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Mobile Hotel Reservation Application Users' Attitudes: M-Service Quality, Technology Acceptance, and Personalization-Privacy-Risk Theory

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Abstract *The study examines attitudes towards mobile hotel reservation apps in the United States (U.S.) and the Republic of Türkiye (T.R.) through the lenses of the technology acceptance model, mobile service quality, and personalization-privacy-risk taking. Initially, a pilot study was conducted with 59 participants. Subsequently, the final survey was distributed to a total of 1,612 participants, comprising 809 U.S. citizens and 803 T.R. citizens. The sample selection criteria included individuals who had previously used mobile hotel reservation apps as well as those who currently utilize them. Analyses for both countries revealed significant differences across six hypotheses. For T.R. participants, the hypotheses concerning the relationship between perceived usefulness and satisfaction, along with the relationship between privacy and satisfaction, were supported, whereas they were not supported for U.S. participants. Conversely, hypotheses regarding the relationship between interface quality and trust, interface quality and satisfaction, information quality and trust, and personalization and satisfaction were not supported for T.R. participants but were supported for U.S. participants. This study offers a novel approach by integrating the technology acceptance model, mobile service quality, and personalization-privacy-risk taking perspectives to explore attitudes towards mobile hotel reservation apps in both the U.S. and T.R.*

Keywords: *Mobile Hotel Reservation Applications, Mobile Service Quality, Trust, Satisfaction, Loyalty, Word-of-Mouth*

INTRODUCTION

The hotel sector plays a pivotal role in the tourism economy by coordinating a comprehensive array of services, including accommodation, food and beverage, and guest-facing information, which enhance destination competitiveness and visitor satisfaction. In the past decade, rapid digitalization has transformed this role, with mobile technologies becoming essential for hotels to create value, manage service interactions, and foster customer loyalty (Buhalis & Leung, 2018; Sharma et al., 2023; Law et al., 2018). Concurrently, the widespread use of smartphones has significantly changed how tourists acquire information, minimizing spatial and temporal limitations on trip planning, booking, and in-destination decision-making. This shift has also accelerated the development of app-mediated touchpoints throughout the customer journey (Chuang, 2023; Law et al., 2018).

In this context, mobile hotel reservation apps integrate multiple service functions—such as search, comparison, booking, payment, itinerary management, and post-stay feedback—into a single, portable interface. Their effectiveness relies not only on functional completeness but also on design attributes that signal quality and minimize

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user effort. Recent research suggests that app design significantly influences perceptions of m-service quality, which subsequently affects purchase intentions and reuse behaviors (Akbudak, 2025). Additionally, complementary studies indicate that perceived technology affordances (e.g., personalization, interactivity, and contextual utility) and the value derived from these affordances vary between hoteliers and customers. This disparity highlights the importance of aligning provider assumptions with user expectations to enhance adoption and satisfaction (Lei et al., 2019).

Building on these service quality and design perspectives, technology acceptance research provides well-established mechanisms for understanding the uptake of mobile hotel reservation apps. Studies (Chen et al., 2025; Mastour et al., 2025) grounded in the Technology Acceptance Model (TAM) and related frameworks consistently demonstrate that perceived usefulness and ease of use promote favorable attitudes and intentions, while inhibitors such as perceived cost, anxiety, or limited control have opposing effects (Park & Huang, 2017). In hospitality contexts, downstream outcomes include satisfaction and intentions for continued use or reuse, underscoring the significance of acceptance drivers in maintaining engagement beyond initial use (Kim et al., 2021).

At the same time, the increasing personalization of hotel apps—enabled by data capture, context awareness, and algorithmic tailoring—intensifies the privacy–personalization risk calculus (Nira, 2025). Emerging hospitality studies document how transparency about data practices can heighten privacy concerns and dampen behavioral intentions unless mitigated by appropriate assurances; these dynamics are especially salient as AI-powered interfaces diffuse into service encounters (Hu & Min, 2025). A recent field-wide review similarly underscores heterogeneous privacy concerns across technologies and calls for theory-driven work that integrates technology-specific risks with consumer trust formation in tourism and hospitality (Law et al., 2025). Taken together, these insights suggest that any explanatory model of mobile hotel reservation apps attitudes should account for (a) design- and quality-related antecedents of perceived value, (b) classic TAM pathways to adoption, and (c) the personalization–privacy–risk trade-offs that shape trust and continuance.

Against this backdrop, the present study examines U.S. and T.R. travelers' attitudes toward mobile hotel reservation apps by integrating three complementary lenses: m-service quality, TAM, and personalization–privacy–risk. This integrative approach enables a more complete account of antecedents to satisfaction and app effectiveness, while acknowledging cross-cultural differences that may moderate acceptance and risk perceptions. By situating hotel-sector digital transformation within contemporary theory and recent empirical findings, the study aims to generate actionable implications for designing trustworthy, high-quality, and adoption-ready mobile reservation apps (Akbudak, 2025; Chuang, 2023; Law et al., 2018; Lei et al., 2019). This study aims to explore attitudes towards these apps among U.S. and T.R. travelers, using TAM, mobile service quality, and personalization-privacy-risk willingness perspectives, to enhance user satisfaction and app effectiveness in the tourism industry.

RQ1: How do U.S. and T.R. travelers' attitudes towards mobile hotel reservation apps differ from the perspectives of the Technology Acceptance Model (TAM), mobile service quality, and personalization-privacy-risk-taking willingness?

RQ2: How do cultural differences affect the usage of mobile hotel reservation apps?

BACKGROUND AND HYPOTHESES DEVELOPMENT

Technology Acceptance Models and Perceived Control

The "Technology Acceptance Model" (TAM) is rooted in the "Theory of Reasoned Action/Planned Behavior" proposed by Fishbein and Ajzen (1975) and serves as a theoretical framework for understanding technology acceptance. Developed by Davis (1989), TAM is an essential tool for exploring the diffusion and adoption of new concepts and innovations. It is informed by theories related to innovation diffusion and social psychology (Akaiso, 2024). TAM incorporates two key dimensions: "perceived ease of use" and "perceived usefulness," which is used to assess the factors influencing users' decisions to adopt or reject technological advancements and to predict their eventual choices (Ladipo et al., 2021). This model is extensively applied to analyze consumer responses and adoption patterns in the context of online shopping (Erjavec & Manfreda, 2022). TAM posits that individuals' perceptions and beliefs regarding innovations significantly shape their attitudes, which subsequently affect their willingness to utilize innovative products (Davis, 1989). Furthermore, the attitude towards a system is directly influenced by its perceived utility and ease of use (Ayanlade et al., 2019).

According to the TAM, the acceptance of a specific technology is significantly influenced by the perceived ease of use. This concept refers to the level of physical and mental effort that users anticipate exerting when interacting with technology (Davis, 1989). It effectively measures the degree

to which users feel comfortable and effortless while utilizing a technology (Indarsin & Ali, 2017). Perceived ease of use is derived from users' perceptions of the simplicity of operating the technology, rather than the actual user-friendliness of the products or systems themselves. Users base their decisions regarding technology adoption on their confidence in their ability to navigate it with ease (Liu et al., 2022). However, there are instances where users may have confidence in a new technology's superior performance but still harbor concerns about its user-friendliness. Consequently, online shopping apps that provide a seamless and user-friendly shopping experience, minimize mental exertion, and align with user expectations contribute to a positive perception of ease of use among consumers (Mamakou et al., 2024). Therefore, perceived ease of use, as a critical factor influencing users' willingness to accept and adopt technology, should be integral to the technology adoption process.

Perceived usefulness is defined as users' inclination to utilize apps and their belief that doing so will enhance their performance (Mehra et al., 2021). In essence, it reflects the degree to which users believe that employing a technological product will improve their effectiveness in completing tasks (Davis, 1989). This factor is a critical determinant within the TAM framework. Perceived usefulness can be characterized as users' confidence in a specific technological system's ability to enhance efficiency and provide innovative features that facilitate their tasks (Garg, 2021; Gupta et al., 2023). From the perspective of perceived usefulness, if users view a technological product as valuable, they are more likely to adopt or continue using it; conversely, if a product is not seen as beneficial, users may be reluctant to embrace it (Venkatesh & Morris, 2000).

Venkatesh and Davis (2000) expanded the TAM by introducing additional variables, resulting in the development of the Extended TAM. This model builds on the foundational principles of perceived ease of use and perceived usefulness, aiming to provide a more comprehensive understanding of consumer behaviors and intentions, particularly in the context of online shopping (Dhagarra et al., 2020). The Extended TAM incorporates supplementary factors such as output quality, subjective norms, and job relevance. Furthermore, Venkatesh et al. (2012) introduced the Unified Theory of Acceptance and Use of Technology (UTAUT), which integrates additional elements, including performance expectations and social influences, into the TAM framework. However, research in domains such as tourism primarily focuses on the original TAM dimensions of ease of use and usefulness (Nathan et al., 2020). Consequently, incorporating the perceived control variable into the TAM for this study allows for a more nuanced understanding of technology acceptance. The TAM places significant emphasis on two critical factors—perceived ease of use and perceived usefulness—as they are pivotal in determining technology acceptance. This model has demonstrated high effectiveness in various studies (Sharma, 2019; Nel & Boshoff, 2017) that focus on mobile apps, underscoring the importance of ease of use in fostering user trust and satisfaction. The hypotheses formulated concerning perceived ease of use are as follows:

H_1: Perceived ease of use affects user trust in mobile hotel reservation apps.

H_2: Perceived ease of use affects user satisfaction with mobile hotel reservation apps.

Perceived usefulness, as defined by Davis (1989), refers to the extent to which an individual believes that using a system will enhance their job performance or provide benefits. From the perspective of perceived usefulness, if users perceive a technological product as valuable, they are more likely to use or continue using it; on the other hand, if a product is not perceived as advantageous, users may hesitate to adopt it (Venkatesh & Morris, 2000). Research (Afshan & Sharif, 2016) indicates that perceived usefulness significantly influences the intention to reuse mobile apps and enhances user trust in these apps. Studies conducted in various sectors (e.g., Dias et al., 2022; Singh & Sinha, 2020) consistently show that perceived usefulness is a critical factor affecting both trusts and satisfaction in mobile apps. Furthermore, it has been observed that perceived usefulness indirectly affects consumer behavior and purchase decisions through its impact on trust (Singh & Sinha, 2020). The hypotheses formulated regarding perceived usefulness are as follows:

H_3: Perceived usefulness affects user trust in mobile hotel reservation apps.

H_4: Perceived usefulness affects user satisfaction with mobile hotel reservation apps.

Numerous studies have substantiated the dimensions of perceived ease of use and perceived usefulness in the Technology Acceptance Model (TAM) (Venkatesh & Bala, 2008). Some research has expanded TAM by incorporating additional variables tailored to specific objectives (Venkatesh et al., 2003). In this project, in addition to these core TAM dimensions, the concept of perceived control has been integrated. Perceived control, which pertains to the extent to which users can customize the apps to suit their preferences, is a crucial factor in technology acceptance (Oyedele & Simpson, 2007). It not only encourages apps usage, but also nurtures trust, satisfaction, intention to reuse, and word-of-mouth promotion, thus significantly influencing user attitudes toward technology (Lee & Allaway, 2002; Van Beuningen et al., 2009). Based on the perceived control factor, the following hypotheses have been developed:

H_5: Perceived control affects user trust in mobile hotel reservation apps.

H_6: Perceived control affects user satisfaction with mobile hotel reservation apps.

Mobile Service Quality (M-S-QUAL)

In the realm of online services, Parasuraman et al. (2005) introduced a service quality model called E-S-QUAL, specifically designed for the electronic service domain. This model consists of four primary dimensions: efficiency, fulfillment, system availability, and privacy. Several other researchers have also proposed various e-service quality models. For example, Liu and Arnett (2000) introduced e-Commerce SQ, while Huang et al. (2015) proposed M-S-QUAL. Within the literature, M-S-QUAL for different sectors is generally examined through the framework of interface quality, interaction quality, and information quality dimensions (Su et al., 2022).

The user interface is key to facilitating seamless human-machine interactions, with users evaluating it based on its practical and enjoyable aspects (Hassenzahl, 2004). A well-designed app should evoke emotional responses and follow design guidelines to improve perceived quality (Bhandari et al., 2017). A high-quality interface boosts user trust and e-loyalty (Lin et al., 2016). Interaction quality evaluates customer engagement with mobile services (Stiakakis & Petridis, 2014), while information quality measures the value of the provided information (Ladhari, 2010). Information quality dimensions significantly impact M-S-QUAL, requiring customers to receive accurate, up-to-date, sufficient, real, and detailed information (Stiakakis & Petridis, 2014). Both the quantity and presentation of information should be balanced, as excessive or insufficient details can negatively affect customer perceptions (Santos, 2003). These quality attributes must be maintained throughout the entire mobile app interaction, covering all provided information, including system details, service descriptions, and hotel information (Fassnacht & Koese, 2006).

Interface quality, which encompasses the appearance and design of the app, has a significant impact on user satisfaction. User-friendly interfaces with visually appealing designs enhance the overall user experience (Tsai, 2017). Interaction quality refers to the responsiveness of service representatives in meeting user needs. Prompt and accurate responses build trust and satisfaction (Huang et al., 2015; Cao et al., 2020). Lastly, information quality, including factors such as speed, accuracy, and relevance of the information provided by the app, is crucial for establishing user trust and satisfaction. Low-quality information can have a negative impact on the user experience (Gao et al., 2015). Consequently, the quality of information delivered by mobile apps has the potential to influence user trust and satisfaction. Based on the M-S-QUAL, hypotheses have been formulated:

H_7: Interface quality affects user trust in mobile hotel reservation apps.

H_8: Interface quality affects user satisfaction with mobile hotel reservation apps.

H_9: Interaction quality affects user trust in mobile hotel reservation apps.

H_{10}: Interaction quality affects user satisfaction with mobile hotel reservation apps.

H_{11}: Information quality affects user trust in mobile hotel reservation apps.

H_{12}: Information quality affects user satisfaction with mobile hotel reservation apps.

Personalization-Privacy-Risk

Personalization involves tailoring services to individual preferences using customer data. This process, commonly known as preference matching, expedites the delivery of customized services (Nyheim et al., 2015). The practice of personalization is highly significant for businesses as it fosters individualized relationships and promotes customer retention (Neuhofer et al., 2015). In the tourism sector, mobile app personalization, similar to other forms of personalization, serves as an internet-based mechanism for tailoring smartphone apps to the unique requirements of tourists. This empowers tourism companies to effectively access and utilizes this data, resulting in the provision of location-based services, a better understanding of user context, and ultimately, the delivery of more personalized travel experiences (Sabbioni et al., 2022).

Mobile apps enhance user experiences through personalization, boosting loyalty and satisfaction, but privacy concerns must be addressed. In sectors like tourism, some users accept the risks of using mobile apps (Nugraha et al., 2020; Shimpi et al., 2022). Security is crucial for user acceptance, with higher trust leading to greater adoption (Zhang et al., 2018). Handling sensitive data securely impacts perceived usefulness, and personalization positively influences user attitudes, reduces risk perception, and increases trust, ultimately enhancing satisfaction and loyalty (Mohammed et al., 2016; Wang & Li, 2012).

Privacy concerns significantly influence user loyalty and satisfaction (Cheng & Jiang, 2020), particularly due to the sharing of sensitive information during mobile transactions

(Shankar & Jebarajakirthy, 2019). Inadequate privacy measures can result in diminished trust (Choe et al., 2021; Gupta, 2021). Users' propensity to take risks may vary, particularly in the context of recreational tourism (Nugraha et al., 2020). Although mobile apps offer cost advantages, the occurrence of technical errors or unfulfilled promises can present potential risks (Kabia & Sribivaasan, 2020; Rossi et al., 2019). Consequently, users who are inclined to take risks may perceive mobile apps as secure and satisfying. Building on the existing literature regarding personalization, privacy, and risk tolerance in the realm of mobile apps, the following hypotheses have been developed:

H_{13}: Personalization affects user trust in mobile hotel reservation apps.

H_{14}: Personalization affects user satisfaction with mobile hotel reservation apps.

H_{15}: Privacy positively users trust in mobile hotel reservation apps.

H_{16}: Privacy positively user satisfaction with mobile hotel reservation apps.

H_{17}: Willingness to take risks affects user trust in mobile hotel reservation apps.

H_{18}: Willingness to take risks affects user satisfaction with mobile hotel reservation apps.

The impact of customer trust on loyalty has been extensively examined in various studies (Nguyen-Phuoc et al., 2021). Lin and Wang (2006) conducted a study on the correlation between service quality, customer satisfaction, and loyalty in mobile apps. The findings indicate that perceived trust and customer satisfaction influence customer loyalty. Given that privacy and risk are significant factors in mobile apps, users' trust and satisfaction with the mobile apps enhance their loyalty towards it (Ponte et al., 2015). Lee and Allaway (2002) asserted that when mobile users hold a positive attitude towards mobile apps, they are more likely to recommend it to other consumers. Hence, it can be inferred that trust and satisfaction have an impact on word-of-mouth recommendations. In this context, the formulated hypotheses are as follows:

H_{19}: Trust in mobile hotel reservation apps affects loyalty.

H_{20}: Satisfaction with mobile hotel reservation apps affects loyalty.

H_{21}: Trust in mobile hotel reservation apps affects WOM.

H_{22}: Satisfaction with mobile hotel reservation apps affects WOM.

MATERIAL AND METHOD

Data Collection Tools

The data is collected using the scale shown in Table 1.

Table 1: Scale Development

Scale	Dimension	Number of Items	Adapted From
TAM	Perceived Ease of Use	6	Noh et al. (2013), Nguyen-Phuoc et al. (2020)
	Perceived Usefulness	5	Lee and Lin (2005)
UTAUT	Perceived Control	3	Fan et al. (2022)
M-S-QUAL	Interface Quality	5	Lee and Lin (2005), Wolfinbarger and Gilly (2003)
	Interaction Quality	4	Yoo and Donthu (2001), Su et al. (2022)
	Information Quality	7	Yang and Jun (2002), Suhartanto et al. (2019)
Personalization-Privacy-Risk Scale	Personalization	6	Wolfinbarger and Gilly (2003), Su et al. (2022)
	Privacy	4	Ranganathan and Ganapathy (2002), Eid (2011)
	Willingness to Take Risk	5	Lalwani et al. (2009), Eid (2011)
User Attitudes	Trust	4	Eid (2011)
	Satisfaction	2	Fan et al. (2022)
	Loyalty	3	Nguyen-Phuoc et al. (2020)
	Word-of-Mouth	3	Fan et al. (2022)

The study underwent review and received approval from the Alanya University Research Ethics Committee on April 5, 2023, under decision number 11. The data has been analyzed using SPSS and SmartPLS4.

Research Model

The conceptual model of the research is illustrated in Fig. 1. The study aims to examine the influence of the technology acceptance model, mobile service quality, and personalization-privacy-willingness to take risk variables on trust and satisfaction. Additionally, it investigates the impact of trust and satisfaction on loyalty and word-of-mouth communication.

Pilot Study

Pilot survey was administered to 59 participants randomly selected between May and June 2023. Skewness and Kurtosis values were examined to assess the suitability of the data for factor analysis, and the results indicated a normal distribution, except for ten excluded statements. Subsequently, the Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of Sphericity were conducted. The KMO value of 0.690 indicated that the sample size was appropriate for factor analysis, and Bartlett's test was found to be significant ($p<0.01$), confirming a multivariate normal distribution.

Factor analysis was conducted on a set of 35 scale items. One statement was excluded due to having an eigenvalue below 0.30. None of the statements had a factor loading below 0.40 or a high loading across multiple factors. As a result, a 9-dimensional, 34-item scale to measure user attitudes towards mobile hotel reservation apps was derived. Reliability and internal consistency of the scale were assessed using Cronbach's Alpha, Composite Reliability (CR), and Average Variance Extracted (AVE) calculations (Table 2). The dimensions of the scale were found to be reliable and internally consistent, as indicated by the results presented in Table 2.

Table 2: Cronbach Alpha and CR Values

Dimensions	# Items	CA (Cronbach's Alpha)	CR	AVE
Perceived Ease of Use (PEU)	4	0.821	0.890	0.620
Perceived Usefulness (PU)	3	0.839	0.904	0.715
Perceived Control (PC)	3	0.770	0.867	0.631
Interface Quality (IFQ)	3	0.895	0.938	0.736
Interaction Quality (IRQ)	3	0.848	0.917	0.774
Information Quality (INQ)	4	0.847	0.899	0.661
Personalization (PER)	6	0.892	0.920	0.631
Privacy (PIR)	4	0.825	0.886	0.648
Willingness to Take Risks (RISK)	4	0.772	0.858	0.793

A comprehensive item analysis was conducted by comparing mean scores between the lower and upper 27% groups using independent sample t-tests. Significant differences were found for all items except the statement "I sometimes cross the line by doing things that my environment may not approve of" ($p < 0.05$), leading to its removal from the scale for enhanced reliability. A correlation analysis was conducted to evaluate the relationship between the overall score and individual items used to gauge users' attitudes towards mobile hotel reservation apps. Strong internal consistency was indicated by high correlations ($r \geq 0.40$), with all items demonstrating significant t-values at the 0.01 level. Path analyses further confirmed the validity and reliability of the scale, as evidenced by fit index results that met established criteria (Hu & Bentler, 1999).

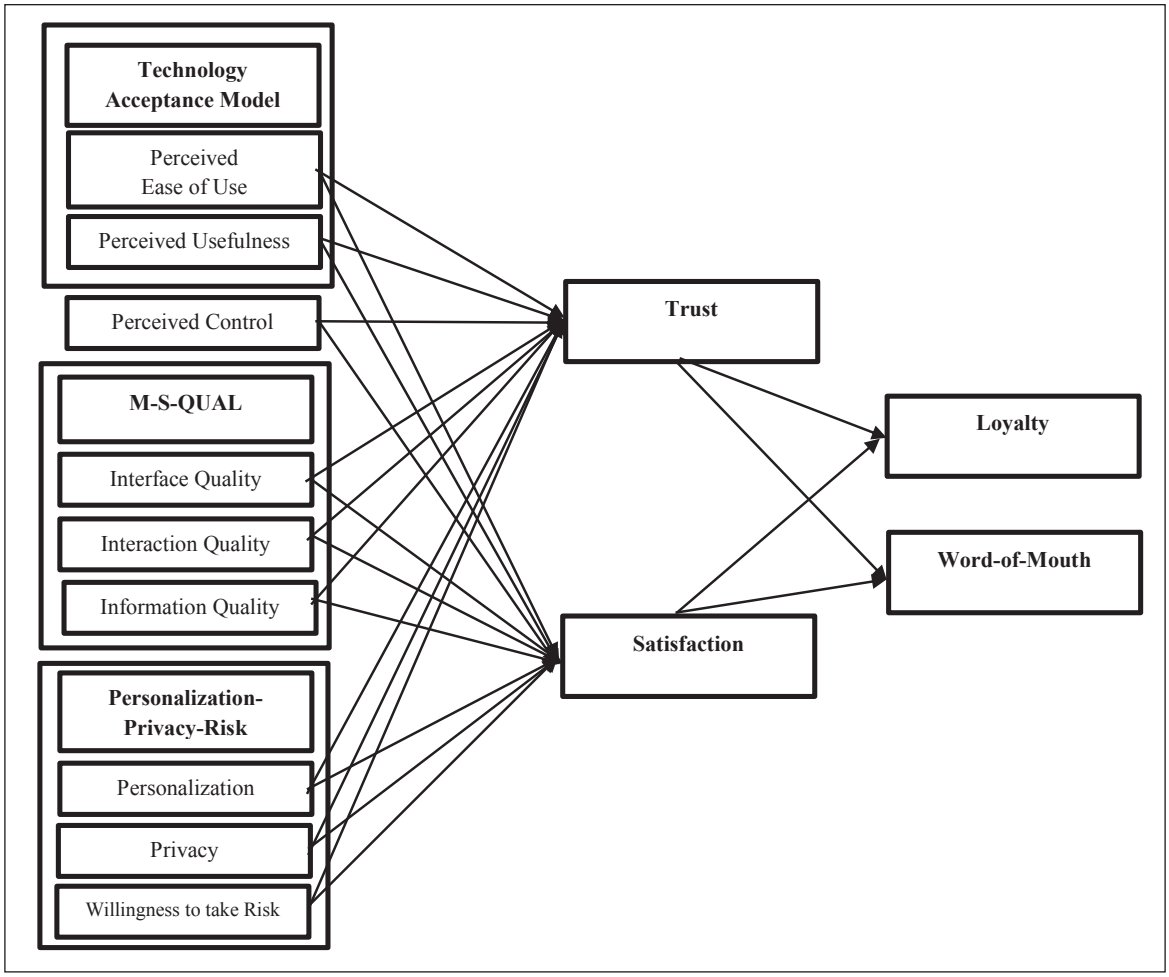

Fig. 1: Conceptual Model of Research

Table 3: Fit Index of Scales

Fit Index	Mobile Apps Technology Acceptance	Mobile Apps Service Quality	Personalization-Privacy-Willingness to Take Risk
AGFI	0.76	0.70	0.69
GFI	0.86	0.82	0.79
CFI	0.98	0.94	0.94
NFI	0.93	0.90	0.88
NNFI	0.74	0.69	0.92
RFI	0.90	0.86	0.84
IFI	0.98	0.94	0.94
RMSEA	0.02	0.02	0.02
SRMR	0.11	0.11	0.11
PNFI	0.72	0.70	0.70

The final scale, developed during the pilot study, was tested on a large sample to validate the conceptual model of the research.

Sample Selection and Demographic Characteristics of Participants

The final scale was administered to 1,612 respondents—809 from the U.S. and 803 from T.R.—who had previously utilized or were currently utilizing a mobile hotel reservation apps. Eligibility criteria included being 18 years or older and reporting at least one instance of mobile hotel reservation apps usage within the past 12 months. The bilingual (English–Turkish) questionnaire underwent translation and back-translation, followed by a pilot study to refine the wording. Data were collected through a secure web survey that adhered to electronic informed consent protocols; no identifying data were retained (anonymized, in compliance with GDPR/KVKK). Attention checks and ex-ante/ex-post quality filters were implemented, with nonconforming cases excluded. Cross-country analyses were conducted only after confirming measurement invariance across language versions.

Among the U.S. group, there were 809 participants. The age group "32-37" constituted the largest proportion at 62.4%. Regarding marital status, 88.5% were married, while 11.5% were single. In terms of educational attainment, 76.9% held associate/bachelor's degrees, and 16.5% possessed postgraduate degrees. For the T.R. group, there were 803 participants. The age group "44 and above" had the highest representation at 34.0%, whereas the "25 and below" age group had the lowest representation at 6.0%. In terms of marital status, 75.6% of participants were married, while 24.4% were single. With regard to education, 62.4% held postgraduate degrees, 30.8% held associate/bachelor's degrees, and 6.4% had a high school education.

Data Analysis and Results

Skewness and kurtosis tests were conducted to assess the normal distribution of the data. It is expected that both values should fall within the range of -2 and +2 (George and Mallery, 2010). As depicted in Table 4, the skewness and kurtosis values of the variables fall within acceptable levels, suggesting that the data follows a normal distribution.

Table 4: Data Distribution Normality

Variables	Skewness	Kurtosis
Perceived Ease of Use (PEU)	-0.978	1.753
Perceived Usefulness (PU)	-1.096	1.676
Perceived Control (PC)	-0.705	0.496
Interface Quality (IFQ)	-0.703	0.751
Interaction Quality (IRQ)	-0.361	-0.272
Information Quality (INQ)	-0.804	0.917
Personalization (PER)	-0.779	0.701
Privacy (PIR)	-0.679	0.511
Willingness to Take Risks (RISK)	-0.118	-0.962

The discriminant validity was assessed using the Fornell-Larcker criterion. This criterion determines whether the square root of the Average Variance Extracted (AVE) for each variable exceeds its correlations with other latent constructs, as proposed by Fornell and Larcker (1981). The results, as shown in Table 5, confirm that this criterion is met, indicating the strong discriminant validity achieved by the measurement model.

Table 5: Correlations Among Constructs (Fornell-Larcker Criterion)

	AVE	IFQ	INQ	IRQ	PU	PC	PER	PEU	PIR	RISK
IFQ	0.736	0.858								
INQ	0.661	0.700	0.813							
IRQ	0.774	0.642	0.628	0.880						
PU	0.715	0.645	0.621	0.458	0.845					
PC	0.631	0.640	0.592	0.596	0.590	0.794				
PER	0.631	0.686	0.666	0.634	0.574	0.614	0.794			
PEU	0.620	0.687	0.689	0.568	0.701	0.571	0.618	0.788		
PIR	0.648	0.649	0.713	0.601	0.501	0.588	0.706	0.627	0.805	
RISK	0.793	0.288	0.332	0.453	0.160	0.402	0.347	0.213	0.423	0.890

Discriminant validity was evaluated using the heterotrait-monotrait ratio of correlations (HTMT) method (Hair et al., 2017). This method calculates the average of heterotrait-heteromethod correlations relative to the average of monotrait-heteromethod correlations. The results of the HTMT assessment can be seen in Table 6, indicating a satisfactory level of discriminant validity. The highest HTMT value observed was 0.868, which falls below the established threshold of 0.90 (Gold et al., 2001).

Table 6: Heterotrait-Monotrait Ratio of Correlations

	IFQ	INQ	IRQ	PU	PC	PER	PEU	PIR	RISK
IFQ									
INQ	0.850								
IRQ	0.769	0.739							
PU	0.844	0.854	0.683						
PC	0.830	0.768	0.754	0.618					
PER	0.808	0.781	0.729	0.602	0.766				
PEU	0.844	0.854	0.683	0.728	0.748	0.739			
PIR	0.788	0.868	0.705	0.698	0.761	0.836	0.786		
RISK	0.339	0.380	0.520	0.431	0.505	0.393	0.250	0.487	

Structural Model Results

The PLS-SEM analysis employed a bootstrap method, utilizing 803 cases from participants in T.R. and 809 cases from participants in the U.S., to assess the path coefficients (β) that represent the direct relationships among the specified constructs. The results for participants in T.R. are outlined in Table 7, while the corresponding findings for the U.S. are displayed in Table 8.

As illustrated in Table 7, the findings indicate that twelve out of the twenty-two hypotheses achieved statistical significance, with their respective t-values exceeding the established threshold of 1.96 at a 5% significance level, as recommended by Hair et al. (2017). Notably, the correlations identified among key constructs—trust, satisfaction, loyalty, and word of mouth—are particularly important. In the context of T.R., both satisfaction and trust influence outcomes; however, satisfaction serves as the primary driver. Its effect on loyalty (β=0.579) is approximately 2.43 times that of trust (β=0.238), and its impact on word-of-mouth (β=0.567) is about 2.00 times that of trust (β=0.283). Therefore, hotels should prioritize satisfaction as the primary pathway to fostering loyalty and advocacy, while treating trust as a complementary factor. Furthermore, trust is primarily influenced by perceived privacy protection (PIR→TRU, β=0.392), risk-taking propensity (RISK→TRU, β=0.198), and interaction quality (IRQ→TRU, β=0.172). Satisfaction is dependent on information quality (INQ→SAT, β=0.301), privacy protection (PIR→SAT, β=0.186), perceived usefulness (PU→SAT, β=0.163), and ease of use (PEU→SAT, β=0.121), with risk-taking also playing a role (RISK→SAT, β=0.092). In contrast, interface quality, personalization, and perceived control do not show significant effects on either trust or satisfaction after controlling for other variables, and perceived usefulness and ease of use do not directly translate into trust.

Table 7: Findings of Direct Effects Evaluation for T.R.

		Path Coefficients	t-Value	P Value	Result
H_1	PEU->TRU	0.058	1.438	0.151	Reject
H_2	PEU->SAT	0.121	2.860	0.004	Supported
H_3	PU->TRU	-0.030	0.710	0.478	Reject
H_4	PU->SAT	0.163	3.768	0.000	Supported
H_5	PC->TRU	0.062	1.729	0.084	Reject
H_6	PC->SAT	-0.027	0.679	0.497	Reject
H_7	IFQ->TRU	0.047	1.079	0.281	Reject
H_8	IFQ->SAT	-0.007	0.146	0.884	Reject
H_9	IRQ->TRU	0.172	4.627	0.000	Supported
H_{10}	IRQ->SAT	0.051	1.257	0.209	Reject
H_{11}	INQ->TRU	0.084	1.650	0.099	Reject
H_{12}	INQ->SAT	0.301	5.803	0.000	Supported
H_{13}	PER->TRU	0.009	0.201	0.841	Reject
H_{14}	PER->SAT	0.052	1.217	0.224	Reject
H_{15}	PIR->TRU	0.392	8.895	0.000	Supported
H_{16}	PIR->SAT	0.186	3.638	0.000	Supported
H_{17}	RISK->TRU	0.198	6.503	0.000	Supported

		Path Coefficients	t-Value	P Value	Result
H_{18}	RISK->SAT	0.092	3.073	0.002	Supported
H_{19}	TRU->LOY	0.238	6.826	0.000	Supported
H_{20}	SAT->LOY	0.579	16.995	0.000	Supported
H_{21}	TRU->WOM	0.283	8.825	0.000	Supported
H_{22}	SAT->WOM	0.567	17.802	0.000	Supported

Note: TRU: Trust; SAT: Satisfaction; LOY: Loyalty; WOM: Word of Mouth.

As shown in Table 8, the findings indicate that fourteen out of the twenty-two hypotheses have obtained statistical support, with their respective t-values surpassing the established threshold of 1.96 at a significance level of 5%, as recommended by Hair et al. (2017). In particular, the connections between key concepts such as trust, satisfaction, loyalty, and word of mouth have been notably identified. In the U.S., trust serves as the primary conduit to outcomes. Its impact on loyalty (β=0.640) significantly exceeds that of satisfaction (β=0.128), as well as its effect on word-of-mouth (β = 0.487 compared to 0.329). Therefore, strategies aimed at fostering loyalty and advocacy should prioritize trust first, followed by satisfaction. The strongest antecedents of trust include information quality (INQ→TRU, β=0.272), risk-taking propensity (RISK→TRU, β=0.197), privacy protection (PIR→TRU, β=0.172), interaction quality (IRQ→TRU, β=0.158), and interface quality (IFQ→TRU, β=0.144). In terms of satisfaction, the contributing factors are information quality (INQ→SAT, β=0.168), personalization (PER→SAT, β=0.127), interface quality (IFQ→SAT, β=0.109), risk (RISK→SAT, β=0.111), and ease of use (PEU→SAT, β=0.100). Notably, perceived usefulness (PU) and perceived control (PC) are not statistically significant; while privacy influences trust, it does not affect satisfaction. Interaction quality enhances trust exclusively, indicating distinct path-specific levers for improvement.

Table 8: Findings of Direct Effects Evaluation for U.S.

		Path Coefficients	t-Value	P Value	Result
H_1	PEU->TRU	0.058	1.421	0.155	Reject
H_2	PEU->SAT	0.100	1.959	0.049	Supported
H_3	PU->TRU	-0.042	0.976	0.329	Reject
H_4	PU->SAT	0.068	1.310	0.190	Reject
H_5	PC->TRU	0.094	1.898	0.058	Reject
H_6	PC->SAT	-0.068	1.429	0.153	Reject
H_7	IFQ->TRU	0.144	3.343	0.001	Supported
H_8	IFQ->SAT	0.109	1.951	0.049	Supported
H_9	IRQ->TRU	0.158	2.963	0.003	Supported
H_{10}	IRQ->SAT	0.053	1.152	0.249	Reject
H_{11}	INQ->TRU	0.272	4.201	0.000	Supported
H_{12}	INQ->SAT	0.168	3.028	0.002	Supported
H_{13}	PER->TRU	0.056	1.018	0.309	Reject
H_{14}	PER->SAT	0.127	2.163	0.031	Supported
H_{15}	PIR->TRU	0.172	3.627	0.000	Supported
H_{16}	PIR->SAT	0.062	1.134	0.257	Reject
H_{17}	RISK->TRU	0.197	4.022	0.000	Supported
H_{18}	RISK->SAT	0.111	2.711	0.007	Supported
H_{19}	TRU->LOY	0.640	17.814	0.000	Supported
H_{20}	SAT->LOY	0.128	3.842	0.000	Supported
H_{21}	TRU->WOM	0.487	15.392	0.000	Supported
H_{22}	SAT->WOM	0.329	10.409	0.000	Supported

The analysis conducted for both countries yielded a comparison of hypothesis acceptance and rejection, as outlined in Table 9. The findings demonstrate disparities in six hypotheses. Across both markets, the relationships between ease of use and satisfaction (H2), information quality and satisfaction (H12), privacy and trust (H15),

risk propensity and trust/satisfaction (H17–H18), and trust/satisfaction and loyalty and word of mouth (H19–H22) are robust. Both samples also reject the hypotheses of perceived usefulness and trust (H3), perceived control and trust/satisfaction (H5–H6), interaction quality and satisfaction (H10), and personalization and trust (H13). The six divergences indicate a clear distinction in design priorities across markets: in Türkiye, the hypotheses perceived usefulness and satisfaction (H4) and privacy and satisfaction (H16) are supported, suggesting that satisfaction primarily increases with perceived usefulness and credible privacy assurances. In contrast, in the U.S., the hypotheses information quality and trust (H7), information quality and satisfaction (H8), interaction quality and trust (H11), and personalization and satisfaction (H14) are upheld, indicating that trust and satisfaction are more sensitive to interface quality, the depth and accuracy of information, and the meaningfulness of personalization.

Table 9: Comparison of the Results from Two Countries

		T.R.	U.S.
H_1	PEU->TRU	Reject	Reject
H_2	PEU->SAT	Supported	Supported
H_3	PU->TRU	Reject	Reject
H_4	*PU->SAT*	*Supported*	*Reject*
H_5	PC->TRU	Reject	Reject
H_6	PC->SAT	Reject	Reject
H_7	*IFQ->TRU*	*Reject*	*Supported*
H_8	*IFQ->SAT*	*Reject*	*Supported*
H_9	IRQ->TRU	Supported	Supported
H_{10}	IRQ->SAT	Reject	Reject
H_{11}	*INQ->TRU*	*Reject*	*Supported*
H_{12}	INQ->SAT	Supported	Supported
H_{13}	PER->TRU	Reject	Reject
H_{14}	*PER->SAT*	*Reject*	*Supported*
H_{15}	PIR->TRU	Supported	Supported
H_{16}	*PIR->SAT*	*Supported*	*Reject*
H_{17}	RISK->TRU	Supported	Supported
H_{18}	RISK->SAT	Supported	Supported
H_{19}	TRU->LOY	Supported	Supported
H_{20}	SAT->LOY	Supported	Supported
H_{21}	TRU->WOM	Supported	Supported
H_{22}	SAT->WOM	Supported	Supported

DISCUSSION

No significant relationship was found between ease of use and trust in either country, indicating that users do not directly associate ease of use with trust. However, ease of use was significantly correlated with satisfaction in both countries (Nel & Boshoff, 2017), suggesting that a more user-friendly experience increases satisfaction. This pattern aligns with the notion that usability serves as an effort-reduction cue, enhancing affective evaluations such as satisfaction, rather than acting as a diagnostic signal of integrity or reliability necessary for trust formation. In contrast to the findings of Afshan and Sharif (2016), perceived usefulness did not have a significant relationship with trust, implying that users' perception of usefulness does not directly influence their trust in the apps. While perceived usefulness was associated with satisfaction among participants from T.R., it was not among U.S. participants, possibly due to cultural differences in evaluating the benefits. Collectively, these findings indicate a decoupling of instrumental value from credibility assessments. While utility may enhance satisfaction, trust seems to rely on credibility-related cues that extend beyond perceived usefulness. The asymmetry between perceived usefulness and satisfaction suggests that benefit appraisals are influenced by cultural factors.

There is no significant correlation between perceived control and trust, which contradicts the findings of Lee and Allaway (2002). This suggests that users of the mobile hotel reservation app do not directly associate the sense of control it provides with trust. Similarly, there is no noteworthy correlation between perceived control and satisfaction, in contrast to Van Beuningen et al.'s (2009) findings. Hence, it can be concluded that users' perception of control in the mobile hotel reservation app does not directly affect their satisfaction. A plausible interpretation is that highly streamlined, guided mobile journeys make "control" a less significant evaluative criterion. Users seem to prioritize fluency and outcome confidence over detailed control features when assessing both trust and satisfaction.

While no significant relationship was found between the interface quality of mobile hotel reservation apps and trust and satisfaction for TR participants, a meaningful connection was identified for participants from the USA. Cultural characteristics shape the perception and evaluation of app interface quality in both countries. In the U.S. context, interface polish—encompassing speed, stability, and navigational clarity—serves as a competence signal that enhances both credibility and user comfort. In contrast, in T.R., these surface cues appear to be secondary to the prioritization of privacy assurances and tangible usefulness. A significant relationship was found between the interaction quality of mobile hotel reservation apps and trust (Cao et al., 2020), indicating that as interaction quality improves, users' trust significantly increases. This positions interactional responsiveness within the trust calculus, rather than the hedonic or comfort dimensions of satisfaction, thereby elucidating the relationship between IRQ and TRU, while distinguishing it from SAT. However, contrary to Zhao et

al. (2012), no relationship was found between interaction quality and satisfaction. Regarding information quality, a meaningful relationship was found between information quality and trust for US participants (Gao et al., 2015), while no such connection was found for TR participants, contrasting with Gao et al.'s (2015) findings. This divergence suggests that trust strengthens with increased information quality in US participants, whereas cultural differences, local expectations, or user experience priorities may explain the lack of connection for TR participants. Accordingly, information depth, accuracy, and timeliness seem to be directly integrated into the credibility judgments of U.S. users, while T.R. users may necessitate additional assurances, such as privacy cues, before translating information quality into trust.

No overall correlation was found between personalization and trust in mobile hotel reservation apps. However, personalization impacted satisfaction for U.S. participants, unlike T.R. participants (Wang & Li, 2012), highlighting cultural differences. Personalization primarily serves as a relevance and convenience indicator that enhances satisfaction when it is perceived as meaningful and non-intrusive; however, it does not independently establish integrity for trust. A general link between privacy and trust was found (Zhang et al., 2018), with T.R. participants showing a significant correlation between privacy and satisfaction, suggesting varying privacy perceptions. The dual association observed in the T.R. sample indicates that risk reduction through privacy not only enhances credibility but also provides affective comfort that is integrated into satisfaction assessments. Additionally, willingness to take risks was significantly related to trust and satisfaction, emphasizing the role of risk tolerance in shaping user experiences. Trust in mobile hotel reservation apps strongly correlates with loyalty and satisfaction, leading to increased loyalty. Significant connections were also found between trust, satisfaction, and word-of-mouth, highlighting trust's key role in fostering long-term loyalty, satisfaction, and positive user communication. The pattern delineates two partially distinct assembly processes: trust, which is informed by credibility-diagnostic cues such as privacy, information and interaction quality, and competence signals; and satisfaction, which is influenced by effort-reduction and relevance cues including ease, usefulness, and personalization. Together, these processes underpin downstream loyalty and positive word-of-mouth.

IMPLICATIONS

Theoretical Implications

Firstly, the emergence of an ambiguous relationship between ease of use and trust in both countries indicates that users do not directly associate ease of use with their trust levels. This suggests that users consider more intricate and multifaceted factors when building trust. This theoretically supports a dual-route perspective, where usability serves as a cue for effort reduction and affect, while trust formation is based on credibility-diagnostic signals (e.g., privacy assurances and the reliability of information and interactions) that are independent of simplicity alone. The significant relationship between ease of use and satisfaction highlights the link between the apps usability and satisfaction levels. This finding emphasizes the importance of user-friendly interfaces in enhancing user satisfaction and potentially fostering long-term loyalty (Khoshaim et al., 2023). In other words, ease of use contributes to the satisfaction pathway rather than the credibility pathway, which clarifies why perceived ease of use enhances satisfaction without necessarily translating into trust.

The inconclusive relationship between perceived usefulness and trust suggests that users of mobile hotel reservation apps do not establish a direct correlation between perceived usefulness and their trust in the apps. Conceptually, perceived usefulness indicates instrumental value (performance expectancy) but does not encompass integrity or benevolence; thus, its connection to trust is weak. This indicates that users evaluate trust through a more complex process when assessing the usefulness provided by apps. The significant relationship between perceived usefulness and satisfaction among T.R. participants implies that perceived usefulness may directly impact satisfaction, and this effect can vary depending on cultural factors. This cross-national asymmetry suggests that benefit appraisals are culturally contingent, aligning with a boundary-condition perspective in which utility cues have a greater impact on affective evaluations (satisfaction) in certain cultures compared to others.

The correlation between privacy and trust underscores the crucial role of users' trust in the privacy policies of mobile hotel reservation apps. This underscores privacy calculus perspectives by establishing privacy as a key credibility indicator in mobile contexts. The prominent association between privacy and satisfaction among T.R. participants indicates that the influence of privacy perception on satisfaction has a cultural dimension. This suggests that privacy policies can impact not just trust, but also satisfaction, with potential variations in different cultural contexts (Kassim & Asiah Abdullah, 2010). This suggests a dual function of privacy—namely, risk reduction and emotional comfort—whose relative importance is influenced by cultural factors, thereby expanding the concept of privacy calculus beyond a purely cognitive risk assessment to include satisfaction judgments.

The study demonstrates a significant correlation between the interface quality of mobile hotel reservation apps and

trust and satisfaction, emphasizing the crucial role of cultural factors and user expectations. Interface quality can be interpreted as a signal of competence. In contexts where such signals are diagnostic, it contributes to both trust (credibility) and satisfaction (comfort). Conversely, in other contexts, its impact is diminished unless accompanied by governance cues, such as privacy. The lack of this correlation among T.R. participants implies that interface quality may not have a direct impact on trust and satisfaction for them, indicating diverse design preferences resulting from cultural differences. On the other hand, the correlation among U.S. participants indicates that U.S. users strongly connect interface quality with trust and satisfaction. This highlights the potential influence of design strategies on user experience in various cultural contexts. We propose a context-dependent architecture of antecedents based on the synthesis of these patterns: (i) surface design (interface quality), (ii) process design (interaction quality), (iii) content design (information quality), and (iv) governance design (privacy). Surface, process, and content designs primarily influence trust when interpreted as credibility cues and satisfaction when perceived as effort or relevance cues. Governance design, particularly concerning privacy, predominantly serves as a foundation for trust but can also enhance satisfaction, depending on cultural factors.

Managerial Implications

The correlation between ease of use and trust is crucial for app developers and marketers, highlighting the need for tailored strategies to build trust. However, our data indicates that ease of use did not directly predict trust. Instead, enhancing usability can improve user satisfaction, while trust can be built through credibility cues such as privacy transparency, reliable information, and responsive support. The link between ease of use and satisfaction emphasizes the importance of app design, where user-friendly interfaces can boost loyalty. Prioritize seamless processes (including streamlined search, intelligent defaults, and effective error recovery) while minimizing cognitive load to maintain and enhance user satisfaction. Cultural differences in perceived usefulness and satisfaction suggest the need for region-specific marketing strategies. In T.R., emphasize tangible value through best-price guarantees, flexible cancellation policies, and transparent fees. In the U.S., avoid solely focusing on utility messaging and instead incorporate trust signals. The correlations between interface quality, trust, and satisfaction highlight the importance of cultural factors. Developers should consider regional differences to meet user expectations. Specifically, the lack of clear correlation for T.R. participants suggests they may assess these factors differently. Treat interface polish as a primary focus in the U.S., emphasizing speed, stability, and navigational clarity. In T.R., pair UI enhancements with robust privacy assurances and clear messaging regarding their usefulness.

Improving user interaction quality can boost trust and loyalty. Developers should consider various factors to enhance satisfaction. Regional differences in how information quality affects trust and satisfaction highlight the need for tailored strategies, especially since T.R. users' value information quality more in determining satisfaction. Emphasize the depth and accuracy of content as a trust indicator in the U.S., while integrating comprehensive content with privacy signals in T.R. to enhance both satisfaction and trust. The strong link between personalization and satisfaction highlights the importance of local culture and user preferences. Implement opt-in, transparent personalization strategies that include preference centers and frequency controls in the U.S. In T.R., maintain a conservative and privacy-focused approach to personalization unless explicit consent and clear value are established. Tailoring strategies to regional contexts, especially for T.R. users, can boost satisfaction. Cultural differences in privacy, trust, and satisfaction require developers to adapt policies to align with regional needs.

The substantial correlation among risk tolerance, trust, and satisfaction holds great importance for app developers and marketers. Users' capacity to handle uncertainties strengthens their trust and satisfaction levels, emphasizing the need to devise strategies that comprehend and enhance these factors. Segment by risk propensity: provide enhanced guarantees, flexible cancellation options, and transparent refund timelines for risk-averse users, while emphasizing speed and convenience for risk-tolerant users. The robust connection between trust in mobile hotel reservation apps and customer loyalty, as well as between satisfaction and loyalty, underscores the potential of trust in fostering long-term user loyalty. Furthermore, the associations between trust and word-of-mouth (WOM), and satisfaction and WOM, present opportunities to cultivate positive verbal communication, expand the user base, and fortify brand reputation.

LIMITATIONS AND FURTHER DIRECTIONS

The sample is limited to the U.S. and T.R., which may affect the generalizability of the findings. The exclusion of participants from different geographical regions may result in a lack of cultural diversity. This implies that the study's findings may only be applicable to these two countries, reducing the likelihood of obtaining different results in other regions. In future studies, it is recommended to conduct a more detailed examination of cultural factors and include a broader participant base from different geographical regions.

Lastly, in addition to exploring the relationships among the factors examined in the study, it may be important to

incorporate new factors to comprehensively assess the user experience of mobile hotel reservation apps. Future research should expand the sampling frame by employing probability-based or stratified approaches across diverse regions and should model culture using theory-driven dimensions rather than relying solely on country dummies. Methodologically, incorporating longitudinal or experience-sampling designs, field or online experiments (e.g., A/B testing of privacy prompts, information depth, and interface speed), and utilizing multi-source data that link surveys to log-level behaviors (such as search, conversion, and cancellations) would bolster causal claims. Attention should also be given to design heterogeneity; comparing brand apps versus online travel agencies, device and operating system ecosystems, app maturity, and hotel category contexts can illuminate boundary conditions. Lastly, exploring moderated-mediation structures (e.g., the impact of privacy cues and risk propensity on trust and satisfaction pathways) across different regulatory regimes (KVKK, GDPR, CCPA) and implementing transparent practices (such as pre-registration and robustness checks) will enhance the cumulative credibility and external validity of this research area.

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REFERENCES

Afshan, S., & Sharif, A. (2016). Acceptance of mobile banking framework in Pakistan. *Telematics and Informatics, 33*(2), 370–387.

Akaiso, E. (2024). Innovation diffusion and technology acceptance theory. In A. Adewale, F. Victor and U. Violet (Eds.). *Economic Trends and Sustainable Environmental Assessment* (pp. 1-16). CRC Press.

Akbudak, N. (2025). The impact of mobile hotel reservation apps design on m-service quality, purchase intention, and apps re-usage. *International Journal of Hospitality and Tourism Systems, 18*(1), 17-29.

Ayanlade, O. S., Oyebisi, T. O., & Kolawole, B. A. (2019). Health information technology acceptance framework for diabetes management. *Heliyon, 5*(5), e01735.

Bhandari, U., Neben, T., Chang, K., & Chua, W. Y. (2017). Effects of interface design factors on affective responses and quality evaluations in mobile applications. *Computers in Human Behavior, 72,* 525–534.

Buhalis, D., & Leung, R. (2018). Smart hospitality—Interconnectivity and interoperability towards an ecosystem. *International Journal of Hospitality Management, 71,* 41–50.

Cao, Y., Zhang, J., Ma, L., Qin, X. and Li, J. (2020). Examining user's initial trust building in mobile online health community adopting. *International Journal of Environmental Research and Public Health, 17*(11), 3945.

Chen, X., Jiang, L., Zhou, Z., & Li, D. (2025). Impact of perceived ease of use and perceived usefulness of humanoid robots on students' intention to use. *Acta Psychologica, 258,* 105217.

Cheng, Y., & Jiang, H. (2020). How do AI-driven chatbots impact user experience? Examining gratifications, perceived privacy risk, satisfaction, loyalty, and continued use. *Journal of Broadcasting and Electronic Media, 64*(4), 592–614.

Choe, J. Y., Kim, J. J., & Hwang, J. (2021). Perceived risks from drone food delivery services before and after COVID-19. *International Journal of Contemporary Hospitality Management, 33*(4), 1276–1296.

Chuang, C. M. (2023). The conceptualization of smart tourism service platforms on tourist value co-creation behaviours: An integrative perspective of smart tourism services. *Humanities and Social Sciences Communication, 10,* 367.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly, 13*(3), 319–340.

Dhagarra, D., Goswami, M., & Kumar, G. (2020). Impact of trust and privacy concerns on technology acceptance in healthcare: An Indian perspective. *International Journal of Medical Information, 141,* 104164.

Dias, A., Melo, J., & Patuleia, M. (2022). Creative tourism and mobile apps: A comparative study of usability, functionality and creativity of travel apps. *International Journal of Hospitality and Tourism Systems, 15*(1), 17–29.

Eid, M. I. (2011). Determinants of e-commerce customer satisfaction, trust, and loyalty in Saudi Arabia. *Journal of Electronic Commerce Research, 12*(1), 78–93.

Erjavec, J., & Manfreda A. (2022). Online shopping adoption during COVID-19 and social isolation: Extending the UTAUT model with herd behavior. *Journal of Retailing and Consumer Services, 65,* 102867.

Fan, A., Lu, Z., & Mao, Z. (2022). To talk or to touch: Unraveling consumer responses to two types of hotel in-room technology. *International Journal of Hospitality Management, 101,* 103112.

Fassnacht, M., & Koese, I. (2006). Quality of electronic services. *Journal of Service Research, 9*(1), 19–37.

Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.

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

Gao, L., Waechter, K. A., & Bai, X. (2015). Understanding consumers' continuance intention towards mobile purchase: A theoretical framework and empirical study - A case of China. *Computers in Human Behavior, 53*(1), 249–262.

Garg, A. (2021). The technology acceptance and use of tablet menu among young adults: An empirical study based on UTAUT 2 model. *International Journal of Hospitality and Tourism Systems, 14*(1), 41-50.

George, D., & Mallery, P. (2010). *SPSS for Windows step by step: A simple guide and reference.* Boston: Allyn and Bacon.

Gold, A. H., Malhotra, A., & Segars, A. H. (2001). Knowledge management: An organizational capabilities perspective. *Journal of Management Information Systems, 18,* 185–214.

Gupta, S. (2021). Investigating the impact of customer engagement on customer value in case of mobile travel apps. *International Journal of Hospitality and Tourism Systems, 14*(1), 106–120.

Gupta, S. K., Tiwari, S., Hassan, A., & Gupta, P. (2023). Moderating effect of technologies into behavioural intensions of tourists toward use of mobile wallets for digital payments: TAM model perspective. *International Journal of Hospitality and Tourism Systems, 16*(1), 43–57.

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

Hassenzahl, M. (2004). The interplay of beauty, goodness, and usability in interactive products. *Human Computer Interaction, 19*(4), 319–349.

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6*(1), 1–55.

Hu, Y., & Min, H. K. (2025). Information transparency, privacy concerns, and customers' behavioral intentions regarding AI-powered hospitality robots: A situational awareness perspective. *Journal of Hospitality and Tourism Management, 63,* 177–184.

Huang, E. Y., Sheng-Wei, L., & Ya-Chu, F. (2015). M-S-QUAL: Mobile service quality measurement. *Electronic Commerce Research and Applications, 14*(2), 126–142.

Indarsin, T., & Ali, H. (2017). Attitude toward using m-commerce: The analysis of perceived usefulness, perceived ease of use, and perceived trust: Case study in Ikens Wholesale Trade, Jakarta – Indonesia. *Saudi Journal of Business and Management Studies, 2*(11), 995–1007.

Kabia, S. K., & Srinivaasan, G. (2023). Role of smartphones in destination promotion and its impact on travel experience. *International Journal of Hospitality and Tourism Systems, 13*(1), 22–34.

Kassim, N., & Asiah Abdullah, N. (2010). The effect of perceived service quality dimensions on customer satisfaction, trust, and loyalty in e-commerce settings: A cross cultural analysis. *Asia Pacific Journal of Marketing and Logistics, 22,* 351-371.

Khoshaim, L. S., Yüksel, S., & Dinçer, H. (2023). Evaluating a user-centered environment-friendly mobile phone app for tourists and residents using facial-recognition software. *Sustainability, 15,* 14689.

Kim, J. J., Chua, B. L., & Han, H. (2021). Mobile hotel reservations and customer behavior: Channel familiarity and channel type. *Journal of Vacation Marketing, 27*(1), 82–102.

Ladhari, R. (2010). Developing e-service quality scales: A literature review. *Journal of Retailing and Consumer Services, 17*(6), 464–477.

Ladipo, P., Dixon-Ogbechi, B., Enyinnaya, N., & Akeke, O. (2021). Influence of technology acceptance model (TAM) on customer adoption of e-banking practice in Lagos state. *Journal of Social Sciences, 4*(3), 124–138.

Lalwani, A. K., Shrum, L. J., & Chiu, C. Y. (2009). Motivated response styles: The role of cultural values, regulatory focus, and self-consciousness in socially desirable responding. *Journal of Personality and Social Psychology, 96*(4), 870–882.

Law, R., Chan, I. C. C., & Wang, L. (2018). A comprehensive review of mobile technology use in hospitality and tourism. *Journal of Hospitality Marketing and Management, 27*(6), 626–648.

Law, R., Lin, K. J., & Li, K. Q. (2025). Information privacy in tourism and hospitality: Technology-specific issues, theoretical fundamentals and future research avenues. *Asia Pacific Journal of Tourism Research,* 1–18.

Lee, G., & Lin, H. (2005). Customer perceptions of e-service quality in online shopping. *International Journal of Retail and Distribution Management, 33*(2), 161–176.

Lee, J., & Allaway, A. (2002). Effects of personal control on adoption of self-service technology innovations. *Journal of Services Marketing, 16*(6), 553–572.

Lei, S. I., Wang, D., & Law, R. (2019). Perceived technology affordance and value of hotel mobile apps: A comparison

of hoteliers and customers. *Journal of Hospitality and Tourism Management, 39,* 201–211.

Lin, C., Yeh, J., & Yu, Y. T. (2016). The influence of privacy calculus, user interface quality and perceived value on mobile shopping. *Journal of Economics, Business and Management, 4,* 567–572.

Lin, H. H., & Wang, Y. S. (2006). An examination of the determinants of customer loyalty in mobile commerce contexts. *Information and Management, 43*(3), 271–282.

Liu, C., & Arnett, K. P. (2000). Exploring the factors associated with Web site success in the context of electronic commerce. *Information and Management, 38*(1), 23–33.

Liu, Y., Lu, X., Zhao, G., Li, C., & Shi, J. (2022). Adoption of mobile health services using the unified theory of acceptance and use of technology model: Self-efficacy and privacy concerns. *Frontiers in Psychology, 13,* 944976.

Mamakou, X. J., Zaharias, P., & Milesi, M. (2024). Measuring customer satisfaction in electronic commerce: The impact of e-service quality and user experience. *International Journal of Quality and Reliability Management, 41*(3), 915–943.

Mastour, H., Yousefi, R., & Niroumand, S. (2025). Exploring the acceptance of e-learning in health professions education in Iran based on the technology acceptance model (TAM). *Scientific Reports, 15*(1), 8178.

Mehra, A., Paul, J., & Kaurav, R. P. S. (2021). Determinants of mobile apps adoption among young adults: Theoretical extension and analysis. *Journal of Marketing Communications, 27*(5), 481–509.

Mohammed, M. E., Wafik, G. M., Jalil, S. G. A., & El Hassan, Y. A. (2016). The effects of e-service quality dimensions on tourist's e-satisfaction. *International Journal of Hospitality and Tourism Systems, 9*(1), 1–17.

Nathan, R. J., Victor, V., Tan, M., & Fekete-Farkas, M. (2020). Tourists' use of Airbnb app for visiting a historical city. *Information Technology and Tourism, 22,* 217–242.

Nel, J., & Boshoff, C. (2017). Development of application-based mobile-service trust and online trust transfer: An elaboration likelihood model perspective. *Behaviour and Information Technology, 36*(8), 809–826.

Neuhofer, B., Buhalis, D. and Ladkin, A. (2015). Smart technologies for personalized experiences: A case study in the hospitality domain. *Electronic Markets, 25*, 243–254.

Nguyen-Phuoc, D. Q., Oviedo-Trespalacios, O., Vo, N. S., Le, P. T., & Van Nguyen, T. (2021). How does perceived risk affect passenger satisfaction and loyalty towards ride-sourcing services? *Transportation Research Part D: Transport and Environment, 97*(1), 102921.

Nguyen-Phuoc, D. Q., Su, D. N., Tran, P. T. K., Le, D. T. T., & Johnson, L. W. (2020). Factors influencing customer's loyalty towards ride-hailing taxi services – A case study of Vietnam. *Transportation Research Part A: Policy and Practice, 134*(1), 96–112.

Nira, R. A. (2025). AI-driven hyper-personalization in hospitality: Application, present and future opportunities, challenges, and guest trust issues. *International Journal of Research and Innovation in Social Science, 9*(4), 5562–5573.

Noh, M., Lee, K., Kim, S., & Garrison, G. (2013). Effects of collectivism on actual e-commerce use and the moderating effect of price consciousness. *Journal of Electronic Commerce Research, 14*(3), 244–260.

Nugraha, A., Hamin, H., & Elliott, G. (2020). The role and impact of risk reduction in leisure tourism. *Annals of Leisure Research, 25*(2), 179–202.

Nyheim, P., Xu, S., Zhang, L., & Mattila, A. S. (2015). Predictors of avoidance towards personalization of restaurant smartphone advertising: A study from the Millennials' perspective. *Journal of Hospitality and Tourism Technology, 6*(2), 145–159.

Oyedele, A., & Simpson, P. M. (2007). An empirical investigation of consumer control factors on intention to use selected self-service technologies. *International Journal of Service Industry Management, 18*(3), 287–306.

Parasuraman, A., Zeithaml, V. A., & Malhotra, A. (2005). E-S-QUAL a multiple-item scale for assessing electronic service quality. *Journal of Service Research, 7*(3), 213–233.

Park, S., & Huang, Y. (2017). Motivators and inhibitors in booking a hotel via smartphones. *International Journal of Contemporary Hospitality Management, 29*(1), 161–178.

Ponte, E. B., Carvajal-Trujillo, E., & Escobar-Rodríguez, T. (2015). Influence of trust and perceived value on the intention to purchase travel online: Integrating the effects of assurance on trust antecedents. *Tourism Management, 47,* 286–302.

Ranganathan, C., & Ganapathy, S. (2002). Key dimensions of business-to-consumer web sites. *Information and Management, 39*(6), 457–465.

Rossi, M., Mueller-Bloch, C., Thatcher, J. B., & Beck, R. (2019). Blockchain research in information systems: Current trends and an inclusive future research agenda. *Journal of the Association for Information Systems, 20*(9), 1388–1403.

Sabbioni, A., Villano, T., & Corradi, A. (2022). An architecture for service integration to fully support novel personalized smart tourism offerings. *Sensors, 22*(4), 1619.

Santos, J. (2003). E-service quality: A model of virtual service quality dimensions. *Managing Service Quality: An International Journal, 13*(3), 233–246.

Shankar, A., & Jebarajakirthy, C. (2019). The influence of e-banking service quality on customer loyalty. *International Journal of Bank Marketing, 37*(5), 1119–1142.

Sharma, D., Bhardwaj, B., & Dhiman, M. C. (Eds.). (2023). *Leveraging AI and emotional intelligence in contemporary business organizations*. IGI Global. doi:https://doi.org/10.4018/979-8-3693-1902-4

Sharma, S. K. (2019). Integrating cognitive antecedents into TAM to explain mobile banking behavioral intention: A SEM-neural network modeling. *Information Systems Frontiers, 21*(4), 815–827.

Shimpi, S., Bhadange, S., Patil, S., & Anbhule, H. (2022). Impact of online reviews on hotel booking for novice travelers. *International Journal of Hospitality and Tourism Systems, 15*(2), 37–47.

Singh, N., & Sinha, N. (2020). How perceived trust mediates merchant's intention to use a mobile wallet technology. *Journal of Retailing and Consumer Services, 52,* 101894.

Stiakakis, E., & Petridis, K. (2014). Developing and validating a multi-criteria model to evaluate mobile service quality. In F. Martínez-López (Eds) *Handbook of Strategic E-Business Management* (pp. 935–956). Berlin: Springer-Verlag.

Su, D. N., Nguyen, N. N., Nguyen, N. T., Luu, T. T., & Nguyen-Phuoc, D. Q. (2022). Modeling consumers' trust in mobile food delivery apps: Perspectives of technology acceptance model, mobile service quality and personalization-privacy theory. *Journal of Hospitality Marketing and Management, 31*(5), 535–569.

Suhartanto, D., Helmi, A. M., Tan, K. H., Sjahroeddin, F., & Kusdibyo, L. (2019). Loyalty toward online food delivery service: The role of e-service quality and food quality. *Journal of Foodservice Business Research, 22*(1), 81–97.

Tsai, S. P. (2017). E-loyalty driven by website quality: The case of destination marketing organization websites. *Journal of Organizational Computing and Electronic Commerce, 27*(3), 262–279.

Van Beuningen, J., Ruyter, K., Wetzels, M., & Streukens, S. (2009). Customer self-efficacy in technology-based self-service: Assessing between- and within-person differences. *Journal of Service Research, 11*(4), 407–428.

Venkatesh, V., & Bala, H. (2008). Technology acceptance model 3 and a research agenda on interventions. *Decision Sciences, 39*(2), 273–315.

Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science, 46*(2), 186–204.

Venkatesh, V., & Morris, M. G. (2000). Why don't men ever stop to ask for directions? Gender, social influence, and their role in technology acceptance and usage behavior. *MIS Quarterly, 24*(1), 115–139.

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly, 27*(3), 425–478.

Venkatesh, V., Thong, J. Y., & Xu, X. (2012). Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology. *MIS Quarterly, 36*(1), 157–178.

Wang, W. T., & Li, H. M. (2012). Factors influencing mobile services adoption: A brand-equity perspective. *Internet Research, 22*(2), 142–179.

Wolfinbarger, M., & Gilly, M. C. (2003). eTailQ: Dimensionalizing, measuring and predicting etail quality. *Journal of Retailing, 79*(3), 183–198.

Yang, Z., & Jun, M. (2002). Consumer perception of e-service quality: From Internet purchaser and non-purchaser perspectives. *Journal of Business Strategies, 19*(1), 19–41.

Yoo, B., & Donthu, N. (2001). Developing a scale to measure the perceived quality of an Internet shopping site (SITEQUAL). *Quarterly Journal of Electronic Commerce, 2*(1), 31–45.

Zhang, T., Lu, C., & Kızıldağ, M. (2018). Banking "on-the-go": Examining consumers' adoption of mobile banking services. *International Journal of Quality and Service Sciences, 10*(3), 279–295.

Zhao, L., Lu, Y., Zhang, L., & Chau, P. Y. K. (2012). Assessing the effects of service quality and justice on customer satisfaction and the continuance intention of mobile value-added services: An empirical test of a multidimensional model. *Decision Support Systems, 52*(3), 645–656.