

Exploring the Mobile Shopping Experience: A Comparative Study of Perceived Service Quality on Lazada and Shopee Platforms

Santhiramalar Tanggarachai¹, Ahmad Zulhusny Rozali², H. Hartini³

^{1,2} Faculty of Business and Communication, University Malaysia Perlis, Arau, Perlis, Malaysia

³ School of International Studies, Universiti Utara Malaysia, Sintok, Kedah, Malaysia

*Corresponding author: H. Hartini (h.hartini@uum.edu.my)

ABSTRACT

Mobile commerce (m-commerce) refers to the range of commercial activities and transactions conducted through communication technology networks, allowing individuals and businesses to buy, sell, and exchange goods and services using mobile devices. The popularity of m-commerce has surged due to the rapid growth in mobile device usage and market penetration. When consumers experience dissatisfaction with the perceived service quality offered by a company in the m-commerce sector, it creates a negative impression that can tarnish the company's reputation. This dissatisfaction ultimately reduces overall customer satisfaction, as individuals find their expectations unmet or compromised. This research examines the impact of service quality, system quality, and information quality dimensions on perceived service quality within the context of mobile commerce in Malaysia, with a particular focus on leading platforms such as Lazada and Shopee. The study gathered data through a combination of online and offline surveys, involving a sample of 384 mobile commerce users in Malaysia. The results indicate that Lazada users prioritize various aspects of m-commerce quality, such as responsiveness, personalization, and content usefulness, which significantly influence their perception of service quality. In contrast, Shopee users primarily emphasize responsiveness and content usefulness, with other factors, such as interactivity, having a lesser impact on their perceived service quality. By identifying the key drivers of perceived service quality, this research provides actionable insights for improving user experience and optimizing service offerings on mobile commerce platforms such as Lazada and Shopee. These insights can help mobile commerce platform operators and service designers prioritize responsiveness, personalization, and content usefulness to enhance user satisfaction and strengthen their competitive edge in the Malaysian market.

Keywords: Information Quality; Mobile Commerce; Perceived Quality; Service Quality; System Quality.

1. INTRODUCTION

In the rapidly evolving technological landscape, particularly with the widespread adoption of mobile devices and the rise of internet technologies, the user market has undergone a significant shift in how commerce is conducted. Just a decade ago, e-commerce was the dominant channel for online shoppers to purchase desired items. E-commerce involves the dynamic exchange of goods and services between buyers and sellers through digital platforms. This process not only includes the buying and selling of products but also ensures the seamless delivery of goods, thereby promoting interactive engagement between traders and consumers via the Internet [1]. Traditionally, e-commerce relied heavily on a stable wired internet connection, which limited access for corporate professionals and mobile consumers [2]. However, the introduction of mobile commerce (m-commerce) has transformed the landscape, as it has gained popularity due to the significant increase in mobile device usage and market penetration.

M-commerce, or mobile commerce, refers to activities in which potential commercial transactions are conducted via a communication network that interfaces with wireless devices. According to [3], m-commerce technology combines mobile devices, supporting software, and wireless internet. Consumers increasingly prefer m-commerce, largely due to advancements in mobile technology and applications. The convenience of conducting business transactions via mobile devices enables flexibility in purchasing goods or services anywhere and at any time, without being tied to a wired infrastructure [4]. Two prominent examples of mobile commerce (m-commerce) platforms in Malaysia are Lazada and Shopee. In terms of mobile app engagement, Shopee's Android app receives approximately 551,100 downloads per month, whereas Lazada's Android app receives around 390,200 downloads [5]. These figures highlight the significant presence and popularity of both Shopee and Lazada as leading m-commerce platforms in Malaysia. Such widespread engagement demonstrates their ability to attract and retain a large and diverse user base in a competitive market. The dominance of these platforms emphasizes the critical role of mobile commerce in shaping the retail landscape in Malaysia.

The mobile commerce sector in Malaysia is highly competitive, with platforms like Lazada and Shopee striving to capture and retain users. However, there is limited understanding of the specific factors that drive perceived service quality, which is crucial for shaping a company's image. Therefore, it is essential to conduct an in-depth empirical investigation into the dynamics of m-commerce in Malaysia, with a focus on Lazada and Shopee. This study employs the DeLone and McLean Information Systems (IS) Success Model as a foundational framework to investigate whether information quality, system quality, and service quality have a significant impact on perceived service quality in the context of mobile commerce in Malaysia. It also aims to explore the specific dimensions within each quality construct to better understand their individual impacts on perceived service quality.

2. LITERATURE REVIEW

2.1 Service Quality

[6] defined service quality as "the quality of support services that users receive from the IT department or IT support personnel". From an m-commerce perspective, service quality refers to the effectiveness of support and assistance provided to users through mobile digital platforms. [7] stated that Mobile Service Quality (MSQ) is the "discrepancy between consumer perceptions of mobile application services offered by companies and customer expectations of services provided through mobile applications." This highlights the importance of bridging the gap between what customers anticipate before using a service and their actual experience afterward, as this discrepancy can significantly influence their overall satisfaction and loyalty to the platform.

According to [8], service quality encompasses several key factors, including system reliability, responsiveness, assurance, personalization, credibility, and safety. Together, these elements shape the overall user experience and are essential in forming perceptions of the system's overall quality. Among these aspects, responsiveness and personalization have been recognized as significant determinants of service quality [9][10]. As this study is centred on mobile commerce, the focus will be on responsiveness and personalization, given their critical roles in shaping user satisfaction and enhancing the overall user experience on digital platforms.

Responsiveness and personalization are crucial aspects of service quality, particularly in the fast-paced world of online commerce. Responsiveness not only involves addressing customer issues effectively but also developing quick and agile solutions to meet the high expectations of online consumers [11][12]. In an environment dominated by real-time interactions, businesses must adapt swiftly to customer needs, making responsiveness a cornerstone of successful online operations. On the other hand, personalization focuses on tailoring the mobile commerce

experience to individual preferences by leveraging user information [13]. Often used interchangeably with customization, personalization goes beyond generic recommendations by offering highly specific and advanced product recommendations that closely align with users' preferences [14][15][16]. This proactive approach not only enhances the user experience but also simplifies the purchasing process by providing information and options tailored to individual needs and desires. Together, responsiveness and personalization create a seamless and engaging shopping experience, reinforcing customer satisfaction and loyalty in the competitive online marketplace.

In digital business environments, numerous studies have shown that system quality significantly affects perceived service quality. For instance, [17] found that service quality, as a crucial aspect of system quality, positively influences the overall perceived service quality of m-commerce services in Jordan. Similarly, [18] examined m-commerce ride-hailing services in Vietnam and found that information system service quality is a significant predictor of overall perceived service quality. However, the impact of service quality on m-commerce shopping platforms in Malaysia is still underexplored in the existing literature. This study aims to address this gap by analyzing the relationship between service quality and perceived service quality, focusing specifically on users of Lazada and Shopee in Malaysia's m-commerce market.

It is expected that m-commerce users will develop a more positive perception of service quality when they engage with the system in meaningful ways, such as through personalized experiences tailored to their preferences, responsive support that addresses their needs, and timely assistance.

Hence, this study hypothesizes:

H1a: Service quality has a significant positive effect on the perceived service quality of the Lazada mobile commerce platform.

H1a1: Responsiveness has a significant positive effect on the perceived service quality of the Lazada mobile commerce platform.

H1a2: Personalization has a significant positive effect on the perceived service quality of the Lazada mobile commerce platform.

H1b: Service quality has a significant positive effect on the perceived service quality of the Shopee mobile commerce platform.

H1b1: Responsiveness has a significant positive effect on the perceived service quality of the Shopee mobile commerce platform.

H1b2: Personalization has a significant positive effect on the perceived service quality of the Shopee mobile commerce platform.

2.2 System Quality

System quality refers to the desirable characteristics of technology that enhance its effectiveness and user satisfaction [19]. It focuses on evaluating the technical features and functionalities of an information system to ensure that it operates efficiently, meets users' expectations, and fulfils their needs. Scholars have emphasized the importance of accessibility and interactivity as key factors in evaluating system quality. For instance, [20] argued that accessibility and interactivity are fundamental components for evaluating digital health technologies, highlighting their significance in assessing the quality of systems. Similarly, [21] and [22] emphasized accessibility as a key indicator in measuring the service quality of internet banking. They suggested that effective online services, such as Internet banking, must be easily accessible to users to ensure optimal functionality. [23] further noted that mobile commerce should be accessible 24 hours a day, regardless of location and time. This highlights the notion that users should have constant and uninterrupted access to mobile commerce services. In this context, accessibility refers to users' ability to access and engage with the mobile commerce platform at any time, thereby contributing to a seamless and convenient user experience.

Prior studies have acknowledged interactivity as a vital element of system quality [18][24][25]. In an online environment, interactivity enhances user engagement with the platform through features such as personalized product recommendations, feedback mechanisms, chatbots, and real-time communication [26]. For instance, Lazada and Shopee employ features such as user reviews, product demonstrations, and interactive search tools that enhance the user experience. This positive engagement is anticipated to enhance users' overall perception of service quality.

In the realm of e-commerce, accessibility refers to a range of techniques, guidelines, or methods designed to ensure that web content is usable by all individuals, regardless of their physical or technological capabilities [27]. In m-commerce, it means ensuring that mobile platforms are easily navigable and functional across different devices and operating systems, so that all users, regardless of their technical expertise or physical limitations, can seamlessly engage with the mobile commerce experience.

A study by [2] found that accessibility plays a significant role in influencing users' overall perception of service quality in mobile commerce (m-commerce). The research indicates that when mobile commerce platforms are easily accessible, users are more likely to perceive the service quality positively. For platforms such as Shopee and Lazada, accessibility is essential to enhancing perceived service quality, as it ensures a seamless and efficient shopping experience. This not only increases user satisfaction but also fosters greater loyalty, encouraging regular use of these platforms.

Based on the above discussion, this study hypothesizes:

H2a: System quality has a significant positive effect on the perceived service quality of the Lazada mobile commerce platform.

H2a1: Interactivity has a significant positive effect on the perceived service quality of the Lazada mobile commerce platform.

H2a2: Accessibility has a significant positive effect on the perceived service quality of the Lazada mobile commerce platform.

H2b: System quality has a significant positive effect on the perceived service quality of the Shopee mobile commerce platform.

H2b1: Interactivity has a significant positive effect on the perceived service quality of the Shopee mobile commerce platform.

H2b2: Accessibility has a significant positive effect on the perceived service quality of the Shopee mobile commerce platform.

2.3 Information Quality

From an e-commerce perspective, information quality refers to the extent to which consumers perceive the information provided by a company on its brand page as superior [28]. This information typically originates from the company and may include details on products, services, promotions, and other relevant data. [19] highlighted that the success of an information system (IS) is measured by the quality of its information, which encompasses key aspects such as relevance, timeliness, and accuracy. Several scholars [29][30][31] have classified information quality into two dimensions: content usefulness and content adequacy. While both dimensions are integral for understanding information quality, this study will focus specifically on content usefulness. This focus is due to its emphasis on the practical value and utility of the information, which are often more observable and measurable in digital contexts than content adequacy, which may require more extensive contextual analysis.

[32] discovered that information positively influences the success of the Grab mobile application. Users typically value accurate, relevant, and timely information when using mobile applications, and higher information quality can lead to a better user experience. Ensuring the usefulness of content is crucial to guarantee the accuracy and appropriateness of information on the mobile commerce site. This implies that the information presented on the mobile commerce website must be up to date to effectively address potential inconveniences and help retain existing consumers [33]. [34] emphasized that companies that fail to effectively leverage information systems may become uncompetitive and struggle to meet consumer expectations. Consumer expectations are shaped by the availability of information, seamless interactions, and personalized experiences. If a company does not utilize information systems to understand and respond to these expectations, it may struggle to deliver high-quality services that align with consumers' demands.

Hence, this study hypothesizes:

H3a: Information quality has a significant positive effect on the perceived service quality of the Lazada mobile commerce platform.

H3a1: Content usefulness has a significant positive effect on the perceived service quality of the Lazada mobile commerce platform.

H3b: Information quality has a significant positive effect on the perceived service quality of the Shopee mobile commerce platform.

H3b1: Content usefulness has a significant positive effect on the perceived service quality of the Shopee mobile commerce platform.

Figure 1 depicts the research framework of the study.

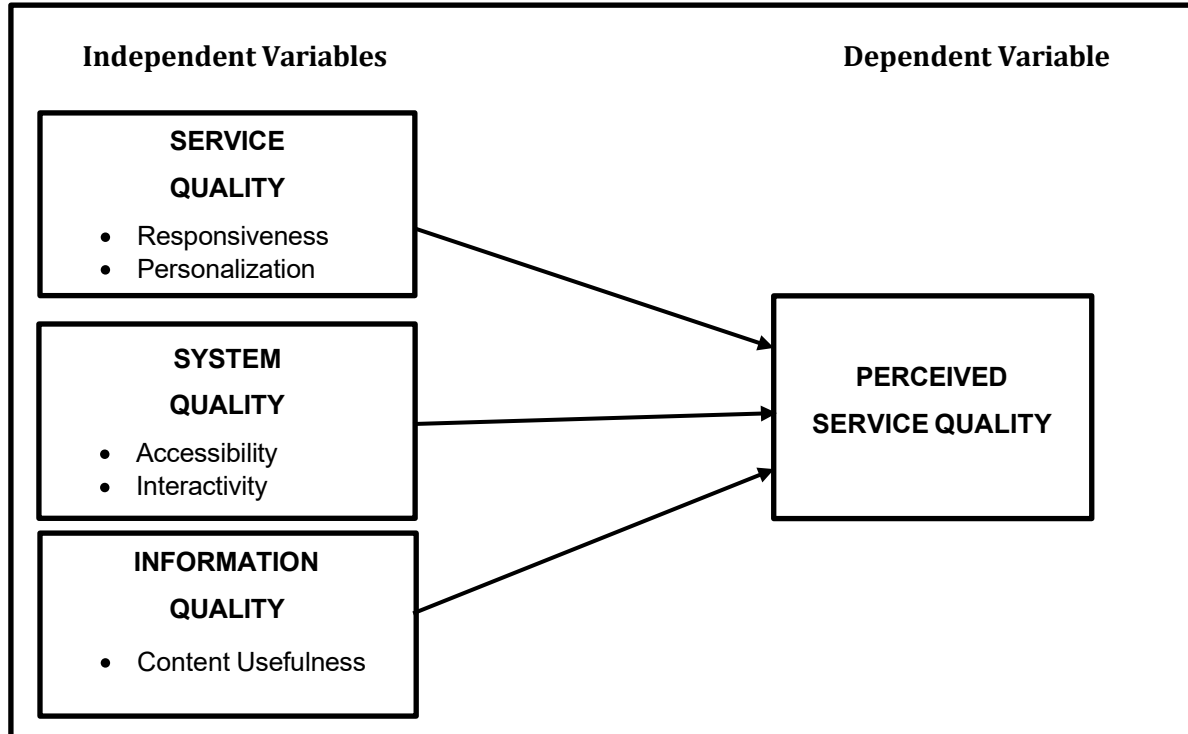


Figure 1 Research Framework

3. METHODOLOGY

3.1 Sample and Data Collection

A questionnaire was designed as both a paper-and-pencil and an online survey to collect responses from a large number of participants. This study employed purposive sampling, also known as selective sampling, in which participants were deliberately selected based on their ability to provide relevant data [35]. Certain criteria were established to select the sample. Participants needed to be Malaysian citizens with firsthand experience using mobile commerce platforms, specifically Lazada and Shopee. A total of 420 respondents completed the surveys; however, 36 responses were discarded during screening due to incompleteness. Thus, the final valid sample consisted of 384 responses.

Table 1: Respondents' Demographic Profile

	Respondents' Profile	Frequency	Percentage (%)
Gender	Male	108	28.1
	Female	276	71.9
Age (Years)	Below 20	42	10.9
	21 - 30	282	73.4
	31 - 40	46	12.0
	41 - 50	10	2.7
	Above 51	4	1.0
Ethnicity	Malay	123	32.0
	Chinese	138	35.9
	Indian	115	29.9
	Others	8	2.1
State	Perlis	37	9.6
	Kedah	36	9.4
	Terengganu	11	2.9
	Pahang	27	7.0
	Perak	47	12.2
	Kelantan	15	3.9
	Penang	47	12.2
	Selangor	37	9.6
	Negeri Sembilan	14	3.6
	Johor	28	7.3
	Malacca	15	3.9
	Kuala Lumpur	45	11.7
	Putrajaya	22	5.7
	Others	3	0.8

Education Level	High School	32	8.3
	Diploma	66	17.2
	Bachelor's Degree	275	71.6
	Master and above	11	2.9
Occupation	Student	233	60.7
	Government Employee	42	10.9
	Private Sector	74	19.3
	Businessperson	16	4.2
	Others	19	4.9
Income Level	Below RM 2,000	76	19.8
	RM 2,001 - RM 4,000	55	14.3
	RM 4,001 - RM 6,000	48	12.5
	RM 6,001 - RM 8,000	13	3.4
	RM 8,001 - RM 10,000	5	1.3
	RM 10,001 and above	2	0.5
	No Income	185	48.2
Frequency of using mobile commerce for shopping	0-1 times/month	175	45.6
	2-3 times/month	135	35.2
	4-5 times/month	51	13.3
	≥ 6 times/month	23	6.0
Duration of m-commerce usage	≤ 1 month	77	20.1
	1 - 6 months	62	16.1
	6 months - 1 year	66	17.2
	1 - 2 years	53	13.8
	2 - 3 years	72	18.7
	3 - 5 years	46	12.0
	> 6 years	8	2.1

Table 1 presents the characteristics of a sample comprising 384 respondents. Among them, 276 (71.9 percent) were male, and 108 (28.1 percent) were female. The majority of participants were between 21 and 30 years old (73.4 percent), indicating a relatively young sample. A significant portion of the respondents were students with no income. Regarding m-commerce experience, approximately 20.1 percent of respondents had used m-commerce platforms for less than a month, 18.7 percent for 2 to 3 years, and 17.2 percent for 6 months to 1 year. Regarding the frequency of m-commerce usage, 175 respondents (45.6 percent) used these platforms once a month, 135 (35.2 percent) used them 2 to 3 times a month, 51 (13.3 percent) engaged with them 4 to 5 times a month, and 23 (6 percent) accessed them more than 6 times a month.

3.2 Measures

All variables in this study were measured using a variety of validated scales, which were modified to fit the research context. Service quality was measured using scales developed by [34] and [36]. System quality was measured by combining scales suggested by [37] and [38]. The measurement of system quality comprised six items. Information quality was evaluated using three items from the scale developed by [34]. Perceived service quality was assessed with three items from the scale created by [39]. Table 2 presents the constructs and measures used in this study.

Table 2 Measurement Items

Construct	Items	Measurement Items	Author(s)
Service Quality	RES01	This m-commerce application offers easy procedures for product returns.	Yassierli et al. (2018)
	RES02	I think if this m-commerce application offers a product warranty, it will be useful for users.	
	RES03	I think if this m-commerce application provides information about what to do if a transaction fails, it will be easier for users.	
	PER01	I think using m-commerce meets my needs.	Liébana - Cabanillas et al. (2017)
	PER02	M-commerce offers information and services in line with my preferences.	
	PER03	Using m-commerce is in line with my personal standards and values.	
System Quality	ACC01	Mobile internet allows me to access information at the best moment for me.	Anwar et al. (2018)
	ACC02	Mobile internet allows me to get things done regardless of my location.	
	ACC03	Mobile internet is practical because I can use it without difficulty wherever I am.	
	INT01	This m-commerce application responded to my questions very quickly.	Bao et al. (2016)
	INT02	I was able to get information from this m-commerce application very quickly.	
	INT03	While I was on this m-commerce website, I could choose freely what I wanted to see.	
Information Quality	CUF01	The information contained in this m-commerce application is relevant.	Yassierli et al. (2018)
	CUF02	The information contained in this m-commerce application is updated regularly.	
	CUF03	The information provided in this m-commerce application is accurate.	
Perceived Service Quality	PSQ01	This m-commerce platform always delivers excellent overall services	Moghavvemi et al. (2018)
	PSQ02	The services offered by this m-commerce platform are high quality.	
	PSQ03	This m-commerce platform offers me a complete range of products.	

Note: RES=Responsiveness, PER=Personalization, ACC= Accessibility, INT= Interactivity, CUF = Content Usefulness, PSQ = Perceived Service Quality

4. RESULTS

4.1 Descriptive Statistics and Correlation Analysis

Table 3 presents descriptive statistics for the independent variables—service quality, system quality, and information quality, as well as the dependent variable, perceived service quality. This analysis uses Pearson’s correlation coefficient to compare the results between Lazada and Shopee.

Table 3 Descriptive Statistics and Correlation in Assessing Perceived Service Quality Between Lazada and Shopee

LAZADA										
Variables	N	SD	MEAN	PSQ	RES	PER	ACC	INT	CUF	
PSQ	384	0.64233	4.0373	1						
SQD	RES	384	0.57122	3.9809	0.848**	1				
	PER	384	0.59165	3.9479	0.792**	0.643**	1			
SYQ	ACC	384	0.60794	4.1641	0.293**	0.234**	0.406**	1		
	INT	384	0.54620	4.1450	0.380**	0.279**	0.367**	0.326**	1	
IQD	CUF	384	0.51408	4.0026	0.849**	0.709**	0.800**	0.460**	0.463**	1

**Correlation is significant at the 0.01 level (2-tailed)

SHOPEE										
Variables	N	SD	MEAN	PSQ	RES	PER	ACC	INT	CUF	
PSQ	384	0.51953	4.2561	1						
SQ	RES	384	0.51697	4.2726	0.709**	1				
	PER	384	0.66016	4.0148	0.114*	0.334**	1			
SYQ	ACC	384	0.52155	4.1771	0.673**	0.721**	0.219**	1		
	INT	384	0.44141	4.3437	0.100	0.227**	0.106*	0.165**	1	
IQ	CUF	384	0.57722	4.1267	0.482**	0.325**	0.300**	0.428**	0.008	1

**Correlation is significant at the 0.01 level (2-tailed)

*Correlation is significant at the 0.05 level (2-tailed)

Note: PSQ = Perceived Service Quality, SQ = Service Quality, RES= Responsiveness, PER= Personalization, SYQ = System Quality, ACC= Accessibility, INT= Interactivity, IQ = Information Quality, CUF = Content Usefulness

Service quality, system quality, and information quality are distinct quality factors, each measured by different dimensions, and their effect on perceived service quality can vary. The comparative analysis of descriptive statistics and correlations for Lazada and Shopee reveals the relationships between these dimensions and perceived service quality, demonstrating how these factors influence each platform.

For Lazada, the results indicate that all constructs exhibit high positive correlations. The relationship between perceived service quality (PSQ) and service quality (SQ) dimensions, such as responsiveness ($r = 0.848$) and personalization ($r = 0.792$), indicates that these factors significantly shape users’ perceptions of service quality. Additionally, content usefulness shows a strong positive correlation ($r = 0.849$), further underscoring the important role of information quality (IQ) in shaping user perceptions of service quality on the Lazada platform. Within the system quality (SYQ)

dimensions, accessibility demonstrates a modest correlation with perceived service quality ($r = 0.293$), indicating a relatively minor influence on user perceptions. Conversely, interactivity shows a stronger correlation ($r = 0.380$), suggesting that interactive features such as responsive interfaces, two-way communication, and user engagement mechanisms play a more significant role in enhancing Lazada users' perceptions of service quality.

In contrast, Shopee's correlations are generally weaker. Among the service quality (SQ) dimensions, responsiveness shows a substantial positive association with perceived service quality (PSQ) ($r = 0.709$), whereas personalization displays a weak association ($r = 0.114$), suggesting that personalized experiences may have less impact on user perceptions within this platform. Furthermore, accessibility within the system quality (SYQ) dimensions demonstrates a moderate correlation with perceived service quality ($r = 0.673$), indicating a meaningful influence. Conversely, interactivity shows a very weak correlation ($r = 0.100$), suggesting it plays a minor role in shaping user perceptions. Meanwhile, content usefulness (CU), a critical element of information quality (IQ), shows a moderate positive relationship with perceived service quality ($r = 0.482$).

4.2 Hypothesis Testing Results

Table 4 Hypothesis Testing Results

Hypotheses	Relationship	β	T	Sig.	Result
Hypothesis 1a	SQ -> PSQ				
H1a1	RES -> PSQ	0.445	16.070	0.000*	Supported
H1a2	PER -> PSQ	0.229	7.106	0.000*	Supported
Hypothesis 1b	SQ -> PSQ				
H1b1	RES -> PSQ	0.537	11.384	0.000*	Supported
H1b2	PER -> PSQ	- 0.190	- 5.565	0.000*	Rejected
Hypothesis 2a	SYQ -> PSQ				
H2a1	ACC -> PSQ	- 0.087	- 3.967	0.000*	Rejected
H2a2	INT -> PSQ	0.025	1.147	0.252	Rejected
Hypothesis 2b	SYQ -> PSQ				
H2b1	ACC -> PSQ	0.218	4.593	0.000*	Supported
H2b2	INT -> PSQ	- 0.040	- 1.242	0.215	Rejected
Hypothesis 3a	IQ -> PSQ				
H3a1	CUF -> PSQ	0.379	10.041	0.000*	Supported
Hypothesis 3b	IQ -> PSQ				
H3b1	CUF-> PSQ	0.271	7.599	0.000*	Supported

Note: PSQ = Perceived Service Quality, SQ = Service Quality, RES = Responsiveness, PER = Personalization, SYD = System Quality, ACC = Accessibility, INT = Interactivity, IQD = Information Quality, CUF = Content Usefulness.

The first hypothesis examined the impact of service quality dimensions (responsiveness and personalization) on perceived service quality. A total of four related hypotheses were proposed and tested. Of the four related hypotheses proposed, responsiveness (RES) had a significant positive effect on perceived service quality (PSQ) for both Lazada and Shopee, with T-values of 16.07 and 11.38, respectively. For the second dimension, personalization (PER), a significant positive influence on perceived service quality was observed only for Lazada, with a T-value of 7.10. As a result, hypotheses H1a1, H1a2, and H1b1 are accepted, but H1b2 is rejected.

The following hypothesis investigates the relationship between system quality dimensions (accessibility and interactivity) and perceived service quality. The results indicated that only one of the four individual hypotheses was significant. With a T-value of 4.59, accessibility (ACC) has a statistically significant positive effect on perceived service quality (PSQ) for Shopee, supporting H2b1. However, the T-value of -3.96 for Lazada indicates that accessibility has a negative influence on perceived service quality (PSQ) on this platform, leading to the rejection of H2a1. Interactivity (INT) does not exhibit a significant impact on perceived service quality (PSQ) for either platform, with T-values of 1.14 for Lazada and -1.24 for Shopee. Consequently, H2a2 and H2b2 are not supported.

The final hypothesis examined the impact of information quality on perceived service quality (PSQ). Information quality was operationalized as a composite measure comprising a single dimension: content usefulness (CU). The findings indicate that content usefulness is significantly and positively correlated with perceived service quality for both Lazada and Shopee platforms, with T-values of 10.04 and 7.59, respectively. Therefore, hypotheses H3a1 and H3b1 are supported.

5. DISCUSSIONS

The hypothesis examining the impact of responsiveness, a key dimension of service quality on perceived service quality (PSQ) for both Lazada and Shopee was supported. This outcome aligns with previous findings [40] [41] [42], which highlight the significant influence of responsiveness on service quality. Responsiveness, particularly in handling product returns and efficiently executing online warranty arrangements, plays a crucial role in shaping customer perceptions. Both Lazada and Shopee demonstrate a high level of responsiveness by promptly addressing customer inquiries, resolving complaints, and providing reliable post-purchase support. As a result, Malaysian customers view their service quality positively, highlighting the importance of responsiveness in enhancing overall customer satisfaction in the e-commerce sector.

The second dimension of service quality, personalization, was found to positively affect perceived service quality (PSQ) for the Lazada mobile commerce platform. This finding supports [43], who emphasized that personalization significantly enhances the overall customer experience within mobile commerce platforms. It is also consistent with [18], who explained that personalization, often referred to as customization, involves using communication channels to deliver relevant content based on individual user preferences. By offering features such as personalized recommendations, targeted promotions, and individualized services, personalization helps users feel recognized and valued, leading to a more satisfying shopping experience [5][44]. However, personalization did not have a significant effect on perceived service quality on the Shopee platform. This suggests that while personalization can be a key driver of service quality on some platforms, its effectiveness may vary depending on the extent to which it is implemented and integrated into platform-specific strategies.

The findings of this study reveal that accessibility, a key dimension of system quality, has a significant positive impact on perceived service quality (PSQ) for the Shopee mobile commerce platform. As highlighted by [2], accessibility in m-commerce refers to users' ability to access and interact with the system at any time and from any location to carry out commercial transactions.

In this context, mobile platforms must be easily navigable, functionally reliable, and capable of supporting seamless user interactions. Higher accessibility enhances user convenience, which not only boosts customer satisfaction but can also foster greater customer loyalty [45]. Moreover, [22] highlighted that users are more likely to assign higher service ratings when they experience fast, smooth, and uninterrupted access to the platform. Therefore, ensuring consistently high accessibility is crucial for strengthening users' perceptions of service quality in mobile commerce. Interestingly, this study found that accessibility has a negative influence on perceived service quality on the Lazada platform. One possible reason is that when an app is accessible and easy to use, users may expect everything to work perfectly and quickly. If there are any delays, errors, or minor issues, users may be more disappointed because their expectations are higher. This demonstrates that while accessibility is crucial, it must be complemented by smooth and reliable service to ensure a consistently positive user experience.

While previous research [26][46] has consistently shown that interactivity enhances perceived service quality by facilitating real-time engagement and strengthening customer relationships, this study found that interactivity does not significantly affect perceived service quality for either Lazada or Shopee. This unexpected result may be attributed to the implementation of interactive features on these platforms. Poorly designed or overly complex interactivity can overwhelm users, causing frustration rather than adding value. [47] noted that excessive interactive elements may reduce usability and contribute to decision fatigue, while [48] highlighted how information overload, such as too many product choices, user reviews, or pop-ups, can lead to cognitive dissonance and uncertainty in decision-making. In mobile commerce, where user attention spans are shorter, streamlined and purposeful interaction design is essential. These findings suggest that although interactivity is generally viewed as beneficial, its impact on service quality is highly context-dependent and may backfire if it is not aligned with user expectations and usability standards.

Information quality comprises a single dimension, namely content usefulness. The findings show that content usefulness is significantly and positively correlated with perceived service quality (PSQ) on both the Lazada and Shopee platforms. This indicates that when users perceive the information provided as reliable, relevant, and clear, their overall evaluation of service quality improves. The usefulness of content plays a vital role in assessing the reliability [49], accuracy [50], and consistency [51] of the data presented. According to [2], content usefulness directly enhances perceived service quality and indirectly contributes to overall satisfaction.

Useful content, characterized by up-to-date accuracy and relevance, helps customers make informed decisions and builds trust in the platform [52]. As [53] observed, content that meets user expectations positively influences satisfaction, while [54] emphasized its role in fostering customer loyalty. In the context of mobile commerce, where quick and reliable information is critical, content usefulness becomes a central driver of positive user experiences. These findings support the notion that high-quality content, along with strong system and service quality, is essential for sustaining competitiveness and user retention on e-commerce platforms [55]. Ultimately, ensuring content usefulness can enhance user trust and encourage continued engagement with the platform. Lazada and Shopee platforms should continue to invest in the creation of accurate, relevant, and engaging product information, while maintaining reliable system performance and responsive customer service. By doing so, they can strengthen user confidence, foster long-term loyalty, and remain competitive in the rapidly evolving mobile commerce landscape.

6. CONCLUSION

This research offers an in-depth examination of the mobile commerce landscape, with a focus on the Lazada and Shopee platforms. This study enriches the Information Systems Success Model by clarifying the roles of service quality, system quality, and information quality, each represented through key dimensions such as responsiveness, personalization, accessibility, interactivity, and content usefulness. It advances a more comprehensive understanding of the determinants of success within the mobile commerce sector. The findings offer valuable insights for mobile commerce operators and platform developers, emphasizing that strengthening key dimensions such as responsiveness, personalization, accessibility, and content usefulness can significantly enhance users' perceptions of service quality and overall platform success.

While this study offers valuable contributions, it is important to acknowledge its limitations, which also present opportunities for future research. The primary limitation is its exclusive focus on Lazada and Shopee, which may restrict the generalizability of the findings to the larger mobile commerce landscape. Future research should consider a broader range of mobile commerce platforms to provide a comprehensive examination of service quality dynamics across various contexts. Additionally, reliance on a quantitative survey methodology may limit the depth of insights, as it may overlook qualitative nuances that could enrich the findings. Combining quantitative surveys with qualitative methods, such as interviews or focus groups, could yield a more comprehensive understanding of users' perceptions, preferences, and experiences within the mobile commerce environment. Finally, the study's cross-sectional design provides a snapshot of the relationships at a specific point in time, limiting the exploration of dynamic changes over time. Future studies could benefit from a longitudinal approach to account for temporal variations and gain a more comprehensive understanding of how these dynamics evolve.

ACKNOWLEDGEMENTS

The authors would like to express their sincere gratitude to Universiti Malaysia Perlis (UniMAP) for the support and resources provided throughout this research.

REFERENCES

- [1] Santos, V. F. dos, Sabino, L. R., Morais, G. M., & Goncalves, C. A. *E-Commerce: A short history follow-up on possible trends*. International Journal of Business Administration, 8:7, 130-138. (2017). <https://doi.org/10.5430/ijba.v8n7p130>
- [2] Salameh, A. A., Hassan, S. B., & Alekam, J. M. *The influence of m-commerce service and system quality dimensions on overall perceived service quality*. International Journal of Research (GRANTHAALAYAH), 3:8, 1-13. (2015)
- [3] Chhonker, M. S., Verma, D., & Kar, A. K. *Review of technology adoption frameworks in mobile commerce*. Procedia Computer Science, 122, 888-895. (2017). <https://doi.org/10.1016/j.procs.2017.11.451>
- [4] Ratna Mary, P., & Charles, P. *E-business as a new trend in the economy*. International Journal of Management, Technology and Engineering, 8:12, 108-117. (2018).
- [5] TMO Group. *13 marketplaces in Malaysia for businesses selling online*. Retrieved from: <https://www.tmogroup.asia/insights/top-online-marketplaces-malaysia/> (2025).
- [6] DeLone, W. H., & McLean, E. R. *The DeLone and McLean model of information systems success: A ten-year update*. Journal of Management Information Systems, 19:4, 9-30. (2003). <https://doi.org/10.1080/07421222.2003.11045748>
- [7] Mulyono, R. A., & Pasaribu, L. H. *The impact of mobile service quality and brand image on customer loyalty*. Enrichment: Journal of Management, 12:1, 1-7. (2021).

- [8] Chan, X. Y., Rahman, M. K., Mamun, A. A., A. Salameh, A., Wan Hussain, W. M. H., & Alam, S. S. *Predicting the intention and adoption of mobile shopping during the COVID-19 lockdown in Malaysia*. SAGE Open, 12:2, 215824402210950. (2022). <https://doi.org/10.1177/215824402210950>
- [9] Wattoo, M. U., & Iqbal, S. M. J. *Unhiding nexus between service quality, customer satisfaction, complaints, and loyalty in online shopping environment in Pakistan*. SAGE Open, 12:2, 215824402210979. (2022). <https://doi.org/10.1177/215824402210979>
- [10] Gonu, E., Agyei, P. M., Richard, O. K., & Asare-Larbi, M. *Customer orientation, service quality, and customer satisfaction interplay in the banking sector: An emerging market perspective*. Cogent Business & Management, 10:1, 1-20. (2023). <https://doi.org/10.1080/23311975.2022.2163797>
- [11] Mmutle, T & Shonhe. L. *Customer's perception of service quality and its impact on reputation in the hospitality industry*. African Journal of Hospitality, Tourism and Leisure, 6:3, 1-25. (2017).
- [12] Sari, P.K., Alamsyah, A., & Wibowo, S. *Measuring e-commerce service quality from online customer review using sentiment analysis*. Journal of Physics: Conference Series, 971:1, 012053. (2018). <https://doi.org/10.1088/1742-6596/971/1/012053>
- [13] Jeyapaul, P. P., Rajamani, K., & Devi, J. P. *Measuring service quality in m-commerce context: A conceptual model*. Multidisciplinary Handbook of Social Exclusion Research. (2023).
- [14] Chopdar, P. K., Korfiatis, N., Sivakumar, V. J., & Lytras, M. D. *Mobile shopping apps adoption and perceived risks: A cross-country perspective utilizing the Unified Theory of Acceptance and Use of Technology*. Computers in Human Behavior, 86, 109–128. (2018). <https://doi.org/10.1016/j.chb.2018.04.017>
- [15] Zhang, R., Jun, M., & Palacios, S. *M-shopping service quality dimensions and their effects on customer trust and loyalty: an empirical study*. International Journal of Quality & Reliability Management, 40:1, 169-19. (2021). <https://doi.org/10.1108/IJQRM-11-2020-0374>
- [16] Mollick, J., Cutshall, R., Changchit, C., & Pham, L. *Contemporary mobile commerce: Determinants of its adoption*. Journal of Theoretical and Applied Electronic Commerce Research, 18:1, 501–523. (2023). <https://doi.org/10.3390/jtaer18010026>
- [17] Salameh, A. A. M., Ahmad, H., Zulhumadi, F., & Abubakar, F. M. *Relationships between system quality, service quality, and customer satisfaction; M-commerce in the Jordanian context*. Journal of Systems and Information Technology, 20:1, 73–102. (2018).
- [18] Phuong, N. N. D. & Tran, T.T. D. *Repurchase intention: The effect of service quality, system quality, information quality, and customer satisfaction as mediating role: A PLS approach of m-commerce ride hailing service in Vietnam*. Marketing and Branding Research, 5, 78–91. (2018).
- [19] DeLone, W. H., & McLean, E. R. *Information systems success: The quest for the dependent variable*. Information System Research, 3, 60–95. (1992).
- [20] Boone, A., Braeckman, L., Michels, N., Kindermans, H., Van Hoof, E., Van den Broeck, K., & Godderis, L. *Accessibility, retention and interactivity of online co-creation workshops: A qualitative post-hoc analysis*. International Journal of Qualitative Methods, 22. (2023). <https://doi.org/10.1177/16094069231180169>
- [21] Marinkovic, S., Gatalica, B., & Rakicevic, J. *New technologies in commerce and sharing economy*. 19th Toulon-Verona International Conference Excellence in Services, (September 2016), 287–298. (2016).
- [22] Nyarku, K. M., Kusi, L. Y., Domfeh, H. A., Ofori, H., Koomson, I., & Owusu, J. A. *Moderating the service quality-customer loyalty relation through customer satisfaction, gender, and banking status: Evidence from mobile money users in the University of Cape Coast, Ghana*. International Journal of Academic Research in Business and Social Sciences, 8:6, 704–732. (2018). <https://doi.org/10.6007/ijarbss/v8-i6/4265>

- [23] Hsu, C. W., & Yeh, C. C. *Understanding the critical factors for successful M-commerce adoption*. International Journal of Mobile Communications, 16:1, 50–62. (2018). <https://doi.org/10.1504/ijmc.2018.088272>
- [24] Ismail, A., Mursyid Arshad, M., Saros, A., Ibrahim, Z., & Sharif, S. *Online service quality of m-commerce: Effect on user satisfaction*. International Journal on Emerging Technologies, 11: 4, 39–45. (2020).
- [25] Saleh, A., Johan David Wetik, & Sik Sumaedi. *Smartphone apps-based health communication media usage among older individuals during the COVID-19 Pandemic: The role of system quality factors*. SAGE Open, 13:4. (2023). <https://doi.org/10.1177/21582440231210376>
- [26] Utami, A. F., Ekaputra, I. A., Japutra, A., & Van Doorn, S. (2021). *The role of interactivity on customer engagement in mobile e-commerce applications*. International Journal of Market Research, 64:2, 147078532110274. <https://doi.org/10.1177/14707853211027483>
- [27] Acosta-Vargas, P., Acosta, T., & Luján-Mora, S. *Challenges to assess accessibility in higher education websites: A comparative study of Latin American and European universities*. IEEE Access, 6, 36500–36508. (2018).
- [28] Zhang, K. Z. K., Benyoucef, M., & Zhao, S. J. *Building brand loyalty in social commerce: The case of brand microblogs*. Electronic Commerce Research and Applications, 15, 14–25. (2016). <https://doi.org/10.1016/j.elerap.2015.12.001>
- [29] Loiacono, E. T., Watson, R. T., & Goodhue, D. L. *WebQual™: A Measure of Web Site Quality*. American Marketing Association Winter Educators' Conference, Austin, 1-71. (2002).
- [30] Udo, G. J., Bagchi, K. K., & Kirs, P. J. *An assessment of customers' e-service quality perception, satisfaction and intention*. International Journal of Information Management, 30:6, 481–492. (2010). <https://doi.org/10.1016/j.ijinfomgt.2010.03.005>
- [31] Salameh, A. A., & Hassan, S. B. *Measuring service quality in m-commerce context: A conceptual model*. International Journal of Scientific and Research Publications, 5:3, 1-9. (2015).
- [32] Patma, T. S., Djajanto, L., Widodo, S., & Rahayu, K. S. *The effect of information quality and experience quality on trust and its impact on customer loyalty*. Proceedings of the 3rd Annual Management, Business and Economics Conference (AMBEC 2021), 260–268. (2022). https://doi.org/10.2991/978-94-6463-026-8_30
- [33] Huang, E. Y., Lin, S.-W., & Fan, Y.-C. *M-S-QUAL: Mobile service quality measurement*. Electronic Commerce Research and Applications, 14:2, 126–142. (2015). <https://doi.org/10.1016/j.elerap.2015.01.003>
- [34] Yassierli, Y., Vinsensius, V., & Mohamed, M. S. S. *The importance of usability aspect in m-commerce application for satisfaction and continuance intention*. Makara Journal of Technology, 22:3, 149-168. (2018). <https://doi.org/10.7454/mst.v22i3.3655>
- [35] Parahoo, K. (2014). *Nursing research: principles, processes and issues* (3rd ed.). London: Palgrave Macmillan.
- [36] Liébana-Cabanillas, F., Marinković, V., & Kalinić, Z. *A SEM-neural network approach for predicting antecedents of m-commerce acceptance*. International Journal of Information Management, 37:2, 14–24. (2017). <https://doi.org/10.1016/j.ijinfomgt.2016.10.008>
- [37] Anwar, A. *Drivers and barriers of mobile commerce: The role of consumers' personal innovativeness*. (Master's thesis, Brock University). Brock University Digital Repository. (2018). <https://brocku.scholaris.ca/items/88d9d0eb-fedb-44d4-9655-54130e5c6261/full>
- [38] Bao, H., Li, B., Shen, J., & Hou, F. *Industrial management & data systems article information? Repurchase Intention in Chinese E-marketplace? Roles of interactivity, trust and perceived effectiveness of e-commerce institutional mechanisms*. Industrial Management & Data Systems, 116:8, 1–31. (2016).

- [39] Moghavvemi, S., Lee, S. T., & Lee, S. P. (2018). *Perceived overall service quality and customer satisfaction*. International Journal of Bank Marketing, 36:5, 908–930. <https://doi.org/10.1108/ijbm-06-2017-0114>
- [40] Loonam, M., & O'Loughlin, D. *Exploring e-service quality: A study of Irish online banking*. Marketing Intelligence & Planning, 26:7, 759–780. (2008).
- [41] Nusair, K. K., & Kandampully, J. *The antecedents of customer satisfaction with online travel services: A conceptual model*. European Business Review, 20(1), 4–19. (2008). <https://doi.org/10.1016/j.chb.2016.03.016>
- [42] Zemblyte, J. *The instrument for evaluating e-service quality*. Procedia, 213, 801–806. (2015).
- [43] Princy, A. S., Jayaraj, P., & Krishnan, M. M. *Behavioral analysis of consumers towards selection of mobile network service*. In Multidisciplinary Handbook of Social Exclusion Research (pp. 15–25). (2024).
- [44] Huang, J., & Zhou, L. *Timing of web personalization in mobile shopping: A perspective from Uses and Gratifications Theory*. Computers in Human Behavior, 88, 103–113. (2018). <https://doi.org/10.1016/j.chb.2018.06.035>
- [45] Nur, Y., Basalamah, S., Semmail, B., & Hasan, S. *The influence of bank image, accessibility, and customer relationship management on customer satisfaction and loyalty at Islamic Banks in Makassar City*. International Journal of Professional Business Review, 8:9, 1-34. (2023). <https://doi.org/10.26668/businessreview/2023.v8i9.3640>
- [46] Huang, Z., Luo, Y., & Wang, D. *Online customer service quality of online shopping: evidence from Dangdang.com*. Cluster Computing, 22:S6, 15285–15293. (2018). <https://doi.org/10.1007/s10586-018-2565-5>
- [47] Sutcliffe, A., & Hart, J. *Analyzing the role of interactivity in user experience*. International Journal of Human–Computer Interaction, 33:3, 229–240. (2016). <https://doi.org/10.1080/10447318.2016.1239797>
- [48] Lv, J., & Liu, X. *The impact of information overload of e-commerce platform on consumer return intention: Considering the moderating role of perceived environmental effectiveness*. International Journal of Environmental Research and Public Health, 19:13, 8060. (2022). <https://doi.org/10.3390/ijerph19138060>
- [49] Gao, L., & Waechter, K. A. *Examining the role of initial trust in user adoption of mobile payment services: An empirical investigation*. Information Systems Frontiers, 19:3, 525–548. (2017). <https://doi.org/10.1007/s10796-015-9611-0>.
- [50] Sarkar, S., Chauhan, S., & Khare, A. *A meta-analysis of antecedents and consequences of trust in mobile commerce*. International Journal of Information Management, 50, 286–301. (2020). <https://doi.org/10.1016/j.ijinfomgt.2019.08.008>
- [51] Baabdullah, A. M., Alalwan, A. A., Rana, N. P., Kizgin, H., & Patil, P. *Consumer use of mobile banking (M-Banking) in Saudi Arabia: Towards an integrated model*. International Journal of Information Management, 44, 38-52. (2019). <https://doi.org/10.1016/j.ijinfomgt.2018.09.002>
- [52] Silalahi, S. L. B., Handayani, P. W., & Munajat, Q. *Service quality analysis for online transportation services: Case study of GO-JEK*. Procedia Computer Science, 124, 487-495. (2017). <https://doi.org/10.1016/j.procs.2017.12.181>
- [53] Tam, C., & Oliveira, T. *Understanding the impact of m-banking on individual performance: DeLone & McLean and TTF perspective*. Computers in Human Behavior, 61, 233–244. (2016).
- [54] Prasetyo, Y. T., Tanto, H., Mariyanto, M., Hanjaya, C., Young, M. N., Persada, S. F., Miraja, B. A., & Redi, A. A. N. P. *Factors affecting customer satisfaction and loyalty in online food delivery service during the COVID-19 pandemic: Its relation with open innovation*. Journal of Open Innovation: Technology, Market, and Complexity, 7:1, 76. (2021). <https://doi.org/10.3390/joitmc7010076>
- [55] Rita, P., Oliveira, T., & Farisa, A. *The Impact of e-service Quality and customer satisfaction on customer behavior in online shopping*. Heliyon, 5:10, 1–14. (2019)