International Journal of Education, Vocational and Social Science
https://e-journal.citakonsulfindo.or.id/index.php/IJEVSS
E-ISSN : 2963 4954
IJEVSS

Key Performance Indicators In Public Sector Organizations: A Systematic Literature Review

Anggia Marshanda Putri
Master of Accounting Science Program, Sriwijaya University, Indonesia
Luk Luk Fuadah
Department of Accounting, Sriwijaya University, Indonesia

Corresponding Author: anggia.anggia15@gmail.com

Abstract

Public sector performance measurement requires appropriate indicators to ensure the achievement of organizational goals, the effectiveness of resource use, and the quality of service to the community. This study aims to analyze the framework and role of Key Performance Indicators (KPIs), identify challenges in their implementation, and examine strategies to improve the effectiveness of KPIs in public sector organizations. The research uses the Systematic Literature Review (SLR) method with a descriptive-qualitative approach to 40 scientific articles obtained through Google Scholar, ScienceDirect, MDPI, Taylor & Francis, Wiley, and other sources. The articles analyzed include Scopus Q1–Q3 indexed international journals and SINTA 2–3 accredited national journals. The results of the study show that KPIs play a role in measuring the strategic, operational, service, and accountability performance of the organization. However, its implementation faces challenges in the form of indicator mismatches, limited resources, data quality, and weak supervision. The effectiveness of KPIs can be improved through adjusting indicators, strengthening the competence of apparatus, integrating information technology, and continuous evaluation. The research concludes that the implementation of KPIs needs to be carried out in an integrated, adaptive, and oriented manner towards improving the quality of public services.

Keywords: Key Performance Indicators, public sector, performance management, performance measurement, Systematic Literature Review.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License

International Journal of Education, Vocational and Social Science
https://e-journal.citakonsulfindo.or.id/index.php/IJEVSS
E-ISSN : 2963 4954
IJEVSS

INTRODUCTION

Performance measurement is an important part of the management of public sector organizations to assess the achievement of organizational goals. Public organizations are not only required to manage budgets and run programs, but also provide quality services and benefits to the community. Therefore, performance measurement needs to pay attention to the aspects of effectiveness, efficiency, productivity, and accountability. One of the instruments used is (Khadijah et al., 2025) Key Performance Indicators (KPIs) to measure the achievement of targets based on indicators and targets that have been set. (Ridwan et al., 2025)

KPIs help public sector organizations connect strategic objectives with the implementation of operational activities. Through the right indicators, organizations can monitor the achievement of targets and identify aspects that need improvement. However, its implementation still faces obstacles, such as the selection of inappropriate indicators, unrealistic targets, limited data, and the use of measurement results that are not optimal. This condition shows that the effectiveness of KPIs is not only determined by the preparation of indicators, but also by their implementation and evaluation. (Suryani et al., 2023) (Kholik, 2022)

A number of studies have discussed the implementation of KPIs in managing public sector performance. Kholik (2022) found that strategic planning and human resource performance have a positive effect on the achievement of local government KPIs. Suryani et al. (2023) examined the relationship between budget reallocation during the pandemic and the achievement of the Bengkulu City Government's performance indicators. Meanwhile, Supriyadi et al. (2024) evaluated the suitability of local government performance indicators based on the SMART principle and organizational resource support.

Other research discusses the implementation of KPIs from various perspectives. examining employee performance measurement through performance indicators and work behavior, while examining KPIs in the follow-up evaluation of BPK audit recommendations. discussing KPIs in supporting Agile Governance, while examining the evaluation of local government performance through a public sector accounting approach. The research shows that KPIs play a role in performance evaluation, program monitoring, and improving organizational accountability. Firman & Lestari (2025) Kurniati & Abbas (2023) Ridwan et al., (2025) Khadijah et al., (2025)

Nevertheless, the implementation of KPIs needs to be understood not only in terms of achieving targets, but also from the measurement framework and the conditions that affect its

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License

effectiveness. The KPI framework includes performance dimensions, types of indicators, and their suitability with the organization's strategic goals. Meanwhile, the success of its implementation is influenced by the quality of human resources, leadership commitment, data availability, technology support, and coordination between units. These two aspects are interrelated in forming an effective performance measurement system. (Rayendra et al., 2025) (Aditya et al., 2024)

Based on previous research, there is still room for study to integrate the discussion of the KPI framework with the challenges and strategies for its implementation in public sector organizations. Previous research tends to focus on certain aspects, such as KPI achievement, budget management, employee evaluation, or organizational governance. Meanwhile, the relationship between the preparation of indicators, their use in performance management, as well as implementation obstacles and their completion strategies still need to be studied more thoroughly. This is the basis for the need for a systematic study of the implementation of KPIs in the public sector.

This research provides novelty through the merger of two main focuses, namely the KPI framework and its role in public sector performance management as well as the challenges and strategies for effective KPI implementation. The first focus includes the performance dimension, the type of indicators, the KPI formulation framework, and its role in evaluation and decision-making. The second focus discusses implementation barriers, limitations of measurement systems, and new strategies and approaches to improve the effectiveness of KPI implementation. The merger of these two focuses is expected to provide a more comprehensive picture of the implementation of KPIs in public sector organizations.

Based on this description, this study aims to analyze the application of Key Performance Indicators in public sector organizations through the Systematic Literature Review (SLR) approach. In particular, this study identifies the KPI framework and its role in performance management, as well as analyzes the challenges and strategies for their implementation. The results of the research are expected to provide a theoretical contribution through the synthesis of the development of KPI studies in the public sector as well as practical contributions as consideration materials in developing a more relevant, effective, and accountable performance measurement system.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License

International Journal of Education, Vocational and Social Science
https://e-journal.citakonsulfindo.or.id/index.php/IJEVSS
E-ISSN : 2963 4954
IJEVSS

LITERATURE REVIEW

Public Sector Performance Management

Public sector performance management is the process of managing and assessing the performance of government organizations in achieving goals and providing services to the community. Performance measurement in the public sector is not only oriented towards achieving targets and using the budget, but also pays attention to program effectiveness, resource efficiency, service quality, and accountability in government administration. Behn (2003) explained that performance measurement has various objectives, including to evaluate, control, budget, motivate, improve, and improve organizational performance. This shows that performance measurement has an important role in supporting the management of public organizations. (Kurniati & Abbas, 2023) Benamraoui et al., (2024)

The implementation of public sector performance management requires indicators that are able to describe organizational achievements in a measurable manner and in accordance with the goals that have been set. These indicators can include aspects of (Sala & Subriadi, 2023) input, process, output, and outcome of a program or activity. The use of these various dimensions helps organizations obtain a more comprehensive picture of program implementation and the resulting benefits. Therefore, public sector performance management requires a measurement system that not only focuses on administrative achievements, but is also able to support program evaluation, decision-making, and improvement of the quality of public services. (Gebhardt et al., 2023) (Saleh & Widiastuti, 2025)

Key Performance Indicators (KPIs)

Key Performance Indicators (KPIs) are the main indicators used to measure the level of success of an organization in achieving goals and objectives that have been set. KPIs help translate strategic objectives into more specific performance measures so that organizational achievements can be monitored and evaluated systematically. The preparation of KPIs needs to pay attention to the relevance of indicators to organizational goals, clarity of size, availability of data, and achievable targets. One of the principles that can be used in the preparation of indicators is SMART, namely (Kurniati & Abbas, 2023) (Firman & Lestari, 2025) Specific, Measurable, Achievable, Relevant, and Time-bound. These principles help ensure that indicators have clear, measurable, realistic, on-demand goals, and have a deadline for achievement. (Ali & Rahmawati, 2024)

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License

In public sector organizations, KPIs can be used to measure program achievements, work unit performance, and individual performance in accordance with organizational goals. The results of KPI measurement can be the basis for evaluating the achievement of targets, identifying problems, and determining improvement and decision-making steps. However, its implementation can still face various challenges, such as indicator mismatches, limited human resources, inadequate data quality, technology support, and leadership commitment. Therefore, the effectiveness of KPIs needs to be supported by periodic evaluations, improving human resource competencies, strengthening information systems, and adjusting indicators to changing organizational needs. Thus, KPIs not only function as a measurement tool, but also as an instrument to support the improvement of the performance and accountability of public sector organizations. (Benamraoui et al., 2024; Sala & Subriadi, 2023; van de Ven et al., 2023) (Dasallas et al., 2024) (Khadijah et al., 2025)

RESEARCH METHODS

This study uses the Systematic Literature Review (SLR) method with a descriptive-qualitative approach to identify and analyze previous research on the implementation of Key Performance Indicators (KPIs) in public sector organizations. The literature was obtained from 40 scientific articles searched through Google Scholar, ScienceDirect, MDPI, Taylor & Francis, Wiley, and other scientific publication sources. The selection of articles was based on the relevance of the topic, especially the KPI framework, public sector performance measurement and management, implementation challenges, and strategies to increase the effectiveness of KPIs.

The articles used consisted of Scopus Q1, Q2, and Q3 indexed international journals as well as SINTA 2 and SINTA 3 accredited national journals. International journal rankings were verified through SCImago Journal & Country Rank (SJR), while national journal accreditation was checked through the official SINTA website. The distribution of articles by publication category is presented in Table 1:

Table 1. Category 40 Articles used

Categories	Quantity
Q1	10
Q2	6
Q3	13

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License

Categories	Quantity
S2	2
S3	9
Total	**40 articles**

Data analysis is carried out through several stages, namely literature identification, article selection based on topic suitability, information grouping, and synthesis of research results. Each article is analyzed by paying attention to the identity of the publication, the purpose of the research, the method used, and findings related to the implementation of KPIs.

RESULTS AND DISCUSSION

KPI Framework and Its Role in Public Sector Performance Management

Key Performance Indicators (KPIs) are instruments to measure the achievement of organizational strategic goals through indicators that have been set. In the public sector, KPIs are used to evaluate program success, resource use, and service quality. Explains that government performance measurement is carried out at the individual, organizational unit, and institutional levels. Meanwhile, it shows that the (Hussain et al., 2022) El Araby & Ayaad (2020) Saleh & Widiastuti (2025) Balanced Scorecard (BSC) approach can translate the ministry's strategic goals into organizational and employee indicators. The two studies show that KPIs need to be arranged in stages so that the performance of each level of the organization is in line with the strategic goals that have been set.

The public sector KPI framework includes the dimensions of effectiveness, efficiency, service quality, accountability, and sustainability. explains the (Suryani et al., 2023) Benamraoui et al., 2024) Value for Money approach through the concept of economy, efficiency, and effectiveness (3E), while Khadijah et al., (2025) emphasizes the evaluation of program achievements, activity outputs, and resource efficiency through accounting information and LKjIP. It also identifies financial management, infrastructure, adaptability, public services, and stakeholder satisfaction as dimensions of regional head performance. The findings show that government performance measurement is not sufficiently oriented towards budget absorption, but also needs to assess program results and their benefits for the community. Ali & Rahmawati, (2024)

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License

In organizations that provide direct services, KPIs need to reflect service quality and operational effectiveness. identify 25 public hospital KPIs that include patient services, safety, finance, human resources, and operations. add indicators of waiting time, patient satisfaction, death rate, infection, bed occupancy, and service costs. Meanwhile, group hospital supply chain indicators into financial, managerial, and clinical dimensions. At the employee level, assess work outcomes and behaviors, while El Araby & Ayaad (2019) and emphasize personal characteristics, competence, ethics, empathy, and the ability to understand community needs. This shows that KPIs need to combine quantitative and qualitative indicators so that the assessment includes work results as well as the quality of service and behavior of the apparatus. Nabovati et al., (2023) Talebpour et al., (2025) Fallahnezhad et al., (2024) Firman & Lestari (2025) Wardiyanto et al., (2025) (Khadijah et al., 2025)

In addition to services, public sector KPIs also include aspects of governance, transparency, and sustainability. shows that BSC and Dragomir et al., (2025) Monitoring and Evaluation can integrate sustainable development goals in public administration evaluations. emphasizing indicators of document openness, community participation, environmental impact monitoring, and follow-up recommendations in the - Therivel & Gonzalez (2024) Strategic Environmental Assessment. It also emphasizes outcome-oriented indicators Andries & Tewu (2023) that are equipped with targets, deadlines, and threshold values. In the environmental sector, it uses indicators of transportation accessibility, air quality, emissions, and congestion, while covering water cycle, water disaster management, water supply, and treatment. This diversity shows that KPI indicators must be adjusted to the characteristics of government affairs as well as the social and environmental goals to be achieved. Soriano-Gonzalez et al., (2023) Dasallas et al., (2024)

The preparation of KPIs needs to be carried out in a hierarchical manner by connecting strategic goals, work unit targets, and individual performance. explained that the evaluation of local government performance includes data collection, periodic monitoring, comparison of targets and realization, and analysis of the causes of non-achievement of targets. found that strategic planning and human resource performance have a positive and significant effect on the achievement of the KPIs of the Blitar City Government. The alignment is in line with the grouping of strategic, tactical, and operational performance by as well as the relationship between organizational targets, Supriyadi et al., (2024) Kholik (2022) van de Ven et al., (2023) Critical Success Factors (CSF), and individual KPIs according to . show the application of BSC through

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License

academic, administrative, and financial indicators in higher education governance, while and Hussain et al., (2022) discuss the grouping of indicators based on the level of importance and measurement function. Although some research comes from non-governmental contexts, the concept is relevant to show the importance of the linkage of indicators to organizational goals and priorities. (Aditya et al., 2024) Rusdi et al., (2023) Tarek et al., (2022)

KPIs also link performance achievements with budget management and government accountability. explains that Abbasov (2025) Performance-Based Budgeting (PBB) links resource allocation to measurable results, operational efficiency, and transparency. Suryani et al., (2023) show that budget changes and reallocations during the COVID-19 pandemic affect local government financial indicators, while Kurniati et al., (2023) emphasize the use of KPIs to measure the follow-up of recommendations from BPK audit results. These measurements require information system support, as shown through indicators of system usage, information quality, security, timeliness, convenience, and technical support in the HOT-Fit model. emphasizing the role of Management Information Systems in planning to development evaluation. identify the frequency of security incidents, the speed of handling, and the effectiveness of control, while demonstrating a positive relationship between Sala & Subriadi (2023) Basri et al., (2023) Magnusson et al., (2025) Amirova et al., (2025) digital Human Resource Management and the quality of public services. These findings show that KPIs will be more effective when supported by accurate information and an integrated management system.

Based on these various studies, an effective KPI framework needs to have clear, relevant, measurable, and accountable indicators. The preparation is carried out by setting strategic goals, identifying Critical Success Factors, and determining indicators along with targets and evaluation periods. The measurement results are then used to compare targets and realization, identify gaps, and determine improvement actions. Thus, the effectiveness of KPIs does not only depend on the selection of indicators, but also on alignment with organizational goals and the use of evaluation results in decision-making. The integration of financial, operational, service, human resources, accountability, and sustainability dimensions makes KPIs an important instrument to improve organizational performance while ensuring that public services provide benefits to society.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License

International Journal of Education, Vocational and Social Science
https://e-journal.citakonsulfindo.or.id/index.php/IJEVSS
E-ISSN : 2963 4954
IJEVSS

Challenges and Strategies for Effective KPI Implementation in Public Sector Organizations

The implementation of KPIs in public sector organizations still faces challenges in determining indicators that are in accordance with the characteristics and capacity of the organization. El Araby & Ayaad (2019) explained that differences in functions between agencies cause uniform indicators to not necessarily be able to describe overall performance. Supriyadi et al., (2024) also found obstacles to fulfilling SMART criteria, especially the Assignable aspect, which is related to the suitability of targets and the availability of resources. This shows that indicators need to be compiled based on the actual tasks, functions, and capabilities of each agency, while still paying attention to clear measurement standards so that evaluations can be carried out consistently.

The next challenge relates to the gap between formal indicators and the working conditions of the apparatus. Wardiyanto et al., (2024) found that performance measurement is still oriented towards tasks that are easy to calculate, so the aspects of empathy and ethics have not been fully measured. Firman & Lestari (2023) emphasizes the balance between results and work behavior, while Kurniati et al., (2023) found obstacles in the Measurable and Achievable aspects. This condition shows that reliance on quantitative targets has the potential to encourage gaming behavior and ignore the quality of work. Therefore, KPIs need to combine quantitative and qualitative indicators with clear operational definitions and involve employees in setting targets.

The quality and availability of data also affect the reliability of KPI measurements. Soriano-Gonzalez et al., (2023) found that differences in data sources and collection periods make it difficult to compare indicators between regions. Dasallas et al., (2024) emphasized indicator standardization and data quality control, while identifying the absence of standardized KPI methodologies in the management of wastewater treatment plants. Basri et al., (2023) also highlighted the importance of integrating government information systems. The findings show that data inconsistencies can reduce the objectivity of evaluations. Thus, indicator standardization, data verification, and information system integration are necessary to produce accurate and comparable measurements. Rodrigues et al., (2025)

Limited human resources and budgets also determine the success of the implementation of KPIs. Abbasov et al., (2025) explain that performance-based budgeting requires the support of technology, data, leadership, and results-oriented organizational culture. Kholik (2022) attributes the achievement of KPIs to strategic planning and the quality of human resources, while Suryani

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License

et al., (2023) show that policy changes and budget reallocations can affect the achievement of financial indicators. Supriyadi et al., (2024) also emphasize the identification of Critical Success Factors in achieving targets. This shows that the quality of indicators alone is not enough without organizational readiness. Therefore, leadership commitment, improving apparatus competencies, and providing a budget that is in accordance with performance targets are needed.

Aspects of transparency, supervision, and accountability are also challenges in the implementation of KPIs. Saleh & Widiastuti (2025) found that ministry performance evaluations through SAKIP still face dependence on internal reports, limited standardization, and administrative assessments. Kurniati et al., (2023) show that the follow-up measurement of BPK audit recommendations can strengthen financial accountability. Meanwhile, Benamraoui et al., (2024) also highlight the importance of a balance of financial and non-financial indicators as well as stakeholder involvement. These findings show that the success of KPIs is not enough to assess the completeness of reports, but also from the disclosure of information and accountable results. Therefore, data verification, external evaluation, and audit follow-up need to be part of the performance measurement system. Ecim et al., (2025)

The complexity of services and differences in community needs also demand adjustments to KPI indicators. Identifying digital gaps, literacy limitations, data security, and infrastructure as obstacles to digital services. Sala & Subriadi (2023) emphasize the human, organizational, and technological aspects in the evaluation of the population administration system. In health services, Nabovati et al., (2023) and , point out the importance of indicators of patient safety, user satisfaction, efficiency, and standardization of services. Amirova et al., (2025) also emphasized budget support and employee involvement in the implementation of digital Human Resource Management. This shows that the measurement of public service performance needs to be oriented towards the benefits received by the community, not just the number of services or the use of technology. Sahur & Amiruddin (2023) Cossart et al., (2024)

The use of technology and monitoring systems is a strategy to increase the effectiveness of KPI implementation. Basri et al., (2023) emphasize the role of information systems in planning, budgeting, monitoring, and evaluating development. Magnusson et al., (2025) point out the importance of information security indicators, such as incident frequency and handling speed. Meanwhile, Ridwan et al., (2025) integrate KPIs with the Agile Governance approach through SMART principles and performance gap evaluation. The findings show that digitalization needs to

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License

be directed not only at record-keeping, but also at monitoring and decision-making. Thus, an integrated information system can help organizations detect problems and respond to target achievement faster.

In addition to technology, the implementation of KPIs requires periodic evaluation and balance of indicators. emphasizing monitoring of asset condition to determine maintenance needs, while demonstrating the potential Matos et al., (2023) Marinagi et al., (2023) of the Internet of Things, Big Data Analytics, Artificial Intelligence, and Cloud Computing in improving process monitoring. also found that some organizations do not yet have formal measurement systems at the PMO and project levels. Meanwhile, Fallahnezhad et al., (2024) and Talebpour et al., (2025) emphasize the integration of financial, managerial, and clinical indicators. Rodrigues et al., (2025), Therivel & Gonzalez (2024), and Dragomir et al., (2025) also point out the importance of technical, social, environmental, and sustainable development aspects. This shows that KPIs need to measure processes, results, and impacts in a balanced manner so that performance orientation is not limited to efficiency, but also service quality and sustainability. Ntshwene et al., (2022)

Based on the overall findings, the effectiveness of the implementation of KPIs in the public sector is determined by the suitability of indicators, the readiness of resources, data quality, leadership, and stakeholder engagement. Research outside the public sector also offers adaptable approaches, such as the integration of KPIs with Lean Management to improve efficiency, the grouping of indicators based on the level of importance as well as quantitative and qualitative measures (Tarek et al., 2022; Hussain et al., 2022), as well as the integration of environmental, social, and governance aspects. also demonstrate the use of KPIs to monitor timeliness and compliance with procedures. Although they come from different organizational contexts, they can be referenced with adjustments to the characteristics of the public sector. Thus, the implementation of KPIs requires a performance management system that is integrated, adaptive, and oriented towards improving the quality of services and accountability to the community. (Alalawin et al., 2022) (Gebhardt et al., 2023) Rayendra et al., (2025)

CONCLUSION

Based on the results of the study, it can be concluded that Key Performance Indicators (KPIs) have an important role in public sector performance management, especially as an instrument to measure the achievement of strategic goals, the effectiveness of budget use,

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License

service quality, and organizational accountability. Effective implementation of KPIs requires indicators that are relevant to agency characteristics, measurable, and include financial and non-financial aspects, both at the organizational and individual levels. However, its implementation still faces various obstacles, such as limited resources, data quality and integration, target mismatches, and weak supervision and evaluation. Therefore, public sector organizations need to strengthen leadership commitment, improve the competence of apparatus, develop integrated information systems, and carry out periodic evaluations involving stakeholders.

REFERENCES

Abbasov, R. (2025). The Effectiveness of Performance-Based Budgeting in the Public Sector: An Empirical Analysis and Policy Implications. iBusiness, 17(01), 56–76. https://doi.org/10.4236/ib.2025.171003

Aditya, M., Sri, S., & Marisi, P. (2024). The Influence of Key Performance Index on Employee Motivation and Performance. MASMAN : Master of Management, 2(1), 147–155. https://doi.org/10.59603/masman.v2i1.317

Alalawin, A., Qamar, A. M., AlAlaween, W. H., Bentahar, Y., Al-Halaybeh, T., Al-Jundi, S., & Tanash, M. (2022). Aligning key performance indicators with lean management in the service sector: A case study for a Jordanian telecommunication company. Cogent Engineering, 9(1). https://doi.org/10.1080/23311916.2022.2124940

Ali, C., & Rahmawati, D. E. (2024). Acting Performance Evaluation Governor of Aceh in 2022 Based on Key Performance Indicators (KPIs) : Key Performance Indicators (KPIs), Acting Governor of Aceh: Achmad Marzuki, Strategic Policy, Strategic Program. Journal of Government Studies, 43–74. https://doi.org/10.18196/jsp.v15i1.350

Amirova, A., Iskendirova, S., Daueshova, A., Zhanseitov, A., & Abylasimov, M. (2025). The Impact of Digital HRM Implementation on Public Sector Performance: A Quantitative Analysis of Service Delivery Efficiency. ECONOMICS, 13(3), 303–318. https://doi.org/10.2478/eoik-2025-0067

Andries, B. I., & Tewu, M. L. D. (2023). Key Performance Indicator (KPI) of Waste Management in North Minahasa Regency by the Environment Agency. IMWI Repository Horizon, 6(4), 1282–1296. https://doi.org/10.52851/cakrawala.v6i4.462

Basri, M. R. N., Zainal, V. R., & Hakim, A. (2023). The Role of Management Information Systems on the Effectiveness of Employee Performance and Economic Growth (Qualitative Study

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License

on Pekalongan City Government). Widya Balina, 8(2), 781–791. https://doi.org/10.53958/wb.v8i2.342

Benamraoui, A., Chatzivgeri, E., Jory, S. R., & Ajay, R. (2024). VfM audit and the UK public sector: A critical review of the VfM reports. Financial Accountability & Management, 40(2), 127–153. https://doi.org/10.1111/faam.12338

Cossart, A. R., Canning, M. L., Yong, F. R., & Freeman, C. R. (2024). Benchmarking hospital clinical pharmacy practice using standardised key performance indicators (KPIs). Journal of Pharmaceutical Policy and Practice, 17(1). https://doi.org/10.1080/20523211.2024.2431181

Dasallas, L., Lee, J., Jang, S., & Jang, S. (2024). Development and Application of Technical Key Performance Indicators (KPIs) for Smart Water Cities (SWCs) Global Standards and Certification Schemes. Water, 16(5), 741. https://doi.org/10.3390/w16050741

Dragomir, L., Croitur, I. M., Ignat, N. D., & Chivu, M. (2025). Reflecting the alignment of key administrative performance indicators with the UN's sustainable development goals in the public sector in the specialized literature. International Conference of Management and Industrial Engineering (ICMIE 2025). Agility and Readiness for Sustainable Business Continuity, 546–554. https://doi.org/10.56177/12icmie2025.171

Ecim, D., Maroun, W., & Ferreira, C. (2025). Aligning Key Performance Indicators With Integrated Thinking Principles: Insights From Academic Literature and South African Organisations' Extra-Financial Reports. Corporate Social Responsibility and Environmental Management, 32(3), 4270–4294. https://doi.org/10.1002/csr.3176

El Araby, M. A., & Ayaad, N. el D. S. (2020). The dilemma of institutional performance assessment in governmental sector. Journal of Humanities and Applied Social Sciences, 2(2), 115–139. https://doi.org/10.1108/JHASS-08-2019-0026

Fallahnezhad, M., Langarizadeh, M., & Vahabzadeh, A. (2024). Key performance indicators of hospital supply chain: a systematic review. BMC Health Services Research, 24(1), 1610. https://doi.org/10.1186/s12913-024-11954-5

Firman, F., & Lestari, T. (2025). Performance Measurement of Administrative Employees Based on Key Performance Indicators at the Directorate of Airworthiness and Aircraft

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License

Operations. Journal of Economic Management and Accounting, 2(1), 98–103. https://doi.org/10.63921/jmaeka.v2i1.217

Gebhardt, M., Thun, T. W., Seefloth, M., & Zülch, H. (2023). Managing sustainability—Does the integration of environmental, social and governance key performance indicators in the internal management systems contribute to companies' environmental, social and governance performance? Business Strategy and the Environment, 32(4), 2175–2192. https://doi.org/10.1002/bse.3242

Hussain, S., Hasmori, M. F., Abas, N. H., Balasbaneh, A. T., & Khan, M. W. (2022). Key Performance Indicators for Project Success in Saudi Arabian Construction Industry. Research Square, 1(1), 1–15. https://doi.org/10.21203/rs.3.rs-2329589/v1

Khadijah, K., Ferdila, F., Maizar, M., & Syafitri, A. (2025). Performance Evaluation of Batam City Government: A Public Sector Accounting Approach. Scientific Journal of Accusi, 7(2), 395–403. https://doi.org/10.36985/33yg9845

Kholik, B. A. (2022). The Influence of Strategic Planning and Human Resources Performance with a Focus on the Blitar Keren Program on the Achievement of IKU in the Blitar City Regional Government. REVITALIZATION, 11(2), 244. https://doi.org/10.32503/revitalisasi.v11i2.3267

Kurniati, S., & Abbas, Y. (2023). Evaluation of the Completion of Follow-up Recommendations of Bpk Audit Results as Key Performance INDICATOR. Owner, 7(4), 3461–3471. https://doi.org/10.33395/owner.v7i4.1632

Magnusson, L., Iqbal, S., Elm, P., & Dalipi, F. (2025). Information security governance in the public sector: investigations, approaches, measures, and trends. International Journal of Information Security, 24(4), 177. https://doi.org/10.1007/s10207-025-01097-x

Marinagi, C., Reklitis, P., Trivellas, P., & Sakas, D. (2023). The Impact of Industry 4.0 Technologies on Key Performance Indicators for a Resilient Supply Chain 4.0. Sustainability, 15(6), 5185. https://doi.org/10.3390/su15065185

Matos, J., Fernandes, S., Tran, M., Nguyen, Q., Baron, E., & Dang, S. (2023). Developing a Comprehensive Quality Control Framework for Roadway Bridge Management: A Case Study Approach Using Key Performance Indicators. Applied Sciences, 13(13), 7985. https://doi.org/10.3390/app13137985

Nabovati, E., Farrahi, R., Sadeqi Jabali, M., Khajouei, R., & Abbasi, R. (2023). Identifying and prioritizing the key performance indicators for hospital management dashboard at a

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License

national level: Viewpoint of hospital managers. Health Informatics Journal, 29(4). https://doi.org/10.1177/14604582231221139

Ntshwene, K., Ssegawa, J. K., & Rwelamila, P. D. (2022). Key Performance Indicators (KPIs) for measuring PMOs Services in selected Organisations in Botswana. Procedia Computer Science, 196, 964–972. https://doi.org/10.1016/j.procs.2021.12.098

Rayendra, A., Indriyani, I., Masturoh, H., & Anggraeni, F. E. (2025). The Application of Key Performance Indicators (KPI) in the Handling of Original Forwarding Document Returns at PT Silkargo Indonesia. Saintara: Scientific Journal of Maritime Sciences, 9(1), 39–44. https://doi.org/10.52475/saintara.v9i1.385

Ridwan, R., Susanti, L., Zadry, H. R., & Meilani, D. (2025). Designing Agile Governance Implementation Strategies in Regional Apparatus Organizations (OPD). Journal of Industrial Engineering and Systems Media, 9(2), 102–112. https://doi.org/10.35194/jmtsi.v9i2.4978

Rodrigues, C., Martins, T. A. E., & Amaral, L. (2025). From Efficiency to Circularity in the Wastewater Sector: A Review of Performance Indicators in Regulated Countries. Water, 17(15), 2226. https://doi.org/10.3390/w17152226

Rusdi, M., Sartika, D., Putra, I., & Sari, N. (2023). Quality Governance Design Good University Governance In The Education Sector: A Literature Review of Concepts Performance Models and Audit Practices From a Risk Management Perspective. International Journal Of Humanities Education and Social Sciences (IJHESS), 3(3). https://doi.org/10.55227/ijhess.v3i3.682

Sahur, A., & Amiruddin, A. (2023). Analysis of the Success of Implementing Digital Service Delivery in the Indonesian Public Sector: A Case Study on the Use of Online Public Service Applications. International Journal Papier Public Review, 4(3), 1–9. https://doi.org/10.47667/ijppr.v4i3.242

Sala, E. E., & Subriadi, A. P. (2023). Hot-Fit Model to Measure the Effectiveness and Efficiency of Information System in Public Sector. The Winners, 23(2), 131–141. https://doi.org/10.21512/tw.v23i2.7423

Saleh, M., & Widiastuti, R. (2025). Transformation of Ministerial Performance Evaluation: Integrating Key Performance Indicators and Principles of Transparency into the Governance System. Journal of Constitutional and Governance Studies, 1–19. https://doi.org/10.20885/JCGS.vol2.iss1.art1

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License

Soriano-Gonzalez, R., Perez-Bernabeu, E., Ahsini, Y., Carracedo, P., Camacho, A., & Juan, A. A. (2023). Analyzing Key Performance Indicators for Mobility Logistics in Smart and Sustainable Cities: A Case Study Centered on Barcelona. Logistics, 7(4), 75. https://doi.org/10.3390/logistics7040075

Supriyadi, D., Daraba, D., Khairi, H., & Sutiyo, S. (2024). EVALUATION OF THE MAIN PERFORMANCE OF THE BEKASI REGENCY GOVERNMENT, WEST JAVA PROVINCE. Journal of Academia Praja, 7(1), 82–95. https://doi.org/10.36859/jap.v7i1.2050

Suryani, P., Gaol, L. L., & Daurrohmah, E. W. (2023). Analysis of relaxation of local government budgeting on the achievement of the Bengkulu City government's key performance indicators during the covid-19 period. Entrepreneurship Business Management Accounting (E-BISMA), 115–128. https://doi.org/10.37631/ebisma.v4i1.843

Talebpour, A., Sadeghi-Bazargani, H., Janati, A., Pashazadeh, F., & Gholizadeh, M. (2025). Crucial key performance indicators for hospital evaluation: A scoping review. Journal of Education and Health Promotion, 14(1). https://doi.org/10.4103/jehp.jehp_2102_23

Tarek, E., Motawa, I., & Elmasoudi, I. (2022). Relative Importance Index for the Key Performance Indicators for the construction industry in Egypt. International Journal of Civil and Structural Engineering Research, 10(1), 125–131.

Therivel, R., & Gonzalez, A. (2024). Developing key performance indicators for strategic environmental assessment effectiveness: a systematic framework. Impact Assessment and Project Appraisal, 42(3), 240–250. https://doi.org/10.1080/14615517.2024.2355706

van de Ven, M., Lara Machado, P., Athanasopoulou, A., Aysolmaz, B., & Turetken, O. (2023). Key performance indicators for business models: a systematic review and catalog. Information Systems and E-Business Management, 21(3), 753–794. https://doi.org/10.1007/s10257-023-00650-2

Wardiyanto, B., Setijaningrum, E., Samad, S., & Kandar, A. H. (2025). Mending the mismatch of minds and mandates: reimagining competency-centric public service delivery in Bojonegoro Regency, Indonesia. Cogent Business & Management, 12(1). https://doi.org/10.1080/23311975.2024.2442538

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License