The Role of Digital Capabilities in Enhancing Customer Satisfaction through Product Quality and Service Quality

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Abstract

Background : The increasing competition in the fashion industry requires companies to continuously improve their capabilities to maintain customer satisfaction. In this context, digital capabilities have become an important factor that supports firms in improving product and service performance

Purpose : This study aims to examine the role of digital capabilities in enhancing customer satisfaction through product quality and service quality in the context of local sport fashion brands in Indonesia

Methodology : The study employs a quantitative approach using data collected from 100 respondents who have experience purchasing products from local sport fashion brands. The data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM).

Findings : The results indicate that digital capabilities have a significant positive effect on both product quality and service quality. Furthermore, product quality and service quality significantly influence customer satisfaction.

Implications : The findings also reveal that digital capabilities indirectly enhance customer satisfaction through improvements in product and service quality. These results highlight the importance of integrating digital technologies into business processes to improve product performance and service responsiveness.

Originality : The study provides practical implications for local sport fashion brands to strengthen their digital capabilities in order to enhance customer satisfaction and maintain competitiveness in the market.

Keywords: Kedigital capabilities, product quality, service quality, customer satisfaction, sport fashion industry

INTRODUCTION

The fashion industry plays an important role in supporting economic growth and the development of creative industries in Indonesia (Abdullah, Putri, et al., 2025; Astuti, 2023) . This sector not only contributes to employment creation but also encourages innovation and competitiveness among small and medium enterprises (SMEs) (Arimany-Serrat et al., 2025; Ashok Kumar, 2025; Fani et al., 2025; Ika Nurizza et al., 2019; Rachmawati & Octavia, 2023; Singh et al., 2023). In particular, fashion SMEs have become one of the most dynamic sectors, driven by changing consumer trends and the increasing demand for diverse and innovative products (Abdullah, Putri, et al., 2025).

However, despite its significant potential, many fashion SMEs currently face challenges related to declining product sales (Abdullah, Putri, et al., 2025; Achmad & Inrawan Wiratmadja, 2024; Achmad & Wiratmadja, 2025; Rumanti et al., 2023). The increasing level of market competition and the rapid changes in consumer preferences require businesses to continuously adapt their strategies to remain competitive

(Abdullah, Aprilia, et al., 2025). Consequently, companies must not only focus on production activities but also understand the factors that influence consumer purchasing decisions.

In this context, sales performance is closely related to customer satisfaction (Bahri & Herawan, 2020; Kalya Adzhani et al., 2021; Mustikasari, 2024). Customers tend to maintain repeat purchases and develop loyalty when their expectations are fulfilled or exceeded (Abdelmeguid et al., 2024; Astuti, 2023; Lodhi et al., 2022; Shen et al., 2017). Therefore, maintaining customer satisfaction has become an important strategic objective for businesses seeking to sustain their market position and improve overall performance.

Furthermore, customer satisfaction is influenced by several key factors, particularly product quality and service quality (Adhia & Shihab, 2025; Bahri & Herawan, 2020; Haryadi et al., 2024; Mustikasari, 2024; Rahman et al., 2024; Riswara et al., 2021). Product quality reflects the ability of a product to meet consumer expectations in terms of durability, design, and functionality, while service quality represents how well companies respond to customer needs and provide reliable support throughout the purchasing process (Budianto, 2019; Kumar & Agrawal, 2025; Mustikasari, 2024; Prameka et al., 2016). Both factors are widely recognized as essential determinants in shaping customer perceptions and satisfaction levels.

Previous studies have also highlighted the importance of these relationships process (Budianto, 2019; Kumar & Agrawal, 2025; Mustikasari, 2024; Prameka et al., 2016). Several studies indicate that product quality and service quality significantly influence customer satisfaction and purchasing decisions. In addition, recent research suggests that the development of digital capabilities enables firms to improve operational efficiency, strengthen service delivery, and better understand customer preferences through digital platforms (Khan et al., 2025; Wangsa et al., 2026). These findings demonstrate that the integration of digital technology can play an important role in improving customer satisfaction.

However, although previous studies have examined the relationship between product quality, service quality, and customer satisfaction, limited research has explored how digital capabilities act as a strategic driver that strengthens these relationships, particularly in the context of fashion SMEs. This gap indicates the need for further investigation to understand how digital capabilities can support firms in improving both product and service quality to enhance customer satisfaction.

Therefore, this study aims to examine the role of digital capabilities in enhancing customer satisfaction through product quality and service quality. Understanding these relationships is expected to provide valuable insights for SMEs in developing strategies that improve customer satisfaction and strengthen business competitiveness in the digital era.

METHODOLOGY

This study employed a quantitative research approach to examine the role of digital capabilities in enhancing customer satisfaction through product quality and service quality in the fashion sports industry. The quantitative approach was chosen because it allows for the systematic measurement of relationships between variables and enables statistical analysis of the proposed research model. The research was designed to test the causal relationships between digital capabilities, product quality, service quality, and customer satisfaction using empirical data collected from consumers who have experience purchasing local sport fashion products in Indonesia.

The research procedure was carried out through several systematic stages. The process began with a deep identification of the research problem related to declining sales performance in fashion sport products and the importance of improving customer satisfaction. Based on this problem identification, the research variables and conceptual framework were determined. The next stage involved developing the research instrument in the form of a questionnaire based on indicators derived from previous studies. After the instrument was prepared, data were collected from respondents who met the research criteria. The collected data were then tested for validity and reliability to ensure that the measurement indicators

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were appropriate. If the indicators met the required criteria, the study proceeded to hypothesis testing using structural model analysis. The overall research procedure used in this study is illustrated in Figure 1.

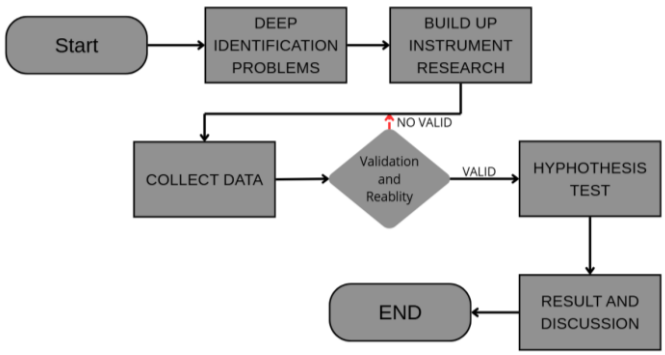


Figure 1. Research procedure for analyzing the role of digital capabilities in building customer satisfaction

Population and Sample

The population in this study consisted of consumers who have purchased products from local sport fashion brands in Indonesia. The sampling technique used was purposive sampling, where respondents were selected based on specific criteria relevant to the research objectives. The criteria for respondents included individuals who had previously purchased sports fashion products from three major local brands in Indonesia. A total of **100 respondents** participated in this study and provided the data used for analysis (Abdullah, Putri, et al., 2025). Table 1 presents identification of respondents.

Table 1. To better understand the characteristics of respondents involved in this study, demographic information was collected. The following table presents the categories of respondent information used in the questionnaire

Variable	Category
Gender	Male / Female
Age	<20 years / 21–25 years / 26–30 years / >30 years
Occupation	Student / Employee / Entrepreneur / Others
Frequency of Purchase	1 time / 2–3 times / >3 times
Purchased Brand	Brand A / Brand B / Brand C

Data Collection Technique

Data were collected using a structured questionnaire distributed to consumers who met the respondent criteria. The questionnaire consisted of several statements designed to measure digital capabilities, product quality, service quality, and customer satisfaction. The measurement used a **Likert scale ranging from 1 to 5**, where 1 represents strong disagreement and 5 represents strong agreement (Abdullah, Putri, et al., 2025). This method allows respondents to express their perceptions and experiences regarding the products and services provided by the selected fashion sport brands.

Measurement of Variables

The variables used in this study include digital capabilities, product quality, service quality, and customer satisfaction. Each variable was measured using several indicators adapted from relevant literature to ensure conceptual validity. Digital capabilities reflect the firm's ability to utilize digital technology to support business operations and customer interactions. Product quality represents the performance, reliability, and design of the products offered to consumers. Service quality describes the

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ability of businesses to provide responsive and reliable services. Meanwhile, customer satisfaction reflects the overall evaluation of consumers regarding their purchasing experience. The detailed indicators used to measure each variable are presented in Table 2.

Table 2. Research Variables and Measurement Indicators Used in Measuring the Influence of Digital Capabilities, Product Quality, and Service Quality on Customer Satisfaction

Variable	Indicators
Digital Capabilities	Digital platform usage (D1), data utilization(D2), online interaction capability(D3)
Product Quality	Durability(P1), design(P2), product reliability (P3)
Service Quality	Responsiveness (S1), reliability (S2), customer assistance (S3)
Customer Satisfaction	Satisfaction level (C1), expectation fulfillment (C2), repurchase intention (C3)

Data Analysis Technique

The data collected in this study were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). This method was chosen because it is suitable for analyzing complex relationships between latent variables and can effectively handle relatively small sample sizes. The analysis process involved two main stages: the evaluation of the measurement model (outer model) and the evaluation of the structural model (inner model). The outer model assessment includes validity and reliability testing, while the inner model evaluation examines the relationships between variables and tests the proposed research hypotheses .

Research Framework

The research framework developed in this study explains the relationship between digital capabilities, product quality, service quality, and customer satisfaction in the context of the fashion sports industry. Digital capabilities are considered an important strategic resource that enables companies to utilize digital technologies in improving business processes and customer interactions. Figure 2 shown research framework.

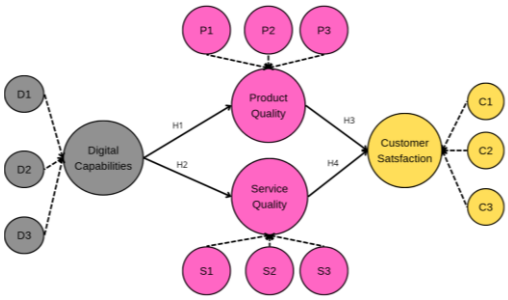


Figure 2. Conceptual Framework of the Relationship between Digital Capabilities, Product Quality, Service Quality, and Customer Satisfaction (Self Produced)

In this model, digital capabilities act as an independent variable that influences two mediating variables, namely product quality and service quality. Digital capabilities allow companies to optimize production processes, monitor product standards, and utilize digital platforms to enhance communication with customers. As a result, companies that effectively leverage digital technologies are more likely to improve the quality of their products and services.

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Furthermore, product quality and service quality function as mediating variables that directly influence customer satisfaction. Product quality reflects the ability of products to meet customer expectations in terms of durability, design, and performance. Meanwhile, service quality represents the company's ability to deliver reliable, responsive, and customer-oriented services. When customers perceive that the products and services meet or exceed their expectations, their level of satisfaction increases.
Finally, customer satisfaction is positioned as the dependent variable in this research model. Customer satisfaction reflects the overall evaluation of customers after purchasing and using the product. High customer satisfaction is expected to strengthen customer loyalty and encourage repeat purchases.
Each latent variable in this study is measured using several indicators. Digital capabilities are measured by indicators D1–D3, product quality by indicators P1–P3, service quality by indicators S1–S3, and customer satisfaction by indicators C1–C3. These indicators represent respondents' perceptions and experiences regarding the digital capabilities of firms, the quality of products and services, and their overall satisfaction with the purchased products.

RESULTS AND DISCUSSION

Data Collection

The data used in this study were collected from **100 respondents** who had experience purchasing products from local sport fashion brands in Indonesia. The questionnaire was distributed to consumers who met the research criteria, and their responses were used to analyze the relationships between digital capabilities, product quality, service quality, and customer satisfaction.

Based on the demographic data presented in Figure 3, the distribution of respondents by **gender** shows that female respondents slightly dominate the sample compared to male respondents. This indicates that female consumers tend to be more active in purchasing sport fashion products from local brands.



Figure 3. (a) Respondent based on gender

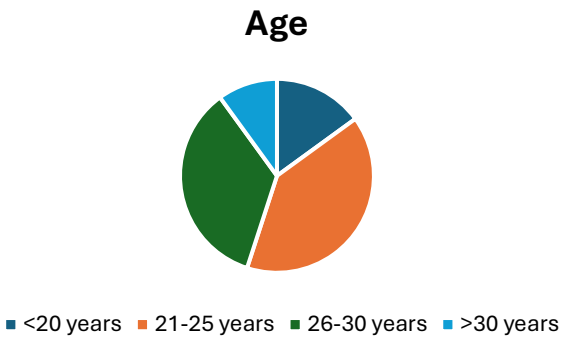


Figure 3. (b) Respondent based on age

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Figure 3. (c) Respondent based on occupational
Figure 3. Demographic Characteristics of Respondents: (a) Gender Distribution, (b) Age Distribution, and (c) Occupational Background,

The demographic distribution of respondents indicates that the majority fall within the 21–25 years age group, followed by respondents aged 26–30 years, suggesting that local sport fashion products are predominantly consumed by young adults who are generally more familiar with digital platforms and current fashion trends. In terms of occupation, most respondents are employees, followed by students, while a smaller proportion consists of entrepreneurs and other occupations. This pattern implies that consumers of local sport fashion brands largely come from individuals with active lifestyles and relatively stable purchasing power, particularly those already engaged in the workforce. Overall, the respondent profile reflects consumers who are actively involved in the sport fashion market and possess sufficient familiarity with digital technologies, making them appropriate participants for examining the role of digital capabilities in enhancing product quality, service quality, and customer satisfaction.

Data Analysis Technique

Validity and Reability

The survey data collected in this study were first evaluated through validity and reliability testing to ensure the accuracy and consistency of the measurement instruments. The results of these tests are presented in Tables 2 and 3. Table 2 shows that all questionnaire items related to digital capabilities, product quality, service quality, and customer satisfaction meet the validity criteria, as the calculated r-values are greater than the r-table value. With a sample size of 100 respondents, the degree of freedom was calculated using the formula DF = N − 2, resulting in DF = 98. Based on this value, the r-table value used in the validity test was 0.161(Abdullah, Putri, et al., 2025). Furthermore, the reliability of the measurement instrument was evaluated using Cronbach's alpha. A reliability coefficient greater than 0.70 indicates that the measurement instrument has acceptable internal consistency (Abdullah, Putri, et al., 2025). The results show that all variables have Cronbach's alpha values above the required threshold, confirming that all measurement items are both valid and reliable and therefore suitable for further analysis in this study. Table 3 shown result validity and reability.

Table 3. Test Results of Measurement Indicators for Digital Capabilities, Product Quality, Service Quality, and Customer Satisfaction.

Variable	Items	Correlation (r^2)	Reability

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		R^2	Status	Cronbach alpha	Status
Digital Capabilities	D1	0.913	Valid	0.795	Realible
	D2	0.719	Valid		
	D3	0.883	Valid		
Product Quality	P1	0.999	Valid	0.999	Realible
	P2	0.998	Valid		
	P3	0.998	Valid		
Service Quality	S1	0.839	Valid	0.836	Realible
	S2	0.869	Valid		
	S3	0.892	Valid		
Customer Satisfaction	C1	0.999	Valid	0.998	Realible
	C2	0.998	Valid		
	C3	0.998	Valid		

The results of the validity and reliability tests presented in Table 3 indicate that all measurement indicators used in this study meet the required criteria. Based on the validity test, all items for the variables digital capabilities, product quality, service quality, and customer satisfaction show correlation values (r^2) greater than the minimum r-table value of 0.161, indicating that each indicator is valid and capable of representing its respective construct. The digital capabilities indicators have correlation values ranging from 0.719 to 0.913, while product quality and customer satisfaction indicators show very high correlation values between 0.998 and 0.999. Meanwhile, the service quality indicators range from 0.839 to 0.892, confirming their validity in measuring service-related aspects. Furthermore, the reliability test results show that all variables have Cronbach's alpha values above the recommended threshold of 0.70, with digital capabilities at 0.795, product quality at 0.999, service quality at 0.836, and customer satisfaction at 0.998. These results demonstrate that the measurement instruments used in this study are both valid and reliable, and therefore suitable for further analysis in examining the relationships among the variables in the proposed research model.

Hyphothesis Test

Table 4 presents the results of the hypothesis testing conducted using the Partial Least Squares Structural Equation Modeling (PLS-SEM) approach. The analysis evaluates the relationships between digital capabilities, product quality, service quality, and customer satisfaction as proposed in the research framework. The results are interpreted based on the path coefficient values, t-statistics, and p-values obtained from the bootstrapping procedure. A hypothesis is considered supported when the t-statistic value exceeds the critical threshold of 1.96 and the p-value is less than 0.05, indicating a statistically significant relationship between the variables. The findings provide empirical evidence regarding the influence of digital capabilities on product quality and service quality, as well as the impact of these variables on customer satisfaction.

Table 4. Hypothesis Testing Results from the PLS-SEM Structural Model Based on t-Statistic and p-Value Thresholds (t > 1.96; p < 0.05) at a 95% Confidence Level

Hyphothesis	Tcount	Coef. Path	Information
Digital Capabilities→Product Quality	13.732	0.000	Sig
Digital Capabilites →Service Quality	37.263	0.000	Sig

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Product Quality→ Customer Satisfaction	4.353	0.000	Sig
Service Quality → Customer Satisfaction	14.291	0.000	Sig
Digital Capabilities→Product Quality→ Customer Satisfaction	3.767	0.000	Sig
Digital Capabilities→Service Quality → Customer Satisfaction	11.730	0.000	Sig

The results of the hypothesis testing presented in Table 4 indicate that all proposed hypotheses are statistically significant. Digital capabilities have a significant positive effect on product quality, as indicated by a t-value of 13.732 and a significance value of 0.000, suggesting that the ability of firms to utilize digital technologies contributes to improving the quality of products offered to customers. Similarly, digital capabilities also show a significant positive influence on service quality with a t-value of 37.263, indicating that the use of digital platforms and digital communication tools helps firms enhance their service performance and responsiveness to customer needs. Furthermore, product quality has a significant positive effect on customer satisfaction, with a t-value of 4.353, implying that higher product performance, durability, and design quality lead to greater satisfaction among consumers. Service quality also significantly influences customer satisfaction, as reflected by a t-value of 14.291, demonstrating that responsive and reliable services contribute strongly to improving customer satisfaction levels. In addition, the mediation analysis shows that digital capabilities indirectly influence customer satisfaction through product quality (t = 3.767) and service quality (t = 11.730), both of which are statistically significant. These findings indicate that digital capabilities not only directly improve product and service quality but also indirectly enhance customer satisfaction through these two mediating variables. Overall, the results confirm that the integration of digital capabilities plays a crucial role in strengthening product quality and service quality, which ultimately leads to higher customer satisfaction. Figure 5 shown model hyphothesis result.

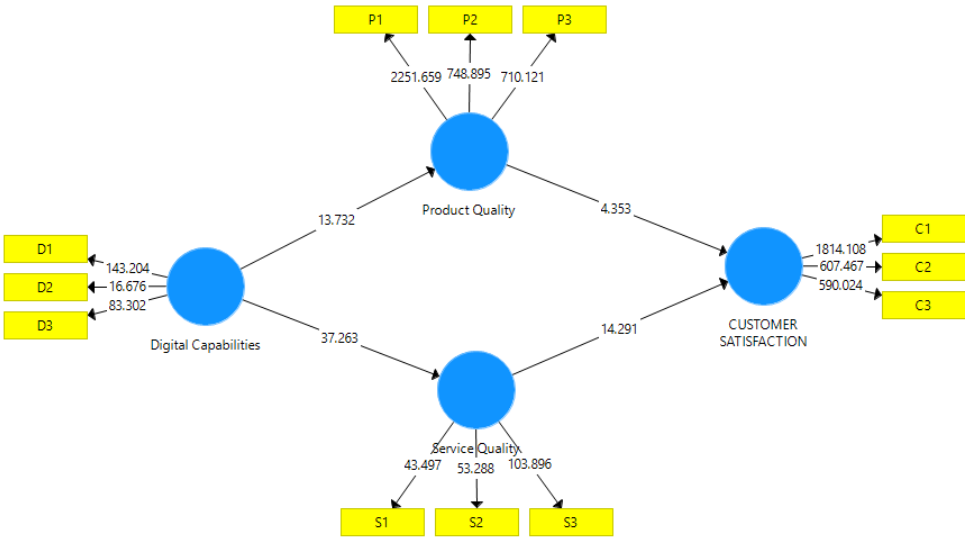


Figure 3. Bootstrapping Results of the Structural Model Showing t-Statistic Values for the Relationships between Digital Capabilities, Product Quality, Service Quality, and Customer Satisfaction.

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Discussion

1. Digital Capabilities → Product Quality

The results of this study indicate that digital capabilities have a significant positive effect on product quality. This finding suggests that the ability of firms to utilize digital technologies plays an important role in improving product performance, design, and reliability. Through digital tools, companies can better manage production processes, monitor product standards, and collect customer feedback that can be used to improve product development.

This finding is consistent with previous studies which emphasize that digital capabilities contribute to improving operational efficiency and product development processes (Kumar & Agrawal, 2025; Mustikasari, 2024; Rahman et al., 2024; Wangsa et al., 2026). Prior research has shown that firms with strong digital capabilities are able to integrate digital systems into production and quality control processes, enabling them to deliver products that better meet consumer expectations.

From the relationship identified in this study, it can be simulated that companies with higher digital capability adoption are more likely to develop better product quality through improved data management, digital monitoring of production processes, and faster adaptation to customer preferences. Consequently, digital transformation becomes an important strategic resource for firms seeking to improve product competitiveness.

2. Digital Capabiliies → Service Quality

The findings also reveal that digital capabilities significantly influence service quality. This indicates that companies that effectively adopt digital technologies are better able to improve the responsiveness, reliability, and accessibility of services provided to customers. Digital platforms allow firms to interact with customers more efficiently and respond more quickly to consumer needs.

These results support previous studies which highlight the importance of digital technologies in enhancing service delivery. Earlier research has demonstrated that digital platforms such as online communication systems, customer service applications, and digital feedback mechanisms enable firms to provide faster and more efficient services.

Based on this relationship, it can be simulated that the integration of digital systems within business operations enables companies to improve customer service performance. For example, digital communication channels allow customers to access services more easily, while digital information systems help companies respond more quickly to customer inquiries and complaints.

3.Product Quality → Customer Satisfaction

The results of this study indicate that product quality has a significant positive effect on customer satisfaction. This finding suggests that customers tend to feel more satisfied when the products they purchase meet their expectations in terms of durability, design, and functionality. High product quality enhances customer perceptions and increases the likelihood of repeat purchases..

From the identified relationship, it can be simulated that improvements in product quality will directly increase customer satisfaction levels. When companies consistently provide products that meet consumer expectations, customers are more likely to develop positive perceptions and long-term loyalty toward the brand.

4.Service Quality → Customer Satisfaction

The findings also demonstrate that service quality has a significant positive influence on customer satisfaction. This indicates that the quality of service provided during the purchasing process

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plays an important role in shaping customer evaluations and experiences. Responsive and reliable services contribute to creating positive interactions between firms and consumers.

From this relationship, it can be simulated that improving service quality will significantly enhance customer satisfaction levels. Companies that prioritize customer-oriented service strategies are more likely to create positive experiences that strengthen customer relationships and encourage repeat purchases.

5.Indirect Effect: The Role of Digital Capabilities in the Relationship between Product Quality and Customer Satisfaction.

The results of the mediation analysis indicate that digital capabilities indirectly influence customer satisfaction through product quality. This finding suggests that digital capabilities play an important role in strengthening the relationship between product quality and customer satisfaction. Companies that effectively utilize digital technologies are better able to improve product development processes, monitor product performance, and respond more quickly to consumer feedback, which ultimately enhances the perceived quality of products.

This result is consistent with previous studies highlighting that digital capabilities enable firms to optimize production processes and maintain higher product standards. Prior research has shown that digital technologies, such as data management systems and digital monitoring tools, support companies in improving product quality and aligning products with customer expectations.

Based on this relationship, it can be simulated that companies with strong digital capabilities are more capable of continuously improving product quality through digital integration in their operational processes. As product quality improves, customer satisfaction is also likely to increase, indicating that digital capabilities act as an important supporting mechanism in strengthening the impact of product quality on customer satisfaction.

6.Indirect Effect: The Role of Digital Capabilities in the Relationship between Service Quality and Customer Satisfaction.

The findings also reveal that digital capabilities indirectly influence customer satisfaction through service quality. This indicates that digital capabilities enhance the effectiveness of service delivery, which subsequently strengthens the relationship between service quality and customer satisfaction. The adoption of digital platforms enables companies to improve communication with customers, provide faster responses, and deliver more efficient services.

From this relationship, it can be simulated that firms with higher digital capabilities are able to optimize service processes and improve customer interaction through digital platforms. As service quality improves, customers are more likely to develop positive perceptions and experience higher levels of satisfaction. Therefore, digital capabilities function as a key strategic resource that strengthens the influence of service quality on customer satisfaction.

CONCLUSION

In the context of regional sport fashion brands in Indonesia, this study investigates how digital capabilities enhance customer satisfaction through product quality and service quality. The findings indicate that digital capabilities significantly influence both product quality and service quality. This suggests that a firm's ability to utilize digital technologies can support more efficient production processes, improve product performance, and enhance the responsiveness of customer services.

The results also show that product quality and service quality have a significant impact on customer satisfaction. Customers tend to feel more satisfied when the products they purchase perform well and

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when the services they receive meet their expectations. These findings highlight the importance of maintaining high standards in both product development and service delivery.

Furthermore, the study reveals that digital capabilities indirectly increase customer satisfaction through improvements in product quality and service quality. In other words, the adoption of digital technologies enables firms to strengthen the performance of their products and services, which ultimately leads to higher levels of customer satisfaction.

Overall, these results emphasize the importance of integrating digital capabilities into business strategies, particularly for regional sport fashion brands operating in a competitive market environment. By strengthening digital capabilities, companies can maintain product standards, provide more responsive services, and better meet customer expectations, which may contribute to increased customer satisfaction and long-term business sustainability

AUTHOR'S CONTRIBUTION

Ikbal Anggara was responsible for the conceptualization of the study, research methodology, supervision, cooling load analysis, data interpretation, manuscript preparation, and correspondence with the journal.
Amalia contributed to field investigation, data collection, retrofitting implementation, performance testing, literature review, manuscript revision, and validation of the research findings.
Both authors contributed substantially to this research, critically reviewed the manuscript, and approved the final version for publication.

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DECLARATION OF COMPETING INTEREST

The authors declare that they have no known competing financial interests or personal relationships that could have influenced the work reported in this manuscript.

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REFERENCES

1. Abdelmeguid, A., Tsironis, G., Afy-Shararah, M., Tsagarakis, K. P., & Salonitis, K. (2024). Insights into sustainability and circular economy trends in luxury fashion: A LinkedIn topic modelling study. *Cleaner and Responsible Consumption*, *15*, 100228. https://doi.org/10.1016/j.clrc.2024.100228
2. Abdullah, F., Aprilia, H., & Hamidah, S. N. (2025). A Systems Approach to Understanding the Carbon Emission Pathways and Economic Benefits of Tempeh SMEs Supply Chain in West Java. *Airlangga Journal of Innovation Management*, *6*(2), 303–318. https://doi.org/10.20473/ajim.v6i2.72663

*Corresponding Authors :*ikbal_anggara@usindo.ac.id

3. Abdullah, F., Putri, S. H., Maharani, N., Barus, W. H. R., Candrawati, N., & Ihsan, M. A. (2025). EXPLORING CUSTOMER VALUE IN NON APPAREL TEXTILE SMES: THE ROLE OF BUSINESS STRATEGY. *Multidisciplinary Indonesian Center Journal (MICJO)*, *2*(4), 5771–5790. https://doi.org/10.62567/micjo.v2i4.1742
4. Achmad, F., & Inrawan Wiratmadja, I. (2024). Driving Sustainable Performance in SMEs Through Frugal Innovation: The Nexus of Sustainable Leadership, Knowledge Management, and Dynamic Capabilities. *IEEE Access*, *12*, 103329–103347. https://doi.org/10.1109/ACCESS.2024.3433474
5. Achmad, F., & Wiratmadja, I. I. (2025). Organizational performance and competitive advantage in SMEs: The role of green innovation and knowledge management. *Journal of Open Innovation: Technology, Market, and Complexity*, *11*(2). https://doi.org/10.1016/j.joitmc.2025.100532
6. Adhia, R. F., & Shihab, M. S. (2025). MEMBANGUN LOYALITAS PELANGGAN DI ERA DIGITAL: PERAN DIGITAL MARKETING, KUALITAS PRODUK, DAN CITRA MEREK MELALUI KEPUASAN KONSUMEN. *Journal of Social and Economics Research*, *7*(2).
7. Arimany-Serrat, N., Arribas-Ibar, M., & Erdoğan, G. (2025). Fast Fashion Sector: Business Models, Supply Chains, and European Sustainability Standards. *Systems*, *13*(6). https://doi.org/10.3390/systems13060405
8. Ashok Kumar, K. S. (2025). The impact of RFID technology on fashion and textile retail operations. *Asian Textile Journal*, *34*(11), 58–61. https://www.scopus.com/inward/record.uri?eid=2-s2.0-105024904570&partnerID=40&md5=f8cbe9af2fad8aef6605f48d0bbd9b60
9. Astuti, I. P. (2023). *Pengaruh Trend Fashion, Promosi Online dan Brand Image Terhadap Minat Beli Fashion Thriting (Studi Kasus pada Akun Instagram Bassecondstuff)* [1-=115]. Universitas Islam Negeri Raden Mas Said Surakarta.
10. Bahri, R. R., & Herawan, E. (2020). *The Improving of Customer Satisfaction: Service Triangle Approach*.
11. Budianto, A. (2019). Customer Loyalty: Quality of Service. *Journal of Management Review*, *3*(1), 299. https://doi.org/10.25157/jmr.v3i1.1808
12. Fani, V., Bucci, I., Bandinelli, R., & Ribeiro Da Silva, E. R. (2025). Sustainable reverse logistics network design using simulation: Insights from the fashion industry. *Cleaner Logistics and Supply Chain*, *14*. https://doi.org/10.1016/j.clscn.2024.100201
13. Haryadi, R., Widiyanti, M., Shihab, M. S., & Maulana, A. (2024). THE EFFECT OF PRODUCT QUALITY AND PRICE ON COAL PURCHASE INTEREST THROUGH SALES BASED ON NON-KAI LOGISTICS AT PT BUKIT ASAM, TBK. *Journal of Social Science*, *10*(10). https://joss.al-makkipublisher.com/index.php/js
14. Ika Nurizza, N., Rosjadi, F., & Setyaningrum, I. (2019). Analisis Komparasi Daya Saing Ekspor Tekstil dan Produk Tekstil Indonesia-Vietnam Terhadap Pasar Amerika Serikat. *Jurnal Lmiah Mahasiswa Universitas Surabaya*, *7*(2).
15. Kalya Adzhani, N., Simanjuntak, M., & Author, C. (2021). Analysis of Satisfaction and Loyalty with the Customer Experience Approach. *International Journal of Research and Review (Ijrrjournal.Com)*, *8*, 3.
16. Khan, M. I. M., Sun, Q., Ahmed, Z., Zhang, R., & Khosa, M. (2025). Orchestrating Digital Capabilities for Supply Chain Resilience: Evidence from China-Pakistan Economic Corridor. *Systems*, *13*(11). https://doi.org/10.3390/systems13110981

*Corresponding Authors :*ikbal_anggara@usindo.ac.id

17. Kumar, A., & Agrawal, S. (2025). Enhancing quality-based classification of perishable products: a convolutional neural network approach with statistical hyperparameter optimization. *Multimedia Tools and Applications*, *84*(15), 15429–15452. https://doi.org/10.1007/s11042-024-19700-z
18. Lodhi, R. N., Shahid, D., & Mahmood, Z. (2022). Emerging Industry Trends Shape the Business and Economic Research and Analysis in 2022 and Beyond. *Eurasian Journal of Economic and Business Studies*, *2*(64). https://doi.org/10.47703/ejebs.v2i64.101
19. Mustikasari, F. (2024). Product Quality, Service Quality, Price, and Location Influence Towards Coffee Shop Customer's Satisfaction. In *Management Studies and Entrepreneurship Journal* (Vol. 5, Number 1). http://journal.yrpipku.com/index.php/msej
20. Prameka, A. S., Do, B.-R., & Rofiq, A. (2016). How Brand Trust is Influenced by Perceived Value and Service Quality: Mediated by Hotel Customer Satisfaction. *Asia Pacific Management and Business Application*, *5*(2), 72–84. https://doi.org/10.21776/ub.apmba.2016.005.02.2
21. Rachmawati, R., & Octavia, E. (2023). Inability Adapt to Environmental Changes Causes TheDeclining Performance of Indonesia's Textile Industry. *International Journal of Environmental, Sustainabiity and Social Science*, *4*(1).
22. Rahman, B., Widiyanti, M., Shihab, S., & Rosa, A. (2024). The Influence of Product Quality, Service Quality, and Perception of Coal Prices on Customer Satisfaction at PT Bukit Asam, Tbk. *Journal of Research and Community Service*, *5*(10).
23. Riswara, E. P., Wagiman, & Purwadi, D. (2021). The strategy of increasing customer satisfaction of coffee shop in Yogyakarta through GAP Analysis. *IOP Conference Series: Earth and Environmental Science*, *828*(1). https://doi.org/10.1088/1755-1315/828/1/012061
24. Rumanti, A. A., Rizana, A. F., & Achmad, F. (2023). Exploring the role of organizational creativity and open innovation in enhancing SMEs performance. *Journal of Open Innovation: Technology, Market, and Complexity*, *9*(2). https://doi.org/10.1016/j.joitmc.2023.100045
25. Shen, C., Kuo, C.-J., & Thi Minh Ly, P. (2017). Analysis of Social Media Influencers and Trends on Online and Mobile Learning. In *International Review of Research in Open and Distributed Learning* (Vol. 18).
26. Singh, N., Chakrabarti, N., & Tripathi, R. (2023). Factors determining fashion clothing interest and purchase intention: A study of Generation Z consumers in India. *Fashion, Style & Popular Culture*. https://doi.org/10.1386/fspc_00197_1
27. Wangsa, I. H. S., Sulastri, S., Natalisa, D., & Shihab, M. S. (2026). Rethinking Marketing in the Digital Era: Evidence from Clean200 Global Firms 2019–2023. *Sustainability*, *18*(5), 2248. https://doi.org/10.3390/su18052248

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