is essential to ensure that all resources are used optimally in order to meet public service objectives. Internal processes include various aspects, such as traffic management, vehicle licensing, and maintenance of transportation infrastructure.

Challenge 1: Traffic Management

Traffic management is one of the main tasks of the KBB Transportation Department. The effectiveness of traffic management is directly related to the level of congestion and the safety of road users. Based on data obtained from the annual report of the KBB Transportation Department and statistical analysis of congestion, it was found that several points in West Bandung Regency experienced significant congestion, especially during peak hours. This shows the need for better strategies in traffic management.

To improve efficiency in traffic management, several strategic steps can be taken:

- a. Implementation of Technology-Based Traffic Management Systems: The use of information technology to monitor and manage traffic flows in real-time can improve management efficiency. These systems can include the use of sensors and cameras to detect traffic density and automatically regulate traffic lights. According to research by (Tantaoui et al., 2024), an integrated traffic management system can significantly reduce congestion and improve traffic flow.
- b. Infrastructure Improvements: The addition of vehicular lanes, the repair of damaged roads, and the construction of bridges or underpasses at critical points can reduce congestion. Research shows that good infrastructure can contribute to reduced travel time and increased user satisfaction (Mehta et al., 2006).

Challenge 2: Vehicle Licensing Process

The vehicle licensing process at the KBB Transportation Department is also one of the areas that requires special attention. This process includes various stages, from registering a new vehicle, testing the vehicle's feasibility, to issuing permits. However, based on feedback from the public, many complain about the long and complicated process, which is often an obstacle for those who want to register or renew vehicle permits.

Some of the steps that can be taken to improve the vehicle licensing process include:

- a. Digitization of the Licensing Process: Adopting a technology-based system to simplify the registration and renewal process of permits. By implementing online services, the public can access licensing services anytime and anywhere without having to come to the KBB Transportation Office. This will not only reduce queues in the office, but also increase community satisfaction. According to research by (Dutta & Mia, 2011), the digitization of public services can increase transparency and efficiency in service management (Dutta & Mia, 2011).
- b. Improving Service Quality: Employee training to improve skills in serving the community is also important. Friendly and professional service can improve the community experience when taking care of vehicle licensing. Customer satisfaction can increase when employees understand the procedures and are able to explain well to the community.

Challenge 3: Maintenance of Transportation Infrastructure

Maintenance of transportation infrastructure is also an important part of internal processes that must be managed properly. Inadequate infrastructure can lead to safety risks, such as accidents due to potholes or improper bridges. Based on the maintenance data collected, it was found that many transportation infrastructures in West Bandung Regency need immediate attention.

To improve infrastructure maintenance, the following steps can be taken:

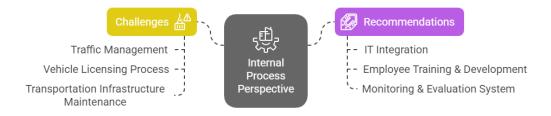
- a. *Maintenance Planning and Scheduling*: The KBB Transportation Department needs to have a clear and well-scheduled maintenance plan for each type of infrastructure. By using the analysis data to prioritize which ones need faster attention, it can reduce maintenance costs and improve the safety of road users (Omrany et al., 2023).
- b. *Use of Technology in Maintenance*: The implementation of technology such as automatic monitoring of road conditions can help in maintenance planning. By utilizing sensors and drones for periodic inspections, the KBB Transportation Department can be more efficient in identifying and handling infrastructure problems before they become more serious.

Recommendations for Internal Process Improvement

From the above analysis, the KBB Transportation Department needs to implement several strategic recommendations to improve internal processes:

- 1. *Information Technology Integration*: Implementing a technology-based management system for traffic management and vehicle licensing. This will not only improve efficiency but also provide analytical data that can be used for future planning.
- 2. Employee Training and Development: Provide training to employees to improve their skills and abilities in providing services. Focusing on improving public services can have a positive impact on the image of the KBB Transportation Department in the eyes of the public.
- 3. Monitoring and Evaluation: Establish a monitoring and evaluation system for existing internal processes. It aims to assess process performance and provide feedback for continuous improvement.

Figure 3.
Results on Internal Process Perspectives Analysis of BSC in Dishub KBB



Source: Author Processed

Conclusion of Internal Process Perspective

From the perspective of internal processes, the KBB Transportation Department has significant challenges that need to be overcome to improve efficiency and effectiveness in transportation services. Traffic management, vehicle licensing processes, and infrastructure maintenance are all important aspects that affect the overall performance of the organization. With the application of technology, improving service quality, and better planning, the KBB Transportation Department can improve its internal processes to meet the expectations of the community and achieve public service goals optimally.

4. Learning and Growth Perspectives

The perspective of learning and growth within the framework of the Balanced Scorecard (BSC) at the West Bandung Regency Transportation Office (Dishub KBB) emphasizes the importance of human resource development and innovation in achieving organizational goals. In the context of the KBB Transportation Department, learning and growth include aspects of organizational adaptation to change, innovation in public services, development of employee potential, and the application of new technology. Improvements in these areas are essential for creating responsive and innovative organizations, which in turn can improve overall performance.

Challenge 1: Organizational Adaptation and Innovation

Organizational adaptation refers to the ability of the KBB Transportation Department to adapt to changes in the external environment, including technological developments, community needs, and government policies. Innovation in public services is the key to improving the quality of services provided. According to research by (Hsu & Lamb, 2020), organizations that are able to learn and adapt well tend to have better performance and are able to meet customer expectations more effectively.

To encourage innovation, the KBB Transportation Department can take several strategic steps:

- a. Encourage a Culture of Innovation: Build a culture of innovation within the organization that supports new ideas from employees. For example, creating a forum or forum for employees to propose and discuss innovative ideas that can improve public services. Research by (Damanpour & Schneider, 2006) shows that organizations that encourage creativity and innovation from the bottom are better able to adapt to change and improve performance.
- b. Collaboration with External Parties: Collaborate with universities, research institutes, or non-governmental organizations to develop innovative solutions in public service. This collaboration can open access to new knowledge and technology that can be implemented at the KBB Transportation Department.

Challenge 2: Employee Potential Development

Human resource development (HR) at the KBB Transportation Department is very important in creating an effective and efficient organization. Employees who are trained and have good skills will be able to provide better services to the community. Employee capacity building also contributes to job satisfaction and motivation, which in turn will have a positive impact on organizational performance.

Some of the steps that can be taken to improve employee development include:

- a. Ongoing Training: Provides training and development programs for employees to improve their technical and managerial skills. This training can cover topics such as transportation management, information technology, and public services. According to research by (Hengky, 2013), proper training can improve employee competence and overall organizational performance
- b. Providing Opportunities to Grow: Providing opportunities for employees to be involved in new projects or more challenging positions. This will not only improve their skills, but also help increase employee motivation and loyalty to the organization.

Challenge 3: Application of New Technology

In today's digital era, the application of new technology is very important for the KBB Transportation Department to increase efficiency and effectiveness in public services. Technology can help in a variety of aspects, from traffic management to vehicle licensing. The right use of information technology can improve the accuracy, speed, and transparency of services.

Steps that can be taken include:

- a. *Management Information System Implementation*: Develop an integrated information system to monitor and evaluate operational performance. The system can provide real-time data necessary for better decision-making. According to (Pratolo et al., 2023), a good information system can improve operational efficiency and overall organizational performance.
- b. Use of Technology for Public Services: Adopt mobile applications or online portals that allow the public to access services, provide feedback, and obtain transportation-related information more easily. This will not only increase community satisfaction, but also provide valuable data for the KBB Transportation Department for sustainable improvement.

Challenge 4: Management Capacity Building

Managerial capacity at the KBB Transportation Department is also a key factor in improving organizational performance. Managers who are competent and have a clear vision will be better able to direct the team to achieve organizational goals. Therefore, increasing management capacity should be a major concern.

Some ways to increase management capacity include:

- a. *Managerial Training*: Provides managerial training programs for employees in leadership positions. This training can include leadership skills, project management, and decision-making. According to (Goleman, 2009), emotional and social skills are essential for a leader to manage a team well and achieve the desired results.
- b. *Performance Evaluation*: Conduct periodic performance evaluations for managers and employees. This evaluation not only aims to assess performance, but also to provide constructive feedback for the self-development of employees and managers.

Recommendations for Increased Learning and Growth

From the above analysis, the KBB Transportation Department can implement several strategic recommendations to improve learning and growth:

- 1. Building a Learning Culture: Encouraging employees to continue learning and innovating. This can be achieved through incentive programs for new ideas and successful initiatives.
- 2. Collaboration with Educational Institutions: Collaborating with educational institutions in developing training and research programs related to transportation that can provide direct benefits to the KBB Transportation Agency.
- 3. *Implementing Digital Technology*: Adopting digital technology solutions that support operational efficiency and facilitate access to services for the public.

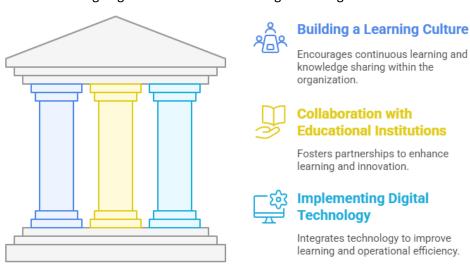


Figure 4. Enhancing Organizational Growth through Learning and Innovation

Source: Author Processed

Conclusion of Learning and Growth Perspective

The perspective of learning and growth at the KBB Transportation Department is very important to create a responsive and innovative organization. By focusing on adaptation, human resource development, the application of new technologies, and managerial capacity building, the KBB Transportation Department can improve public service performance and meet community expectations. This initiative will not only help the KBB Transportation Department in achieving its strategic goals, but also in building a reputation as a quality public service provider.

This research on the implementation of the Balanced Scorecard (BSC) at the West Bandung Regency Transportation Office (Dishub KBB) has several important implications, both for managerial practices in the public sector and for the development of performance management theory. Here are some of the implications that can be drawn from this study:

1. Development of Performance Management Models for the Public Sector

This research contributes to the development of performance management models that can be applied in the public sector, especially in the context of local government. The implementation of BSC provides an integrated framework for measuring organizational performance, which can be used by other institutions to improve the efficiency and effectiveness of public services.

2. Improving the Quality of Public Services

By using BSC, the KBB Transportation Department can identify areas that need improvement, so that it can better respond to the needs of the community. These implications are important for increasing public satisfaction, which in turn can increase public trust in the government and public services.

3. Improving Organizational Adaptability

The focus on learning and growth encourages the KBB Transportation Department to be more adaptive to the changes and challenges faced. This implication shows the importance of human resource development and innovation in increasing organizational capacity which supports existing studies (Murliasari et al., 2023; Suma, 2024), so that it can be more responsive to the dynamics that occur in the surrounding environment.

4. Application of Technology in Public Services

This research underscores the importance of the application of information technology in the management of internal processes and public services. This implication encourages the KBB Transportation Department to continue to innovate and adopt digital solutions that can improve service efficiency and effectiveness, as well as provide useful data for better decision-making.

5. Further Research and Development

This research opens up space for further studies on the application of BSC in the public sector in different regions and contexts. Further research can explore the factors that influence the successful implementation of BSC, as well as their impact on the overall performance of the organization.

6. Increased Inter-Agency Collaboration

The results of the study show that collaboration between the KBB Transportation Department and external parties, such as educational institutions and research institutions, can improve innovation and service quality. This implication emphasizes the importance of cooperation in capacity building and solutions to challenges faced in public services.

Overall, the implications of this study provide guidance for the KBB Transportation Department and other government agencies to continue to improve the quality of public services through a systematic and measurable approach. The implementation of BSC is expected to create a more responsive, innovative, and high-performance organization in meeting the needs of the community.

CONCLUSIONS

The implementation of the Balanced Scorecard (BSC) at the West Bandung Regency Transportation Office (Dishub KBB) demonstrates significant potential in enhancing organizational performance through a comprehensive approach that integrates the four main perspectives: finance, customers, internal processes, and learning and growth. Each perspective offers critical insights into how the department can achieve better alignment with public service goals and improve the overall quality of services provided to the community.

From a financial perspective, the focus on efficient budget management and the optimization of public transportation subsidies has enabled the department to better allocate resources. This approach not only supports infrastructure development but also ensures that public transportation services remain financially sustainable. However, challenges in managing public transportation subsidies still persist, which requires more targeted efforts in project management and strengthening monitoring and evaluation systems.

Regarding customer satisfaction, the department has identified key challenges such as service timeliness, transportation safety, and the overall quality of public services. The use of the BSC has helped pinpoint areas for improvement, particularly in developing a comprehensive transportation information system, enhancing safety education programs, and rejuvenating the fleet and facilities. These initiatives are critical to meeting the expectations of the public and enhancing trust in the department's services.

In terms of internal processes, optimizing traffic management, streamlining the vehicle licensing

process, and improving transportation infrastructure maintenance are essential for operational efficiency. The integration of IT systems and a more robust monitoring and evaluation framework will be key to addressing these challenges and ensuring the sustainability of the department's operations. Employee training and development will also play a crucial role in enhancing operational effectiveness.

Finally, the emphasis on learning and growth within the organization encourages continuous innovation and the development of employee potential. Fostering a culture of learning and collaborating with educational institutions are essential strategies for adapting to the evolving needs of the community. The department's commitment to embracing new technologies further strengthens its capacity to meet future demands.

Overall, the Balanced Scorecard not only facilitates performance measurement but also serves as a vital strategic tool for planning and decision-making within the KBB Transportation Office. By maintaining a strong focus on continuous improvement across all perspectives, the department is well-positioned to meet the growing demands of the community and enhance the quality of public services in West Bandung Regency.

However, it is important to note that this study is limited by its focus on a single case study, which may not fully represent the diverse challenges faced by other public organizations in different regions. Future research could explore the application of the BSC in other public sectors or regions, and examine the long-term impact of BSC implementation on organizational performance. Additionally, future studies might consider a deeper analysis of the barriers to technology adoption within government agencies and how they affect the broader implementation of performance management frameworks.

REFERENCES

- Allen, R., & Daniel, T. (2021). Managing Public Expenditure: A Reference Book for Transition Countries. Paris: OECD. In Oecd (p. 500).
- Amin, M. A., Thaha, R., & Irwan, A. L. (2023). Quality of Government Innovation Public Safety Center (PSC) 199 in Soppeng Regency. Journal La Bisecoman, 4(4), 148–155. https://doi.org/10.37899/journallabisecoman.v4i4.998
- Balaji, M., Dinesh, S. N., Manoj Kumar, P., & Hari Ram, K. (2021). Balanced Scorecard approach in deducing supply chain performance. Materials Today: Proceedings, 47, 5217–5222. https://doi.org/10.1016/j.matpr.2021.05.541
- Boven, M. (2007). Analysing and Assessing Accountability: A Conceptual Framework. In European Law Journal (Vol. 13, Issue 4, pp. 447–468). European Governance Papers.
- Bovio, G., Marchetti, M., Tonarelli, L., Salis, M., Vacchiano, G., Lovreglio, R., Elia, M., Fiorucci, P., & Ascoli, D. (2017). Forest fires are changing: let's change the fire management strategy. Forest@ - Rivista Di Selvicoltura Ed Ecologia Forestale, 14(4), 202–205. https://doi.org/10.3832/efor2537-014
- Clausen, T. H., Demircioglu, M. A., & Alsos, G. A. (2020). Intensity of innovation in public sector organizations: The role of push and pull factors. In Public Administration (Vol. 98, Issue 1). Public Administration. https://doi.org/10.1111/padm.12617
- Damanpour, F., & Schneider, M. (2006). Phases of the adoption of innovation in organizations: Effects of environment, organization and top managers. British Journal of Management, 17(3), 215–236. https://doi.org/10.1111/j.1467-8551.2006.00498.x
- Dessler, G. (2020). Fundamentals of Human Resource Management. Human Resource Management, November, 133–154. https://doi.org/0470169680
- Didik Supriyanto. (2023). Quality of Public Services Through Social Media. International Journal

- of Social Science, 2(5), 2055-2062. https://doi.org/10.53625/ijss.v2i5.4810
- Edward, A., Kumar, B., Kakar, F., Salehi, A. S., Burnham, G., & Peters, D. H. (2011). Configuring balanced scorecards for measuring health system performance: Evidence from 5 years' evaluation in Afghanistan. In *PLoS Medicine* (Vol. 8, Issue 7). https://doi.org/10.1371/journal.pmed.1001066
- Elliott, F. (2023). The Advantages of Decentralized Government from the Viewpoint of Public Service Innovation. *Journal of Management and Administration Provision*, *2*(3), 65–72. https://doi.org/10.55885/jmap.v2i3.172
- Endrian, O., & Lanin, D. (2022). The Effect of Work Discipline, Professionalism, and Integrity of the State Civil Apparatus on the Quality of Public Services. In *Jurnal Ad'ministrare* (Vol. 9, Issue 1, p. 275). https://doi.org/10.26858/ja.v9i1.36544
- Gasik, S. (2018). A framework for analysing differences between public-sector and other-sector projects. In *Zarządzanie Publiczne* (Issue 3(45)/2018). Zarządzanie Publiczne. https://doi.org/10.15678/zp.2018.45.3.05
- Harkin, D. (2018). Community safety partnerships: The limits and possibilities of "policing with the community." In *Crime Prevention and Community Safety* (Vol. 20, Issue 2, pp. 125–136). https://doi.org/10.1057/s41300-018-0042-y
- Hsu, S. W., & Lamb, P. (2020). Still in search of learning organization?: Towards a radical account of The Fifth Discipline: The Art and Practice of the Learning Organization. *Learning Organization*, 27(1), 31–41. https://doi.org/10.1108/TLO-09-2019-0142
- Kardong-Edgren, S., Cason, C. L., Brennan, A. M. W., Reifsnider, E., Hummel, F., Mancini, M., & Griffin, C. (2010). Cultural competency: Graduating BSN nursing students. *Nursing Education Perspectives*, 31(5), 278–285.
- Krisnadi, A., & Arifin, T. (2023). Does Public Attention Impact Local Government Performance?

 An Empirical Study in Indonesia. *International Journal of Academic Research in Accounting, Finance and Management Sciences, 13*(4). https://doi.org/10.6007/ijarafms/v13-i4/19907
- Lanin, D., & Hermanto, N. (2019). The effect of service quality toward public satisfaction and public trust on local government in Indonesia. *International Journal of Social Economics*, 46(3), 377–392. https://doi.org/10.1108/IJSE-04-2017-0151
- Lewis, B. D. (2010). Indonesian decentralization: Accountability deferred. *International Journal of Public Administration*, 33(12), 648–657. https://doi.org/10.1080/01900692.2010.514442
- Mahsyar, A. (2011). Masalah Pelayanan Publik di Indonesia Dalam Perspektif Administrasi Publik. Otoritas: Jurnal Ilmu Pemerintahan, 1(2). https://doi.org/10.26618/ojip.v1i2.22
- Mättö, T. (2019). Innovation through implementation of a quality improvement method: A finnish public-sector case. *TQM Journal*, *31*(6), 987–1002. https://doi.org/10.1108/TQM-12-2018-0193
- Mehta, V., Walker, W., Marchau, V., & Agusdinata, B. (2006). Innovative policies for implementing intelligent speed adaptation on urban roads. WIT Transactions on the Built Environment, 89, 703–712. https://doi.org/10.2495/UT060681
- Mosimanegape, P., Jaiyeoba, O., Iwu, C. G., & Chekula-Mahama, C. (2020). Examining the relationship between service quality and customer satisfaction in the public service. The case of Botswana. *WSEAS Transactions on Business and Economics*, 17, 579–593. https://doi.org/10.37394/23207.2020.17.57
- Muhammadiah, M. (2011). Reformasi Pelayanan Publik Sebagai Strategi Mewujudkan Good Governance. *Otoritas : Jurnal Ilmu Pemerintahan, 1*(2).

- https://doi.org/10.26618/ojip.v1i2.27
- Murliasari, R., Rony, Z. T., Djafar, T., Peristiwo, H., Saefudin, A., & Islah, K. (2023). Dilemma of Human Resources in Public Services: An Analysis of Performance among Honorary Pelayanan Publik, Employees. Jurnal Manajemen 7(2), 444-456. https://doi.org/10.24198/jmpp.v7i2.49801
- Mutale, W., Godfrey-Fausset, P., Mwanamwenge, M. T., Kasese, N., Chintu, N., Balabanova, D., Spicer, N., & Ayles, H. (2013). Measuring Health System Strengthening: Application of the Balanced Scorecard Approach to Rank the Baseline Performance of Three Rural Districts in Zambia. In PLoS ONE (Vol. 8, Issue 3). https://doi.org/10.1371/journal.pone.0058650
- Noon, J. (1981). Marketing Management & Products Liability. European Journal of Marketing, 15(2), 3-31. https://doi.org/10.1108/EUM0000000004874
- Northcott, D., & Ma'amora Taulapapa, T. (2012). Using the balanced scorecard to manage performance in public sector organizations: Issues and challenges. International Journal Sector Management, *25*(3), 166-191. https://doi.org/10.1108/09513551211224234
- NTSB. (2015). The Use of Forward Collision Avoidance Systems to Prevent and Mitigate Rear-End Crashes. Special Investigation Report. Special Investigation Report, 22312, 605-6000. https://www.ntsb.gov/safety/safety-studies/Documents/SIR1501.pdf
- Omrany, H., Al-Obaidi, K. M., Husain, A., & Ghaffarianhoseini, A. (2023). Digital Twins in the Construction Industry: A Comprehensive Review of Current Implementations, Enabling Technologies, and Future Directions. In Sustainability (Switzerland) (Vol. 15, Issue 14). https://doi.org/10.3390/su151410908
- Orazi, D. C., Turrini, A., & Valotti, G. (2013). Public sector leadership: New perspectives for research and practice. International Review of Administrative Sciences, 79(3), 486-504. https://doi.org/10.1177/0020852313489945
- Pareek, U., & Sole, N. A. (2022). Quality of Public Services in the Era of Guaranteed Public Service Public Indian Journal of Administration, 68(2), 160-173. https://doi.org/10.1177/00195561211072575
- Pratolo, S., Spama, D. T., & Sofyani, H. (2023). The Mediating Role of Performance Measurement System in the Relationship between Information Technology Capabilities and University Performance. In Jurnal Dinamika Akuntansi dan Bisnis (Vol. 10, Issue 1, pp. 115–132). https://doi.org/10.24815/jdab.v10i1.29068
- Pülmanis, E. (2021). Public Sector Project Management Efficiency Problems, Case of Latvia. In Regional Formation and Development Studies (Vol. 11, Issue 3, pp. 177-188). https://doi.org/10.15181/rfds.v11i3.620
- Rana, F., Ali, A., Riaz, W., & Irfan, A. (2019). Impact of Accountability on Public Service Delivery efficiency. Journal of Public Value and Administration Insights, 2(1), 7-9. https://doi.org/10.31580/jpvai.v2i1.480
- Rochmansjah, H. (2019). Impact Regional Autonomy in Improving Public Services Quality. International Journal of Science and Society, 1(2), 173-180. https://doi.org/10.54783/ijsoc.v1i2.137
- Russell, E. B. (2003). Emotional Intelligence Why it Can Matter More Than IQ by Daniel Goleman. In Journal of Cutaneous Pathology (Vol. 30, Issue 2, pp. https://www.academia.edu/37329006/Emotional_Intelligence_Why_it_Can_Matter_M ore_Than_IQ_by_Daniel_Goleman
- Salam, R. (2023). Improving Public Services in Realizing Good Governance in Indonesia. In Endless: International Journal of Future Studies (Vol. 6, Issue 2). INTERNATIONAL JOURNAL OF FUTURE STUDIES. https://doi.org/10.54783/endlessjournal.v6i2.192
- Suma, D. (2024). The Effect of Work Culture and Management Quality on Employee Performance: The Mediating Role of Work Commitment at Lampung Province Industry

- and Trade Department. *Jurnal Manajemen Pelayanan Publik, 8*(1), 215–226. https://doi.org/10.24198/jmpp.v8i1.53677
- Tantaoui, M., Moukhafi, M., & Chana, I. (2024). Big data vehicle density management in vehicular ad-hoc network. *Indonesian Journal of Electrical Engineering and Computer Science*, 33(1), 314–323. https://doi.org/10.11591/ijeecs.v33.i1.pp314-323
- Thi Hai Yen, N., Van Dat, T., Ngoc Ha, T., Hue Ngan, T., Dang Tu Nguyen, L., & Pham Luyen, D. (2020). Outpatient Satisfaction with Health Insurance Drug Dispensing Quality at the Pharmacy of Ho Chi Minh City University of Medicine and Pharmacy Hospital. *VNU Journal of Science: Medical and Pharmaceutical Sciences*, *36*(3). https://doi.org/10.25073/2588-1132/vnumps.4223
- Torugsa, N. A., & Arundel, A. (2016). The Nature and Incidence of Workgroup Innovation in the Australian Public Sector: Evidence from the Australian 2011 State of the Service Survey. *Australian Journal of Public Administration*, 75(2), 202–221. https://doi.org/10.1111/1467-8500.12095
- Utkin, A. I. (2021). Simulation of balanced scorecard for forecasting cybernetic cost collaboration of engineering enterprises. *IOP Conference Series: Materials Science and Engineering*, 1155(1), 012047. https://doi.org/10.1088/1757-899x/1155/1/012047
- Voelker, K. E., Rakich, J. S., & French, G. R. (2001). The balanced scorecard in healthcare organizations: A performance measurement and strategic planning methodology. *Hospital Topics*, 79(3), 13–24. https://doi.org/10.1080/00185860109597908
- Weiss, A., & Downar, J. (2013). Ontario hospitals are not using palliative care performance indicators in their balanced scorecards. *Journal of Pain and Symptom Management*, 46(2). https://doi.org/10.1016/j.jpainsymman.2013.03.006
- Wisniewski, M., & Ólafsson, S. (2004). Developing balanced scorecards in local authorities: A comparison of experience. *International Journal of Productivity and Performance Management*, *53*(7), 602–610. https://doi.org/10.1108/17410400410561222