

# The Impact of E-Service Quality and Perceived Product Quality on Customer Satisfaction in Batik Keris Online Store

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## ABSTRACT

The *Batik Keris* industry has witnessed a surge in online sales in recent years, making e-service quality and perceived product quality crucial factors influencing customer satisfaction. This study investigates the impact of e-service quality and perceived product quality on customer satisfaction in the context of *Batik Keris* online stores. A survey questionnaire was administered to 267 online *Batik Keris* customers to gather data on their perceptions of e-service quality, perceived product quality, and customer satisfaction. The findings suggest that *Batik Keris* online stores should prioritize e-service quality and perceived product quality to enhance customer satisfaction and foster long-term customer relationships. By providing a seamless and secure online shopping experience, offering high-quality *Batik Keris* products, and responding promptly to customer inquiries, businesses can effectively retain and attract customers in the competitive e-commerce landscape. E-service quality and perceived product quality have a significant impact on customer satisfaction in using *Batik Keris*' online store. Based on the results, perceived product quality has more impacts on customer satisfaction as a mediating variable in e-commerce platforms.

Keywords: *E-Service Quality, Customer Satisfaction, Product Quality, Batik Keris, Online Store*

## 1. INTRODUCTION

Batik is widely recognized as one of Indonesia's richest cultural heritages, with its origins deeply rooted in Javanese tradition. Its prominence reached the international stage when President Soeharto introduced Batik at the UN Conference, wearing it as a symbol of Indonesia's identity. To preserve this heritage, the Regulation of the Minister of Administrative and Bureaucratic Reform No. PER/87/M.PAN/8/2005 mandates the safeguarding of Indonesia's cultural assets. Over the years, Batik has experienced a global evolution, with its motifs now merging traditional designs with modern aesthetics to appeal to a broader audience (Puspaningrum, 2020). The growing interest in Batik has contributed to an increase in its production and market competition among various Batik brands.

Among the leading companies in this sector is Batik Keris, a well-known Batik brand that has expanded from local to international markets. Founded by Kasom Tjokrosaputro, the son of Kwee Tiong Djien, the company's roots go back to the early 20th century. Initially a trading business,

Batik Keris transformed into a formal entity in 1970 as PT Batik Keris and has grown to become a key player in the textile industry, exporting a significant portion of its production. With more than 90 years in operation, Batik Keris has built a legacy of quality, heritage, and innovation. The company operates hundreds of stores across major cities in Indonesia and has also established international outlets in the United States and the Middle East (Irsan, Santoso, & Kusadjibrata, 2022).

To maintain its market presence, Batik Keris has embraced technological advancements and digital platforms. The rise of online shopping has reshaped consumer behavior, making accessibility, convenience, and service responsiveness critical to customer satisfaction. Batik Keris recognized this trend and expanded its presence through an online store, enabling it to reach a wider audience and better serve its customers (Kartikaningtyas, Kustiyah, & Djumali, 2020). In the digital retail ecosystem, customer satisfaction plays a pivotal role in business sustainability. It encompasses various dimensions, particularly the quality of services and products perceived by the customer.

E-service quality including the responsiveness and reliability of digital platforms and perceived product quality such as brand image and perceived value are vital in influencing customers' online purchasing decisions (Noor, Nawi, & Nordin, 2019). Since customers cannot physically interact with products in online platforms, companies must ensure that their digital and service offerings are optimized to meet or exceed customer expectations.

The current study seeks to examine the influence of e-service quality and perceived product quality on customer satisfaction in the context of the Batik Keris online store. Through this research, the aim is to explore how digital service performance and product perception shape consumer satisfaction and loyalty, offering both theoretical contributions and practical insights for business strategy. The primary objective of this research is to investigate the relationship between e-service quality and perceived product quality on customer satisfaction. Specifically, it aims to determine the degree to which responsiveness and reliability in online services, as well as brand image and perceived value in products, affect customer satisfaction and loyalty in Batik Keris's digital marketplace. Based on these phenomena, three key problems are identified: to explore how e-service quality influences customer satisfaction; to assess the impact of perceived product quality on satisfaction; and to investigate the reciprocal influence of customer satisfaction on perceptions of service and product quality. Accordingly, the research addresses the following questions: How significant is the influence of e-service quality on customer satisfaction? And how significant is the influence of perceived product quality on customer satisfaction?

This study also sets out with three specific objectives: first, to analyze the impact of e-service quality, focusing on responsiveness and reliability; second, to evaluate the impact of perceived product quality, focusing on brand image and perceived value; and third, to assess how customer satisfaction as reflected through repurchase intention, word-of-mouth, and price sensitivity interacts with both service and product evaluations. The research is limited to Indonesian consumers and is based on data collected between 2022 and 2024. It relies primarily on primary data from surveys and secondary data from academic publications. Therefore, the findings should be interpreted within the scope of the local market and

timeframe. The significance of this research lies in its potential contributions to marketing science, particularly in understanding consumer behavior in digital cultural product markets. It offers insights for practitioners, marketers, and researchers on how quality both in service and product shapes customer satisfaction and loyalty. Moreover, the study seeks to enrich academic literature and serve as a foundational reference for future research in digital consumer satisfaction.

## **2. LITERATURE REVIEW**

### **2.1 GRAND THEORY: DIGITAL MARKETING**

Digital marketing is a data-driven process that involves promoting products and services using digital technologies, primarily through the internet. The transformation began in the 1990s and early 2000s, revolutionizing how businesses connect with customers by leveraging websites, mobile platforms, social media, and e-commerce technologies (Mandal & Joshi, 2017). The increased use of digital devices has allowed companies to embed marketing into digital touchpoints, enhancing reach and customer targeting.

Digital marketing strategies encompass various tools, including email campaigns, SEO, SEM, social media marketing, influencer marketing, and content automation. In the context of Batik Keris, digital marketing especially through e-commerce has become essential to extending market reach beyond traditional limitations. This transition supports strategic goals in planning, product promotion, and improving customer accessibility. Notably, while many strategies are internet-based, digital marketing also includes non-internet channels such as SMS, MMS, call-back tones, and digital signage, allowing firms to engage even with customers who are not always online.

E-service quality is defined as customers' overall evaluation of the quality and effectiveness of digital service delivery in online environments. It includes key components such as responsiveness, which refers to the speed and attentiveness in handling customer inquiries, and reliability, which focuses on accurate and dependable delivery of promised services such as product information, transaction processing, and order fulfillment. Other supporting elements include system efficiency, clear communication, technical support, and

security in transactions (Ojasalo, 2010). According to Surjadjaja et al. (2003), e-services are characterized by the interaction between front-end web systems and back-end operational systems, forming the basis of consistent service delivery. Perceived service quality is therefore seen as a subjective measure determined by customer expectations and actual service performance.

Perceived product quality reflects the consumer's judgment about a product's overall excellence or superiority. It includes both tangible attributes such as durability, performance, aesthetics, and compliance, and intangible attributes such as brand image and emotional associations (Stylidis, Bursac, & Heitger, 2018). Batik Keris leverages its brand reputation to convey consistent quality across its offerings, making perceived product quality a vital factor in consumer decision-making. Extrinsic cues like brand image, price, and retailer reputation, along with intrinsic cues such as color, size, and fabric quality, all influence how a customer perceives a product. Moreover, Haverkamp and Moos (2017) argue that perceived quality arises not only from visual inspection but through a multisensory evaluation, often subconsciously processed by consumers.

Perceived product quality has become a strategic asset in competitive markets, especially in industries like Batik where heritage and aesthetic values are deeply embedded in the product identity. As such, it serves not just as an outcome of customer evaluation, but also as a driver of satisfaction, loyalty, and willingness to pay premium prices. Contrast theory provides a psychological perspective to understanding customer satisfaction. It suggests that when a product's performance deviates from expectations, consumers tend to exaggerate the discrepancy. If performance is lower than expected, the product may be evaluated more negatively than it objectively deserves. Conversely, when performance exceeds expectations, the customer may respond with highly favorable evaluations (Yüksel & Yuksel, 2008). This amplification of the disconfirmation experience explains why managing customer expectations is critical, particularly in online retail where consumers cannot physically assess a product beforehand. For instance, if a Batik Keris customer finds the product quality inferior to what was promised online, they may evaluate the entire brand more harshly. However, if their expectations are exceeded, they may become loyal advocates of the brand.

Contrast effects play a vital role in digital consumer behavior. They emphasize the psychological gap between perceived and actual performance and help explain the extremes in customer feedback, both positive and negative. In retail settings especially those involving heritage-based products like Batik such theoretical insights guide strategies in product representation, expectation management, and service recovery.

In summary, the literature review highlights the relevance of digital marketing as the strategic foundation, e-service quality and perceived product quality as the operational variables, and contrast theory as the psychological lens through which customer satisfaction is formed. Together, these concepts frame the analytical model for investigating consumer experiences with Batik Keris's online platform.

## 2.2 E-SERVICE QUALITY

E-service quality has emerged as a central factor influencing customer satisfaction in the context of online shopping. With the rapid advancement of digital commerce, understanding how the quality of electronic services shapes consumer experience has become essential for sustaining competitiveness. Studies have consistently shown that high levels of e-service quality correlate positively with customer satisfaction and loyalty, encouraging repeat purchases and positive word-of-mouth (Zeithaml, 2002). In the digital marketplace, the ability of companies to deliver secure, responsive, and reliable service is crucial to building trust and fulfilling customer expectations (Aladwani, 2006).

Researchers have identified several dimensions of e-service quality, including responsiveness, reliability, website design, personalization, and trust (Lee & Lin, 2005). However, in this study, the focus is placed on two key dimensions: responsiveness and reliability due to their direct relevance to online consumer satisfaction. Responsiveness refers to the willingness and readiness of a service provider to respond promptly to customer needs, inquiries, and complaints. In the context of e-commerce, it involves quick and accurate digital interactions, such as real-time chat support, rapid email responses, or order status updates. When businesses respond effectively, they not only resolve issues but also reinforce customer confidence, which contributes to a positive shopping experience and greater loyalty (Vu, 2021).

Reliability, on the other hand, represents the consistency and dependability of service performance over time. It encompasses accurate product information, timely delivery, secure transactions, and fulfillment of service promises. A reliable online service ensures uninterrupted access, error-free processes, and transparent communication. Studies have emphasized that perceived reliability is a strong predictor of customer trust, particularly when privacy and security of data are maintained (Parasuraman, Zeithaml, & Malhotra, 2005). For example, online banking platforms that provide 24/7 access, swift transactions, and robust security protocols serve as practical models of reliability in digital service delivery. Together, responsiveness and reliability create the foundation for a satisfying e-commerce experience. By focusing on these aspects, companies like Batik Keris can enhance their digital service quality, thus strengthening customer satisfaction, trust, and loyalty in an increasingly competitive online environment.

### 2.3 PERCEIVED PRODUCT QUALITY

Perceived product quality refers to a consumer's subjective evaluation of a product's overall excellence, formed by prior experiences, expectations, and the product's brand reputation. It plays a pivotal role in shaping customer perceptions, influencing purchase decisions, and driving post-purchase satisfaction (Zeithaml, 2002). Unlike objective quality, which may be measured technically, perceived quality is psychological and varies from one consumer to another. It encompasses how a product meets the expectations shaped by marketing messages, user experience, and competitive comparisons.

Research has long recognized perceived product quality as a multidimensional construct, encompassing functional aspects like performance, durability, and compliance with specifications, as well as emotional and symbolic dimensions tied to branding and identity (Garvin, 1984; Keller, 1993). As such, companies are encouraged to not only focus on improving product functionality but also on how customers perceive the brand itself. The perception of quality is often influenced by external cues such as brand name, price, or reviews, and internal attributes like the product's appearance or usability. These perceptions are key determinants of customer loyalty and brand preference.

One critical factor within perceived product quality is brand image, which refers to the associations and impressions formed in the consumer's mind when they encounter a brand. According to Keller (1993), brand image represents the network of memories and attitudes that consumers attach to a brand, shaping their overall perception of quality. A strong brand image builds trust, enhances emotional connection, and elevates the perceived value of the product. In the case of Batik Keris, the brand is recognized for preserving Indonesia's cultural legacy through timeless Batik fashion. This strong cultural and artistic identity enhances the brand's reputation, positioning it as a trusted and meaningful choice for customers (Tarigan & Siregar, 2018).

Another essential component is perceived value, which reflects the trade-off customers make between the benefits they receive and the costs they incur. It encompasses not only monetary price but also time, effort, and emotional investment (Huber & Volckner, 2002). When customers perceive high value in a product where benefits outweigh the sacrifices they are more likely to buy, recommend, and remain loyal to the brand. Conversely, when perceived value is low, customer dissatisfaction and brand-switching behaviors may occur (Hai et al., 2018). Perceived value is influenced by multiple factors such as product quality, customer service, brand positioning, and marketing communication. Therefore, businesses need to highlight both tangible benefits and emotional appeals to reinforce the value proposition (Kotler & Keller, 2016). Together, brand image and perceived value serve as critical dimensions of perceived product quality. They not only influence individual purchase decisions but also foster long-term customer relationships. For heritage-based products like Batik, where cultural meaning and craftsmanship are central to the offering, managing these dimensions is essential for sustaining relevance and building consumer trust in competitive digital markets.

### 2.4 CUSTOMER SATISFACTION

Customer satisfaction plays a vital role in the success of businesses operating in the digital environment. It encompasses the total customer experience with a company's online platforms, including aspects such as ease of navigation, service responsiveness, system reliability, and problem resolution (Esteban-Bravo, Viglia, & Martin-Consuegra, 2011). Satisfied customers are

more likely to engage with digital products and services, contribute to revenue through repeat purchases, and enhance the brand's reputation through positive word-of-mouth and online reviews (Verhoef & Leunis, 2009). One of the most significant consequences of customer satisfaction is repurchase behavior. When consumers have positive experiences such as smooth transactions, responsive customer service, and quality products they are more inclined to return and make additional purchases. User-friendly interfaces, personalized recommendations, and loyalty programs further strengthen the repurchase intention, as customers begin to form emotional connections with the brand (Cui & Zhang, 2017; Kumar & Moon, 2007). This loyalty generates a consistent revenue stream and reduces the cost of acquiring new customers.

Customer satisfaction also drives word-of-mouth (WOM), a powerful form of organic marketing in the digital space. Consumers tend to share their experiences via online reviews, social media posts, and personal recommendations. Positive WOM enhances brand credibility and trustworthiness, influencing the decisions of potential buyers (Trusov, 2016; Hennig-Thurau, Gwinner, & Houston, 2004). Moreover, companies can gather real-time feedback through these channels, enabling them to improve service delivery and product offerings. By fostering customer satisfaction, businesses can stimulate digital WOM, expanding their market reach and reinforcing their brand image.

Another key outcome of customer satisfaction is its impact on price sensitivity. Satisfied customers often perceive higher value in the products or services offered and are, therefore, less sensitive to price changes (Boulding, Ehret, & Babakus, 2005). They are more willing to pay premium prices for a consistent and pleasant experience. Conversely, dissatisfied customers may be more price-conscious and susceptible to switching to competitors. Factors such as brand loyalty, perceived value, and transparent pricing practices contribute to reducing price sensitivity. Businesses can implement value-based pricing strategies, loyalty incentives, and effective communication to manage customer expectations and sustain long-term profitability (Kotler & Armstrong, 2018).

In conclusion, customer satisfaction is a multidimensional construct that significantly affects repurchase intentions, word-of-mouth

promotion, and price sensitivity. It fosters a self-reinforcing cycle where satisfied customers contribute to business growth and operational improvement through loyalty, advocacy, and reduced price sensitivity. For digital businesses like Batik Keris, prioritizing customer satisfaction is essential not only for immediate sales but also for sustainable market competitiveness.

## 2.5 PREVIOUS STUDIES SUMMARY

Several prior studies have addressed the roles of e-service quality and perceived product quality in influencing customer satisfaction across various e-commerce platforms. For instance, Pradnyadewi and Giantari (2022) examined Tokopedia customers in Denpasar and found that five dimensions of e-service quality security, responsiveness, ease of use, reliability, and efficiency positively impacted customer satisfaction. Similarly, Zongo and Nasse (2019) analyzed online ticketing services in Burkina Faso and confirmed the importance of website design, reliability, and responsiveness in shaping customer perceptions. In the banking sector, Ardiansyah and Handrijaningsih (2021) explored how multiple aspects of e-service quality efficiency, fulfillment, reliability, privacy, responsiveness, contact, and compensation affected customer satisfaction in internet banking. Meanwhile, Zeglal et al. (2016) linked e-service quality dimensions such as ease of use, privacy, and information quality with user satisfaction and behavioral intention in academic digital libraries. These studies consistently indicate that various dimensions of e-service quality significantly influence customer satisfaction and downstream behaviors, such as loyalty and repurchase. However, most existing works treat product quality or service quality as isolated variables and often overlook how customer satisfaction reciprocally interacts with these variables in digital shopping ecosystems.

## 2.6 RESEARCH GAP AND STUDY CONTRIBUTION

While previous research provides valuable insights into the effects of e-service quality or perceived product quality on customer satisfaction, this study fills several notable gaps. First, few studies have examined the **reciprocal** relationship between customer satisfaction and the two quality constructs simultaneously, particularly in the context of culturally rooted products like Batik. This study contributes by assessing how customer satisfaction

may not only result from service and product quality but also reinforce them through mechanisms like word-of-mouth, brand trust, and loyalty. Second, many earlier works conceptualize perceived product quality solely in terms of physical attributes. In contrast, this study proposes a more nuanced view by dividing perceived product quality into brand image and perceived value, providing a dual perspective that reflects both emotional and functional aspects of consumer perception.

Finally, the research is contextually significant as it focuses on Indonesian consumers of Batik Keris, a national brand rooted in local heritage. Most prior studies have analyzed international or generalized e-commerce platforms; this study, however, offers cultural specificity and local relevance, which can inform both academic research and industry practices in emerging markets.

### 3. METHODOLOGY

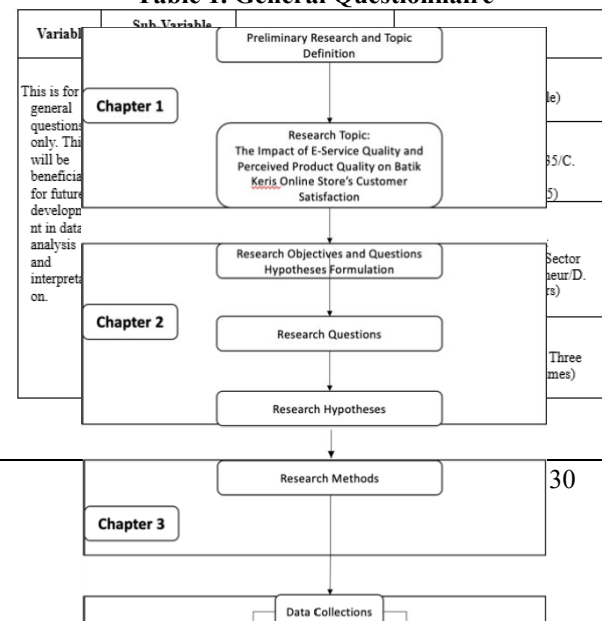
This study employed a descriptive quantitative approach with a correlational design to examine the relationship between e-service quality, perceived product quality, and customer satisfaction in the context of Batik Keris' online store. The research process began with problem identification, followed by a literature review, formulation of hypotheses, data collection through an online survey, statistical analysis using SPSS and AMOS, and finally the formulation of conclusions. The overall stages of the research are illustrated in Figure 1. Quantitative research will produce more accurate results if a little qualitative approach is added, (Afera 2023).

Primary data were collected using a structured questionnaire distributed via Google Forms over a 30-day period. The questionnaire was disseminated online through digital platforms such as social media and instant messaging apps. The survey consisted of two parts: general demographic questions and items measuring the study's main variables using a 5-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree." The sampling technique used was non-probability sampling with purposive criteria, targeting individuals aged 18 to 55 years and above who were confirmed customers of Batik Keris. The minimum required sample size, based on Raosoft's Sample Size Calculator with a 90% confidence level and 5% margin of error, was 267 respondents. A total of 299 valid responses were obtained and analyzed.

To ensure accurate data processing and analysis, the research utilized Microsoft Excel, IBM SPSS Statistics version 25, and IBM SPSS AMOS version 26. Table 1 summarizes the general demographic questions, while Table 2 outlines the indicators used to measure each research variable.

**Figure 1. Research Process Illustration**

**Table 1. General Questionnaire**





The collected data were analyzed using SPSS to perform descriptive statistics, validity testing using the Kaiser-Meyer-Olkin (KMO) and Bartlett's Test, and reliability testing using Cronbach's Alpha. Structural Equation Modeling (SEM) was conducted using AMOS to examine the relationships between latent constructs and test the proposed hypotheses. The KMO value obtained was 0.939, indicating excellent sampling adequacy, and the Cronbach's Alpha reliability score was 0.967, demonstrating a high level of internal consistency among the questionnaire items. These results confirmed that the instrument was both valid and reliable for further analysis.

#### 4. RESULT

This study collected data from 299 valid respondents who had experience purchasing from the Batik Keris online store. The data were analyzed using SPSS and AMOS to examine the distribution, validity, reliability, and structural relationships between the variables. The data processing summary confirmed that 100% of the collected responses were valid and usable for analysis. Table 1 presents the case processing summary.

**Table 2. Case Processing Summary**

Case Processing Summary		N	%
Cases	Valid	299	100.0
	Excluded <sup>a</sup>	0	.0
	Total	299	100.0

a. Listwise deletion based on all variables in the procedure.

Descriptive statistics revealed the characteristics of the respondents. The majority were female (62.2%), aged 26–35 years (45.8%), and working in the private sector (41.1%). In terms of online shopping behavior, most respondents reported shopping 2–3 times per month. These demographic insights support the relevance of the data to the study context.

**Table 3. KMO and Bartlett's Test**

KMO and Bartlett's Test			
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.			.939
Bartlett's Test of Sphericity	Approx. Chi-Square	2494.600	
	df	21	
	Sig.		.000

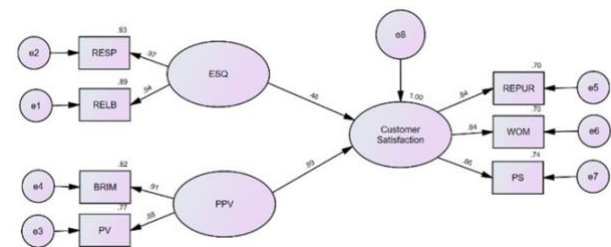
The instrument validity was assessed using the Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of Sphericity. As shown in Table 2, the KMO value was 0.939, indicating excellent sampling adequacy. The significance level was 0.000, confirming the dataset's suitability for factor analysis.

**Table 4. Reliability Test Result (Cronbach's Alpha)**

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.967	.967	7

Reliability testing using Cronbach's Alpha showed a score of 0.967, indicating that the measurement instrument has a very high internal consistency.

**Figure 2. Standardized Path Diagram of the Structural Model**



AMOS software was used to conduct Structural Equation Modeling (SEM) to test the research hypotheses. The standardized path diagram model, presented in Figure 1, depicts the relationships among the constructs.

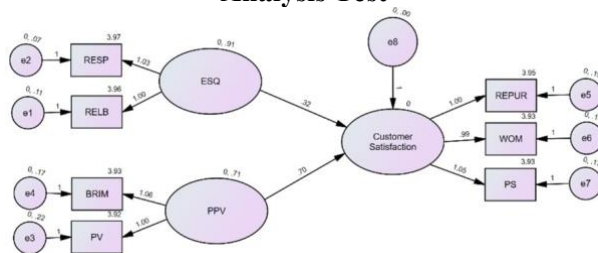
**Table 5. Standardized Regression Weights**

		Estimate
Customer_Satisfaction	<--- ESQ	.460
Customer_Satisfaction	<--- PPV	.888
RELB	<--- ESQ	.944
RESP	<--- ESQ	.967
PV	<--- PPV	.876
BRIM	<--- PPV	.908
REPUR	<--- Customer_Satisfaction	.836
WOM	<--- Customer_Satisfaction	.838
PS	<--- Customer_Satisfaction	.862

The regression weights and significance levels for each hypothesized relationship are presented in Table 4. Both e-service quality and perceived

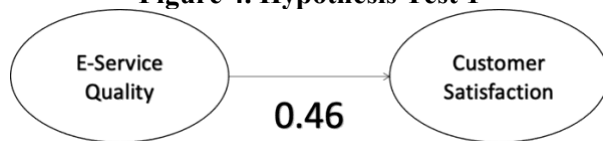
product quality had significant positive influences on customer satisfaction.

**Figure 3. Understandardized Path Diagram Analysis Test**



Based on the relationship model between the variables under study, path analysis is performed. In this model, the variables' relationships are represented by arrows and are ordered in a left-to-right orientation. The tool used to do route analysis is the path diagram, which displays the overall effect of customer satisfaction as the dependent variable and perceived product and e-service quality as independent factors. Above are diagrams that are not yet standardized. While the following is the standardized ones, explanation will be given based on the standardized diagrams.

**Figure 4. Hypothesis Test 1**



**Figure 4. Hypothesis Test 2**



The results of the hypothesis testing confirmed that both proposed hypotheses were supported by the data. The first hypothesis (H1), which posited that e-service quality significantly influences customer satisfaction, was accepted. Similarly, the second hypothesis (H2), which stated that perceived product quality has a significant influence on customer satisfaction, was also accepted. These findings validate the conceptual model developed in this study, highlighting that both responsiveness and reliability as dimensions of e-service quality, along with brand image and perceived value as dimensions of perceived product quality, serve as key determinants of customer satisfaction. This

suggests that to enhance satisfaction in the Batik Keris online store, businesses must ensure both service quality and product perception are consistently maintained at high standards.

## 5. CONCLUSION

This study explored the relationship between e-service quality, perceived product quality, and customer satisfaction within the context of Batik Keris' online store. The findings confirmed that both variables significantly affect customer satisfaction. However, while e-service quality demonstrated a statistically significant and positive effect, the impact of perceived product quality, though also significant, appeared to be lower than expected based on AMOS analysis. This suggests that the full potential of product quality in influencing satisfaction may not yet be fully realized, potentially due to limitations in the website's current state or user experience design. The analysis also revealed demographic patterns in the respondent profile predominantly aged 26–35, based in Bali and Jakarta, and employed in the government sector. These trends reflect the limited diversity of the sample, as the distribution relied heavily on personal networks. Future research should therefore strive for more inclusive sampling to enhance external validity and represent broader consumer perspectives.

The results also indicated that customer satisfaction is influenced by both tangible and intangible aspects: product quality (brand image and perceived value), and website functionality (responsiveness and reliability). Improvements in either area particularly in online presentation and service quality can have implications not only for satisfaction but also for price perception, as delivery fees and perceived value influence overall customer experience. In sum, this research highlights the dynamic interplay between product perception and online service delivery. It emphasizes the importance of continuous website optimization and strategic focus on product presentation in driving satisfaction in e-commerce. These insights provide a foundation for future investigations into consumer behavior and service improvement in digital retail contexts.

Based on the findings, Batik Keris should prioritize enhancing perceived product quality as it exerts a more substantial influence on customer satisfaction than e-service quality. Strategies to achieve this



include improving product presentation with detailed descriptions, professional imagery, and customer reviews, as well as ensuring consistency through strict quality control. Actively engaging customers through surveys and direct feedback will also provide valuable insights into their needs and expectations. To further support brand strength, Batik Keris should invest in authentic brand storytelling that highlights the cultural heritage and craftsmanship of its Batik products. Innovation within tradition such as collaborations or modern interpretations can appeal to younger or diverse consumer groups. Integrating sustainable and ethical practices in production, and clearly communicating these values, will enhance brand appeal, especially among environmentally conscious customers.

Maintaining a visually consistent and culturally rich online presence is also essential. A user-friendly website, cohesive branding, and aesthetic presentation across all digital platforms will contribute to stronger consumer trust and loyalty. For future research, it is recommended to expand the sampling frame beyond personal networks to ensure a more diverse and representative respondent pool. Including participants from varied age groups, locations, and professional backgrounds will enrich the understanding of customer preferences and improve the generalizability of research outcomes. Broader demographic engagement will offer deeper insight into how different segments perceive and respond to online service and product quality, contributing to more robust academic and practical conclusions.

## References

- Yap, B. W., Rani, K. A., Rahman, H. A., Fong, S., Khairudin, Z., & Abdullah, N. N. (2014). An Application of Oversampling, Undersampling, Bagging and Boosting in Handling Imbalanced Datasets. *Proceedings of the First International Conference on Advanced Data and Information Engineering (DaEng-2013)*. 285, pp. 13-22. Singapore: Springer. doi:10.1007/978-981-4585-18-7\_2
- Afera (2023), Before and After Merger of BankPerformance Analysis. <https://ojs.iuli.ac.id/index.php/best/article/view/77/69>
- Aladwani, A. (2006). An Integrated Performance Model of E-Commerce Websites. *Information & Management Joirnal* , 747-762.
- Ardiansyah, D., & Handrijaningsih, L. (2021). The Impact of E-Service Quality Towrads Customer Satisfaction on the User of Internet Banking in PT. Bank Rakyat Indonesia Tbk (Persero). *International Journal of Science, Technology & Management*, 1415-1422.
- Boulding, W., Ehret, M., & Babakus, E. (2005). *The Customer Relationship management Revolution: How it Works and How to Make it Work for You*. Pearson .
- Cui, L., & Zhang, Z. (2017). The Role of Digital Customer Experience in Customer Repurchase Intention. *Journal of Business Research* , 47-58.
- Esteban-Bravo, D., Viglia, G., & Martin-Consuegra, F. (2011). Customer Satisfaction in The Digital Age: The Impact of Website Quality and Customer Characteristics. *International Journal of Information Management* , 37-45.
- Garvin, D. A. (1984). What Does "Product Quality" Really Mean? *MIT Sloan Mangement Review*. 25-43. Retrieved December 26, 2021, from [https://www.amazon.com/Discovering-Statistics-Using-IBM-SPSS-ebook/dp/B079HYHP5P/ref=as\\_li\\_ss\\_tl?dchild=1&keywords=Discovering+Statistics+Using+IBM+SPSS+Statistics&qid=1590692753&sr=8-1&linkCode=sll&tag=statistics07-20&linkId=27ab9b657d3cce694c1bc0bbb864](https://www.amazon.com/Discovering-Statistics-Using-IBM-SPSS-ebook/dp/B079HYHP5P/ref=as_li_ss_tl?dchild=1&keywords=Discovering+Statistics+Using+IBM+SPSS+Statistics&qid=1590692753&sr=8-1&linkCode=sll&tag=statistics07-20&linkId=27ab9b657d3cce694c1bc0bbb864)
- Huber, J., & Volckner, F. (2002). Perceived Value: An Integrative Framework for the Business-to-Business Context. *Journal of the Academy of Marketing Science* , 275-293.
- Irsan, M., Santoso, P., & Kusadjibrata, N. (2022). Strategi Komunikasi Pemasaran Batik Keris di Masa Pandemi. *Hybrid Advertising Journal: Publication for Advertising Studies* , 119-129.
- Kartikaningtyas, N. I., Kustiyah, E., & Djumali. (2020). Kepuasan Pelanggan Gerai Batik Ditinjau dari Diferensiasi Produk, Brand Image, dan Pelayanan. *Edunomika* , 277-283.
- Kotler, P., & Keller, K. (2016 ). *Marketing Management* (15th ed) . Pearson .
- Mandal, P., & Joshi, D. (2017). *Understanding Digital Marketing Strategy* .

- International Journal of Scientific Research and Management , 2321-3418.
- Noor, Y. M., Nawi, N., & Nordin, N. (2019). Investigating the Product Quality and E-Service Quality Attributes that Influence Customers Satisfaction of Online Apparels. *International Journal of Advanced Research* , 811-818.
- Ojasalo, J. (2010). E-Service Quality: A Conceptual Model . *International Journal of Arts and Sciences*, 127 - 143.
- Puspaningrum, A. (2020). The Influence of Brand Image on Satisfaction to Improve Customer Retention Towards Batik Keris in Malang City . *Journal of Applied Management* , 142-151.
- Stylidis, K., Bursac, N., & Heitger , N. (2018). Perceived Quality Framework in Product Generation Engineering: An Automotive Industry Example. *Cambridge University* .
- Tarigan, Z. S., & Siregar, H. (2018). Marketing Strategy of Batik Keris. *Internatiional Journal of Scientific Research and Management* , 49-54.
- Verhoef, P., & Leunis , J. (2009). Understanding Customer Satisfaction in E-Commerce: An Empirical Analysis of the Relatioinship Between Satisfaction Dimensions and Repurchase Intention. *Journal of Business Research*, 174-182.
- Vu, T. (2021). Service Quality and Its Impact on Customer Satisfaction. *The University of Northampton* .
- Yüksel, A., & Yuksel, F. (2008). Customer Satisfaction: Conceptual Issues Consumer Satisfaction Theories: A Critical Review. *Adnan Menderes University*.
- Zeithmail, V. (2002). Consumer Perceptions of Price, Quality, and Value: A Means-End Model and Synthesis of Evidence. *Journal of Marketing*, 2-22.