

Shared Services of Selected Companies in Metro Manila: An Operational Efficiency Benchmark

Jose Carlo A. Serraon

Adamson University, Manila, Philippines

Publication history: Received: January 12, 2025; Revised: January 15, 2026; Accepted: January 17, 2026

Email of Corresponding Author: jose.carlo.serraon@adamson.edu.ph

Abstract

This study evaluates the operational efficiency of shared services among selected logistics companies in Metro Manila with the objective of establishing an operational efficiency benchmarking framework across key business functions, namely Logistics and Supply Chain Management, Human Resources, Information Technology, and Business Development. The study employed a descriptive, comparative, and evaluative research design and utilized stratified purposive sampling. Data were collected from 43 managers and supervisors through a validated survey questionnaire and analyzed using descriptive statistics, weighted means, and nonparametric tests, specifically the Kruskal–Wallis H Test and the Mann–Whitney U Test, to determine significant differences in shared service evaluations and operational challenges across functional areas. The findings revealed that shared services across all four functions were perceived as “very evident” in terms of effectiveness. High levels of performance were observed in cost optimization, operational flexibility, robustness of information technology infrastructure, and stakeholder alignment. However, gaps were identified in recruitment alignment, proactivity in the adoption of new technologies, and responsiveness to market and industry trends. Logistics and Supply Chain Management emerged as the highest-performing function, while Business Development received the lowest, though still favorable, evaluation. Despite strong performance ratings, operational challenges were consistently observed across all functions, with Logistics and Supply Chain Management experiencing the most pronounced challenges. Overall, the results indicate that shared services contribute to economies of scale, improved service quality, and strategic business growth, while also revealing opportunities for innovation, process optimization, and continuous improvement. The study supports Sustainable Development Goal (SDG) 8 on Decent Work and Economic Growth and SDG 9 on Industry, Innovation and Infrastructure by demonstrating how efficient shared service models enhance productivity and organizational performance in logistics firms. Its sustainability impact lies in strengthening institutional efficiency, operational resilience, and long-term competitiveness through standardized processes and continuous performance benchmarking.

Keywords: Benchmarking; Logistics and Supply Chain; Metro Manila; Operational Efficiency; Shared Services

1. Introduction

Organizations in highly competitive and evolving business environments increasingly adopt shared service provider (SSP) models to enhance operational efficiency, reduce costs, and sustain performance. In Metro Manila, shared service centers (SSCs) are integral to logistics and third-party logistics (3PL) companies seeking to consolidate key support functions, including logistics and supply chain management, human resources, information technology, and business development. Anchored in Sheldon’s (2024) Shared Services Model, this study evaluates the shared services of selected logistics companies in Metro Manila to establish an operational efficiency benchmark, with emphasis on people, processes, and technology. Consistent with this focus, operational efficiency in SSC environments is strengthened through standardized workflows, clear service protocols, and quality assurance mechanisms that support reliable service performance across consolidated functions (De Lara & Santos, 2024; Gamit et al., 2024). In addition, shared services performance is closely linked to the capability of the workforce supporting these centralized operations, since human capital alignment and employee contribution remain essential for sustaining service continuity and meeting performance expectations (Ortiz et al., 2025). Given that shared services are designed to deliver efficiency gains through coordinated operations, challenges affecting employee well-being and work stability may also influence service outcomes, making the “people” component of SSC models a critical area for operational benchmarking (Armas et al., 2019). Moreover, the effectiveness of shared services is reinforced by technology-enabled documentation and communication systems that support transaction accuracy, process integration, and service responsiveness across units (Jacoba et al., 2025). By integrating these operational dimensions, the present study advances an efficiency benchmark framework that reflects how SSCs function as strategic enablers of performance within logistics and 3PL companies in Metro Manila.

1.1 Shared Services and Operational Efficiency in Logistics Companies in Metro Manila

Shared services involve consolidating similar business functions into a centralized unit that operates as an internal service provider, improving efficiency and cost management (Sheldon, 2024). In Metro Manila, the expansion of logistics and outsourcing industries has accelerated the adoption of shared services to support operational excellence amid increasing complexity and stakeholder demands. Logistics companies face the challenge of managing performance, workforce capability, and digital systems while maintaining service quality and cost containment. Shared services and outsourcing models enable organizations to focus on core competencies while leveraging economies of scale, standardized processes, and specialized expertise.

1.2 Key Literature Themes on Shared Services, Logistics Outsourcing, and Performance Benchmarking

Prior studies consistently show that logistics outsourcing and shared services enhance operational efficiency, productivity, and cost performance across sectors and regions (Kolodiihuk et al., 2021; Adesunkanmi and Nurain, 2022; Afum et al., 2021). Literature emphasizes the role of logistics infrastructure, customs efficiency, collaboration, and digitalization in improving trade performance and competitiveness (Aydas et al., 2020; Da Silva De Almeida and Ayarza, 2022; Reis et al., 2020; S nquiz-D    , 2021). Benchmarking is identified as a critical tool for performance assessment, goal setting, and strategic improvement aligned with organizational mission and future planning (DAP, 2021). Emerging research highlights sustainability, innovation, and advanced technologies as increasingly important dimensions of logistics outsourcing frameworks (Magento, 2022; Mou and Wang, 2023).

1.3 Operational Context of Shared Services in Logistics at the Local, National, and Global Levels

Globally, logistics performance is a key determinant of trade competitiveness and foreign direct investment (Luttermann et al., 2020; Roy and Schoenherr, 2022). Emerging economies encounter challenges related to customs processes, infrastructure limitations, regulatory enforcement, and skilled labor availability (Mengesha, 2020; Kuzminova et al., 2023). In Metro Manila, logistics firms operate within globally connected supply chains shaped by digital transformation, sustainability pressures, and increasing service expectations. The integration of SSCs among leading 3PL providers reflects global practices aimed at improving service reliability, innovation, and operational flexibility.

1.4 Theoretical and Conceptual Basis: Sheldon’s Shared Services Model

This study is grounded in Sheldon’s (2024) Shared Services Model, which conceptualizes shared services as centralized organizational units delivering standardized support functions across departments. The model highlights economies of scale, process standardization, regulatory compliance, cross-functional collaboration, workforce continuity, and accountability. Guided by this framework, the study evaluates shared services across four functional areas—logistics and supply chain management, human resources, information technology, and business development—while examining operational challenges and benchmarking efficiency through people, process, and technology dimensions.

1.5 Research Gaps and Rationale for Evaluating Shared Services in Metro Manila

Although extensive research exists on logistics outsourcing and performance outcomes, gaps remain in comparative evaluations of shared services across functional areas and organizations, particularly within the Metro Manila logistics sector. Prior studies often emphasize macro-level indicators or single-industry contexts, with limited focus on operational challenges across logistics, HR, IT, and business development. This study addresses these gaps by systematically evaluating shared services among selected companies and proposing an operational efficiency benchmark grounded in empirical evidence.

1.6 Alignment of the Study with Relevant Sustainable Development Goals (SDGs)

The study aligns with SDG 8 – Decent Work and Economic Growth by examining how shared services improve productivity, operational efficiency, and sustainable business practices in logistics organizations. It supports SDG 9 – Industry, Innovation and Infrastructure through its focus on logistics systems, shared service models, and digital infrastructure. The study also contributes to SDG 12 – Responsible Consumption and Production by highlighting efficiency-driven logistics practices that reduce redundancies and optimize resource utilization.

1.7 Importance of the Study to Multidisciplinary Sustainability

This research contributes to socio-economic sustainability by providing insights that support competitive, efficient, and resilient logistics organizations. It advances technological and innovation sustainability through its emphasis on information technology, digital logistics platforms, and performance measurement systems. The findings also support institutional and policy sustainability by informing government agencies, industry practitioners, and academic institutions on effective shared service strategies that strengthen governance, efficiency, and long-term organizational sustainability.

2. Material and methods

2.1 Research Design

The study employed a descriptive, comparative, and evaluative survey research design. Rather than relying on experimental methods, the approach focused on systematic observation and objective description of existing conditions related to shared services and operational efficiency. Descriptive research was used to determine the current state of shared services across selected companies by collecting factual and methodical data. As explained by Gay (1976, as cited in Aguila, S., 2022), descriptive research gathers information to test theories or provide answers regarding present conditions, events, or characteristics of a population.

2.2 Locale of the Study

The study was conducted among selected logistics companies operating in Metro Manila. These companies utilize shared service arrangements to support key organizational functions. Metro Manila was selected due to its role as a major hub for logistics, outsourcing, and shared service operations in the Philippines.

2.3 Respondents of the Study

The respondents consisted of middle-management and supervisory-level employees from three logistics companies located in Metro Manila. These individuals were selected because of their direct involvement in managing and evaluating shared services within their respective organizations. The respondents were recruited anonymously to ensure confidentiality and objectivity.

2.4 Sample and Sampling Procedure

A total of 43 respondents participated in the study, drawn from three logistics companies. The sample included managers and team leaders or supervisors from each organization, providing sufficient representation for evaluating shared services and operational challenges. Stratified purposive sampling was employed to ensure that relevant subgroups were adequately represented. This method involved dividing the population into specific strata and selecting participants based on criteria aligned with the research objectives, making it appropriate for quantitative research and allowing for focused yet diverse perspectives (Smith & Jones, 2023). Companies were selected based on business location, length of organizational engagement, and country of service to ensure relevance to shared service effectiveness.

2.5 Research Instrument

The primary data collection tool was a self-developed survey questionnaire designed for middle-management and supervisory-level respondents. The instrument measured shared services and operational efficiency across logistics and supply chain management, human resources, information technology, business development, and operational challenges. The questionnaire underwent content validation with the assistance of the research adviser and a statistician and was tested for reliability through field testing. The collected data were analyzed using AMOS and SPSS to ensure accuracy and consistency.

2.6 Data Gathering Procedure

Data collection involved the distribution of validated survey questionnaires to approved respondents from the selected companies. Prior to administration, the instrument underwent expert validation and reliability testing, including a dry run. Formal written requests were submitted to each organization, accompanied by endorsement letters from the thesis adviser and the Dean of the College of Business Administration at Adamson University's Graduate Studies School. Coordination with company officers ensured authorization to conduct the survey. The entire process of coordination, approval, administration, and retrieval of questionnaires spanned approximately three months, after which feedback from advisers and panel members was incorporated into the manuscript.

2.7 Data Analysis Techniques

Data analysis involved both descriptive and nonparametric statistical techniques. Frequency distribution and percentage were used to organize and describe respondent characteristics and responses. Weighted mean was applied to evaluate shared services and operational challenges using a four-point scale. Reliability of the instrument was assessed using Cronbach's alpha. Nonparametric statistics were employed to determine significant differences among groups, including the Kruskal-Wallis Test for comparing three or more groups and the Mann-Whitney U Test for pairwise comparisons. These techniques addressed differences in shared service evaluations and operational challenges across the selected companies.

2.8 Ethical Considerations

Ethical standards were strictly observed throughout the research process. Potential conflicts of interest were identified and managed to maintain objectivity. Participant privacy and confidentiality were ensured through anonymous coding and restricted data access. Informed consent was obtained after providing participants with clear information about the study's purpose, procedures, risks, and benefits, with participants retaining the right to withdraw at any time. Special safeguards

were implemented for vulnerable participants. Recruitment was conducted using fair and transparent procedures, and assent protocols ensured participant understanding. Risks were assessed and minimized, while potential benefits were clearly communicated. Community values were respected, and feedback on findings was provided when appropriate. Any incentives offered were reasonable and non-coercive. For collaborative research arrangements, roles, responsibilities, and data-sharing agreements were clearly defined to uphold fairness and research integrity.

3. Results and Discussion

3.1 Evaluation of Shared Services Across Functional Areas

3.1.1 Logistics and Supply Chain Management

The results indicate that Logistics and Supply Chain Management received the highest overall evaluation among the four functional areas, with a weighted mean of 3.88, interpreted as very evident. Respondents rated cost optimization, operational flexibility, coordination with the head office, achievement of operational goals, and consistency in service delivery highly, with cost optimization receiving the highest individual rating. These findings suggest strong confidence in the effectiveness of shared services in managing logistics and supply chain operations. The results align with existing literature emphasizing the importance of cost management strategies, including strategic sourcing, vendor development, and technology utilization, in improving supply chain efficiency (Nnaji et al., 2024; Salunke, 2024). Integration of logistics and supply chain functions enhances flexibility, resilience, and responsiveness to market changes through improved coordination and real-time data sharing (Debgupta & Bhattacharyya, 2024). Effective use of logistics technologies supports seamless coordination and operational efficiency, although continuous innovation remains necessary to address evolving technological and market challenges (Andru, 2024; Jia, 2025; Anaba et al., 2024).

3.1.2 Human Resources

Human Resources shared services were evaluated with a weighted mean of 3.60, indicating very evident performance. High ratings were observed for employee engagement, compensation and benefits, communication with clients, and retention strategies. Recruitment alignment with required standards received the lowest rating within this function, though still categorized as evident, suggesting room for improvement. These findings reflect the critical role of employee engagement in enhancing individual and organizational performance, productivity, and commitment (Dabrai, 2025). In shared services environments, engaged employees contribute significantly to service efficiency and cost savings (Davis & Southey, 2024). The identified gaps in recruitment practices underscore the importance of transparency, effective onboarding, and alignment with organizational goals to sustain engagement and workforce stability (Hu, 2024; Kumara, 2024).

3.1.3 Information Technology

Information Technology shared services achieved a weighted mean of 3.65, interpreted as very evident. Respondents expressed strong confidence in the robustness and productivity of IT infrastructure, support for performance measurement, and balance between innovation and service quality. Proactiveness in adopting new technologies received the lowest, though still positive, rating. The results support literature highlighting the benefits of consolidating IT functions into centralized shared services to achieve cost savings and operational efficiencies through economies of scale (Gupta, 2023). Continuous process improvement methodologies and structured IT management practices are essential to sustaining shared service performance (Chandran, 2024; Gulzar et al., 2024). Moreover, leadership-driven innovation culture and employee engagement are vital in maximizing the benefits of shared services and technological investments (Chandran, 2024; Nargis, 2024).

3.1.4 Business Development

Business Development shared services received a weighted mean of 3.55, also interpreted as very evident. Respondents rated stakeholder prioritization, communication with strategic partners, and relationship-building positively. Lower ratings were noted for scaling business development in response to growth and integrating current industry trends, indicating potential limitations in adaptability. The findings emphasize the need for agile business development strategies that respond to dynamic market conditions and balance production, financial, marketing, innovation, and personnel considerations (Bondar & Deineka, 2023). Strategic alignment, digital integration, and adaptability are critical to sustaining competitiveness and long-term growth (Druhova, Fediuk, and Miroshnychenko, 2024; Kharchenko & Marchenko, 2022).

3.2 Significant Differences in the Evaluation of Shared Services

The Kruskal–Wallis H test revealed statistically significant differences in shared service evaluations across functional areas, indicating that at least one department differed in performance ratings. Logistics and Supply Chain Management received the highest mean rank, while Business Development received the lowest. Post-hoc Mann–Whitney U tests showed that Logistics and Supply Chain Management was rated significantly higher than Business Development even after Bonferroni adjustment, indicating a robust difference. Differences between Logistics and Human Resources, and Logistics and Information Technology were significant at the 0.05 level but not after adjustment. No significant differences were observed among Human Resources, Information Technology, and Business Development. These results demonstrate the dominant performance of Logistics and Supply Chain Management relative to other shared services.

3.3 Operational Challenges Across Functional Areas

3.3.1 Logistics and Supply Chain Management Challenges

Respondents identified observed operational challenges in Logistics and Supply Chain Management, with a weighted mean of 3.11. Challenges included quality control monitoring, communication issues, dependability of services, performance monitoring, and escalation processes, with performance monitoring rated highest. The findings reinforce the importance of regular audits, KPI monitoring, and digital communication technologies in addressing operational challenges and improving efficiency (Sonawane & Bothra, 2024; Wang et al., 2024). Advanced digital technologies such as artificial intelligence, blockchain, and IoT can further enhance transparency, reduce costs, and strengthen customer trust (Nagy, 2024).

3.3.2 Human Resources Challenges

Human Resources challenges were rated with a weighted mean of 3.02, indicating observed challenges related to talent attraction, internal communication, employee transition, and change management. All indicators were rated similarly, reflecting consistent perceptions across respondents. These challenges align with literature emphasizing the need for strategic HR alignment during organizational change to enhance adaptability and employee satisfaction (Kriemadis et al., 2023). Digital literacy, flexible work arrangements, and adaptive HR practices are critical for managing post-pandemic and technology-driven transformations, though cultural resistance remains a challenge (Surianto et al., 2024; Rustanti et al., 2023).

3.3.3 Information Technology Challenges

Information Technology challenges were rated with a weighted mean of 3.00, indicating observed but moderate challenges. These included system downtime, lack of integration, limited automation, and usability issues across IT systems and applications. The findings suggest that strengthening IT service management practices, improving system reliability, and enhancing user experience are essential to addressing these challenges. Literature supports the use of integrated platforms, automation, and AI-driven ITSM solutions to improve efficiency, reduce downtime, and enhance user engagement.

3.3.4 Business Development Challenges

Business Development challenges received a weighted mean of 3.03, reflecting observed issues related to unclear procedures, inconsistent service quality, insufficient communication with country offices, and challenges during process migration. These findings highlight the importance of clear standard operating procedures, effective communication, and alignment between shared services and organizational strategy to improve efficiency and service quality (Afriza, 2023; Christophers & Klimkeit, 2022; Pavlov & Gladchenko, 2024).

3.4 Significant Differences in Operational Challenges

The Kruskal–Wallis H test indicated statistically significant differences in operational challenges across functional areas. Logistics and Supply Chain Management recorded the highest challenge ratings, while Information Technology recorded the lowest. Post-hoc Mann–Whitney U tests revealed that Logistics and Supply Chain Management experienced significantly greater challenges than Human Resources and Information Technology even after Bonferroni adjustment. Differences between Logistics and Business Development, and between Human Resources and Information Technology, were significant at the 0.05 level but not after adjustment. These results confirm that Logistics and Supply Chain Management faces the most substantial operational challenges among the shared services.

3.5 Operational Efficiency Benchmarking

Despite receiving the highest performance evaluations, Logistics and Supply Chain Management also exhibited the greatest operational challenges, highlighting the complexity of its role. The structured use of Key Result Areas and Key Performance Indicators within this function positions it as the operational benchmark for shared services. In contrast, Human Resources, Information Technology, and Business Development, while positively evaluated, require targeted improvements in recruitment alignment, system integration, and strategic adaptability. The findings support the development of an operational efficiency benchmarking framework that leverages best practices from Logistics and Supply Chain Management, standardizes performance metrics, and integrates continuous improvement cycles. By adopting internal and external benchmarking, standardizing KPIs, and addressing function-specific challenges, organizations can enhance operational alignment, service delivery, resilience, and competitiveness within the shared services environment.

4. Conclusion & Recommendations

The study concludes that shared services among the selected companies in Metro Manila were positively evaluated across all four functional areas—Logistics and Supply Chain Management, Information Technology, Human Resources, and Business Development—with all receiving “Very Evident” ratings, indicating strong stakeholder confidence in service effectiveness and quality. Logistics and Supply Chain Management emerged as the highest-performing function, while Business Development received the lowest, though still favorable, evaluation. Statistically significant differences were found both in service evaluations and in operational challenges across functional areas, confirming that performance and constraints vary by department. Although all functions demonstrated strong service delivery, operational challenges were consistently observed, particularly in Logistics and Supply Chain Management. These findings underscore that high

performance does not eliminate operational constraints and highlight the need for an operational efficiency benchmarking framework that leverages best-performing internal practices while addressing function-specific weaknesses to strengthen shared services performance across the organization.

Based on the findings, management is recommended to institutionalize existing strengths across all shared service functions through sustained quality assurance, service-level monitoring, and continuous capability development. Departments with relatively lower evaluation rankings, particularly Business Development, should be prioritized for targeted improvement initiatives. Given the consistent presence of operational challenges, structured problem-solving, continuous improvement planning, and department-specific interventions should be implemented to address recurring issues in communication, process alignment, system integration, and change management. The organization is further recommended to adopt a formal operational efficiency benchmarking framework using Logistics and Supply Chain Management as the internal benchmark, standardize KRAs and KPIs, implement cross-departmental process mapping, and integrate internal and external benchmarking supported by a continuous improvement cycle to ensure sustained efficiency, resilience, and competitiveness of shared services.

Compliance with ethical standards

This study adhered to accepted academic and institutional ethical standards for research involving human participants. Participation of middle-management and supervisory-level employees from selected logistics companies in Metro Manila was voluntary. Confidentiality, anonymity, and responsible data management were maintained throughout all stages of the research process.

Acknowledgements

The author gratefully acknowledges the participating logistics companies and respondents for their cooperation, as well as the thesis adviser, statistician, and expert validators for their guidance in instrument validation and research implementation.

Conflict of interest statement

The author declares no financial, professional, or personal conflicts of interest. No external individual or organization influenced the design, conduct, analysis, or reporting of this study.

Statement of ethical approval

Ethical safeguards were integrated into the research design and implementation. Permission to conduct the study was obtained from the participating organizations prior to data collection. The study complied with accepted research ethics standards, including confidentiality protection, fair recruitment, and objective reporting.

Statement of informed consent

Informed consent was obtained from all participants prior to data collection. Respondents were informed of the study's purpose, procedures, potential risks and benefits, and their right to withdraw at any time without penalty. Participation was voluntary, and anonymity was ensured throughout the research process.

REFERENCES

- Adesunkanmi, S. O., & Nurain, S. A. (2022). Empirical study of logistics outsourcing practices and firm productivity of selected manufacturing companies in Nigeria. *Open Journal of Business and Management*, 10(6), 3327–3341. <https://doi.org/10.4236/ojbm.2022.106164>
- Afriza, B. R. (2023). Maximizing productivity: The power of standard operating procedure, work environment and communication. *PRODUKTIF: Jurnal Kepegawaian dan Organisasi*, 2(1), 82–92.
- Afum, E., Agyabeng-Mensah, Y., Acquah, I. S. K., Baah, C., Dacosta, E., Owusu, C. S., & Owusu, J. A. (2021). Examining the links between logistics outsourcing, company competitiveness, and selected performances: The evidence from an emerging country. *The International Journal of Logistics Management*, 32(3), 1068–1090. <https://doi.org/10.1108/IJLM-05-2020-0205>
- Aguila, S. D. (2022). *Trucking services of small logistics companies in the National Capital Region Philippines: Input for trucking business model* (Doctoral dissertation, Asian Institute of Maritime Studies).
- Anaba, D. C., Kess-Momoh, A. J., & Ayodeji, S. A. (2024). Optimizing supply chain and logistics management: A review of modern practices. *Open Access Research Journal of Science and Technology*, 11(2), 020–028. <https://doi.org/10.53022/oarjst.2024.11.2.0083>
- Andru, S. (2024). Optimizing company performance through effective logistics management. *Deleted Journal*, 20(10s), 6039–6044. <https://doi.org/10.52783/jes.6545>

- Armas, K. L., De Leon, C. L., Santos, A. R., & Vitug, E. G. (2019). Workplace bullying in private companies in the Philippines: Major cause of employee burnout. *International Journal of Advanced Engineering, Management and Science (IJAEMS)*.
- Aydas, O. T., Ross, A., & Parker, H. (2020). Exploring country-level logistics infrastructure, market potential, and trade exports amongst developed and emerging markets. *Journal of Transport and Supply Chain Management*, 14, Article 487. <https://doi.org/10.4102/jtscm.v14i0.487>
- Binaluyo, J. P., Agustin, N. B., & Santos, A. R. (2025). Microfinance institutions and services: Consumer perspectives and the path to standardized guidelines. *Institutions*, 15(2), 80–91.
- Bondar, I., & Deineka, V. (2023). Business development strategies: Sense, types, features. *Rozvitok Metodiv Upravlinnâ Ta Gospodarûvannâ Na Transporti*, 84(3), 77–88. <https://doi.org/10.31375/2226-1915-2023-3-77-88>
- Cacal, D. M., Santos, A. R., Hipolito, M. C., & Morales, S. R. F. (2023). Productivity of inbred rice applied with biochar under different planting distances. *Asian Journal of Agriculture and Rural Development*, 13(3), 192–205.
- Chandran, V. S. (2024). Operational excellence: Process optimization for competitive edge. *International Journal for Multidimensional Research Perspective*, 2(10), 1–15. <https://doi.org/10.61877/ijmrp.v2i10.203>
- Christophers, L., & Klimkeit, D. (2022). Global business services als Transformationstreiber: Eine Fallstudie der heutigen Möglichkeiten von shared services. *Der Betriebswirt*, (1), 13–26.
- Da Silva De Almeida, I. C. T., & Ayarza, J. A. C. (2022). Import and export process: The impact of bureaucratic simplification in customs clearance. *Dialnet*. <https://dialnet.unirioja.es/servlet/articulo?codigo=8637687>
- Dabrai, R. (2025). Impact of employee engagement on the performance of employee and organization. *Social Science Research Network*. <https://doi.org/10.2139/ssrn.5012056>
- Davis, K., & Southey, K. (2024). Employee engagement in shared services in a regional university context. *Journal of Higher Education Policy and Management*. <https://doi.org/10.1080/1360080X.2024.2344238>
- De Lara, M. G. O., & Santos, A. R. (2024). Service delivery and quality assurance in administrative units of higher education institutions during the pandemic. *Corporate and Business Strategy Review*, 5(1), 494–504.
- Debgupta, I., & Bhattacharyya, S. (2024). Supply chain mastery: Strategies for seamless operations. *Indian Scientific Journal of Research in Engineering and Management*, 8(8), 1–13. <https://doi.org/10.55041/ijsrem37348>
- Development Academy of the Philippines, Productivity and Development Center. (2024, November 2). *Benchmarking*. <https://pdc.dap.edu.ph/index.php/benchmarking/>
- Druhova, O., Mosumova, A., Dai, B., & Qian, T. (2024). Competitiveness as a key factor in successful strategic business management. *Business Inform*, 8(559), 439–445. <https://doi.org/10.32983/2222-4459-2024-8-439-445>
- Galano, J. A., & Santos, A. R. (2024). Cultivating prosperity: Unveiling the economic and livelihood potentials of mushroom farming in Nueva Ecija, Philippines. *International Journal of Agricultural Science, Research & Technology (IJASRT) in Extension & Education Systems*, 14(3).
- Gamit, A. M., Santos, A. R., Armas, K. L., & Villegas, M. N. (2024). Implementation of ISO 9001:2015 in state universities and colleges: A quality management, organizational performance, and legal framework. *Corporate Law & Governance Review*, 6(4).
- Gulzar, M., Ali, A., Naqvi, B., & Smolander, K. (2024). Revealing the state of the art in managing IT infrastructure within enterprises: A systematic mapping study. *IEEE Access*, 12, 108533–108555. <https://doi.org/10.1109/ACCESS.2024.3439093>
- Gupta, D. (2023). Shared services organisation: A culture that fosters growth, efficiency and sustainable value creation. <https://doi.org/10.33516/maj.v58i9.96-98p>
- Hipolito, M. C., & Santos, A. R. (2025). Faculty profiles and their influence on research competence and productivity in state universities. *International Journal of Advanced and Applied Sciences*, 12(5), 182–195.
- Hu, X. (2024). A quantitative analysis of recruitment strategies and their impact on employee engagement. *Pacific International Journal*, 7(3), 35–42. <https://doi.org/10.55014/pij.v7i3.614>
- Jacoba, E. F. P., Gamit, A. M., Santos, A. R., Alvarez, S. C., Peria, J. N. T., & Claudio, A. E. G. (2025). Exploring digital and documentation issues in state university–LGU collaborative programs for sustainable quality education. *International Journal of Learning, Teaching and Educational Research*, 24(6).
- Jacoba, F. P., Santos, A. R., Armas, K. L., & Gamit, A. M. (2024). A comprehensive analysis of a science and technology university's alignment with the performance excellence framework: A governance outlook study. *Journal of Governance & Regulation*, 13(3), 213–223.
- Jia, J. (2025). Analysis and optimization of the value chain of H logistics company. *Frontiers in Business, Economics and Management*, 18(1), 230–236. <https://doi.org/10.54097/fdmsq402>
- Kharchenko, Y. I., & Marchenko, V. (2022). Enterprise development strategy in a competitive environment formation directions. *Problemy Systemnoho Pidkhodu v Ekonomitsi*, 2(88). <https://doi.org/10.32782/2520-2200/2022-2-10>
- Kolodiichuk, V., Stanko, V., Averchev, O., Stanko, S., & Averchev, O. V. (2021). LPI-assessment of outsourcing of logistics services in the agro-industrial complex of Ukraine. <https://dspace.ksaeu.kherson.ua/handle/123456789/7029>

- Kriemadis, A., Rossidis, I., & Belias, D. (2023). Strategic human resources management as a key element in the implementation of organizational changes. In *Managing successful and ethical organizational change* (pp. 1–17). IGI Global. <https://doi.org/10.4018/979-8-3693-0235-4.ch001>
- Kumara, N. V. M. (2024). Optimizing talent acquisition: Strategies for efficiency and employee engagement. *Recent Research Reviews Journal*, 3(1), 226–243. <https://doi.org/10.36548/rrrj.2024.1.015>
- Kuzminova, O., Saadulayeva, T., Kuzminov, V., & Buttaeva, S. (2023). Customs and logistics activities in ensuring financial and economic security. *E3S Web of Conferences*, 381, 01055. <https://doi.org/10.1051/e3sconf/202338101055>
- Luttermann, S., Kotzab, H., & Halaszovich, T. (2020). The impact of logistics performance on exports, imports, and foreign direct investment. *World Review of Intermodal Transportation Research*, 9(1), 27. <https://doi.org/10.1504/WRITR.2020.106444>
- Magento, J. (2022). Current and future trends of information technology and sustainability in logistics outsourcing. *Sustainability*, 14(13), 7641. <https://doi.org/10.3390/su14137641>
- Mengesha, F. (2020, June 1). *Assessment of factors on logistics practice performance: The case of some selected logistics service providers*. <http://repository.smuc.edu.et/handle/123456789/5502>
- Mou, J., & Wang, S. (2023). Value-added service for fashion product supply chain with overseas warehouse logistics outsourcing. *Mathematical Problems in Engineering*, 2023, 1–14. <https://doi.org/10.1155/2023/8798358>
- Nagy, G. (2024). The economic role of logistics quality assurance in the era of digitalisation. *Advanced Logistic Systems*, 18(4), 41–56. <https://doi.org/10.32971/ALS.2024.036>
- Nargis, L. (2024). Efficiency unleashed: Streamlining operations for organizational excellence. *Ambidextrous*, 2(1), 11–21. <https://doi.org/10.61536/ambidextrous.v2i01.57>
- Nnaji, U. O., Benjamin, L. B., Eyo-Udo, N. L., & Etukudoh, E. A. (2024). Effective cost management strategies in global supply chains. *International Journal of Applied Research in Social Sciences*. <https://doi.org/10.51594/ijarss.v6i5.1146>
- Ortiz, A. F., Ortega, S. A., & Santos, A. R. (2025). Human capital and business success: Perspectives from emerging business professionals. *Journal of Lifestyle and SDGs Review*, 5(3), e04121–e04121.
- Pavlov, P., & Gladchenko, V. (2024, June). Proving optimization by comparison of business processes. In *Environment. Technology. Resources. Proceedings of the International Scientific and Practical Conference* (Vol. 1, pp. 281–287).
- Reis, J. G. M. D., Amorim, P., Cabral, J. A. S., & Tolo, R. C. (2020). The impact of logistics performance on Argentina, Brazil, and the US soybean exports from 2012 to 2018: A gravity model approach. *Agriculture*, 10(8), 338. <https://doi.org/10.3390/agriculture10080338>
- Roy, V., & Schoenherr, T. (2022). Implications of sectoral logistical capabilities for export competitiveness: A public policy perspective for interventions in the logistics sector. *IEEE Transactions on Engineering Management*, 69(6), 2930–2943. <https://doi.org/10.1109/TEM.2020.3024240>
- Rustanti, D., Kartawijaya, M. A. L., Maulana, M. I., & Yuniawan, A. (2023, December). Human resources in the digital transformation era: A literature review study. In *Proceedings of the International Conference on Finance, Economics and Business (ICOFEB)* (Vol. 1, p. 0016). <https://doi.org/10.29103/icofeb.v1i-.591>
- Salunke, N. (2024). Cost optimization in supply chain management leveraging vendor development and sourcing strategies. *Journal of Business and Management Studies*, 6(5), 225–237. <https://doi.org/10.32996/jbms.2024.6.5.24>
- Santiago, J. M., & Santos, A. R. (2021). Knowledge, attitude and practices of the university students about COVID-19 during the Luzon lockdown in the Philippines. *International Journal of Public Health*, 10(3), 321–328.
- Sénquiz-Díaz, C. (2021). Transport infrastructure quality and logistics performance in exports. *Questa Soft*. <https://www.cceol.com/search/article-detail?id=1100574>
- Sonawane, P. G., & Bothra, L. S. (2024). Review paper: Quality control and assurance strategy for improved operational logistics. *Indian Scientific Journal of Research in Engineering and Management*. <https://doi.org/10.55041/ijrsrem28091>
- Surianto, S., Badaruddin, B., & Firman, A. (2024). Human resource management strategies to increase adaptability in the digital age. *Proceeding of Research and Civil Society Desemination*, 2(1), 1–15. <https://doi.org/10.37476/presed.v2i1.56>
- Tuliao, R. C., Santos, A. R., & Ortega, S. A. (2025). The role of mobile phones in facilitating business education during the transition to new normal learning models. *International Review of Management and Marketing*, 15(1), 146.
- Wang, J., Luo, L., & Wang, J. (2024). Logistics supply chain management and control based on mobile communication technology. *IEEJ Transactions on Electrical and Electronic Engineering*, 19(9), 1475–1482.