

Service Quality as a Strategic Driver of Competitive Advantage: A SERVQUAL-Based Empirical Study in the Steel Industry

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Abstract

This study aims to evaluate differences in digital-based service quality that can be used as a competitive advantage in the B2B steelmaking industry, focusing on a case study of PT Ravana Jaya. This study examines the dimensions of responsiveness, reliability, and assurance within the SERVQUAL framework and their influence on repeat orders from customers. The method applied is a descriptive qualitative approach through in-depth interviews with five key informants, operational observations, and analysis of internal company documents during the period from August to September 2025, using the data analysis model from Miles and Huberman. The research findings indicate that there are significant differences in the responsiveness dimension due to limited digital readiness of services, as seen from the reliance on manual communication without a CRM system or customer portal. This study emphasizes that digital service responsiveness plays a role as an important indicator of customer loyalty and competitive advantage in the medium-sized steel fabrication sector. From a practical perspective, these results emphasize the importance of integrating CRM and real-time digital services as a strategy to increase competitiveness sustainably.

INTRODUCTION

Competition in the Indonesian steel fabrication industry is intensifying in line with the rapid development of the construction and manufacturing sectors, which play a crucial role in national infrastructure development. The Indonesian steel industry is expected to continue to grow, with national steel consumption projected to increase from 17.4 million tons in 2023 to 20.5 million tons in 2025, while steel production is expected to increase from 15.2 million tons to 17.8 million tons. (Adiguna et al., 2025) One of the main triggers is the surge in low-priced steel imports, especially from China, which has intensified competition, depressed market prices, and led to a drastic decline in revenue. This phenomenon is clearly felt by PT Ravana Jaya, a medium-scale steel fabrication contractor in East Java, which experienced a 22% decline in repeat orders by 2025. This decline is directly correlated with slow customer inquiry responses (4-7 business days), which is triggered by reliance on manual email-based communication without the support of CRM, customer portals, or real-time project tracking.

This situation indicates a significant gap, particularly in terms of digital service responsiveness. Poor service system integration leads to inconsistent information between various internal divisions, such as sales, production, and logistics, slowing decision-making and reducing overall service quality. Preliminary data supports this issue. Internal observations of PT Ravana Jaya from August to September 2025 showed a decrease in the number of projects from 55 to 45, along with an average customer complaint rate related to communication reaching 16.9%. These findings were reinforced by interviews with management, which confirmed that reliance on manual processes was the primary cause of low service responsiveness. This pattern aligns with SERVQUAL research findings, which indicate a gap in the responsiveness dimension, reflecting a mismatch between customer expectations and the service received.

Previous studies have examined the urgency of service quality, such as (Nazilah & Sukaris, 2025), (Saputra & Wala, 2024), Angelina & Sukaris (2022). Likewise, studies related to digital

transformation have also been conducted by (Sukaris & Kirono, 2025), (Kusuma & Sukaris, 2026). (Sukaris et al., 2019) emphasizes that the rapid development of digital media has had a significant impact on media change. Ultimately, this has led to changes in perspectives, concepts, and orientations in other fields, including communications. From a marketing perspective, a new perspective and concept of a modern market oriented toward the market or consumer is the electronic market. Meanwhile, from a business perspective, a new perspective and concept has emerged, namely digital marketing. Now, the interaction model has evolved toward electronic interaction or modern e-commerce. One form of business and marketing activity that applies the concepts of electronic markets, digital marketing, and e-commerce

Therefore, in the last decade, the development of information technology has experienced substantial changes in shaping consumer behavior. With the internet, the parties involved in business to make purchases have become wider through various access to products/services and increased ease of making purchases, as stated. (Sukaris et al., 2019) that technological advances through various media platforms, both print, electronic, digital and social media, have contributed to shifts in consumer consumption patterns.

Likewise, previous studies have shown the existence of unexplored research gaps. (Ats-tauri, 2026) examines the readiness, benefits, and barriers to digital transformation in the Indonesian steel industry, with an emphasis on organizational aspects and technological readiness, but has not specifically linked it to B2B service quality and its implications for competitive advantage. On the other hand, studies discussing the digital skills gap in the Indonesian manufacturing sector post-2021 are more concerned with human resources and competency development, without linking the SERVQUAL approach or service analysis in the context of competition in the steel industry. Therefore, academically, this research is important to increase knowledge about the relationship between service quality, digital transformation, and competitive advantage in the B2B steel fabrication sector, especially for medium-sized companies that have rarely been empirically studied. Practically, the research results are expected to provide a foundation for formulating a practical digital service strategy for PT Ravana Jaya's management to increase service responsiveness, improve internal coordination, and strengthen competitiveness amidst pressure from imported competitors. Based on existing phenomena, this study will focus on service quality variables in the B2B context, particularly the dimensions of responsiveness, reliability, and assurance within the SERVQUAL framework as a basis for achieving competitive advantage in the steel fabrication industry. Emphasis is also placed on gaps in service digitalization, such as CRM integration and real-time tracking systems, as well as the impact of factors on repeat order frequency and customer perception of the value of local companies' products and services compared to foreign competitors.

2. Literature review

Service quality is defined as the customer's perception of the superiority of the service provided, where the comparison between expectations and actual performance is the main determinant of satisfaction which directly contributes to competitive advantage through customer loyalty. (Saputra & Wala, 2024) Service quality encompasses five SERVQUAL dimensions of reliability, responsiveness, assurance, empathy, and tangibles that collectively build customer satisfaction and loyalty in the service industry, while creating strategic differentiation against competitors. (Bachtiar et al., 2022) states that service quality is measured through the SERVQUAL gap analysis, especially the responsiveness dimension which often shows negative values due to mismatches with customer expectations, thus becoming the foundation for transformation towards sustainable competitive advantage. (Agustiyanana et al., 2025) describes service quality as a company's ability to provide consistent and responsive service that meets customer standards, becoming a crucial factor in competitive advantage in manufacturing through operational efficiency. Competitive advantage refers to a company's ability to create superior value for customers that is difficult for competitors to imitate through a combination of low cost, product

differentiation, or niche focus, with digital service quality as the primary driver of strategic differentiation. According to (Ats-tsaury, 2026) Competitive advantage in the Indonesian steel industry is achieved through digital transformation that improves operational efficiency and service responsiveness to B2B customers, closing the SERVQUAL responsiveness gap. Winata (2025) emphasized that the competitive advantage for local steel producers lies in digital service responsiveness that rivals the lead times of imported competitors from China and Vietnam, transforming the weakness of response lag into a strategic advantage. Competitive advantage is the ability of an organization to achieve superior performance sustainably by leveraging valuable, rare, and difficult-to-imitate resources and capabilities.

METHODS

This study uses a descriptive qualitative approach that aims to provide a deeper understanding of the service quality phenomenon at PT. Ravana Jaya, especially those related to communication barriers and their impact on responsiveness and service reliability. This method was chosen because the researcher sees reality naturally in its context, while also understanding the processes, experiences, and views of internal parties in the company in providing service to customers. The study was conducted at PT. Ravana Jaya from August to September 2025. Informants for the study were selected purposively, namely individuals who understand the communication process and customer service. Informants consisted of Project Managers, Quality Control staff, administration, and production or warehouse teams who play a role in the information verification process. In addition, additional data was also obtained from internal company documentation, including customer complaint records that showed 25 complaints regarding slow responses out of a total of 148 orders during the study period. Data collection was conducted through in-depth interviews with key informants in a semi-structured manner so that the researcher had the flexibility to explore further important issues that emerged during the conversations. These interviews focused on how the communication process occurs, the challenges faced, and employees' views on its impact on service quality. In addition to interviews, researchers also conducted direct observations of the company's operational activities. This included production processes, communication flows between departments, and procedures for verifying information before it is provided to customers. These observations were crucial for assessing the alignment between written procedures, actual practices, and the views of informants.

Internal company documentation, such as production flow, complaint data, and communication process records, was also analyzed to strengthen the validity of the findings. In qualitative research, the researcher serves as the primary tool in data collection and analysis. To ensure the accuracy and reliability of the collected data, the researcher applied source and technique triangulation. Interview results were verified through observation and supported by company documentation, ensuring the research results had reliable consistency and objectivity. Data analysis was conducted using the Miles and Huberman model, which includes three main stages: data reduction, data presentation, and conclusion drawing. In the data reduction stage, the researcher sorts, selects, and simplifies important information from interviews, observations, and documentation. The next stage is data presentation, where information is organized in a narrative format to enable patterns, cause-and-effect relationships, and key themes to become clear. The final stage is conclusion drawing, which is the process of interpreting the data to understand how communication barriers arise and how they affect the company's service quality.

RESULTS AND DISCUSSION

This study applies a qualitative method conducted at PT Ravana Jaya through in-depth interviews with five key informants, namely the Project Manager, Quality Control, administrative staff, production team, and warehouse team, and supported by analysis of internal company documents for the period August to September 2025. The production process at PT Ravana Jaya is carried out in stages and organized, starting with the receipt of raw materials, initial preparations such as making working drawings and material readiness, as well as the process of marking, cutting, fit-up or fabrication, welding, finishing, to final inspection. Each stage in the production process is supervised by the Quality Control (QC) team as evidence of the company's commitment to quality assurance of the steel fabrication products produced. The research findings indicate weaknesses in the quality of digital-based services in accordance with the initial objectives of the study, especially in the dimensions of responsiveness, reliability, and assurance within the SERVQUAL framework, which have a direct impact on repeat orders and the company's competitive advantage. The following is internal data from the company that shows a decrease in the number of orders.

Month	Number of Incoming Orders (Project/Order)	Communication Related Complaints (Response Lag)	Product Related Complaints (Defects/Specifications)
June 2025	55	9	0
July 2025	48	8	0
August 2025	45	8	1
Total	148	25	1

Source: Internal Company

Internal company data shows a decrease in the number of orders from 55 projects in June to 45 between June and August 2025, with a total of 148 transactions analyzed. Of these, 25 customer complaints related to delays in response and communication (response lag), with an average response time ranging from 4 to 7 business days. Meanwhile, only one complaint related to product quality was recorded, amounting to 0.67%. This finding emphasizes that the company's main problem does not stem from the technical aspects of the product, but rather from the quality of external communication services, which still needs to be improved. The data above regarding complaints shows that the majority of complaints stem from communication issues, reaching 16.9% of total transactions. Conversely, the small number of product-related complaints indicates that the quality control and final inspection systems are operating well and can ensure that product specifications meet customer expectations. Therefore, although the assurance and tangible aspects of service quality are quite good, this does not match the required responsiveness and reliability.

Interviews with the Project Manager revealed that the project's communication flow still relies heavily on manual email communication. This communication must go through several internal checks before information can be conveyed to customers. This check process involves collaboration between Quality Control, warehouse, and maintenance departments to ensure material readiness, production capacity, and equipment condition. While this mechanism aims to maintain information accuracy and ensure service quality, in practice, it creates information dissonance between sales, production, and logistics divisions. This lack of synchronization in internal communication often results in delays in providing project status updates to customers, thus extending overall lead times. This condition is directly related to a 22% decrease in repeat

orders, as identified in a specific phenomenon from this study. Slow responses and lack of visibility into project progress reduce customer confidence in the company's ability to fulfill service promises, even though product quality still meets high standards. It can be concluded that PT Ravana Jaya's main weaknesses lie in its low level of digital readiness in its services and the lack of inter-departmental communication flow, which ultimately hinders the utilization of competitive advantages based on service quality.

4.2 Discussion

The results of this study indicate that digital-based service quality is a key factor influencing customer perception, loyalty, and competitive advantage at PT Ravana Jaya. Although the company's products technically meet high quality standards, as indicated by the low number of product complaints, service quality, particularly in the responsiveness and reliability dimensions, remains weak. This is consistent with modern service quality studies, which emphasize that customer perceptions of service are not only influenced by the final product outcome but more broadly encompass the customer's interaction with the service provider. Research (Utami et al., 2024) shows that good e-service quality significantly impacts customer satisfaction and loyalty, particularly when digital services deliver responsive, accessible, and reliable experiences. Poor digital service quality can create a service gap between customer expectations and actual performance, particularly in dimensions related to response speed and the ability to meet service commitments.

This phenomenon is reinforced by internal company data showing a delay in customer response of 4–7 business days, a dominant factor in the 22% decrease in repeat orders. In the literature, low service quality in the responsiveness and reliability dimensions often contributes to declining customer satisfaction levels because customers do not receive prompt communication or support when needed. Research (Ferianto et al., 2025) also confirmed that e-SERVQUAL dimensions such as responsiveness, assurance, and usability have a positive impact on customer loyalty in the digital era, where customers increasingly expect fast, secure, and transparent service. Dissonance in communication between departments within PT Ravana Jaya also contributed to service quality issues. Mismatched information between sales, production, and logistics divisions can result in delays in delivering project status information to consumers, which in turn reduces the perception of reliability. This finding aligns with research conducted by (Chintany & Rangkuti, 2024) which shows that high service quality makes a significant contribution to the competitive advantage of digital companies by creating a better and more consistent consumer experience, as well as increasing satisfaction which ultimately strengthens consumer loyalty.

Competitive advantage in the context of digital services is not only about having a superior product, but also about how that service is received, perceived, and used by customers. In service management literature, service quality is a key determinant in creating sustainable customer value. (Nurdiyanto & Jayanti, 2022) shows that service quality and service innovation have a positive influence on competitive advantage and customer satisfaction, which in turn drives loyalty and improves business performance. This research confirms that service quality is not merely an operational tool but also a strategic asset for companies in building strong customer relationships. The interaction between service quality, customer satisfaction, and loyalty is also crucial in building competitive advantage. (Sukaris et al., 2020) stated that service quality has a significant meaning for the value to be obtained and has an impact on satisfaction and product selection. This finding is relevant in the context of a manufacturing industry service company

such as PT Ravana Jaya, where customer trust and experience are the main determinants of repurchase decisions and recommendations to others. Thus, it can be concluded that PT Ravana Jaya's main weakness is not product quality, but rather the quality of digital services and inadequate internal communication, resulting in a less than satisfactory service experience for customers. This is in line with academic research findings showing that good digital service quality can increase customer loyalty, which in turn strengthens a company's competitive advantage in an increasingly competitive and digital market. Therefore, companies need to prioritize improving digital service capabilities, for example through the adoption of an integrated and responsive management information system as a strategy to support service quality, satisfaction, and customer loyalty on an ongoing basis.

CONCLUSION

This study shows that the differences in digital service quality at PT Ravana Jaya, particularly in the responsiveness dimension according to the SERVQUAL framework, are a major obstacle for the company in achieving competitive advantage amidst intense competition in the steel industry and the large number of imported products. Results obtained from in-depth interviews with internal parties, observations of operational activities, and analysis of company documents during the study period indicate that slow service responses are caused by reliance on manual communication via email without the support of a Customer Relationship Management (CRM) system or customer portal, which has a significant impact on declining customer repeat purchases and increasing complaints about communication. This situation persists despite technically maintained product quality, as evidenced by strong dimensions of reliability and assurance in the production process and quality control. Low digital service readiness and inconsistencies in information between divisions, especially between sales, production, and logistics, make project communication flows less synchronous and prolong response times to B2B customers. This leads to a decrease in customer perceptions of value towards the services provided, which in turn reduces customer loyalty and trust in establishing sustainable business relationships. These findings confirm that in the context of the medium-scale steel fabrication industry, service responsiveness is not only an additional element, but also a critical factor influencing customer loyalty and maintaining competitive advantage.

In line with the research findings, it was concluded that improving the quality of digital services is a strategic step required by PT Ravana Jaya. The company must transform its services by integrating a CRM system as the primary tool for managing customer relationships and inter-divisional coordination, so that the verification process and delivery of information to customers can be faster, more accurate, and consistent. Furthermore, the development of a real-time customer portal that allows transparent access to project progress information is crucial for improving perceptions of service reliability and assurance. This step must be supported by a

restructuring of service operational procedures through a digital approach to ensure that work processes between divisions can run simultaneously and integrated, thereby improving B2B service capabilities sustainably. Overall, this research not only supports previous findings on the importance of digital transformation in the manufacturing industry but also fills a research gap identified by (Ats-tsauro, 2026) by providing empirical evidence that digital service quality, particularly responsiveness, serves as a sustainable source of strategic differentiation in the steel fabrication industry. Therefore, improving digital service quality is a crucial prerequisite for a company's existing product advantages to be fully translated into long-term competitive advantages.

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