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The Impact of Mobile Hotel Reservation Apps Design on M-Service Quality, Purchase Intention, and Apps Re-Usage

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Abstract *This research aims to understand the impact of design elements in mobile hotel reservation applications on m-service quality, purchase intention, and apps reuse. The data was gathered through an online survey. After addressing records with missing data patterns, a final dataset was created, consisting of 501 participants. The findings highlight that information quality, purchase process, and system availability in mobile hotel reservation apps do not have a positive impact on m-service quality. Conversely, aesthetics, convenience, product selection, price offerings, and personalization significantly contribute to enhancing m-service quality of mobile hotel reservation apps. Moreover, a positive effect is observed between m-service quality and both purchase intention and re-usage of mobile hotel reservation apps. These findings provide valuable guidance for the improvement of mobile hotel reservation apps by emphasizing the positive impact of m-service quality on purchase intention and re-usage.*

Keywords: *M-Service Quality, Mobile Hotel Reservation Apps, Apps Design, Purchase Intention, Apps Re-Usage*

INTRODUCTION

Mobile hotel reservation apps are among the crucial tools that facilitate travel planning in today's world (Xiang et al., 2015). These apps enhance users' travel experiences by providing detailed information about various hotel options, making their travel arrangements more organized and satisfying (Wang & Wang, 2010). The elements present in the design of mobile hotel reservation apps are critical factors that determine users' interaction with the apps and their perception of service quality (Albayrak et al., 2023). Information quality in these apps focuses on the accuracy, completeness, and reliability of the information provided to users (Hwang et al., 2018). When users have access to accurate and reliable information, they can plan their travels more consciously, contributing to a positive travel experience by meeting their expectations (Huang et al., 2017). The improvement of information quality not only increases the number of users preferring mobile hotel reservation apps but also supports the success of the apps (Kim et al., 2006).

Visual appeal and user interface design are crucial factors influencing the user experience of mobile hotel reservation apps (Fang et al., 2017). An aesthetically designed interface provides users with a visually pleasing experience, increasing their motivation to interact with the apps. This, in turn, allows users to use the apps more frequently and for extended periods (Sutcliffe, 2022). The purchase process in mobile hotel reservation apps involves users completing the reservation and payment transactions (Ozturk et al., 2017). The seamless, efficient, and user-friendly nature of this process positively impacts user satisfaction and trust (Law et al., 2014). Users who experience a smooth purchase process contribute to the success of the apps and are more likely to consider using it again (Ozturk et al., 2016).

Ease of use is a fundamental factor shaping the user experience in mobile hotel reservation apps (Huang et al., 2019). The apps that are user-friendly, accessible, and effective enhance the perception of service quality and elevate user satisfaction levels (Wang et al., 2019). The ability for users to quickly access the information they need and easily complete

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reservation processes increases the likelihood of the apps being preferred (Wang et al., 2016). Product selection refers to the diversity and quality of hotel and accommodation options offered in mobile hotel reservation apps (Gibbs et al., 2016). Providing users with a wide range of products enhances overall satisfaction and strengthens the likelihood of the apps being used again (Weng et al., 2017). Pricing strategy is a significant factor influencing users' perception of service quality in mobile hotel reservation apps. Fair and transparent pricing increases user satisfaction and enhances perceived value. Users positively evaluate competitive price offers, strengthening the perception of service quality (Hanjaya et al., 2019; Wang & Wang, 2010).

Personalization features provide users in mobile hotel reservation apps with personalized recommendations, preferences, and customized user interfaces (Lei et al., 2019). The ability of the apps to adapt to individual user needs and preferences positively influences the perception of service quality (Kim & Hwang, 2012). Personalization allows users to form a stronger connection with the apps and increases their overall satisfaction (Gelashvili et al., 2021). System accessibility and reliability are critical elements determining the user experience in mobile hotel reservation apps (Wang et al., 2016). Users, especially during critical reservation and payment processes, expect seamless and secure access to the apps. Reliable system accessibility ensures users have smooth experiences during their interactions, positively impacting their perception of service quality (Moghavvemi et al., 2021).

M-service quality represents the perceived quality of service in mobile hotel reservation apps (Mohammad Salameh et al., 2018). The perception of m-service quality, combined with factors such as information accuracy, ease of use, and visual appeal, influences users' intentions to use the apps again in the future (Zhang et al., 2023). Consequently, m-service quality in mobile hotel reservation apps is shaped by a series of factors that determine the user experience (Nordman & Liljander, 2005). Properly designing and implementing these factors enhances user satisfaction, supports the success of the apps, and strengthens long-term user loyalty (Wang et al., 2019). This research aims to understand the impact of design elements in mobile hotel reservation apps on m-service quality, purchase intention, and application reuse.

BACKGROUND AND HYPOTHESIS DEVELOPMENT

Mobile hotel reservation apps are essential tools that facilitate users' travel planning by providing detailed information about various hotel options (Wang et al., 2016). These apps offer users the opportunity to quickly and effectively access comprehensive information about different hotels, including their locations, services, room types, pricing, and additional amenities (Adukaite et al., 2013). By delivering real-time and reliable information, mobile hotel reservation apps make travel experiences more organized and satisfying for users. The quality of information provided by these apps plays a crucial role in the user's decision-making process (Tao et al., 2018). When users have access to accurate, complete, and reliable information, they can make more informed decisions about their travel plans. Details such as the hotel's location, offered services, availability, and pricing contribute to meeting user expectations (Michopoulou & Buhalis 2013). Informed users can anticipate potential issues during their travels, leading to a more positive overall travel experience. The quality of information significantly influences users' preferences for mobile hotel reservation apps (Albayrak et al., 2023). Users prefer apps that provide reliable information quickly and through a user-friendly interface. This enhances the efficiency and enjoyment of the travel planning process (Nilsson, 2009). High-quality information not only increases the likelihood of users reusing the apps but also contributes to positive user feedback and recommendations, expanding the application's user base. The hypothesis proposed in this context;

H1: The information quality of mobile hotel reservation apps positively affects the m-service quality.

The visual appeal and user interface design of mobile hotel reservation apps constitute a significant part of the user experience on the apps (Ballard, 2007). Aesthetically designed apps provide users with a visually pleasing experience, and the user's initial interaction often begins with the app's interface. Therefore, visual attractiveness can enhance the user's motivation to engage with the apps (Sutcliffe, 2022). When users encounter an aesthetically pleasing interface, they tend to evaluate the overall service quality of the application more positively. A visually appealing apps design enhances the user experience by making the navigation process more enjoyable (Hartmann, 2008). Users are more likely to be motivated to explore the apps and access the information they are looking for when interacting with an aesthetically satisfying interface. This, in turn, encourages users to spend more time on the apps, allowing them to discover more services during their extended engagement (Anderson, 2011). Aesthetic design creates a positive atmosphere as users navigate within the apps, making the user experience more meaningful and satisfying. Users often associate visually appealing interfaces with higher service quality (Ayada & Hammad, 2023). Aesthetic design influences users' perceived service quality, leaving a positive impression on the apps. When users encounter a visually pleasing interface, they may perceive that the apps have been carefully designed (Liu et al., 2016). This perception can increase users' trust in the application provider and enhance the likelihood of users using the application more frequently and for longer durations

(Sutcliffe, 2022). Therefore, there is a positive relationship between the aesthetics of mobile hotel reservation apps and users' perception of m-service quality (Zhani et al., 2022). Visual attractiveness increases user satisfaction, leading to a higher likelihood of prolonged apps usage and future booking preferences. It can be said that aesthetic design is a crucial factor in improving the overall user experience by enhancing users' motivation to interact with the apps. The hypothesis proposed in this context;

H2: The aesthetics of mobile hotel reservation apps positively affects the m-service quality.

The purchase process in mobile hotel reservation apps has a decisive impact on users' perception of the overall service quality of the apps. This process encompasses users making hotel reservations and completing payment transactions, and the smoothness of this stage directly influences user satisfaction and trust (Kourtesopoulou et al., 2018). A seamless, efficient, and user-friendly purchase process contributes positively to the m-service quality of the mobile hotel reservation apps (Mohammad Salamah et al., 2018). When users can complete their reservations quickly and without errors, it positively affects their overall travel experience. Difficulties or glitches encountered by users during the reservation and payment procedures can negatively impact the perception of the overall service quality (Wang & Wang 2010). Therefore, users completing the purchase process without any issues enhance the success of the mobile hotel reservation apps and increases user satisfaction (Ozturk et al., 2016). A smooth and secure transaction process elevates users' overall satisfaction levels. Users experience a more positive overall experience when they feel secure during the booking and payment processes provided by the apps (Xu et al., 2015). Feeling secure during payment transactions increases users' trust in the apps and enhances the likelihood of reuse (Talwar et al., 2020). Users strengthen their beliefs in the reliability and user-friendly interface of the apps during the purchase process. In this context, a positive correlation is expected between the purchase process of mobile hotel reservation apps and users' perception of m-service quality (Zhani et al., 2022). When users have a seamless reservation and payment experience, they form a positive impression of the overall service quality. This impression contributes to an increased likelihood of users reusing the apps, thereby contributing to the long-term success of the apps (Mamakou et al., 2023). A user-friendly purchase process strengthens the competitive advantage of the mobile hotel reservation apps and supports user loyalty. The hypothesis proposed in this context;

H3: The purchase process of mobile hotel reservation apps positively affects the m-service quality.

Ease of use is a key factor that shapes the user experience in mobile hotel reservation apps, influencing the perception of m-service quality and increasing satisfaction levels (Su et al., 2022). This factor involves the apps being user-friendly, accessible, and effective. Quick search options provide instant access to criteria such as location, date, and price, enabling users to quickly obtain the information they need (Ricci, 2010). Easy navigation ensures understandable menus and smooth transitions between pages, allowing users to easily access information (Colborne, 2017). Efficient reservation processes in terms of time simplify users' booking completion with simple steps. Ease of use provides the opportunity to use the application comfortably and perform desired tasks quickly (Distante et al., 2014). Users perceive the apps positively due to this ease of use, enhancing satisfaction levels and increasing the likelihood of reuse (Alalwan, 2020). In conclusion, ease of use plays a crucial role in the success of mobile hotel reservation apps, contributing to users' positive experiences and their preference for the apps. The hypothesis proposed in this context;

H4: The convenience of mobile hotel reservation apps positively affects the m-service quality.

The diversity and quality of hotel and accommodation options in mobile hotel reservation apps make a significant contribution to users' perceptions of m-service quality (Rahman et al., 2023). These apps offer a variety of carefully curated product options, including different types of accommodations, various price ranges, and additional amenities. This diversity positively influences users' overall satisfaction (Tao et al., 2018). When users have the freedom to choose the most suitable option from a rich selection of products, their perceptions of m-service quality increase and this will contribute to enhanced satisfaction (Dorcic et al., 2019; Ltifi 2018). The richness of product selection in mobile hotel reservation apps contributes to users positively evaluating the apps and increasing the likelihood of reuse. The hypothesis proposed in this context;

H5: The product selection of mobile hotel reservation apps positively affects the m-service quality.

The pricing strategy employed by mobile hotel reservation apps is a significant factor that influences users' perceptions of service quality (Ye et al., 2014). Fair and transparent pricing, coupled with occasional promotions or discounts, has a positive impact on user satisfaction and perceived value (Kaura et al., 2015). Users tend to evaluate favorably reasonable and competitive price offers, associating such evaluations with higher m-service quality (Mohammad Salameh et al., 2018; Wang et al., 2019). This, in turn, enhances user satisfaction and increases trust in the apps. When users encounter affordable prices, their perception of m-service quality becomes more positive, contributing to an overall increase in satisfaction. The hypothesis proposed in this context;

H6: The price offerings of mobile hotel reservation apps positively affect the m-service quality.

The personalization features in mobile hotel reservation apps provide users with personalized recommendations, preferences, and customized user interfaces, delivering a more personalized experience (Lei et al., 2019). The ability of the apps to adapt to individual user needs and preferences positively influences users' perceptions of m-service quality (Park & Tussyadiah, 2017). Personalization allows users to form a stronger connection with the apps and enhances their overall satisfaction (Liang et al., 2006; Vayghan et al., 2023). A positive correlation is expected between the level of personalization in mobile hotel reservation apps and users' general satisfaction and loyalty to the apps. The hypothesis proposed in this context;

H7: The personalization of mobile hotel reservation apps positively affects the m-service quality.

The reliability and accessibility of the systems in mobile hotel reservation apps play a crucial role in shaping the user experience and influencing perceptions of service quality (Xu et al., 2013). Users, especially during critical reservation and payment processes, expect seamless and uninterrupted access to the apps (Bethapudi, 2013). Reliable system accessibility enhances the smooth experiences users have during their interactions with the apps (Stankov & Gretzel, 2020). Users have a more positive experience when completing reservations or making payments through a trustworthy system, positively impacting their perceptions of m-service quality (Lin, 2012). Apps that provide reliable services increase user satisfaction and receive positive feedback (Nguyen-Phuoc et al., 2021; Wang et al., 2016). When users can make reservations securely and complete payments smoothly, they are more inclined to prefer and reuse the apps. Furthermore, apps offering reliable services contribute to strengthening user trust in the apps, supporting long-term customer loyalty. The hypothesis proposed in this context;

H8: The system availability of mobile hotel reservation apps positively affects the m-service quality.

The perceived quality of m-service in apps has a direct and significant impact on users' intentions to make future usage (Zhani et al., 2022). Users tend to express higher intentions of making future reservations when they combine their positive experiences in m-service with factors such as information accuracy, ease of use, and aesthetics (Wulfert, 2019). Positive perceptions of m-service quality increase users' confidence in the apps and influence their preferences for reuse (Mohammad Salameh et al., 2018). Users, based on positive experiences related to information accuracy, ease of use, and aesthetics, become more willing to make future reservations through this application, combining these experiences with the reliability and performance of the apps (Ozturk et al., 2016). The perceived quality of m-service also affects users' self-confidence. After experiencing a reliable, user-friendly, and aesthetic m-service, users feel more secure when deciding to make future reservations through these apps. The hypothesis proposed in this context;

H9: M-service quality positively affects purchase intention on mobile hotel reservation apps.

The overall quality of m-service in mobile hotel reservation apps plays a critical role in determining users' likelihood of using the apps again. Positive user experiences such as smooth transactions, reliable information, and user-friendly interfaces result in increased satisfaction and loyalty (Taneja et al., 2023). A strong positive correlation is expected between users consistently perceiving high m-service quality and their likelihood of using the mobile hotel reservation apps again (Lin, 2012). Users who consistently perceive high-quality service are inclined to become repeat customers, significantly contributing to the long-term success of the apps and user loyalty (Wang et al., 2019). When users have a quality m-service experience, their confidence in the apps increases and this shape their intentions to use it again (Huang et al., 2015; Zhang et al., 2023). The overall quality of m-service also creates a positive word-of-mouth effect. Users tend to share their positive experiences with others, helping to expand the apps' user base and attract new users. The hypothesis proposed in this context;

H10: M-service quality positively affects mobile hotel reservation apps re-usage.

METHOD

Data Collection Tools

The data is gathered based on the scale provided in Table 1. Each scale was constructed using a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The variables and items are given in the Appendix.

Table 1: Scale Development

Scale	Number of Statements	Adapted From
Information Quality (IQ)	3	Blut (2016), Holloway and Beatty (2008)
Application Aesthetics (AA)	3	Blut (2016), Holloway and Beatty (2008)
Purchase Convenience (PC)	3	Blut (2016), Holloway and Beatty (2008)

Scale	Number of Statements	Adapted From
Apps Convenience (AC)	3	Blut (2016), Holloway and Beatty (2008)
Product Selection (PS)	3	Blut (2016), Holloway and Beatty (2008)
Price Offerings (PO)	3	Blut (2016), Holloway and Beatty (2008)
Apps Personalization (AP)	3	Blut (2016), Holloway and Beatty (2008)
System Availability (SA)	3	Blut (2016), Holloway and Beatty (2008)
M-service Quality (MQ)	3	Blut (2016)
Purchase Intention (PI)	3	Zeithaml et al. (1996)
Application Re-usage (AR)	3	Gounaris et al. (2010)

RESEARCH MODEL

The research model of the research is presented in Fig. 1. The model encompasses a total of 11 variables. Information quality, application aesthetics, purchases convenience, apps convenience, product selection, price offerings, apps personalization, and system availability affects m-service quality. M-service quality, in turn, affects purchase intention and application re-usage.

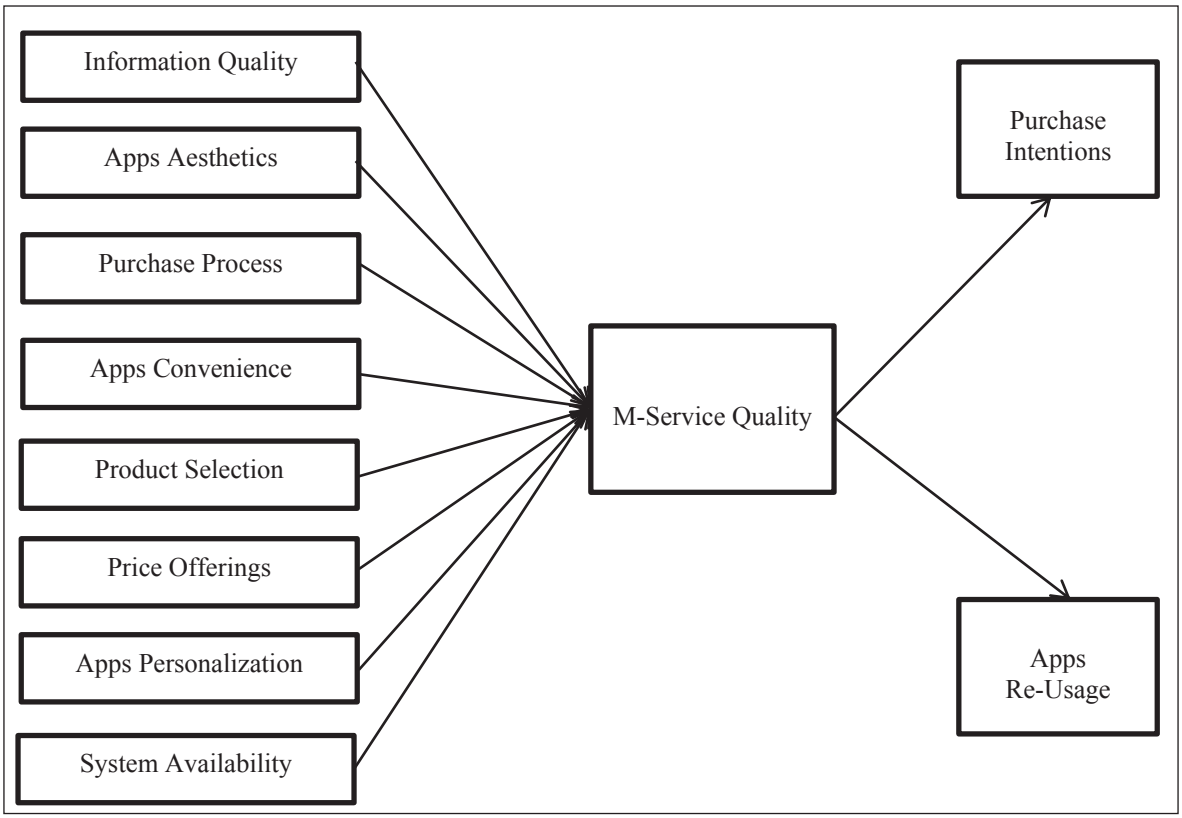


Fig. 1: Research Model

DATA COLLECTION

The information was gathered through an online survey. With consideration for cost constraints per participant, a target sample size of 400 completed participants was established. This sample size was chosen to fulfill the data sufficiency criteria necessary for this type of analysis, following the guidelines recommended by Hair et al. (2017). Once it was confirmed that the data were accurately recorded without any issues during collection, the data collection process continued until the target sample size was achieved. This process took place over one week in January 2024. After addressing records with missing data patterns, a final dataset was created, consisting of 501 participants. The data were analyzed using SPSS and SmartPLS-4. The demographic characteristics of the participants are outlined in Table 2.

Table 2: Demographic Characteristics of Participants

	F	Percentage
Sex		
Female	281	56,1
Male	220	43,9
Age		
25 and below	98	19,6
25-32	85	17,0
33-39	201	40,0
40 and above	117	23,4
Marital Status		
Married	431	86,0
Single	70	14,0
Education Level		
Primary School	1	0,2
High School	17	3,4
Associate/Bachelor	382	76,2
Postgraduate	101	20,2
Experience with Mobile Hotel Reservation Apps		
Very Low	10	2,0
Low	14	2,8
Moderate	**178**	**35,5**
High	216	43,1
Very High	83	16,6

VALIDITY AND RELIABILITY

The validity and reliability of the scales were first examined through exploratory factor analysis. The scales' reliability and internal consistency were further evaluated using Cronbach's Alpha (α) values, Average Variance Extracted (AVE), and Composite Reliability (CR). The outcomes, as detailed in Table 3, indicate that the scales are reliable and have internal consistency (Field, 2009; Zeller & Karmines, 1978).

Table 3: Exploratory Factor Analysis of Scales

	Factor Loading	CA	CR	AVE
Information Quality (IQ)		0,61	0,680	0,632
IQ1	0,757			
IQ2	0,649			
IQ3	0,777			
Application Aesthetics (AA)		0,62	0,696	0,666
AA1	0,739			
AA2	0,811			
AA3	0,705			
Purchase Convenience (PC)		0,62	0,691	0,645
PC1	0,755			
PC2	0,748			
PC3	0,712			
Apps Convenience (AC)		0,60	0,690	0,657
AC1	0,724			
AC2	0,773			
AC3	0,742			

	Factor Loading	CA	CR	AVE
Product Selection (PS)		0,62	0,692	0,665
PS1	0,757			
PS2	0,752			
PS3	0,745			
Price Offerings (PO)		0,64	0,689	0,679
PO1	0,703			
PO2	0,791			
PO3	0,786			
Apps Personalization (AP)		0,60	0,687	0,634
AP1	0,747			
AP2	0,714			
AP3	0,731			
System Availability (SA)		0,61	0,686	0,634
SA1	0,666			
SA2	0,790			
SA3	0,731			
M-service Quality (MQ)		0,62	0,693	0,665
MQ1	0,746			
MQ2	0,776			
MQ3	0,733			
Purchase Intention (PI)		0,61	0,692	0,663
PI1	0,702			
PI2	0,816			
PI3	0,730			
Application Re-usage (AR)		0,62	0,688	0,665
AR1	0,767			
AR2	0,708			
AR3	0,778			

Various methods have been developed for evaluating discriminant validity, with the Fornell-Larcker approach being widely acknowledged in applied research as the preferred technique. According to the criteria established by Fornell and Larcker (1981), the square root of the Average Variance Extracted (AVE) values for the constructs under investigation should exceed the correlations between those constructs. As evidenced in Table 3, the observed values satisfy this criterion.

Table 4: Correlations Among Constructs (Fornell-Larcker Criterion)

	AVE	AA	AC	AP	AR	IQ	MQ	PC	PI	PO	PS	SA
Apps Aesthetics	0,666	0.753										
Apps Convenience	0,657	0.715	0.747									
Apps Personalization	0,634	0.631	0.657	0.730								
Application Re-usage	0,665	0.653	0.670	0.665	0.751							
Information Quality	0,632	0.591	0.650	0.649	0.617	0.729						
M-service Quality	0,665	0.718	0.701	0.667	0.704	0.629	0.752					
Purchase Conv.	0,645	0.567	0.532	0.650	0.635	0.659	0.613	0.738				
Purchase Intention	0,663	0.577	0.616	0.588	0.620	0.598	0.584	0.690	0.751			
Price Offerings	0,679	0.651	0.611	0.557	0.618	0.601	0.664	0.639	0.635	0.761		
Product Selection	0,665	0.639	0.631	0.667	0.629	0.656	0.681	0.686	0.642	0.638	0.751	
System Availability	0,634	0.614	0.633	0.628	0.694	0.662	0.626	0.710	0.678	0.634	0.687	0.730

STRUCTURAL MODEL RESULTS

The analysis using PLS-SEM employed a bootstrap procedure with 450 cases and 5,000 resamples to evaluate the significance of path coefficients (β) that represent the direct effects among information quality, application aesthetics, purchases convenience, apps convenience, product selection, price offerings, apps personalization, system availability, m-service quality, purchase intention and application re-usage. The results are presented in Fig. 2 and Table 5.

Table 5: Findings of Direct Effects for Hypothesis

		Path Coefficients	T-Value	P-Value	Hypothesis
H_1	IQ -> MQ	0,032	0,776	0,438	Rejected
H_2	AA -> MQ	0,235	5,542	0,000	Supported
H_3	PC -> MQ	0,063	1,441	0,150	Rejected
H_4	AC -> MQ	0,199	4,575	0,000	Supported
H_5	PS -> MQ	0,157	3,605	0,000	Supported
H_6	PO -> MQ	0,159	3,956	0,000	Supported
H_7	AP -> MQ	0,135	3,244	0,001	Supported
H_8	SA-> MQ	0,008	0,191	0,848	Rejected
H_9	MQ -> PI	0,584	16,087	0,000	Supported
H_{10}	MQ -> AR	0,703	22,054	0,000	Supported

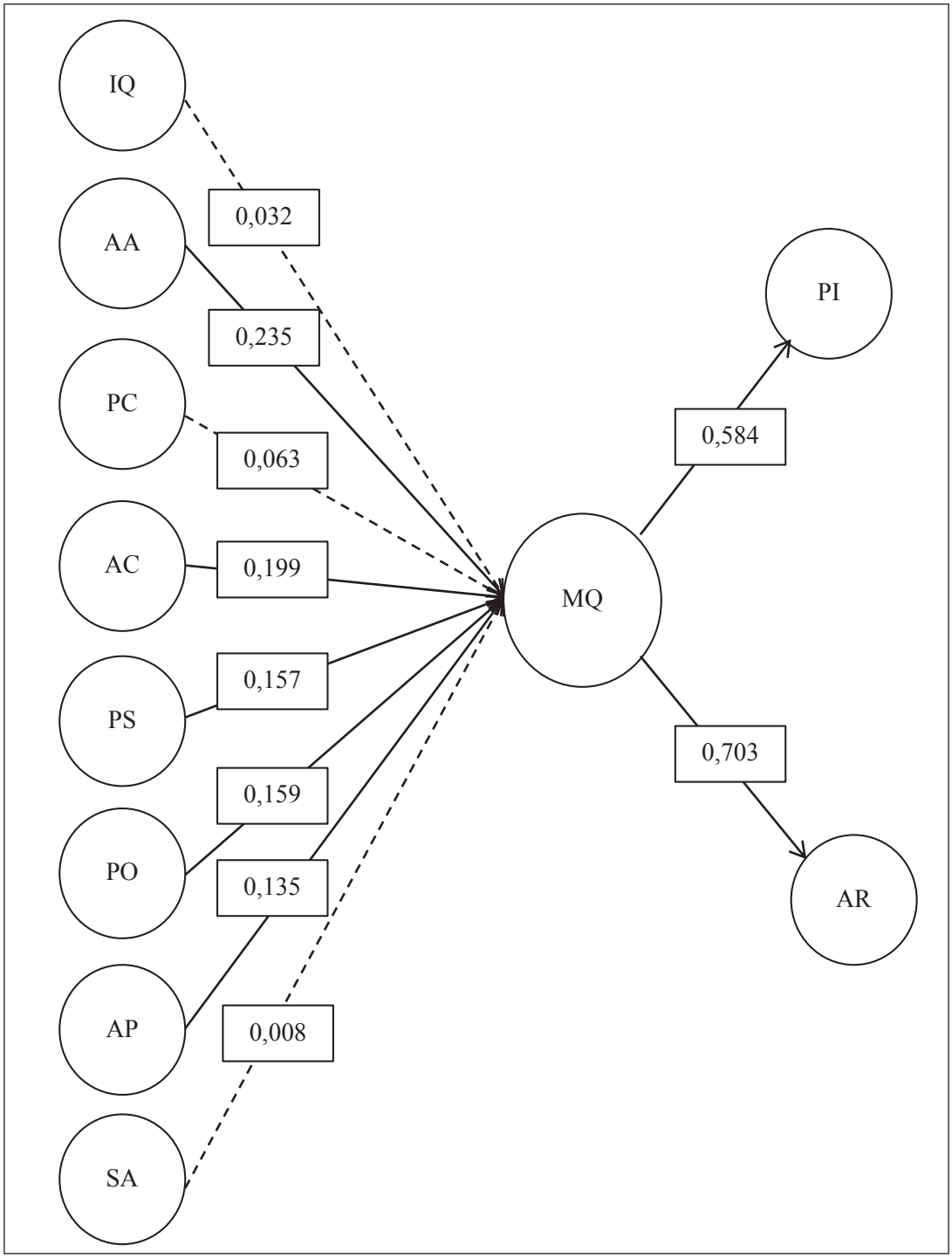
Note: IQ: Information quality, AA: application aesthetics, PC: purchases convenience, AC: apps convenience, PS: product selection, PO: price offerings, AP: apps personalization, SA: system availability, MQ: m-service quality, PI: purchase intention, AR: application re-usage.

As indicated in Table 4, seven out of the ten hypotheses received statistical support, with their t-values exceeding the recommended threshold of 1.96 at a 5% significance level (Hair et al., 2017). The information quality, purchase process, and system availability of mobile hotel reservation apps not positively affects the m-service quality ($p>0,05$). The aesthetics, convenience, product selection, price offerings, and personalization of mobile hotel reservation apps positively affect the m-service quality ($p<0,05$). M-service quality positively affects purchase intention on mobile hotel reservation apps (p=0,000 path coefficients=0,584). M-service quality positively affects mobile hotel reservation apps re-usage (p=0,000 path coefficients=0,703).

DISCUSSION

The lack of positive impact on the quality of information, purchasing process, and system accessibility in mobile hotel reservation applications implies that the quality of information, purchasing process, and system accessibility do not contribute to the improvement of mobile service quality. Poor information quality refers to difficulties users face in accessing accurate and up-to-date information during the reservation process. However, it seems that this situation has had no effect on enhancing mobile service quality. Similar effects are observed in issues during the purchasing process. Problems encountered by users when completing reservation transactions, such as unfriendly interfaces or complex payment processes, have not negatively affected mobile service quality. Weaknesses in system accessibility also do not seem to diminish the mobile service quality. Issues or incompatibilities in access from different devices do not appear to adversely impact the overall service quality of mobile hotel reservation applications. In this context, it is noteworthy that the identified weaknesses in mobile hotel reservation applications in these aspects have not yielded any positive impact on mobile service quality.

The aesthetic, usability, product selection, pricing offers, and personalization features of mobile hotel reservation applications positively influence the m-service quality. Aesthetic considerations encompass the visual design of the application, providing users with a pleasant experience. An aesthetically appealing application contributes to users using the app more frequently and enjoyably. Usability represents the feature of the application being easily understandable and usable. Users' ability to navigate comfortably and quickly access desired features enhances m-service quality. Product selection and pricing offers have the potential to increase user satisfaction by offering a wide range of options and competitive pricing. Personalization features are effective in providing users with personalized recommendations based on their preferences and past reservations, enhancing their personal experience. This, in turn, contributes to improving m-service quality by making the application more personal and valuable to users. In conclusion, it can be said that the aesthetic, usability, product selection, pricing offers, and personalization features of mobile hotel reservation applications positively impact m-service quality. Successfully integrating these elements can enhance user satisfaction and strengthen the competitive advantage of the application.



Note: IQ: Information quality, AA: application aesthetics, PC: purchases convenience, AC: apps convenience, PS: product selection, PO: price offerings, AP: apps personalization, SA: system availability, MQ: m-service quality, PI: purchase intention, AR: application re-usage --------> : No significant relationship.

Fig. 2: The Direct Relationships Among the Variables (Path Coefficients)

In mobile hotel reservation applications, m-service quality is a crucial factor that positively influences users' purchasing intent. When users perceive the mobile service quality as high, it provides them with a reliable experience, potentially increasing their intent to make a purchase. Users finding the application trustworthy and effective allow them to have a positive experience during the reservation process. Additionally, m-service quality is a critical factor that

positively affects repeat usage in mobile hotel reservation applications. Users' experiences on the application, their satisfaction levels, and the quality of service they encounter can determine their intentions to use the application again. If users have a high-quality service experience during their initial interactions, it can encourage them to use the application again. In conclusion, the potential of m-service quality in mobile hotel reservation applications to positively influence users' purchasing intent and increase their intentions to reuse the application holds significant importance.

IMPLICATIONS

In the process of developing mobile hotel reservation applications, user-friendly interface and navigation features hold great significance. Users should not struggle to understand the application's interface and navigate through it. In this context, it is essential for the application to have a simple, understandable, and visually pleasing design, enabling users to easily access information. Additionally, incorporating easy navigation features is important to facilitate users' swift and efficient progress through the reservation process.

Information quality is one of the cornerstones of mobile hotel reservation applications. Users require accurate and up-to-date information during the reservation process. Therefore, the application's information infrastructure should be regularly updated to swiftly and seamlessly respond to users' demands. Improvements in information quality can enhance user confidence, thereby contributing to the success of the application. Aesthetic, usability, product selection, pricing offers, and personalization features are factors that determine the m-service quality of mobile hotel reservation applications. A visually appealing interface encourages users to find the application more attractive and use it more frequently. Usability defines how accessible the application is for users; therefore, creating a simple and user-friendly design is crucial. Product selection and pricing offers can enhance user satisfaction by providing a wide range of options. Additionally, personalization features have the potential to positively impact m-service quality by customizing the user experience.

In conclusion, developers of mobile hotel reservation applications should focus on interface design, information quality, and service features to enhance user satisfaction and experience. Carefully integrating these elements can encourage users to use the application frequently and assist in gaining a competitive advantage.

Limitations and Further Directions

The study primarily examined the impact of the design of mobile hotel reservation applications on in-app purchases and the intention to reuse the application. Future research could employ another model by incorporating additional user attitude variables. Furthermore, examining intercultural differences could be achieved by collecting data from different countries.

REFERENCES

Adukaite, A., Reimann, A. M., Marchiori, E., & Cantoni, L. (2013, January 21-24). *Hotel mobile apps. The case of 4 and 5 star hotels in European German-speaking countries.* Paper presented at the International Conference in Dublin, Ireland.

Alalwan, A. A. (2020). Mobile food ordering apps: An empirical study of the factors affecting customer e-satisfaction and continued intention to reuse. *International Journal of Information Management, 50,* 28-44.

Albayrak, T., Rosario González-Rodríguez, M., Caber, M., & Karasakal, S. (2023). The use of mobile applications for travel booking: Impacts of application quality and brand trust. *Journal of Vacation Marketing, 29*(1), 3-21.

Anderson, S. P. (2011). *Seductive interaction design: Creating playful, fun, and effective user experiences, portable document.* Pearson Education.

Ayada, W. M., & Hammad, M. A. (2023). Design quality criteria for smartphone applications interface and its impact on user experience and usability. *International Design Journal, 13*(4), 339-354.

Ballard, B. (2007). *Designing the mobile user experience.* John Wiley & Sons.

Bethapudi, A. (2013). The role of ICT in tourism industry. *Journal of Applied Economics and Business, 1*(4), 67-79.

Blut, M. (2016). E-service quality: Development of a hierarchical model. *Journal of Retail, 92*(4), 500-517.

Colborne, G. (2017). *Simple and usable web, mobile, and interaction design.* New Riders.

Distante, D., Garrido, A., Camelier-Carvajal, J., Giandini, R., & Rossi, G. (2014). Business processes refactoring to improve usability in e-commerce applications. *Electronic Commerce Research, 14,* 497-529.

Dorcic, J., Komsic, J., & Markovic, S. (2019). Mobile technologies and applications towards smart tourism–state of the art. *Tourism Review, 74*(1), 82-103.

Fang, J., Zhao, Z., Wen, C., & Wang, R. (2017). Design and performance attributes driving mobile travel application engagement. *International Journal of Information Management, 37*(4), 269-283.

Field, A. (2009). *Discovering statistics using SPSS.* Sage Publications.

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*(1), 39-50.

Gelashvili, V., Martínez-Navalón, J. G., & Herrera Enríquez, G. (2021). How stress and anxiety when using mobile restaurant reservation Apps influence users' satisfaction and trust. *Journal of Indian Business Research, 13*(3), 395-412.

Gibbs, C., Gretzel, U., & Saltzman, J. (2016). An experience-based taxonomy of branded hotel mobile application features. *Information Technology & Tourism, 16,* 175-199.

Gounaris, S., Dimitriadis, S., & Stathakopoulos, V. (2010). An examination of the effects of service quality and satisfaction on customers' behavioral intentions in e-shopping. *Journal of Service Marketing, 24*(2-3), 142-156.

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM).* Sage Publications.

Hanjaya, S. M., Kenny, S. K., & Gunawan, S. F. (2019). Understanding factors influencing consumers online purchase intention via mobile app: Perceived ease of use, perceived usefulness, system quality, information quality, and service quality. *Marketing of Scientific and Research Organizations, 32*(2), 175-205.

Hartmann, J., Sutcliffe, A., & Angeli, A. D. (2008). Towards a theory of user judgment of aesthetics and user interface quality. *ACM Transactions on Computer-Human Interaction, 15*(4), 1-30.

Holloway, B. B., & Beatty, S.E. (2008). Satisfiers and dissatisfiers in the online environment: A critical incident assessment. *Journal of Service Research, 10*(4), 347-364.

Huang, C. D., Goo, J., Nam, K., & Yoo, C. W. (2017). Smart tourism technologies in travel planning: The role of exploration and exploitation. *Information & Management, 54*(6), 757-770.

Huang, E. Y., Lin, S. W., & Fan, Y. C. (2015). MS-QUAL: Mobile service quality measurement. *Electronic Commerce Research and Applications, 14*(2), 126-142.

Huang, Y. C., Chang, L. L., Yu, C. P., & Chen, J. (2019). Examining an extended technology acceptance model with experience construct on hotel consumers' adoption of mobile applications. *Journal of Hospitality Marketing & Management, 28*(8), 957-980.

Hwang, J., Park, S., & Woo, M. (2018). Understanding user experiences of online travel review websites for hotel booking behaviours: An investigation of a dual motivation theory. *Asia Pacific Journal of Tourism Research, 23*(4), 359-372.

Kaura, V., Durga Prasad, C. S., & Sharma, S. (2015). Service quality, service convenience, price and fairness, customer loyalty, and the mediating role of customer satisfaction. *International Journal of Bank Marketing, 33*(4), 404-422.

Kim, D. J., & Hwang, Y. (2012). A study of mobile internet user's service quality perceptions from a user's utilitarian and hedonic value tendency perspectives. *Information Systems Frontiers, 14*, 409-421.

Kim, W. G., Ma, X., & Kim, D. J. (2006). Determinants of Chinese hotel customers'e-satisfaction and purchase intentions. *Tourism Management, 27*(5), 890-900.

Kourtesopoulou, A., Kehagias, J., & Papaioannou, A. (2018). *Evaluation of E-service quality in the hotel sector: A systematic literature review.* In Innovative Approaches to Tourism and Leisure: Fourth International Conference IACuDiT, Athens 2017

Law, R., Buhalis, D., & Cobanoglu, C. (2014). Progress on information and communication technologies in hospitality and tourism. *International Journal of Contemporary Hospitality Management, 26*(5), 727-750.

Lei, S. I., Wang, D., & satisfaction: Theoretical synthesis and empirical findings. *Journal of Management Information Systems, 23*(3) 45-70.

Lin, H. H. (2012). The effect of multi-channel service quality on mobile customer loyalty in an online-and-mobile retail context. *The Service Industries Journal, 32*(11), 1865-1882.

Liu, W., Guo, F., Ye, G., & Liang, X. (2016). How homepage aesthetic design influences users' satisfaction: Evidence from China. *Displays, 42,* 25-35.

Ltifi, M. (2018). Determinants of the intention of smartphone usage by mobile internet users for m-services. *Management Decision, 56*(11), 2291-2307.

Mamakou, X. J., Zaharias, P., & Milesi, M. (2023). Measuring customer satisfaction in electronic commerce: The impact of e-service quality and user experience. *International Journal of Quality & Reliability Management.* doi:https://doi.org/10.1108/IJQRM-07-2021-0215

Michopoulou, E., & Buhalis, D. (2013). Information provision for challenging markets: The case of the accessibility requiring market in the context of tourism. *Information & Management, 50*(5), 229-239.

Moghavvemi, S., Mei, T. X., Phoong, S. W., & Phoong, S. Y. (2021). Drivers and barriers of mobile payment adoption: Malaysian merchants' perspective. *Journal of Retailing and Consumer Services, 59,* 102364.

Mohammad Salameh, A. A., Ahmad, H., Zulhumadi, F., & Abubakar, F. M. (2018). 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.

Nguyen-Phuoc, D. Q., Vo, N. S., Su, D. N., Nguyen, V. H., & Oviedo-Trespalacios, O. (2021). What makes passengers continue using and talking positively about ride-hailing services? The role of the booking app and post-booking service quality. *Transportation Research Part A: Policy and Practice, 150*, 367-384.

Nilsson, E. G. (2009). Design patterns for user interface for mobile applications. *Advances in Engineering Software, 40*(12), 1318-1328.

Nordman, J., & Liljander, V. (2005). MSQ-Model: An exploratory study of the determinants of mobile service quality. *Contemporary Research in E-Marketing, 1,* 93-129. IGI Global.

Ozturk, A. B., Bilgihan, A., Nusair, K., & Okumus, F. (2016). What keeps the mobile hotel booking users loyal? Investigating the roles of self-efficacy, compatibility, perceived ease of use, and perceived convenience. *International Journal of Information Management, 36*(6), 1350-1359.

Ozturk, A. B., Nusair, K., Okumus, F., & Singh, D. (2017). Understanding mobile hotel booking loyalty: An integration of privacy calculus theory and trust-risk framework. *Information Systems Frontiers, 19,* 753-767.

Park, S., & Tussyadiah, I. P. (2017). Multidimensional facets of perceived risk in mobile travel booking. *Journal of Travel Research, 56*(7), 854-867.

Rahman, A., Farooq, N., Haleem, M., Shah, S. M. A., & El-Gohary, H. (2023). Exploring the pathways to tourist loyalty in Pakistani tourism industry: The role of destination image, service quality, E-WOM, and social media. *Sustainability, 15*(24), 16601.

Ricci, F. (2010). Mobile recommender systems. *Information Technology & Tourism, 12*(3), 205-231.

Stankov, U., & Gretzel, U. (2020). Tourism 4.0 technologies and tourist experiences: A human-centered design perspective. Information *Technology & Tourism, 22*(3), 477-488.

Su, D. N., Nguyen-Phuoc, D. Q., Duong, T. H., Dinh, M. T. T., Luu, T. T., & Johnson, L. (2022). How does quality of mobile food delivery services influence customer loyalty? Gronroos's service quality perspective. *International Journal of Contemporary Hospitality Management, 34*(11), 4178-4205.

Sutcliffe, A. (2022). *Designing for user engagment: Aesthetic and attractive user interfaces.* Springer Nature.

Talwar, S., Dhir, A., Khalil, A., Mohan, G., and Islam, A. N. (2020). Point of adoption and beyond. Initial trust and mobile-payment continuation intention. *Journal of Retailing and Consumer Services, 55,* 102086.

Taneja, M., Nath, V., & Saxena, N. (2023). Factors influencing behavioral intention toward using travel mobile application: Examining the mediating role of reviews and ratings. *Jindal Journal of Business Research.* Doi:https://doi.org/10.1177/22786821231195396

Tao, M., Nawaz, M. Z., Nawaz, S., Butt, A. H., & Ahmad, H. (2018). Users' acceptance of innovative mobile hotel booking trends: UK vs. PRC. *Information Technology & Tourism, 20,* 9-36.

Vayghan, S., Baloglu, D., & Baloglu, S. (2023). The impact of utilitarian, social and hedonic values on hotel booking mobile app engagement and loyalty: A comparison of generational cohorts. *Journal of Hospitality and Tourism Insights, 6*(5), 1990-2011.

Wang, D., Xiang, Z., Law, R., & Ki, T. P. (2016). Assessing hotel-related smartphone apps using online reviews. *Journal of Hospitality Marketing & Management, 25*(3), 291-313.

Wang, H. Y., & Wang, S. H. (2010). Predicting mobile hotel reservation adoption: Insight from a perceived value standpoint. *International Journal of Hospitality Management, 29*(4), 598-608.

Wang, W. T., Ou, W. M., & Chen, W. Y. (2019). The impact of inertia and user satisfaction on the continuance intentions to use mobile communication applications: A mobile service quality perspective. *International Journal of Information Management, 44,* 178-193.

Weng, G. S., Zailani, S., Iranmanesh, M., & Hyun, S. S. (2017). Mobile taxi booking application service's continuance usage intention by users. *Transportation Research Part D: Transport and Environment, 57,* 207-216.

Wulfert, T. (2019). Mobile app service quality dimensions and requirements for mobile shopping companion apps. *Junior Management Science, 4*(3), 339-391.

Xiang, Z., Magnini, V. P., & Fesenmaier, D. R. (2015). Information technology and consumer behavior in travel and tourism: Insights from travel planning using the internet. *Journal of Retailing and Consumer Services, 22*, 244-249.

Xu, C., Peak, D., & Prybutok, V. (2015). A customer value, satisfaction, and loyalty perspective of mobile application recommendations. *Decision Support Systems, 79,* 171-183.

Xu, J., Benbasat, I., & Cenfetelli, R. T. (2013). Integrating service quality with system and information quality: An empirical test in the e-service context. *MIS Quarterly,* 777-794.

Ye, Q., Li, H., Wang, Z., & Law, R. (2014). The influence of hotel price on perceived service quality and value in e-tourism: An empirical investigation based on online traveler reviews. *Journal of Hospitality & Tourism Research, 38*(1), 23-39.

Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *Journal of Marketing, 60*(2), 31-46.

Zeller, R. A., & Karmines, E. G. (1978). *Statistical analysis of social data*. Rand McNally College Publishing.

Zhang, R., Jun, M., & Palacios, S. (2023). M-shopping service quality dimensions and their effects on customer trust and loyalty: An empirical study. *International Journal of Quality & Reliability Management, 40*(1), 169-191.

Zhani, N., Mouri, N., & Ahmed, T. (2022). The role of mobile value and trust as drivers of purchase intentions in m-servicescape. *Journal of Retailing and Consumer Services, 68,* 103060.

APPENDIX: CONSTRUCTS AND MEASUREMENT ITEMS

(1) Information Quality:

IQ1. The information on the mobile hotel reservation apps (m-apps) is pretty much what I need to carry out my tasks.

IQ2. The m-apps adequately meet my information needs.

IQ3. The information on the m-apps is effective.

(2) Website Aesthetics:

WA1. The m-apps are visually pleasing.

WA2. The m-apps display a visually pleasing design.

WA3. The m-apps are visually appealing.

(3)Purchase Convenience:

PC1. The m-apps has no difficulties with making a payment online

PC2. The purchasing process was not difficult.

PC3. It is easier to use the m-apps to complete my business with the company than it is to use a telephone or fax or mail a representative.

(4) Apps Convenience:

AC1. The m-apps display a visually pleasing easy to read content.

AC2. The text on the m-apps is easy to read.

AC3. The m-apps labels are easy to understand.

(5) Product Selection:

PS1. All my business with the company can be completed via the m-apps.

PS2. The m-apps have a good selection.

PS3. The m-apps have a wide variety of products that interest me.

(6) Price Offerings:

PO1. The m-apps offer discounts.

PO2. The m-apps have low prices.

PO3. The m-apps have lower prices than other purchase options.

(7) Apps Personalization:

AP1. The m-apps allow me to interact with it to receive tailored information.

AP2. The m-apps have interactive features, which help me accomplish my task.

AP3. I can interact with the m-apps in order to get information tailored to my specific needs.

(8) System Availability:

SA1. When I use the m-apps, there is very little waiting time between my actions and the website's response.

SA2. The m-apps load quickly.

SA3. The m-apps take a short time to load.

(9) M-Service Quality

MQ1. Overall, my purchase experience with m-apps is excellent.

MQ2. The overall quality of the service provided by m-apps is excellent.

MQ3. My overall feelings toward m-apps are very satisfied.

(10) Purchase Intention:

RI1. I will purchases through m-apps in the future.

RI2. I will make more purchases through m-apps.

RI3. I will intensify purchases through m-apps.

(11) Application Re-Usage:

AR1. I will purchase again from m-apps.

AR2. I will make my next purchase from m-apps.

AR3. I will re-use m-apps in the future.