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Research Article

Competitive Advantage and Business Performance of Forwarding Companies in Jakarta

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ABSTRACT

Introduction: The forwarding industry in Indonesia faces a complex array of challenges that significantly affect operational performance and the competitiveness of companies. One of the primary challenges encountered is the complexity of regulations. Frequently changing export-import regulations compel companies to continuously adapt and update their understanding of the latest policies. Lengthy licensing processes and complicated bureaucracy delay shipping times, increase operational costs, and add to the burden of understanding different regulations in each region. Research by Istan (2021) indicates that compliance costs with regulations can reach 10-15% of total operational costs, which can erode profit margins for companies.

Objective: This research aims to explore the determinants of competitive advantage and its implications for the business performance of forwarding companies in Jakarta during the 4.0 industrial era. In this context, we consider the influence of service differentiation, logistics service quality (LSQ), and information and communication technology (ICT) on competitive advantage and its impact on the business performance of forwarding companies in Jakarta.

Methods: Employing a quantitative approach with a descriptive design, this study involves 300 respondents from forwarding companies in Jakarta, selected through purposive sampling techniques. The data obtained were analysed using Structural Equation Modelling (SEM) with Partial Least Square (PLS).

Results: The analysis results indicate that service differentiation and LSQ significantly influence competitive advantage and positively contribute to the business performance of forwarding companies in Jakarta. Meanwhile, ICT shows a positive influence on competitive advantage but does not have a direct impact on business performance. Furthermore, competitive advantage plays an effective mediating role between service differentiation and business performance.

Conclusions: These findings provide valuable insights for forwarding companies in adapting competitive strategies that can enhance performance in an increasingly competitive market.

Keywords: Services, logistics, forwarding industry, market growth.

INTRODUCTION

The forwarding industry in Indonesia faces a complex array of challenges that significantly affect operational performance and the competitiveness of companies. One of the primary challenges encountered is the complexity of regulations. Frequently changing export-import regulations compel companies to continuously adapt and update their understanding of the latest policies. Lengthy licensing processes and complicated bureaucracy delay shipping times, increase operational costs, and add to the burden of understanding different regulations in each region. Research by Istan (2021) indicates that compliance costs with regulations can reach 10-15% of total operational costs, which can erode profit margins for companies.

Moreover, according to Pangilinan, A (2025), the implementation of international standards and certifications such as ISO can assist companies in complying with regulations and improving operational efficiency, although it requires a substantial initial investment.

Thus, the complex regulatory challenges not only impact operational costs but also require effective adaptation strategies from companies to remain competitive in the market. Therefore, investment in information technology, human resource training, and enhanced cooperation with the government becomes paramount for the sustainability and performance of the forwarding industry in Indonesia.

In addition, inadequate infrastructure challenges trigger other issues, such as poor road quality in many areas. Research by Triadi et al. (2021) indicates that inadequate transportation infrastructure contributes to damage to goods and delays in delivery, which impacts customer satisfaction. Additionally, limited capacity at ports and airports, coupled with low efficiency, also hampers the smooth flow of goods. Insufficient storage space and a lack of advanced tracking systems can exacerbate the situation, making it difficult for companies to meet customer expectations in both service and operational efficiency.

Intense competition within the forwarding industry also poses a significant issue, where the multitude of players, both large and small, triggers price competition that thins profit margins. Differentiation strategies become essential. Research by Yanti and Rahardja (2022) reveals that businesses capable of offering additional and innovative services can maintain their market share amid fierce competition. However, many companies still operate using outdated systems, rendering them unable to compete effectively. Research by Sari and Kusumawati (2022) uncovers that many players in the forwarding industry are now adopting modern technologies such as automation, the Internet of Things (IoT), and data analytics to enhance efficiency and accelerate decision-making.

According to Wedanaji (2011), "The freight forwarding business is a trade specialist that provides a variety of functions and facilities for the transportation of goods." For a long time, freight forwarders have played a crucial role in the movement of goods from point of origin to destination, whether by sea or air. Unfortunately, data from BPS indicating a decline in the number of shipments from 2022 to 2023 suggests that forwarding companies are facing increasing challenges. Limited human resources and high employee turnover also exacerbate the situation. Research by Yudha (2021) emphasises the importance of maintaining quality human resources within the company, as well as the need for continuous training to prevent errors in the logistics process.

In financial terms, fluctuations in the exchange rate of the rupiah against foreign currencies significantly impact operational costs and the selling prices of shipping services. The instability of exchange rates complicates financial planning and adds challenges for company management. This is articulated by Indratno (2023), who stresses that companies need to engage in hedging to manage financial risks. Furthermore, security and customs risks present serious challenges faced by the industry, where the risk of damage and theft of goods during shipping is highly consequential.

The market value of the freight and logistics sector in Indonesia has continued to experience significant growth from 2017 through projections for 2029. In 2017, the market value was at a lower initial level, consistently increasing to reach $112.18 billion by 2024, with projections of reaching $152.54 billion by 2029. This growth reflects the rising demand for logistics, including the transportation of goods, warehousing, courier services, and forwarding activities, driven by trade growth and the development of the digital economy in Indonesia. In this context, forwarding companies play a vital role in meeting increasingly complex logistics needs (Statista, 2022).

The multitude of competitors in freight forwarding services necessitates that companies minimise issues in delivering services to consumers. Based on data from BPS, there has been a noted decline in the number of shipments from 2022 to 2024.

Table 1.1 Data on Lost Customers from 2022-2023

Mode	**Revenue 2022 (IDR)**	**Revenue 2023 (IDR)**	Number of Shipments **2022**	Number of Shipments **2023**
Air	936.607.263	413.148.975	66	57
Import	89.676.013	157.445.076	8	5
Eksport	846.931.250	255.703.899	58	52

Sea	10.426.001.901	7.259.826.891	505	228
Import	2.560.361.311	2.791.003.023	211	42
Eksport	7.865.640.590	4.468.823.868	294	186
Total	**11.362.609.164**	**7.672.975.866**	**571**	**285**

Sources: BPS.go.id

Based on Table 1., it can be observed that over the past two years, there has been a decline in both revenue and the number of shipments. If a projection of the financial loss due to the average revenue lost is calculated, it is found that for air shipments, both import and export, each lost shipment results in an average loss of IDR. 7,932,000. This amount is quite significant when compared to the revenue that has decreased by almost 50% from 2022 to 2023. Similarly, the trend for sea shipments shows that the revenue lost per shipment reaches IDR. 11,430,000. Numerically, the loss of revenue will undoubtedly have a substantial financial impact on the company. If this issue does not receive attention from the company, the potential financial impact may increase significantly in 2024 and subsequent years.

Amid the significant changes brought about by Industry 4.0, forwarding companies in Jakarta are faced with both significant challenges and opportunities. Advances in supply chain digitalisation, driven by globalisation and e-commerce, compel companies to act swiftly. Many agents in this sector are beginning to recognise the importance of digital transformation to enhance competitiveness. Research by Liu et al. (2022) indicates that technological innovation in logistics processes not only enhances operational efficiency but also strengthens relationships with customers.

In terms of service, logistics service quality (LSQ) has proven to be a key factor driving competitive advantage and company performance. Recent research by Wang et al. (2023) indicates that companies investing in improving LSQ tend to have higher customer satisfaction and loyalty, which directly impacts financial performance. Several dimensions of service quality, such as timeliness, security, and effective communication, are crucial for creating competitive advantage in the market.

However, many challenges remain in enhancing LSQ, including constraints in real-world shipment tracking and slow responses to customer complaints. Research by Setiawan et al. (2022) found that many companies are slow to handle customer complaints due to a lack of effective complaint management systems. A proactive approach to resolving these issues is essential for enhancing customer trust and reducing undetected customer loss.

Overall, the challenges faced by the forwarding industry in Indonesia are substantial; however, there are also significant opportunities for improvement. Enhancing service quality, adopting technology, and improving human resource capabilities are strategic measures that companies can take to achieve competitive advantage. Considering the dynamics of the market and the ever-changing desires of customers, forwarding companies in Indonesia need to adapt to remain relevant and survive in an increasingly competitive market. Customer protection, service quality enhancement, and the implementation of modern technology will be key to achieving success in addressing future challenges.

OBJECTIVE

This study aims to analyze the main challenges faced by the forwarding industry in jakarta and find solutions to improve competitiveness and sustainability of company operations. The research examines the impact of forwarding service differentiation, logistics service quality (LSQ), such as timeliness, security, and effective communication, as well as the application of information and communication technology as determining factors in building competitive advantage and improving business performance. Through a comprehensive analysis of the challenges faced by forwarding companies in jakarta, this research is expected to provide practical recommendations for companies in the face of globalization and technological advances.

METHODS

This study employs a quantitative approach with a descriptive design, aiming to describe current phenomena related to the influence of service differentiation, logistics service quality (LSQ), and information and communication technology (ICT) on competitive advantage and its impact on business performance in forwarding companies in Jakarta. A survey method is applied with a data collection instrument in the form of a questionnaire conducted cross-sectionally, where data is collected only once from the population under study. The population for

this research consists of 818 freight forwarding service companies operating in Jakarta, the primary business centre in Indonesia, and the sampling technique is conducted using non-random purposive sampling, where sample selection is determined based on specific characteristics to answer the research questions. Based on recommendations from Hair et al. (2021), the minimum sample size is set at 300 respondents, primarily from the marketing division to represent the population.

Data analysis is performed descriptively to describe respondents' answers to each question, as well as structural equation modelling (SEM) analysis using SmartPLS software to measure the relationships between variables and both direct and indirect effects. The hypotheses developed in this study are tested through impact analysis with a decomposition model, allowing for the identification of direct effects and impacts through the mediating variable of competitive advantage. With this structured and comprehensive methodology, it is hoped that the research can provide in-depth insights into the dynamics of the forwarding industry in Jakarta and the key factors influencing competitive advantage and overall business performance.

RESULTS

The data description outlines the demographic profile of the 300 respondents, consisting of gender, age, education level, and work experience. The majority of respondents are male (55.67%) and aged between 31 and 40 years (43%). Furthermore, the majority of employees have higher education, with 49.33% holding a Bachelor's degree/S1/D4, and 42.33% possess work experience ranging from 1 to 5 years.

The research variable description identifies three independent variables: service differentiation, logistics service quality, and ICT, as well as the intervening variable of competitive advantage, and the dependent variable of business performance. Data were collected from 300 heads of marketing departments through a questionnaire with three independent variables: Service Differentiation (8 statement items), Logistics Service Quality (14 items), and Information and Communication Technology (14 items). The intervening variable is Competitive Advantage (12 items), while the dependent variable is Business Performance (11 items).

Service Differentiation shows an average score of 4.04, indicating that companies provide good services, with a commendable focus on customer complaints and highly appreciated consultation services (4.08). The analysis results indicate that perceptions of service differentiation are significantly influenced by gender, age, and education, but not by work experience.

Logistics Service Quality received an average score of 4.23, indicating a high level of satisfaction with the services offered, including efficiency in the online ordering system (4.30) and the timeliness of goods delivery (4.22). Although there is no significant relationship between respondents' demographics and Service Quality, respondents' perceptions of quality are very positive.

Information and Communication Technology scored an average of 4.06. Respondents find it easy to access service information (4.17), although online interaction with the company needs improvement (3.99). There is no significant relationship between demographics and perceptions of ICT application, indicating broad acceptance of technology among all respondents.

Competitive Advantage emerged with an average score of 4.02, affirming that companies can guarantee service quality and value commensurate with costs. Despite weaknesses in networking and employee skills, companies generally succeed in maintaining their image and offering non-replaceable services.

Business Performance displays an average of 4.16, indicating that forwarding companies fall into the good category. Significant increases in service users, market reach, and price stability highlight positive company performance in the market. Chi-Square analysis reveals no significant relationship between respondents' demographics and performance perceptions, reflecting a positive consensus among all groups in assessing the company's business performance.

Overall, forwarding companies in Jakarta demonstrate good performance through the provision of quality services, responsiveness to customer needs, and the adoption of the latest technology that supports effective operations.

Hypothesis testing is conducted using Structural Equation Modelling (SEM) with a Partial Least Square (PLS) approach. This research performs measurement model testing (outer model) to understand the relationships between latent variables and their manifest variables, focusing on validity and reliability testing.

a. Convergent Validity Testing shows that all indicators for the Service Differentiation variable have loading factor values above 0.5, except for D3, which has a value of 0.530. In the Logistics Service Quality variable, one statement (Ls3) has a loading factor below 0.5 and is not used in structural analysis. For the Information and Communication Technology variable, T13 also does not meet the criteria. In terms of Competitive Advantage and Business Performance, all statements meet the criteria. The average value of Average Variance Extracted (AVE) for all latent variables is also greater than 0.5, thus meeting the convergent validity threshold.

b. Discriminant Validity Testing shows the results of cross-loading tests where each indicator has a higher correlation with the measured latent variable than with other variables. The results of the Heterotrait-Monotrait Ratio (HTMT) for all pairs of indicators are also below the threshold of 0.90, indicating good discriminant validity. Testing with the Fornell-Larcker Criterion confirms that all constructs in the model meet discriminant validity, where each construct better represents its own variable.

c. Reliability Testing shows that all constructs have Cronbach's Alpha and Composite Reliability values above 0.7, indicating that all measurement instruments are reliable in assessing the constructs studied.

Overall, the test results indicate that the research model has good validity and reliability, making it suitable for further analysis of the relationships between variables in this study.

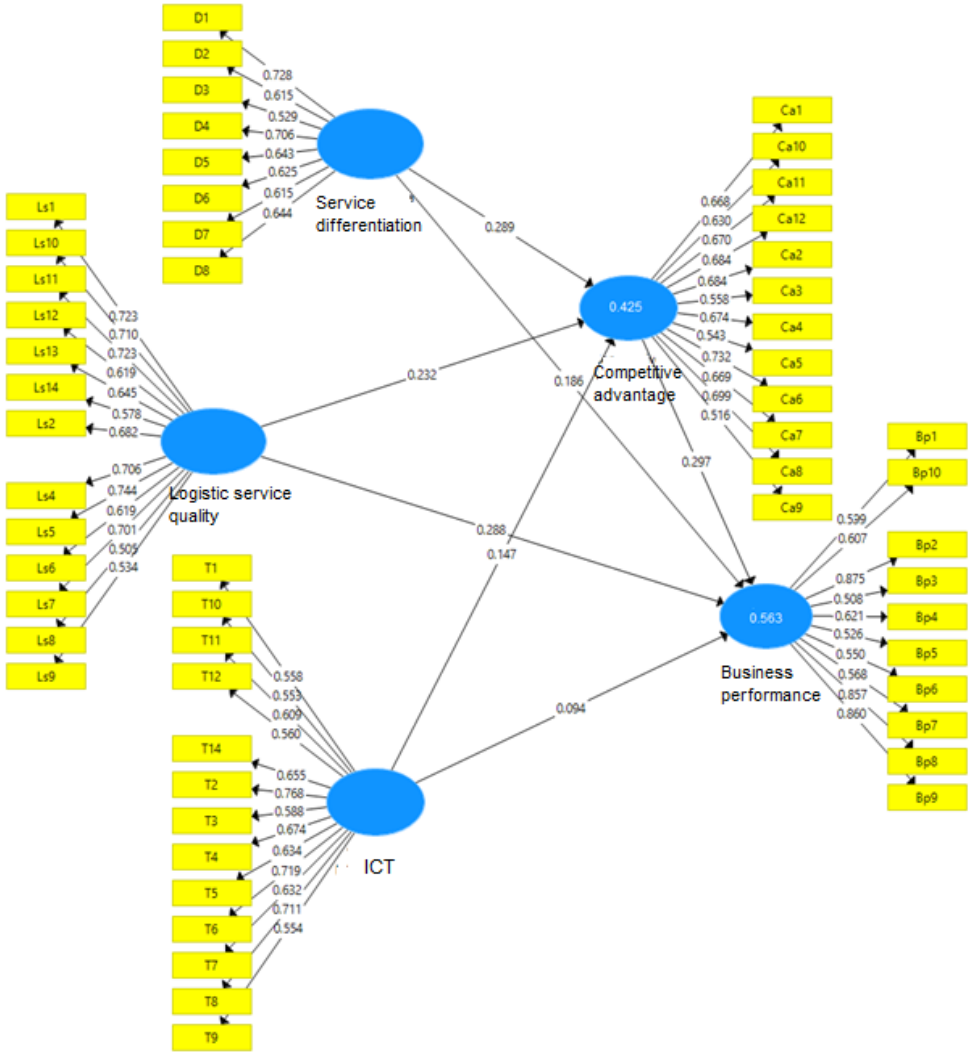

Figure 1. Full Research Model

Source: Data processed using PLS software

In this study, the inner model testing is conducted by displaying the R2 values for the endogenous latent constructs. The hypotheses in this study will be tested using path coefficient values and p-values presented as follows.

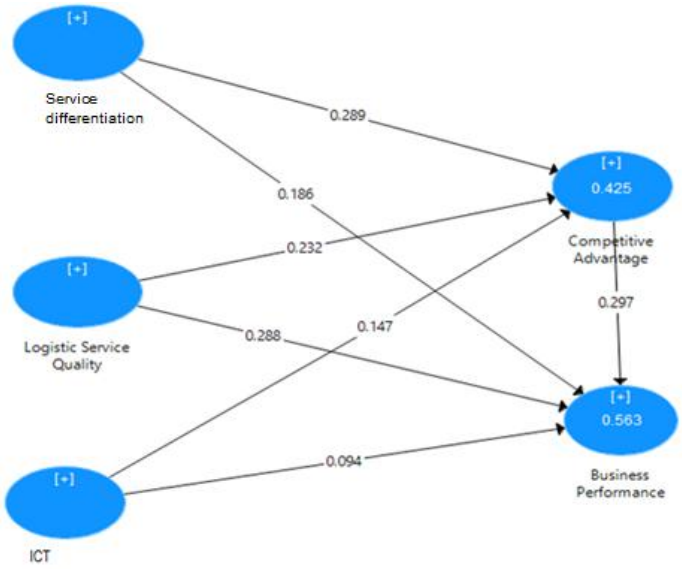

Figure 2. Structural Model

Source: Data processed using PLS software

Based on the path diagram above, there are three main variables influencing Competitive Advantage and Business Performance, namely Service Differentiation, Logistics Service Quality, and ICT. Service Differentiation has a direct effect of 0.289 on Competitive Advantage and an indirect effect on Business Performance through Competitive Advantage with a contribution of 0.425. Logistics Service Quality shows a significant direct effect of 0.288 on Business Performance and also contributes 0.232 to Competitive Advantage. Additionally, ICT provides a direct contribution of 0.094 to Business Performance and an indirect effect through Competitive Advantage with a value of 0.147.

Overall, Competitive Advantage has a significant contribution to Business Performance with a value of 0.297, while Business Performance is influenced by other variables with a coefficient of 0.563. These findings indicate that focusing on Service Differentiation, Logistics Service Quality, and ICT can strengthen competitive advantage, ultimately contributing to improved business performance. This reflects the importance of synergy between variables to support the competitiveness and business performance of companies.

Table 2. Hypothesis Test Results

Relationship Constructs	Original Sample (O)	T Statistics (|O/STDEV|)	P Values
Competitive Advantage → Business Performance	0,297	5,043	0,000
Service differentiation →Business Performance	0,186	3,365	0,001
Service differentiation →Competitive Advantage	0,289	6,438	0,000
Logistic Service Quality →Business Performance	0,288	5,205	0,000
Logistic Service Quality →Competitive Advantage	0,232	4,363	0,000
Information And Commucation Technology →Business Performance	0,094	1,314	0,189
Information And Communication Technology → Competitive Advantage	0,147	2,406	0,016
Service differentiation →Competitive Advantage →Business Performance	0,086	4,163	0,000
Logistic Service Quality → Competitive Advantage →Business Performance	0,069	3,111	0,002
Information And Communication Technology →Competitive Advantage →Business Performance	0,044	2,125	0,034

Source: Data processed using PLS software

Analysis results indicate that service differentiation, logistics service quality, and ICT significantly affect competitive advantage, with t-statistic values greater than 1.96 ($p<0.05$). Furthermore, competitive advantage significantly influences business performance, providing evidence that competitive advantage serves as a mediator between service differentiation and logistics service quality on business performance.

DISCUSSION

Service differentiation is one of the most critical strategies in facing competition in the freight forwarding industry, particularly in Jakarta, which has a highly competitive market. This strategy refers to the company's ability to offer unique and different services compared to competitors. In this context, service innovation and quality enhancement become primary focuses. Companies that can develop innovative features, such as real-time shipment tracking through mobile applications, can attract consumer attention and enhance customer satisfaction. Research by Singh et.al. (2023) indicates that a better customer experience directly increases loyalty and customer retention, which is vital in a service-oriented sector like this.

On the other hand, logistics service quality (LSQ) also plays an important role in creating competitive advantage. LSQ encompasses dimensions such as reliability, timeliness, and responsiveness to customer needs. Companies that can provide reliable services in accordance with promised timelines are usually preferred by customers, leading to increased loyalty. Hapsari (2017) state that improvements in service quality positively impact long-term relationships with customers and the company's reputation in the market. With effective management of service quality, companies can strengthen their position and differentiate themselves from competitors, especially in markets with similar products and services.

Information and communication technology (ICT) has emerged as a critical tool in enhancing operational efficiency and service quality within the logistics industry. The use of transportation management systems (TMS) and advanced analytical tools enables companies to automate many processes, from ordering to delivery. Nikolić (2023) demonstrate that the use of modern technology not only reduces processing times but also increases productivity. However, the implementation of this technology often faces several challenges, including a lack of effective integration and adequate training for employees. In line with this, research by Wang et al. (2022) shows that without strong management support, investments in ICT may not yield the expected results.

Furthermore, service differentiation not only enhances competitive advantage but also positively impacts the business performance of companies. The conducted research indicates that companies that successfully differentiate their services can attract more customers, increase shipment volumes, and enhance profitability. A study by Chang et al. (2009) found that the ability to adapt services according to customer needs can enhance the perceived value by customers and contribute to higher loyalty. This illustrates the complexity of the relationship between service differentiation and positive business outcomes, where companies need to stand out in the market while also meeting the evolving expectations of customers.

Logistics service quality has significant consequences for business performance, where companies with high LSQ standards often contribute to better performance. This refers to the Supply Chain Management model that clarifies the importance of efficient chain management in delivering added value to customers. Research by Akıl, S & Ungan, MC. (2024) notes that companies proficient in goods delivery and information processing can optimise their operations, reduce inefficiencies, and enhance their reputation in the market. Therefore, maintaining and improving logistics service quality not only ensures customer satisfaction but also drives business performance growth in this continuously evolving sector.

Finally, the research indicates that although ICT offers potential for enhancing competitive advantage, factors such as suboptimal implementation and infrastructure issues may limit its impact on business performance. Research by Li et al. (2022) finds that employee skills and adequate operational conditions are crucial in maximising the benefits of technology. Consequently, companies need to invest not only in technology but also in training and human resource development to ensure that all available opportunities can be optimised. Overall, this discussion indicates that the integration of service differentiation, logistics service quality, and the application of information technology is key to achieving competitive advantage and optimal business performance in the freight forwarding industry.

While the results of this study yield findings consistent with previous studies, there are several significant differences. Firstly, most previous research emphasises the importance of price as a primary factor in attracting customers in the freight forwarding industry (Asa et al., 2010; Demir et al., 2020). However, this study reveals that service differentiation and logistics service quality have a more substantial impact on customer loyalty compared to price factors, especially in competitive markets like Jakarta.

Research by Giantari and Jatra (2019) shows that differentiation strategy has a positive and significant effect on business performance. Additionally, research by Zhang et al. (2021) shows that in contexts of low market demand, service differentiation does not always significantly impact business performance. However, this study finds that companies capable of highlighting their services through differentiation can attract new customers and increase shipment volumes, regardless of existing market conditions.

Lastly, regarding the impact of ICT, the findings of this study align with Okwubali et.al (2023), emphasising that technology has the potential to enhance efficiency. However, this study finds that challenges in ICT implementation, such as insufficient employee training and inadequate infrastructure, more significantly hinder its positive impact on business performance than reported in previous studies. Research by Aikor (2024) underscores the importance of internal factors and culture in maximising the outcomes of technology, which is further reinforced by the findings in this study.

Thus, these differences indicate that in different market contexts and with various existing dynamics, the strategies adopted by companies can yield different outcomes. This research contributes to understanding how service differentiation, logistics service quality, and information technology can synergistically function to enhance business performance, which may not have been clearly identified in previous studies.

The findings of this research provide valuable contributions to theory and practice in the freight forwarding industry, demonstrating that the combination of service differentiation, logistics service quality, and ICT integration is key to creating and sustaining competitive advantage and company performance. This study encourages companies to focus on service innovation and quality management to remain relevant and competitive in the previously mentioned market.

CONCLUSION

The conclusions drawn from this research indicate that service differentiation, logistics service quality (LSQ), and information and communication technology (ICT) have significant influences on competitive advantage and business performance of forwarding companies in Jakarta. The research findings affirm that companies capable of offering unique and value-added services through service differentiation will enhance their competitiveness in the market. Furthermore, high logistics service quality proves essential in improving customer satisfaction and loyalty, which directly impacts the business performance of companies. While ICT contributes positively to competitive advantage, its impact on business performance is not significant, reflecting the need for better integration and utilisation of this technology. Competitive advantage serves as a mediator linking service differentiation and logistics service quality with business performance, indicating that the synergy between differentiation strategies and service quality is key to achieving sustainable performance improvement. These findings provide important implications for company management in taking strategic steps to remain relevant and competitive amidst the challenges and opportunities present in the 4.0 industry.

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