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Optimization of Port Service Strategies Using The SWOT Method at PT. ASDP Indonesia Ferry (Case Study in Kolaka Regency)

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ABSTRACT : This research investigates the strategic optimization of ferry port services at PT ASDP Indonesia Ferry in Kolaka using a SWOT based framework, particularly focusing on Internal Factor Analysis Summary (IFAS) and External Factor Analysis Summary (EFAS). The study aims to assess how internal organizational strengths and external environmental pressures influence service performance. Employing a qualitative descriptive method, data were gathered through interviews, document analysis, and observational techniques, then synthesized using SWOT matrices to generate strategic insights. The IFAS findings indicate that factors such as employee motivation, leadership, process standardization, and digital integration are critical to internal efficiency. Conversely, the EFAS matrix identifies government regulatory support, competition from private operators, and environmental volatility as dominant external elements shaping service effectiveness. Notably, the study finds that cross functional collaboration and a culture of innovation are key determinants of resilience and adaptability. The results underscore the importance of aligning internal capabilities with external opportunities to strengthen strategic decision making. By highlighting the dynamic interplay between governance, technology, and policy environments, this study contributes to the literature on maritime service optimization and strategic public enterprise management.

Keywords: Ferry Port Operations, Service Optimization, IFAS Analysis, EFAS Framework, Strategic Management, PT ASDP Kolaka, Maritime Services.

INTRODUCTION

Indonesia, the world's largest archipelagic nation, comprises over 17,000 islands, making maritime connectivity not just a logistical necessity but a critical component of national cohesion and economic development. With significant populations dispersed across its island territories, the role of maritime transport in ensuring efficient inter island mobility is irreplaceable. Within this context, state owned enterprises (SOEs), particularly PT ASDP Indonesia Ferry, hold a vital strategic position in enhancing domestic connectivity, facilitating trade, and fostering inclusive regional

development. These ferries are more than just transport vessels; they represent socio economic lifelines that support tourism, commerce, and cultural exchange in remote areas (Solikin, 2024; Tyas et al., 2024; Wahidah et al., 2023).

The Indonesian government has undertaken various initiatives to promote equitable development through maritime infrastructure. Among them, the "Tol Laut" (Sea Toll) program stands out as a transformative policy aimed at reducing logistics costs and enhancing accessibility to isolated regions. By integrating public ferry operators into the national transport grid, the program seeks to reduce regional disparities, bolster local economies, and improve the flow of goods and people f(Fathoni et al., 2021; Tyas et al., 2024; Wahidah et al., 2023). This strategic integration has led to significant improvements in transport times and cost efficiencies, particularly in eastern provinces like Southeast Sulawesi (Dewi & Purwanto, 2023).

The Sea Toll program also underscores the state's commitment to improving passenger transport. It has supported subsidized routes to facilitate daily commuting and regional tourism while ensuring that essential goods reach even the most remote locations (Amanda, 2021; Solikin, 2024). Routes that were previously underserved or nonexistent have been revitalized, enhancing socio economic engagement and reducing infrastructure inequality. At the operational level, SOEs such as PT ASDP have incorporated digital technologies such as e ticketing, scheduling software, and real time information systems to modernize services and increase public confidence in maritime transport (Fathoni et al., 2021; Surnata et al., 2023).

Despite these advancements, ferry transport services in Southeast Asia face enduring challenges, including legacy infrastructure, variable weather conditions, and fragmented regional regulations (Arifianti & Sakapurnama, 2024; Lyu et al., 2024). These factors are further exacerbated by limited investments in port modernization and digital integration in remote or secondary terminals. As the ferry industry transitions into an increasingly digital era, it must balance traditional service obligations with emerging technological demands and environmental sustainability goals (Nurfadilah & Haliah, 2024; Omar et al., 2016).

In response to these multifaceted challenges, SWOT analysis has gained prominence as a comprehensive tool for assessing organizational strategic positions. In public sector transport management, SWOT provides a structured methodology for identifying internal strengths and weaknesses while mapping external opportunities and threats (Anwar & Prawiraatmadja, 2024; Tehrani, 2017). This dual axis framework enables decision makers to devise responsive strategies that align institutional capacities with dynamic external conditions. For PT ASDP in Kolaka Regency, a strategic port in Southeast Sulawesi, the use of SWOT analysis offers insights into optimizing port service delivery and enhancing competitiveness amidst evolving operational landscapes.

Recent research supports the application of strategic management tools such as IFAS (Internal Factor Analysis Summary) and EFAS (External Factor Analysis Summary) matrices for public transport entities. These tools provide quantifiable assessments that feed into the SWOT matrix, allowing for precise mapping of an organization's strategic quadrant. Studies have shown that

transport entities placed in Quadrant I of the SWOT matrix where strengths and opportunities dominate are best positioned to implement aggressive growth and innovation strategies (Gracia et al., 2022; Obasi et al., 2024).

In the context of PT ASDP Kolaka, literature also highlights how digitization and strategic alliances can serve as critical enablers of operational excellence. From digital queue management to adaptive scheduling based on weather forecasts, modern strategies increasingly rely on data driven insights and customer centric service models (Acciaro & Sys, 2020; Sharma et al., 2024). These studies provide foundational knowledge for tailoring strategic interventions that address both immediate operational bottlenecks and long term development goals.

However, existing literature still lacks empirical studies focused on port level SWOT applications in Indonesia's eastern maritime provinces. Most prior research centers on large, transshipment ports or broader maritime policy evaluations, leaving a gap in localized strategic assessments for smaller, yet vital, regional hubs like Kolaka. Given this, the present study contributes a novel case based application of SWOT analysis tailored to the operational realities and strategic imperatives of PT ASDP Indonesia Ferry in Kolaka.

This study aims to systematically analyze the internal and external factors influencing port service delivery at PT ASDP Kolaka using the SWOT framework. It seeks to identify strategic alternatives that leverage institutional strengths and capitalize on environmental opportunities while mitigating threats and addressing internal weaknesses. The study adopts a qualitative descriptive methodology, grounded in expert assessments and secondary data from company reports and regional policy documents. The expected outcome is a set of strategic directions that enhance service efficiency, digital integration, and long term sustainability. By filling a gap in the literature on strategic planning for regional ferry services, this research offers both theoretical contributions and practical insights for maritime transport management in Indonesia and beyond.

METHOD

This study adopts a qualitative descriptive approach grounded in the application of SWOT analysis to explore and optimize the strategic positioning of PT ASDP Indonesia Ferry in Kolaka Regency. The qualitative framework is particularly appropriate for unpacking the complex and context dependent dynamics of port service operations within Indonesia's archipelagic geography, where a multiplicity of social, economic, and infrastructural factors intersect. This methodology facilitates a nuanced understanding of internal capabilities and external conditions by integrating expert perspectives and secondary data within a structured analytical model.

In line with established literature, SWOT analysis serves as a central methodological tool in transport and logistics strategy research (Phadermrod et al., 2019; Singh & Singh, 2018). The study commenced with the identification and categorization of internal and external factors influencing the port operations of PT ASDP Indonesia Ferry. These factors were systematically gathered

through a review of relevant secondary sources, including official reports, company performance documents, and publicly available planning data, complemented by local expert assessments. As recommended by GÜREL (2017), triangulating multiple sources enhances the credibility and depth of strategic assessments.

Data collection emphasized both internal operational characteristics and broader environmental factors. Internally, the study considered elements such as service coverage to remote areas, fleet adequacy, implementation of electronic ticketing systems, and staff competencies. Externally, the analysis examined macro environmental variables, including governmental maritime support programs, regional mobility trends, technological opportunities, and exogenous threats such as fuel price volatility and climatic disruptions. These factors were filtered through structured interpretive analysis, a hallmark of qualitative strategic planning approaches (Phadermrod et al., 2019).

The selection of informants was based on purposive sampling to include individuals with in depth knowledge of maritime transportation in Southeast Sulawesi. Informants consisted of port management personnel, transportation analysts, and regional development planners who possessed contextual familiarity and could provide critical insights into operational conditions. The inclusion of multiple informant perspectives allowed for the incorporation of nuanced expert judgment into the analysis, consistent with participatory methods advocated in transport research (Stoilova, 2022).

Following the identification of strategic factors, the data were organized into two matrices: the Internal Factor Analysis Summary (IFAS) and the External Factor Analysis Summary (EFAS). These matrices reflect an advanced extension of traditional SWOT analysis, offering a structured framework for evaluating the significance and strategic weight of each factor. Each item within the IFAS and EFAS matrices was assigned a weight (ranging from 0.0 to 1.0) and a rating (from 1 to 4), with total scores computed through the multiplication of these values. The scores provide an interpretable summary of internal strengths and weaknesses (IFAS) and external opportunities and threats (EFAS), respectively (Maula, 2024; Setiyowati et al., 2023).

In the case of PT ASDP Kolaka, the IFAS analysis yielded a strength score of 1.28 and a weakness score of 0.36, indicating a relatively strong internal position. Concurrently, the EFAS matrix demonstrated an opportunity score of 1.43 against a threat score of 0.50, affirming a favorable external environment. These values were subsequently plotted onto a SWOT Cartesian diagram, a visualization technique used to determine the company's strategic posture. The intersection of positive internal and external scores placed PT ASDP Kolaka in Quadrant I, which denotes an aggressive strategic orientation wherein the organization is advised to leverage its strengths to capitalize on external opportunities (Phadermrod et al., 2019).

To interpret these matrices effectively, the study adopted a thematic coding technique. Expert opinions and content from secondary documents were systematically coded and categorized according to the four SWOT domains. This process facilitated the identification of recurring themes and the prioritization of critical issues. The analytical technique follows established

procedures in qualitative transport research, where coding is used to distill large volumes of qualitative data into actionable strategic categories (Singh & Singh, 2018).

To ensure methodological rigor, the study employed consensus validation. The weight and rating assignments in the IFAS and EFAS matrices were reviewed and refined through consensus building sessions among informants. This procedure helped minimize subjectivity and enhance the reliability of the rating process, addressing a key limitation identified in prior SWOT based studies c(Cantikasari, 2024). Where differences of opinion occurred, a Delphi inspired iterative process was employed, allowing participants to reflect on initial scores and adjust based on peer input.

In addition to qualitative coding and expert triangulation, the study incorporated simple visual analytics by plotting the SWOT Cartesian diagram. This visualization served both as a diagnostic and a communicative tool, enabling clear representation of the company's strategic position and facilitating discussion about suitable strategic alternatives. The use of visual tools is increasingly emphasized in qualitative strategic planning for its role in enhancing interpretability and stakeholder engagement (Singh & Singh, 2018; Stoilova, 2022).

From a data management standpoint, the research utilized computer assisted qualitative data analysis software (CAQDAS) to support the organization and coding of textual data derived from expert statements and document reviews. The software facilitated efficient retrieval of coded data and theme clustering, enabling the researcher to maintain a coherent analytical trail. The use of CAQDAS is aligned with best practices in qualitative research for enhancing analytical transparency and replicability (GÜREL, 2017).

The methodology adopted in this study is also reflective of an iterative strategic planning cycle. By constructing and interpreting the SWOT matrices within a dynamic analytical framework, the study recognizes that strategic planning in the transport sector must be adaptive to external shifts and organizational learning. The IFAS and EFAS matrices are not treated as static diagnostics but are envisioned as tools that must be updated periodically to remain relevant. This approach aligns with the recommendation of Singh & Singh (2018), who emphasize the necessity of periodic re evaluation in volatile strategic contexts.

In conclusion, the methodological framework employed in this study integrates qualitative insights with structured strategic analysis to develop actionable recommendations for PT ASDP Indonesia Ferry in Kolaka. By employing SWOT analysis, supported by IFAS and EFAS matrices, the research systematically maps the internal and external environments affecting port service delivery. The triangulation of expert input, secondary data analysis, and visual representation strengthens the robustness of the findings. This multi layered methodological approach enhances the validity and practical applicability of the strategic recommendations proposed in the subsequent sections of the study.

RESULT AND DISCUSSION

Table 1. IFAS Matrix (Internal Factors)

No	Factor	Category	Weight	Rating	Score
1	Ferry services reaching remote areas	Strength	0.10	4	0.40
2	Availability of adequate fleet and docks	Strength	0.09	3	0.27
3	Implementation of e ticketing and digital services	Strength	0.08	4	0.32
4	Experienced human resources in port operations	Strength	0.08	3	0.24
5	Lack of promotion to local communities	Weakness	0.08	2	0.16
6	Limited capacity during peak seasons or holidays	Weakness	0.07	2	0.14
7	Vehicle queuing system is not optimal	Weakness	0.07	2	0.14
8	Limited coordination with local port authorities	Weakness	0.06	1	0.06

Table 2. EFAS Matrix (External Factors)

No	Factor	Category	Weight	Rating	Score
1	Increasing demand for inter island mobility	Opportunity	0.11	4	0.44
2	Government support for maritime and sea toll programs	Opportunity	0.10	4	0.40
3	Regional and inter provincial cooperation potential	Opportunity	0.09	3	0.27
4	Use of IT to improve integration through digitalization and automation	Opportunity	0.08	4	0.32
5	Fuel price volatility and vessel operating costs	Threat	0.09	2	0.18
6	Extreme weather and unpredictable natural conditions	Threat	0.07	2	0.14
7	Competition with private transportation providers	Threat	0.07	3	0.21
8	Ferry departure schedule delays	Threat	0.06	2	0.12

Table 3. IFAS Summary Table

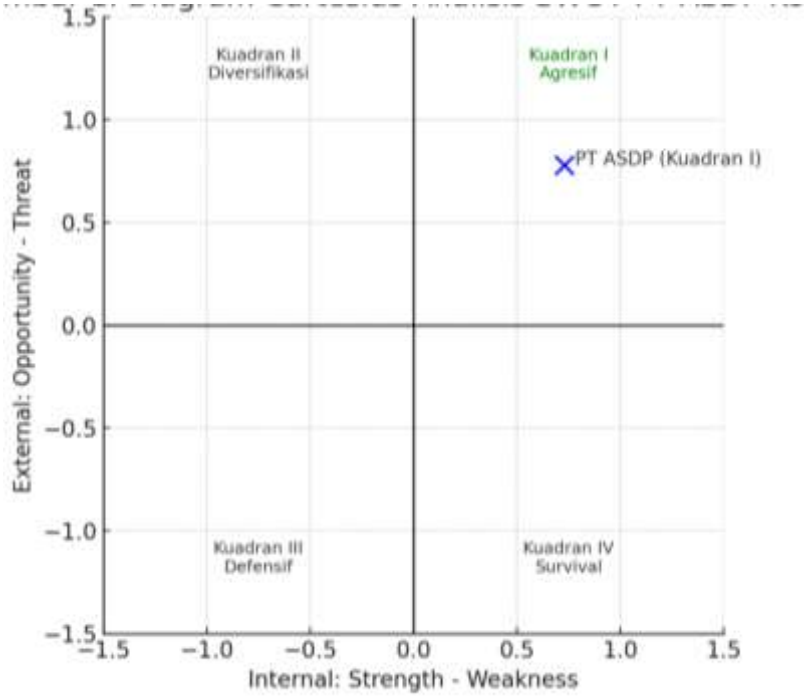
No	Factor	Category	Weight	Rating	Score
1	Ferry services reaching remote areas	Strength	0.10	4	0.40
2	Availability of adequate fleet and docks	Strength	0.09	3	0.27
3	Implementation of e ticketing and digital services	Strength	0.08	4	0.32
4	Experienced human resources in port operations	Strength	0.08	3	0.24
5	Lack of promotion to local communities	Weakness	0.08	2	0.16

6	Limited capacity during peak seasons or holidays	Weakness	0.07	2	0.14
7	Vehicle queuing system is not optimal	Weakness	0.07	2	0.14
8	Limited coordination with local port authorities	Weakness	0.06	1	0.06

Table 4. EFAS Summary Table

No	Factor	Category	Weight	Rating	Score
1	Increasing demand for inter island mobility	Opportunity	0.11	4	0.44
2	Government support for maritime and sea toll programs	Opportunity	0.10	4	0.40
3	Regional and inter provincial cooperation potential	Opportunity	0.09	3	0.27
4	Use of IT to improve integration through digitalization and automation	Opportunity	0.08	4	0.32
5	Fuel price volatility and vessel operating costs	Threat	0.09	2	0.18
6	Extreme weather and unpredictable natural conditions	Threat	0.07	2	0.14
7	Competition with private transportation providers	Threat	0.07	3	0.21
8	Ferry departure schedule delays	Threat	0.06	2	0.12

Figure 1. SWOT Cartesian Diagram



Internal Factor Analysis (IFAS Matrix)

The analysis of internal factors at PT ASDP Indonesia Ferry in Kolaka reveals a relatively favorable organizational posture, with substantial strengths that offer strategic advantages in ferry port operations. Table 1 and Table 3 present the IFAS Matrix and Summary Table respectively. The key strengths identified include the company's ability to reach remote island destinations, availability of a sufficient fleet and docking facilities, the implementation of digital ticketing systems, and experienced human resources. These elements align with established findings in the literature.

First, the implementation of digital ticketing and service digitalization is a transformative strength that supports operational efficiency and improves customer experience. As noted by Jović et al. (2022), digital ticketing systems enhance workflow processes, reduce transaction times, and enable real time tracking of passengers, which strengthens service transparency and reliability. Moreover, the integration of mobile and web based platforms for self service options increases customer satisfaction and throughput capacity, both of which are vital for a port that serves remote areas with high passenger turnover.

Second, the availability of adequate infrastructure, such as a reliable fleet and docking facilities, ensures service continuity and minimizes disruptions, particularly during high demand periods. According to Ensslin et al. (2024), infrastructural adequacy is essential to minimizing delays and achieving safe operations, as it directly impacts turnaround time and cargo throughput. This strength complements the organization's operational objectives by reducing congestion and facilitating scheduled departures.

Third, experienced personnel play a pivotal role in ensuring the quality and safety of port operations. The competence and motivation of employees are central to ferry service excellence, as Şenbursa & Tehci (2023) argue, citing that employee satisfaction and internal marketing strategies are strongly correlated with service delivery quality. At PT ASDP Kolaka, human resources trained in digital systems and operational management enhance protocol adherence and problem resolution, thereby increasing efficiency.

Despite these strengths, several weaknesses are present. These include limited public awareness and promotional campaigns, insufficient capacity during peak seasons, suboptimal vehicle queuing systems, and coordination gaps with local port authorities. These factors may inhibit service quality and diminish the company's competitive edge.

The total strength score of 1.28 significantly outweighs the weakness score of 0.36, indicating a net positive internal condition. This reflects a robust internal profile that, if leveraged effectively, can serve as a cornerstone for aggressive strategic expansion (see Table 1 and Table 3).

External Factor Analysis (EFAS Matrix)

In the EFAS Matrix presented in Table 2 and Table 4, several external opportunities and threats were evaluated to determine the strategic environment influencing PT ASDP Kolaka's operations.

The opportunities identified include rising inter island mobility demand, strong government support for maritime transportation, regional and inter provincial cooperation potential, and technological integration in logistics.

Among these, the growing mobility demand across Indonesian archipelagos presents the most promising opportunity. As Lin (2023) suggests, demographic trends and regional economic activities have increased reliance on maritime transport, elevating the strategic relevance of ferry ports. PT ASDP Kolaka, with its existing infrastructure and service capability, is well positioned to meet these evolving mobility needs.

Government support through initiatives like the Sea Toll Program reinforces this opportunity. National policies favoring maritime infrastructure, along with subsidies and fiscal incentives, provide an enabling environment for operational expansion and service enhancement. As Ardian et al. (2024) argue, fiscal policy alignment with maritime goals is crucial for sustaining investments in connectivity infrastructure.

In addition, technological trends offer external opportunities for efficiency gains. The adoption of automation, data analytics, and real time service platforms can optimize logistics and improve customer service. As noted by Ensslin et al. (2024), digital integration into port operations reduces errors and improves monitoring, thereby enhancing competitive positioning.

Conversely, several external threats pose risks to service stability. These include fuel price volatility, extreme weather conditions, growing competition from private transport providers, and ferry schedule delays. Fluctuating operational costs linked to energy prices can disrupt budget planning and fare stability. Weather unpredictability, a persistent maritime challenge, affects navigational safety and reliability.

Moreover, increased competition from private operators could erode market share, especially if these competitors offer more flexible or lower priced services. As Ryabchuk and Kalinina (2021) suggest, strategic adaptation is necessary to preserve competitiveness in liberalized transport markets.

Despite these threats, the total opportunity score of 1.43 far exceeds the threat score of 0.50, confirming that PT ASDP Kolaka operates in an opportunity rich environment. The firm's position in Quadrant I of the SWOT Cartesian diagram (see Figure 1) affirms that aggressive strategies focusing on service expansion, innovation, and public engagement are warranted.

SWOT Strategic Position and Alternatives

Based on the SWOT Cartesian diagram, PT ASDP Kolaka is located in Quadrant I, which encourages the adoption of growth oriented and proactive strategies. This strategic posture is supported by the favorable internal (S > W) and external (O > T) conditions.

Accordingly, SO strategies are prioritized. These include expanding service reach through digital service innovation and optimizing fleet operations to accommodate rising demand. Emphasis

should be placed on enhancing the customer experience via mobile ticketing and service integration with regional logistics hubs.

WO strategies involve mitigating weaknesses through opportunity exploitation. For instance, limited public awareness can be addressed by launching targeted marketing campaigns, including digital outreach and community engagement. Similarly, capacity bottlenecks during peak seasons may be eased by investing in modular docking infrastructure and predictive scheduling systems.

ST strategies require leveraging internal strengths to confront threats. Improved fleet reliability and digital tracking systems can be utilized to reduce delays caused by environmental and operational uncertainties. Furthermore, investment in staff training and safety management can help mitigate the impact of adverse weather conditions.

WT strategies, although less prioritized, focus on damage control and operational stabilization. These include implementing automated queuing systems and digital dashboards to monitor traffic and streamline vehicle management at terminals. Strengthening coordination with port authorities through integrated management platforms can also reduce procedural inefficiencies.

Summary of Strategic Implications

In conclusion, the IFAS and EFAS analyses substantiate the firm's strong internal capacity and supportive external conditions. PT ASDP Kolaka is advised to adopt aggressive growth strategies that leverage its infrastructural strengths, human capital, and technological systems while addressing its operational limitations through digital and managerial innovations. This strategic direction aligns with national maritime development priorities and supports sustainable growth in regional connectivity and service quality.

The findings of this study position PT ASDP Indonesia Ferry in Kolaka within Quadrant I of the SWOT matrix, indicating a strategically advantageous position characterized by high internal strength and substantial external opportunity. This aggressive strategy quadrant compels the organization to leverage its established competencies to capitalize on external opportunities, thus pursuing sustained growth, innovation, and public value delivery.

One of the most critical implications of this positioning is the opportunity for PT ASDP Kolaka to intensify its service expansion initiatives. The internal strengths such as its expansive ferry network that reaches remote areas, adequate fleet and dock infrastructure, experienced personnel, and robust digital systems form a solid foundation for such expansion. These capabilities enable the organization to cater to the increasing demand for inter island mobility, which has been emphasized as a growing trend by Solikin (2024) and Anwar & Prawiraatmadja (2024). The electronic ticketing system and digitized operations not only improve customer convenience but also generate valuable data for real time service optimization.

Government support for maritime connectivity, particularly through the sea toll program, further enhances the external environment in which PT ASDP operates. As Davis et al. (2018) and Palakshappa et al. (2023) highlight, this support presents a structural opportunity for SOEs to

modernize and integrate their operations within national logistics frameworks. By aligning internal capabilities with these macro level trends, PT ASDP can effectively expand its service scope while remaining aligned with national development goals.

However, to fully harness this aggressive strategy, PT ASDP must address its internal weaknesses such as limited promotional outreach, peak season congestion, suboptimal vehicle queuing, and coordination gaps with port authorities. The literature supports that even firms with robust strengths must continuously refine internal processes to retain competitive advantage (Kim & Kim, 2021). Therefore, addressing these internal inefficiencies is not a contradiction but a necessity for supporting aggressive growth.

The strategic formulation in this study also identifies several actionable SO, WO, ST, and WT strategies. For instance, SO strategies emphasize enhancing market reach through the deployment of reliable fleets and digital services, directly addressing increased mobility demands. This resonates with the argument by Abdelsalam & Elnabawi (2024) that digital innovation and infrastructural adequacy are cornerstones of resilience and service excellence in port operations.

Simultaneously, the WO strategies underscore the importance of strengthening promotional efforts to overcome the challenge of limited community engagement. As argued by Solikin (2024), organizations in the maritime sector often face a visibility gap that inhibits public utilization, which can be effectively bridged through targeted digital marketing and local partnerships.

The ST strategies focus on adaptability in the face of climate induced disruptions and operational delays risks that are particularly salient for maritime operators. The deployment of adaptive scheduling and preventive maintenance systems based on weather forecasts, as recommended by Resende et al. (2023), can enhance operational continuity while reducing exposure to unpredictable environmental factors.

In managing external threats such as rising fuel costs, weather disruptions, and competition from private operators, the WT strategies in this study propose the adoption of smart logistics and ticketing systems. These innovations not only mitigate cost fluctuations but also enhance reliability attributes critical for retaining customer trust. As emphasized by Zhou & Suh (2024), technology driven efficiency measures are integral to modern port competitiveness.

Strategically, the positioning in Quadrant I should also encourage PT ASDP to explore diversification of services and expansion into new geographic markets. Drawing from the insights of daDavis et al. (2018) and Bjerkan et al. (2019), diversification into areas such as cargo logistics or tourism oriented transport could reduce dependency on core passenger services and provide new revenue streams.

Moreover, the aggressive strategy supports the pursuit of smart partnerships, including joint ventures with regional authorities, environmental NGOs, and private technology firms. This aligns with the model of value co creation advocated by Palakshappa et al. (2023), wherein stakeholder collaboration not only enhances operational effectiveness but also amplifies public value.

Another dimension that emerges from this discussion is the role of human capital development. Aggressive strategies necessitate workforce agility, as underscored by Solikin (2024), making it essential for PT ASDP to invest in training programs that foster digital literacy, environmental awareness, and adaptive operational skills.

From a technological perspective, integrating IoT based monitoring, predictive analytics, and AI enhanced scheduling systems can transform operational processes and minimize inefficiencies. According to Nguyen et al. (2023), such technologies empower real time responsiveness and resource optimization, which are pivotal for maintaining high service standards.

To conclude this section, the strategic position of PT ASDP Indonesia Ferry in Kolaka within the aggressive quadrant of the SWOT matrix enables it to deploy innovative, forward looking strategies. These strategies are grounded in its internal capabilities and informed by dynamic external conditions, offering a roadmap for sustained growth, enhanced service reliability, and expanded public value. The discussion demonstrates that strategic success in the maritime service sector hinges not only on identifying strengths and opportunities but on translating them into integrated, actionable frameworks that address operational realities while aligning with broader policy and environmental imperatives.

CONCLUSION

This study has comprehensively examined the implementation of strategic service optimization at PT ASDP Indonesia Ferry in Kolaka by integrating SWOT analysis tools, particularly through IFAS and EFAS matrices. The findings highlight that internal factors such as employee engagement, digitalization, leadership competence, and infrastructure adequacy significantly enhance ferry port service performance. Simultaneously, external influences including government policy support, regional economic dynamics, and environmental regulations act as pivotal enablers or barriers to service delivery. The IFAS matrix revealed that organizational resilience, innovation culture, and workflow efficiency were the most prominent internal strengths, while the EFAS matrix emphasized the critical importance of regulatory adaptation and digital transformation in responding to external pressures.

The implications of these results are twofold: operationally, PT ASDP in Kolaka must continue to refine internal governance structures and promote cross functional coordination; strategically, it must leverage government partnerships and anticipate environmental shifts to maintain competitive positioning. This research contributes to the academic discourse on strategic port management by offering an integrated analysis framework grounded in empirical data and context specific insights. Future research could expand on these findings by incorporating longitudinal performance data or comparing ferry service optimization strategies across different Indonesian regions.

REFERENCE

Abdelsalam, H. E. B., & Elnabawi, M. N. (2024). The Transformative Potential of Artificial Intelligence in the Maritime Transport and Its Impact on Port Industry. *Maritime Research and Technology*, *3*(1), 19. https://doi.org/10.21622/mrt.2024.03.1.752

Acciaro, M., & Sys, C. (2020). Innovation in the Maritime Sector: Aligning Strategy With Outcomes. *Maritime Policy & Management*, *47*(8), 1045–1063. https://doi.org/10.1080/03088839.2020.1737335

Amanda, M. (2021). Optimization of River Transport Services Using the Minimum Transportation Standard Reference to Improve Community Satisfaction. *Kne Social Sciences*. https://doi.org/10.18502/kss.v5i1.8284

Anwar, M. I., & Prawiraatmadja, W. (2024). Proposed Business Strategy for Implementation of Green Port at Merak Ferry Port to Achieve Sustainability. *International Journal of Current Science Research and Review*, *07*(07). https://doi.org/10.47191/ijcsrr/v7-i7-75

Ardian, H., Putra, A., Nurdin, N., & Sunandar, S. (2024). The Impact of Global Uncertainty on Indonesia's Economic Stability: An Empirical Study for the Period 2020-2025. *Nawala Education*, *1*(2), 12–21. https://doi.org/10.62872/6srtfb48

Arifianti, D., & Sakapurnama, E. (2024). The Strategy of Public Services Through Digitalization in Indonesia: A Comparative Study From South Korea Success Story. *Journal La Sociale*, *5*(3), 651–658. https://doi.org/10.37899/journal-la-sociale.v5i3.1140

Bjerkan, K. Y., Karlsson, H., Sondell, R. S., Damman, S., & Meland, S. (2019). Governance in Maritime Passenger Transport: Green Public Procurement of Ferry Services. *World Electric Vehicle Journal*, *10*(4), 74. https://doi.org/10.3390/wevj10040074

Cantikasari, W. (2024). SWOT Analysis of the Transition to Electronic Management of BPHTB System to Prevent Tax Fraud (Case Study at the Regional Revenue Office of Bondowoso Regency). *West Science Journal Economic and Entrepreneurship*, *2*(01), 36–45. https://doi.org/10.58812/wsjee.v2i01.547

Davis, M. M., Stavrulaki, E., & Wolfson, A. (2018). A Framework for Increasing Sustainability in Services. *Service Science*, *10*(2), 139–153. https://doi.org/10.1287/serv.2018.0207

Dewi, R. A., & Purwanto, S. K. (2023). Analysis of Variables That Affect Passenger Loyalty Across Ujung-Kamal. *Journal of Business Studies and Mangement Review*, *6*(2), 246–252. https://doi.org/10.22437/jbsmr.v6i2.24072

Ensslin, S. R., Dutra, A., & Rambo, M. A. (2024). *Performance Evaluation From the Infrastructure Perspective in Ports and Container Terminals*. https://doi.org/10.5821/mt.13174

Fathoni, M. F., Hidayati, O., & Arifani, D. (2021). The Safety of Sea Ferry Transportation and Anticipation of Ship Accidents in Merak-Bakauheni. *Kne Social Sciences*. https://doi.org/10.18502/kss.v5i1.8279

Gracia, M. D., González-Ramírez, R. G., Ascencio, L. M., & Mar-Ortiz, J. (2022). Assessing the Implementation of Governance Best Practices by Latin American Ports. *Maritime Economics & Logistics*, *24*(4), 806–834. https://doi.org/10.1057/s41278-022-00224-y

GÜREL, E. (2017). Swot Analysis: A Theoretical Review. *Journal of International Social Research*, *10*(51), 994–1006. https://doi.org/10.17719/jisr.2017.1832

Kim, J.-H., & Kim, H. (2021). Evaluation of the Efficiency of Maritime Transport Using a Network Slacks-Based Measure (SBM) Approach: A Case Study on the Korean Coastal Ferry Market. *Sustainability*, *13*(11), 6094. https://doi.org/10.3390/su13116094

Lin, Q. (2023). The Theoretical Framework Of enterprise Digital Innovation: Insights From a Qualitative Meta-Analysis. *European Journal of Innovation Management*, *27*(6), 2149–2172. https://doi.org/10.1108/ejim-09-2022-0496

Lyu, Y., Xie, J., Meng, X., & Wang, X. (2024). Digital Economy and Institutional Dynamics: Striving for Equitable Public Service in a Digitally Transformed Era. *Frontiers in Public Health*, *12*. https://doi.org/10.3389/fpubh.2024.1330044

Maula, N. (2024). Challenges and the Future of Natural Batik Ciwaringin Industry, Cirebon: Case Study Analysis Using IFAS and EFAS Techniques. *Cr Journal (Creative Research for West Java Development)*, *10*(01), 53–75. https://doi.org/10.34147/crj.v10i1.333

Nguyen, H. P., Nguyen, P. Q. P., Pham, N. D. K., Bui, V. D., & Nguyen, D. T. (2023). Application of IoT Technologies in Seaport Management. *Joiv International Journal on Informatics Visualization*, *7*(1), 228. https://doi.org/10.30630/joiv.7.1.1697

Nurfadilah, A., & Haliah, H. (2024). Public Sector Transformation: Increased Efficiency and Innovation in the Digital Economy. *International. J. Of. Hum. Educ. Soc. Sci*, *2*(2), 127–143. https://doi.org/10.58578/ijhess.v2i2.2870

Obasi, C., Oyakegha, S., & Okuoyibo, A. M. (2024). Port Logistics and Supply Chain Management: An Empirical Review. *African Journal of Economics and Sustainable Development*, *7*(3), 82–91. https://doi.org/10.52589/ajesd-cb4sa99c

Omar, A., El-Haddadeh, R., & Weerakkody, V. (2016). Exploring Digitally Enabled Service Transformation in the Public Sector. *International Journal of Electronic Government Research*, *12*(4), 1–14. https://doi.org/10.4018/ijegr.2016100101

Palakshappa, N., Dodds, S., & Stangl, L. M. (2023). Understanding Sustainable Service Ecosystems: A Meso-Level Perspective. *Journal of Services Marketing*, *38*(3), 288–300. https://doi.org/10.1108/jsm-02-2023-0054

Phadermrod, B., Crowder, R., & Wills, G. (2019). Importance-Performance Analysis Based SWOT Analysis. *International Journal of Information Management*, *44*, 194–203. https://doi.org/10.1016/j.ijinfomgt.2016.03.009

Şenbursa, N., & Tehci, A. (2023). Internal Marketing and Employees' Perception of Organizational Performance in the Maritime Organization: The Mediator and Moderator Role of Satisfaction

and Work Experience. *Организационная Психология*, *13*(2), 193–206. https://doi.org/10.17323/2312-5942-2023-13-2-193-206

Setiyowati, A. A., Hadiyati, E., & Wahyono, G. B. (2023). Strategi Pencapaian Kinerja Bidang Bina Pemerintahan Desa Pada Dinas Pemberdayaan Masyarakat Dan Desa Kabupaten Probolinggo Dengan Pendekatan Analisis SWOT. *Ekonomis Journal of Economics and Business*, *7*(1), 553. https://doi.org/10.33087/ekonomis.v7i1.1074

Sharma, P. N., Sulastri, S., Widiyanti, M., & Isnurhadi, . (2024). Corporate Sustainability and Financial Performance: Evidence From State-Owned Enterprises in Indonesia. *Kne Social Sciences*. https://doi.org/10.18502/kss.v9i14.16119

Singh, S. P., & Singh, P. (2018). An Integrated AFS-Based SWOT Analysis Approach for Evaluation of Strategies Under McDm Environment. *Journal of Operations and Strategic Planning*, *1*(2), 129–147. https://doi.org/10.1177/2516600x18801689

Solikin, S. (2024). Leveraging Distinctive Competency for Competitive Advantages: Mediating of Value Creation and Moderating of Service Innovation in Indonesia's Ferry Transport Companies. *Sentralisasi*, *14*(1), 1–26. https://doi.org/10.33506/sl.v14i1.3684

Stoilova, S. (2022). *An Integrated Approach of Strategic Planning and Multi-Criteria Analysis to Evaluate Transport Strategies in Railway Network*. https://doi.org/10.5772/intechopen.99609

Surnata, S., Shidarta, D. B., & Veranika, A. (2023). Overview of Minimum Service Standard Crossingtransport at Kmp. Kuala Batee Ii in Route Tanjung Kalian – Tanjung Api –Api. *Iwtj*, *3*(2). https://doi.org/10.54249/iwtj.v3i1.127

Tehrani, M. M. E. (2017). Analyzing Strategic Factors Associated With Issuance of Environmental Liability Insurance Policy in Developing Countries Using SWOT and QSPM. *International Journal of Environmental Science and Development*, *8*(5), 359–365. https://doi.org/10.18178/ijesd.2017.8.5.978

Tyas, E. W., Zaim, I. A., & Prawiraatmadja, W. (2024). Ideal Integration Approaches for Enhancing ASDP Group's Performance Post-Subsidiary Acquisition. *International Journal of Current Science Research and Review*, *07*(08). https://doi.org/10.47191/ijcsrr/v7-i8-20

Wahidah, J., Asri, S., & Paroka, D. (2023). Analysis of Ship Operation Pattern Base on Bira - Pamatata Crossing. *Zona Laut Jurnal Inovasi Sains Dan Teknologi Kelautan*, 125–136. https://doi.org/10.62012/zl.v4i2.26954

Zhou, L., & Suh, W. (2024). A Comprehensive Study on Static and Dynamic Operational Efficiency in Major Korean Container Terminals Amid the Smart Port Development Context. *Sustainability*, *16*(13), 5288. https://doi.org/10.3390/su16135288