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THE INFLUENCE OF WEBSITE QUALITY ON CUSTOMER PURCHASE INTENTION THROUGH THE MEDIATING ROLE OF E-SATISFACTION AND FLOW EXPERIENCE

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ABSTRACT

To attract customers and ensure a competitive advantage in the e-commerce environment, it is crucial to identify which website attributes encourage customers to purchase by offering them overall satisfaction and online customer experience. Although various website attributes have been widely analysed in the literature based on traditional marketing theories, limited studies have applied the holistic view to categorise these website attributes and online consumer experience in the context of flow state. Inspired by the DeLone and McLean IS model and flow theory, this study represents the first to analyse the effect of website quality as the unified perspective of information quality, system quality, and service quality on purchase intention via the mediation of flow experience and e-satisfaction in online travel agencies. This study conducted an online survey with 442 individuals from Turkey who used an online travel agency during the last 12 months. It confirms that telepresence and enjoyment were strongly influenced by system quality and service quality. Further, telepresence and e-satisfaction had a direct effect on purchase intention, while enjoyment did not impact. E-satisfaction was strongly influenced by information quality. Service quality and system quality positively influenced satisfaction but had less significant impact. In terms of the mediation variable, telepresence had mediating effects on the relationship between system quality and purchase intention. E-satisfaction mediated the impact of information, system, and service quality on purchase intention. However, enjoyment had no mediation role in this study. This research provides various unique contributions to the online consumer behaviour literature and e-retailers.

Keywords: Customer satisfaction, e-commerce environment, flow experience, online travel agency, website quality

1.Introduction

With the widespread use of the internet, consumers obtain the benefits of reaching the product or service they prefer anytime, avoiding any geographical limitation. Further, e-commerce does not incur any cost in effort and time, which decreases the customer's time spent searching for products or services and comparing them (Yu and Wu, 2007). Moreover, e-commerce possesses the strength to launch competitive advantages for companies, for instance: low transaction cost, rapid distribution, fast-moving presentation of recent goods and services, and growth of new technologies (Huang et al., 2017). However, being in an online business does not guarantee a competitive advantage because of the intense competition, existing challenges, and technological improvements (Ho and Lee, 2007).

Online users have various website alternatives at their disposal to purchase products and conduct their online transactions. If the website's performance is insufficient, the customers can switch to particular alternatives without any limitations. The question is, "Which attributes make a website effective?" Falling to address this issue, companies are prone to wasting their time and investment to create websites. Hence, e-retailers strive to construct acceptable websites to attract customers to the websites and be aware of some guidelines that satisfy customers' requirements (Cao et al., 2005).

Figuring out customers' attitudes toward a website's attributes assists e-retailers in improving marketing strategies and optimising online users' experience and revenues (Wong and Law, 2005). Indeed, previous research supports this notion highlighted the multiple attributes of website quality impact on e-commerce achievements such as satisfaction, loyalty, and willingness to use and purchase (Aladwani and Palvia, 2002; Goutam and Gopalakrishnan, 2018; Koufaris, 2002; Lee and Lin, 2005; Liu and Arnet, 2000; Palmer, 2002; Park et al., 2007; Wolfinger and Gilly, 2003). However, these studies adopted the fragmented view of web attributes, and they evaluated web quality attributes separately, such as appearance, content, design, privacy, and customer service, instead of using an integrative approach (Ranganathan and Ganapathy 2002). In this direction, DeLone and McLean (2014) claimed that the influence of a website design on customer purchase intention could not be fully examined without an evaluation of the system and information website. To fill this research gap, this study emphasises improving a unified website quality framework based upon the DeLone and McLean IS success Model that integrates the several website quality features analysed by previous research.

This study enables valuable contributions to existing online consumer behaviour literature. First, the majority of studies have adopted traditional theories such as the Technology Acceptance Model (TAM), Expectation Confirmation Theory (ECT) and Stimulus Organism Response model (SOR) to analyse online consumers' intentions, attitudes, and other consumer behaviour (Cao et al., 2005; Gao et al., 2014; Goutam and Gopalakrishna, 2018; Hsu et al., 2012; Lin and Lu, 2000). However, Law et al. (2010) claimed that there is still a requirement to apply different theories from other disciplines, such as psychology, to examine online consumer behaviour and incorporate them into the website evaluation process. Essentially, the main contribution of this study is formulated on flow theory and the IS success model, the structures of which belong to psychology and information systems.

Second, flow experience has been extensively assessed in information systems and various online environments, for instance, online games (Voiskounsky et al., 2004), online banking (Zhou, 2013), omnichannel (Ameen et al., 2020), online learning (Esteban-Millat et al., 2014), internet usage (Thatcher et al., 2008). Although these studies about flow and its influences in the online environment were analysed in prior studies, the relation between websites and consumer behaviour in terms of flow experience has seldom been investigated. In this regard, this study will attempt to enlighten this case by examining the flow experience and website quality of online travel agencies.

Third, most previous research considered the direct effect of satisfaction (Fan et al., 2013; Lau et al., 2011; Lee et al., 2022; Lee and Lin, 2005; Noronha and Rao, 2017), perceived flow (Ali, 2016; Ettis, 2017; Fan et al., 2013; Hsu et al., 2012) on the purchase intention within website quality context. They did not take into account the effect of the mediating role in this context. This study analyses the mediation role of e-satisfaction and flow experience between website quality and intention to purchase.

Lastly, although most studies have focused on online bookstores, C2C retail, mobile payment services, and the airline industry (Cao et al., 2005; Fan et al., 2013; Gao and Li, 2018; Lee and Lin, 2005; Zhou et al., 2010; Zhou, 2013), the tourism industry especially online travel agencies received less attention than others.

Considering all of these, this study represents the first study to analyse website quality based upon the unified perspective of information quality, system quality, and service quality and their

1. Theoretical background

1.1 Website quality

Aladwani and Palvia (2002) described website quality as the "customer's assessment of a website's characteristics and attributes that meet user's requirements and reflecting whole excellence of the website". Many researchers evaluate the web-quality dimensions distributively rather than using an integrative approach (Aladwani and Palvia, 2002; Bai et al., 2008; Chang and Chen, 2009; Goutam and Gopalakrishna, 2018; Hyun and O'Keefe, 2012; Lee and Lin, 2005; Lin and Lu, 2000; Park et al., 2007, Wolfinger and Gilly, 2003). For example, a study focused on travel agencies and examined the effects of website quality on willingness to use was carried out by Park et al. (2007). The three most popular websites (Expedia, Travelocity, and Orbitz) were assessed regarding their fulfilment, ease of use, privacy, responsiveness, and visual appeal. The findings expose that ease of use navigation and information content are essential indicators for predicting willingness to use. Similarly, Nusair and Kandampully (2008) constructed a model on travel websites such as Orbitz.com, Hotels.com, Travelocity.com, and Hotwire.com to analyse the quality that affects customer e-satisfaction. The quality dimensions were playfulness, responsiveness, navigability, information quality, trust, and personalisation. The result demonstrated that online travel companies remain incapable of offering web service attributes to increase customer satisfaction. Moreover, Chang and Chen (2009) defined website quality as interface quality and perceived security. Based on the model, interface quality and perceived security positively influence switching costs, e-satisfaction, and customer loyalty. Although this study concentrated on the components of website quality, such as interface quality and security, they claimed that other multi-faced components with an integrative approach can reveal different results.

In general, several majority researchers have examined the website quality dimensions without an integrative and unified approach. A few studies attempt to combine website quality dimensions with online consumer behaviour based on a unified view (e.g. (Chen et al., 2016; Hsu et al., 2016; Kuan et al., 2008; Lee et al., 2020; Tsao et al., 2016). This is why applying a holistic concept rather than examining the website dimensions separately is essential.

1.2 Information System (IS) success model

DeLone and McLean (1992) developed the Information System Success model and described six variables, including (1) system quality, (2) information quality, (3) usage, (4) user satisfaction, (5) individual impact, and (6) organisational impact. If the information system's quality is higher, individuals are satisfied and use the system, resulting in positive individual performance and organisational productivity development. Over the years, the IS model was revised because of the dramatic advances in information technology, particularly improvements in e-commerce. The service quality positioned to the revised model is an essential variable, especially in e-commerce; it is a field where customer service is crucial. Furthermore,

the individual and organisational impacts coverage as net benefits.

Various website attributes were categorised holistically by applying DeLone's and McLean's three website qualities, as illustrated in Table 1.

The model has been adopted in several contexts. These applications involved a mobile application (Lee and Chung, 2009), online learning (Aldholay et al., 2018), online shopping (Chai and Jun 2003), and virtual reality (Lee et al., 2020). However, the model has not been studied rigorously within online travel agencies.

Table 1 Website attributes based on DeLone and McLean's three website quality dimensions

Quality Dimensions	Website Quality Attributes	References
Information Quality	Accurate, complete, relevant, precise, timely information	Chen et al., 2016; Gao and Li, 2018; Lee and Chung, 2009; Kim et al., 2004; Zhou et al., 2010
System Quality	Easy to use, easy to navigate, well-designed, visually attractive, quick loading	Chen et al., 2016; Gao and Li, 2018; Kim et al., 2004; Zhou 2013
Service Quality	Quick responsiveness, assurance, reliability, empathy, security	Hsu et al., 2012; Liu and Arnett, 2000; Wang et al., (2018); Wang and Tang, 2003

This study aims to improve a framework that advances the understanding of customer satisfaction, flow state, and purchase intention in the tourism industry. Therefore, the IS Success Model of DeLone and McLean is preferred due to its comprehensive scope in explaining online consumer behaviour. This research extends the separate website quality dimensions to a unified view based on the IS success model.

1.3 Flow experience

The flow was first defined by Csikszentmihalyi (1975) and explained as a cognitive state where the individual is completely immersed in activity, ignoring everything around them. Despite this broad definition, Csikszentmihalyi (1988) concentrated on intrinsic motivation to clarify the theory and conducted the study by asking the question of 'What constitutes a good life?' to individuals from diverse backgrounds, such as artists, dancers, and rock climbers. It produced one response, concentrating on full involvement at the moment. Thus, flow focuses on acknowledging this phenomenon of being intrinsically motivated regardless of the extrinsic reward that could derive from the activity (Csikszentmihalyi, 1990). Therefore, flow provides an experience in which individuals are attached to an activity with total concentration, enjoyment, and full involvement by having instinctual motivation during engagement with the activity (Chen et al., 1999).

Hoffman and Novak (1996) focused on understanding the navigation behaviour of customers in the online environment with the state of flow application. In their conceptual model, flow is determined by skill, website speed, challenge, focused attention, and timer distortion. Later, Novak et al. (2000) improved the model relevant to the online flow experience by concentrating on website navigation. They stated that individuals who have a state of online flow expose the following characteristics: (a) The concentrates are entirely on the mutual interaction of the web; (b) being intense involvement; (c) individuals do not consider anything; (d) loss of self-consciousness; (e) time is distorted; (f) physical environment loses its reality and online environment seem to be real; (g) memorising entering flow is satisfying. According

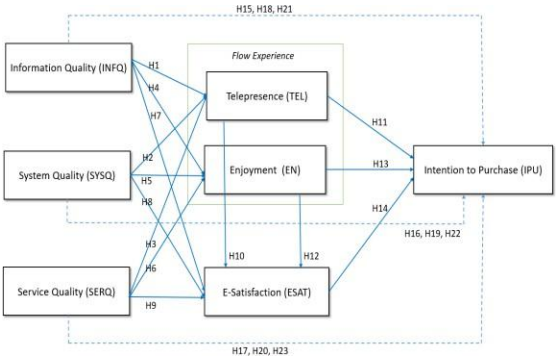
to them, the flow context is presented as significant for explaining consumer behaviour on the World Wide Web and as a method of describing online consumer experiences. Hence, Hsu et al. (2012) proposed that the improvements of e-retailers are subject to their ability to construct facilities for customers to experience flow.

This research broadly focuses on the two factors of perceived telepresence and enjoyment as the dimensions of flow. These two dimensions are examined in the website context as critical dimensions of flow and have received consistent support in research (An et al., 2021; Gao et al., 2019; Giao et al., 2019; Kim et al., 2016; Lee et al., 2019; Ongsakul et al., 2020; Zhou et al., 2010). They find that perceived telepresence and enjoyment are sufficient to represent consumers' flow experience in the virtual world. Thus, this research adopted these two factors as the dimensions of flow.

2. Conceptual Model and Hypotheses Development

This study extends the website quality dimensions as a unified view of DeLone and McLean's IS Model with the application of flow experience. It examines the impact of website quality on customer purchase intention with the mediation role of flow experience and enjoyment in online travel agencies. Figure 1 presents the developed research model for this study.

Figure 1 Developed model for research



: direct effect

: indirect effect

2.1 Web quality and telepresence

Information quality corresponds to the semantic level, creating a rational meaning in the customers' minds, whereas system quality relates to the technical level (DeLone and Mclean, 1992). Lastly, service quality refers to rapidly replying to customers' inquiries, providing personalised service, and maintaining a security and return policy (Kuan et al., 2008).

When consumers are exposed to online information, they tend to become isolated from the existing physical environment and lose their self-consciousness (Choi et al., 2015; Lee et al., 2020). Further, Hsu et al. (2012) claimed that customers who are conscious of high information, system, and service quality tend to experience telepresence and playfulness, resulting in satisfaction and purchasing from the website. If consumers perceive that the website system offers easy navigation to use and more accurate information, they are more likely to be immersed in the system and feel the online environment (Kim and Hyun, 2016). The positive relationship between service quality and telepresence in the previous literature was supported by Gao and Li (2018). As they mentioned, service quality is the determinant of telepresence in e-commerce that diminishes consumers' feeling of being physically present in that environment. Thus, the following hypotheses are formed:

H1: Information quality will positively influence telepresence.

H2: System quality will positively influence telepresence.

H3: Service quality will positively influence telepresence.

2.2 Web quality and enjoyment

Saeed et al. (2003) conducted an integrative framework related to online consumer behaviour that proposed information, system, and service quality as the key predictors influencing consumer behaviour with the mediating role of shopping enjoyment, ease of use, and usefulness. In another study on university websites, Al-Debei (2014) found that the system quality of websites has a positive and direct effect on perceived enjoyment. Nurkaliza (2018) identified a positive link between system quality and perceived enjoyment. In addition, Jang and Noh (2011) stated that service quality is vital in determining perceived enjoyment. More recently, Won et al. (2022) conducted a study examining the influence of web quality on branded sports app usage intention. The researcher claimed that when online consumers experience high-quality information and systems, they tend to perceive the website as enjoyable. The following hypotheses are constructed:

H4: Information quality will positively influence enjoyment.

H5: System quality will positively influence enjoyment.

H6: Service quality will positively influence enjoyment.

2.3 Website quality and satisfaction

Studies focused on the various quality of websites in e-commerce by conducting DeLone and McLean's IS model. These studies demonstrated that information, system and service quality have a positive and significant effect on satisfaction (Chen and Cheng, 2009; Liu and Wang, 2021; Tam et al., 2019; Tseng et al., 2021; Wang et al., 2021; Wang et al., 2018). Noronha and Rao (2017) did a study investigating the effect of website quality on e-satisfaction and intention to purchase regarding online travel booking websites. They concluded that system quality, information quality, and website design are essential predictors of e-satisfaction. Further, Lee et al. (2022) indicated that e-service quality dimensions can significantly positively impact satisfaction. The following hypotheses are constructed:

H7: Information quality will positively influence e-satisfaction.

H8: System quality will positively influence e-satisfaction.

H9: Service quality will positively influence e-satisfaction.

2.4 Telepresence

Novak et al. (2000) described telepresence as the primary flow construct during the navigation process, where the online environment becomes more important than the physical environment. Telepresence is crucial in selecting the tourism industry because it enables customers to feel realistic about their accommodation (Lee et al., 2020). Therefore, when consumers perceive the website as more real than the physical environment, they tend to be more satisfied with the website. Thus, to be experienced telepresence leads to positive satisfaction (Dholakia and Zhao, 2009; Zhao and Lu, 2010). Based upon the above discussion, the hypothesis is set:

H10: Telepresence will positively influence satisfaction.

Another relation was demonstrated in the previous literature is the connection between telepresence and intention to purchase in the tourism sector. Lee (2018) confirms that telepresence positively influences the customer's behavioural intention toward hotel websites.

Gao and Li (2018), Lee et al. (2020), and Ongsakul et al. (2020) also agree that telepresence significantly affects customers' purchase intention. The hypothesis is as follows:

H11: Telepresence will positively influence the intention to purchase.

2.5 Enjoyment

Perceived enjoyment is a positive psychological attitude that refers to how an individual feels joyful, pleasure, and happy with the current position (Menon and Kahn, 2002). According to information technology research, enjoyment is the degree to which users attain joy and pleasure while engaging with the computer system (Ghani et al., 1991). In this direction, they indicated that enjoyment exercises a positive direct influence on e-satisfaction (Ashfaq et al., 2019; Lee et al., 2019; Rekha et al., 2022). Thus, the following hypothesis is improved:

H12: Enjoyment will positively influence the satisfaction.

Another reason for the importance of flow as enjoyment in terms of purchase intention was suggested by Hausman and Siekpe (2007). They found that the perceived level of flow as enjoyment was positively associated with the purchase intention from the website. In line with previous studies, Patanasiri and Krairit (2018) revealed that enjoyment strongly predicts purchasing intention. Based on the evidence presented above, the following hypothesis is constructed:

H13: Enjoyment will positively influence the intention to purchase.

2.6 E-satisfaction

Satisfaction is the value-added distinction between expectation and experience; in other words, customers are satisfied when purchased products and services surpass their expectations (Suchane and Kralova, 2018). Lau et al. (2011) claimed that researchers have recognised customer satisfaction to be an essential indicator of purchase intention, and they were mentioned by many researchers (Ali, 2016; Lee et al., 2022; Noronha and Rao, 2017). The following hypothesis is constructed:

H14: E-satisfaction will positively influence the intention to purchase.

2.7 Mediating effect of flow experience and e-satisfaction

This study also analyses the mediating role of flow experience and e-satisfaction. Hsu et al. (2016) revealed that flow mediates the relationship between website quality information quality, system quality, service quality and purchase intention. Moreover, flow experience also mediates the e-servicescape (aesthetic appeal, layout, financial security) and behavioural intention. (Huang et al., 2017). Flow as telepresence was found to be a significant mediator between the quality of virtual reality (content quality, system quality, vividness) and behavioural intention in destination marketing (Lee et al., 2020). Patel et al. (2020) supported that interface web quality impacts purchase intention by mediating the role of perceived enjoyment. Based on the literature, the following hypothesis is constructed:

H15: Telepresence mediates the relationship between information quality and intention to purchase.

H16: Telepresence mediates the relationship between the system quality and intention to purchase.

H17: Telepresence mediates the relationship between the service quality and intention to purchase.

H18: Enjoyment mediates the relationship between the information quality and intention to purchase.

H19: Enjoyment mediates the relationship between the system quality and intention to purchase.

H20: Enjoyment mediates the relationship between the service quality and intention to purchase.

Many studies examine e-satisfaction as a mediation, especially within the relationship

between website quality and online purchase intention. Bai et al. (2008); and Pereira et al. (2021) developed a model to analyse the mediation role of satisfaction. They found that satisfaction is a significant mediating component for indicating the relation between information quality, service quality, and purchase intention. Similarly, Prashar et al. (2017) and Shukla et al. (2010) confirmed that satisfaction mediates the relation between web informativeness and purchase intention. The following hypothesis is constructed:

H21: E-Satisfaction mediates the relationship between the information quality and intention to purchase.

H22: E-Satisfaction mediates the relationship between the system quality and intention to purchase.

H23: E-satisfaction mediates the relationship between the service quality and intention to purchase.

This study proposes a developed research model based on the hypotheses as illustrated in Figure 1.

3. Research method

3.1 Data collection

An online survey was used to test the conceptual model. The first part of the survey was an overview of the study, involving its aim and voluntary nature. The first question asked whether respondents had used an online travel agency during the last 12 months. If they answered no, the survey was automatically terminated at this stage. Then, the main measurement items in the third stage were presented to those who replied yes. The last part covers the vital demographic attributes of respondents.

The survey was distributed to 529 individuals. Of these, 87 respondents stated that they had not used an online travel agency during the last 12 months, so they were omitted. Therefore, the study's primary analysis involves the data of 442 respondents over 18 years old who have used online travel agencies for the last 12 months.

The demographic profile of the participants is shown in Table 2. The statistics revealed that 208 of the respondents were women and 234 of the respondents were men. The majority of the 49% of the participants are between the ages of 26 and 35. More than half have a bachelor's degree with a percentage of 58%, followed by a master's degree with 28%. A majority of respondents (51%) worked in the private sector. 245 participants stated that their household earned less than 44,401 T.L. for a month.

Table 2 Demographics of respondents

Variable		Frequency	Percentage (%)
Gender	Female	208	47,1
	Male	234	52
Age	26-35	217	49,1
	36-45	88	19,9
	46-55	60	13,6
	56-65	35	7,9
	18-25	29	6,6
	66 or above	13	2,9
Education Level	Bachelor	257	58,1
	Master Degree	109	24,7
	High School	54	12,2
	Doctoral Degree	17	3,8
	Primary School	5	1,1

Occupation	Private Sector	225	50,9
	Public Sector	80	18,1
	Others	58	12,6
	Student	41	9,3
	Unemployed	38	8,6
Household Income	Below 44.401 TL	245	55,4
	44.401 TL and above	197	44,6

3.2 Instrument development

The measurement item scales were adopted from previous studies, for instance, three-item scale of information quality (Chen et al., 2016), five-item scale of system quality (Kim et al., 2014), four-item scale of service quality (Wang et al., 2018), three-item scale of telepresence (An et al., 2020), four-item scale of enjoyment (Ghani and Deshpande, 1994), three-item scale of esatisfaction (An et al., 2020), and three-item scale of purchase intention (Hsu et al., 2012). The developed model in this study has 7 constructs and 26 Items. All items were measured with a 5-point Likert scale, rated from strongly disagree (1) to strongly agree (5) for each measurement.

4. Data analysis and results

4.1 Measurement model

SmartPLS is conducted to analyse the data. The initial stage of the measurement model is to evaluate the internal consistency as reliability and then construct validity before the testing hypothesis. As shown in Table 3, the values of all items for Cronbach's Alpha and Composite Reliability (CR) ranged from 0.86 to 0.94, which were above the threshold value of 0.7 (Hair et al., 2021). The results confirmed that the measurement scale possessed adequate internal consistency.

Table 3: Indicators of reliability and validity constructs

Factor	Item	Loading	Cronbach's α	CR	AVE
Information Quality	INFQ1	0,895	0,943	0,943	0,807
	INFQ2	0,887			
	INFQ3	0,924			
	INFQ4	0,887			
System Quality	SYSQ1	0,890	0,940	0,940	0,759
	SYSQ2	0,855			
	SYSQ3	0,858			
	SYSQ4	0,893			
	SYSQ5	0,859			
Service Quality	SERQ1	0,838	0,912	0,912	0,722
	SERQ2	0,830			
	SERQ3	0,862			
	SERQ4	0,868			
Telepresence	TEL1	0,828	0,864	0,864	0,680
	TEL2	0,825			
	TEL3	0,819			

Enjoyment	EN1	0,890	0,920	0,920	0,742
	EN2	0,877			
	EN3	0,846			
	EN4	0,832			
E-satisfaction	ESAT1	0,866	0,904	0,904	0,759
	ESAT2	0,849			
	ESAT3	0,899			
Intention to Purchase	IPU1	0,891	0,921	0,921	0,796
	IPU2	0,885			
	IPU3	0,900			

Next, to analyse the validation of the model, two main parts of the construct validity as convergent validity and discriminant validity, were tested. According to the results were shown in table 3, the Average Variance Extracted (AVE) for all constructs surpassed the value of 0.5, implying an acceptable convergent validity (Hair et al., 2021).

Further, to analyse the discriminant validity, three main methods,cross-loadings, FornellLarcker criterion, and heterotrait-monotrait ratio (HTMT), were evaluated. The factor loads for each item in the model should obtain the highest value within its own dimensions and there should be more than a 0,1 difference between it and other factor load dimensions (Hair et al., 2021). All items exhibited cross-loading criterion as suggested (Table 4). Next, to analyse the validation of the model, two main parts of the construct validity as convergent validity and discriminant validity, were tested. According to the results were shown in table 3, the Average Variance Extracted (AVE) for all constructs surpassed the value of 0.5, implying an acceptable convergent validity (Hair et al., 2021). Further, to analyse the discriminant validity, three main methods,cross-loadings, FornellLarcker criterion, and heterotrait-monotrait ratio (HTMT), were evaluated. The factor loads for each item in the model should obtain the highest value within its own dimensions and there should be more than a 0,1 difference between it and other factor load dimensions (Hair et al., 2021). All items exhibited cross-loading criterion as suggested (Table 4).

Table 4 Cross loadings

	EN	ESAT	INFQ	IPU	SERQ	SYSQ	TEL
EN1	0,890	0,597	0,375	0,535	0,525	0,52	0,641
EN2	0,877	0,617	0,355	0,511	0,522	0,504	0,643
EN3	0,846	0,603	0,335	0,529	0,488	0,458	0,709
EN4	0,832	0,579	0,336	0,523	0,479	0,462	0,655
ESAT1	0,592	0,866	0,617	0,580	0,584	0,581	0,459
ESAT2	0,572	0,849	0,611	0,534	0,584	0,611	0,428
ESAT3	0,651	0,899	0,601	0,618	0,540	0,629	0,512
INFQ1	0,380	0,622	0,895	0,429	0,468	0,628	0,263
INFQ2	0,343	0,629	0,887	0,414	0,497	0,627	0,279
INFQ3	0,369	0,646	0,924	0,462	0,496	0,628	0,296
INFQ4	0,370	0,614	0,887	0,389	0,483	0,604	0,278
IPU1	0,534	0,583	0,425	0,891	0,625	0,455	0,512
IPU2	0,560	0,590	0,443	0,885	0,627	0,480	0,461
IPU3	0,534	0,601	0,396	0,900	0,595	0,475	0,508
SERQ1	0,497	0,552	0,449	0,591	0,838	0,425	0,413
SERQ2	0,466	0,567	0,485	0,570	0,830	0,443	0,414
SERQ3	0,522	0,529	0,438	0,611	0,862	0,455	0,463
SERQ4	0,503	0,572	0,469	0,575	0,868	0,413	0,442
SYSQ1	0,484	0,639	0,632	0,481	0,424	0,890	0,404
SYSQ2	0,480	0,605	0,612	0,448	0,424	0,855	0,382
SYSQ3	0,478	0,610	0,598	0,455	0,438	0,858	0,383
SYSQ4	0,508	0,618	0,615	0,436	0,461	0,893	0,414
SYSQ5	0,507	0,562	0,556	0,475	0,477	0,859	0,425
TEL1	0,647	0,453	0,287	0,443	0,407	0,386	0,828
TEL2	0,618	0,436	0,257	0,466	0,424	0,373	0,825
TEL3	0,633	0,437	0,223	0,460	0,431	0,381	0,819

As shown in Table 5, the square root of each factor's average variance extracted coefficient was greater than the correlation coefficient of the other factor, satisfying Fornell-Larcker's criteria (Hair et al., 2021).

Heterotrait-monotrait ratio (HTMT) is the last criterion in order to evaluate discriminant validity.

As listed in table 6, all coefficients were below the value of .90 (Hair et al., 2021).

Overall, cross-loading, Fornell-Larcker's, and Heterotrait-monotrait ratio criteria in this study have successfully proceeded and provided strong evidence for discriminant validity.

in the model explained 33% of the TEL, 45% of the EN, and 72% of the ESAT. The model's

Table 5 Fornell-Larcker

	EN	ESAT	INFQ	IPU	SERQ	SYSQ	TEL
EN	0,861						
ESAT	0,695	0,871					
INFQ	0,407	0,699	0,898				
IPU	0,609	0,663	0,472	0,892			
SERQ	0,585	0,653	0,541	0,690	0,85		
SYSQ	0,564	0,697	0,692	0,527	0,511	0,871	
TEL	0,768	0,536	0,311	0,553	0,51	0,461	0,824

Table 6 Heterotrait-monotrait ratio (HTMT)

	EN	ESAT	INFQ	IPU	SERQ	SYSQ	TEL
EN							
ESAT	0,695						
INFQ	0,407	0,7					
IPU	0,609	0,662	0,472				
SERQ	0,584	0,654	0,542	0,69			
SYSQ	0,564	0,697	0,692	0,527	0,511		
TEL	0,768	0,535	0,31	0,553	0,51	0,461	

4.2 Structural model and hypotheses testing

The bootstrapping process with 5,000 iterations in SmartPLS was adopted to test the hypotheses. Measurements such as R2, model fit values, and Q2 were used to assess model quality. R2 is the coefficient of determination, which measures the power of explanation of the total independent variable. For this study, the independent variables dependent variables, such as TEL, EN, and ESAT, explained 50% of the IPU. According to the model fit criterion, SRMR should be less than or equal to 0.08, NFI more than or equal to 0.90, and the Chi-square value below 3 (Hair et al., 2021). The model fit values of this study are 0,03 for SMRE, 0,90 for NFI, and 1 for Chi-square, which is a sufficient fit. Moreover, Q2 (predictive relevance) uses the

blindfolding process to measure the model's out-of-sample predictive power (Hair et al., 2022). Q2 thresholds higher than 0, 0,25 and 0,50 are described as having high, medium, and low prediction accuracy (Hair et al., 2022). In this study, whole dependent values are higher than 0. EN, IPU and TEL have medium predictive power, whereas ESAT has high predictive power.

As presented in Table 7, information quality has no positive influence on telepresence (β:-0,166, p: 0,101). Hence, H1 was not supported. However, it was found that system quality positively influences telepresence (β: 0,364 p: 0,000), supporting H2. The result supports previous literature in the field (Hsu et al., 2012; Kim and Hyun, 2016). Out of the three factors of website quality dimensions, service quality was found to be the highest positive contributor to telepresence (β: 0,413, p: 0,000). As such, H3 was supported. This result was supported by the work of Gao and Li (2018), who claimed that e-service was found to be one of the strong determinants of telepresence in online travel agency websites.

This study cannot reveal a positive relationship between information quality and enjoyment (β:0,125, p: 0,067). Thus H4 was not supported. Besides, system quality positively influences the enjoyment (β: 0,430, p: 0,000), supporting H5. This result agrees with the literature (Al Debei, 2014; Nurkaliza, 2018; Won et al., 2022) that has investigated the positive impact of system quality on enjoyment. The positive relationship between service quality and enjoyment is found to be significant (β: 0,433, p: 0,000), indicating H6 was supported. This result is consistent with the study of Jang and Noh (2011).

Furthermore, information quality (β: 0,342, p: 0,000), system quality (β: 0,170, p: 0,012), and service quality (β: 0,173, p: 0,010) were positively associated with e-satisfaction. Hence, H7, H8, H9 were supported. The results are in agreement with the work of (Chen and Cheng, 2009;

Liu and Wang, 2021; Tam et al., 2019; Tseng et al., 2021; Wang et al., 2021; Wang et al., 2018).

Telepresence does not positively influence e-satisfaction (β:- 0,030, p: 0,680), while it influences purchase intention (β: 0,207, p: 0,013). Hence, H10 was not supported, while H11 was confirmed. The positive relationship between telepresence and purchase intention was confirmed by previous similar studies (Gao and Li, 2018; Lee, et al., 2020; Ongsakul et al., 2020).

The path from enjoyment and e-satisfaction was significant (β: 0,382, p: 0,000), supporting H12. The results are consistent with the literature (Ashfaq et al., 2019; Lee et al., 2019; Rekha et al., 2022). The findings were unable to claim a positive relationship between enjoyment and intention to purchase (β: 0,127, p: 0,233). Hence, H13 was not supported.

As proposed, e-satisfaction was positively associated with the purchase intention (β: 0,464, p: 0,000), which resulted in H14 being confirmed. This positive significant finding is consistent with previous work (Ali, 2016; Noronha and Rao, 2017; Lau et al., 2011).

In addition, testing the indirect effects as multiple mediation variables, specific indirect effects were evaluated by running a bootstrapping technique. This study was unable to reveal a mediation role of telepresence between information quality and intention to purchase (β: -0,034, p: 0,228). On the other hand, telepresence mediates the relationship between the system quality and intention to purchase (β: 0,076, p: 0,038). This result was consistent with (Hsu et al., 2016; Lee et al., 2020). Hence, H15 was not supported, while H16 was supported. Telepresence has no mediation role between service quality and purchase intention (β: 0,086, p: 0,051). Thus H17 was not supported. In this study, enjoyment does not mediate the relationship between information quality (β: -0,016 p: 0,354), system quality (β: 0,055, p: 0,250), service quality (β:

0,055, p: 0,244) and purchase intention. Therefore, H18, H19, and H20 were not supported.

It was found that information quality (β: 0,159, p: 0,000), system quality (β: 0,079, p: 0,020), and

service quality (β: 0,080, p: 0,043) influence intention to purchase with the mediating role of e-satisfaction. Hence, H21, H22, H23 were supported. This result is in agreement with the literature (Bai et al., 2008; Pereira et al., 2021)

Table 7 Significant of path coefficients

Hypothesized Path	β	STDEV	T-Statistics	P-Values	Conclusion
Direct Effects					
H1: INFQ→ TEL	-0,165	0,101	1,641	0,101	Rejected
H2: SYSQ→ TEL	0,364	0,092	3,967	0,000	Supported
H3: SERQ→ TEL	0,413	0,074	5,571	0,000	Supported
H4: INFQ→ EN	-0,125	0,068	1,828	0,067	Rejected
H5: SYSQ→ EN	0,430	0,069	6,232	0,000	Supported
H6: SERQ→ EN	0,433	0,059	7,35	0,000	Supported
H7: INFQ→ ESAT	0,342	0,062	5,473	0,000	Supported
H8: SYSQ→ ESAT	0,170	0,068	2,511	0,012	Supported
H9: SERQ→ ESAT	0,173	0,067	2,568	0,01	Supported
H10: TEL→ ESAT	-0,030	0,073	0,412	0,68	Rejected
H11: TEL→ IPU	0,207	0,084	2,482	0,013	Supported
H12: EN→ ESAT	0,382	0,082	4,688	0,000	Supported
H13: EN→ IPU	0,127	0,106	1,194	0,233	Rejected
H14: ESAT→ IPU	0,464	0,079	5,848	0,000	Supported
Mediation (Indirect) Effects					
H15: INFQ→ TEL→IPU	-0,034	0,028	1,204	0,228	Rejected
H16: SYSQ→ TEL→IPU	0,076	0,036	2,078	0,038	Supported
H17: SERQ→ TEL→IPU	0,086	0,044	1,956	0,051	Rejected
H18: INFQ→ EN→IPU	-0,016	0,017	0,926	0,354	Rejected
H19: SYSQ→ EN→IPU	0,055	0,047	1,152	0,250	Rejected
H20: SERQ→ EN→IPU	0,055	0,047	1,167	0,244	Rejected
H21: INFQ→ ESAT→IPU	0,159	0,037	4,254	0,000	Supported
H22: SYSQ→ ESAT→IPU	0,079	0,034	2,330	0,020	Supported
H23: SERQ→ ESAT→IPU	0,080	0,039	2,035	0,043	Supported

5. Discussion and conclusion

5.1 Discussion of the findings

According to the empirical findings, accurate, up-to-date, relevant information does not emerge as a feeling of physically being in the online environment. However, it was found that system quality positively influences telepresence. It indicates that engaging an online travel agency website with a high-quality system generates a feeling of telepresence. Out of the three dimensions of website quality, service quality was found to be the highest positive contributor to telepresence. Thus, service quality is the main factor, making the customer feel like they were on the website and forgetting the physical environment they were in. The higher the standard of service quality, such as quick

response, rapid customer service, customisation, and privacy protection on the website, the more customers feel like they are in a real-world location.

This study cannot reveal a positive relationship between information quality and enjoyment. On the other hand, both system quality and service quality evoke positive emotions in customers by enhancing their instinctive motivation as perceived enjoyment. Well-designed websites facilitate customers' enjoyment because they feel frustrated when they perceive slow and complex-processing websites.

Moreover, the study's results confirmed the hypothesis that when customers perceive a travel website with a high system and service quality, they tend to be satisfied with the website. Rapid changes in the dynamic tourism sector impact website design. Therefore, it is crucial to update sales-related details promptly and accurately to prevent customers from considering opting on other commercial sites. Poor-quality websites cause dissatisfaction and negative net benefits (DeLone and McLean, 2003). When the website provides an easy navigation system to customers, they tend to experience flow and become satisfied (Gao et al., 2014). Well-designed layout systems decrease customers' search time costs, resulting in a higher level of satisfaction (Jarvenpaa and Tood, 1997). Further customer satisfaction is obtained by system quality with robust transaction and privacy policies.

It can be understood from the results that increasing the telepresence effect on hotel websites including the viewability of videos enables customers to imagine themselves in the hotel they were searching, and direct them to make a reservation via the website. This means that as long as online consumers are immersed into the website as a virtual hotel destination, they are more likely to have high purchase intention. Further, if customers perceive engaging with the website as enjoyable, their e-satisfaction level is enhanced. The study also found that e-satisfaction is the main contributor to driving customers to book their hotel reservations from the website. It follows that the more customers are satisfied with the online travel agency website, the more willing they are to process a purchase transaction.

When the mediator role is evaluated, the study confirmed that if customers perceive that the website has a quality system that will increase their feeling of being in the online environment, then they will proceed to purchase. Between the two mediators of flow experience involving telepresence and enjoyment, telepresence was a significant predictor by mediating the system quality and purchase intention, but this significant mediation effect found in telepresence was not valid for enjoyment as with any other hypothesis.

In addition, if customers believe that the website has clear, up-to-date, relevant hotel information, they become satisfied and are more likely to book the hotel via the website. When customers consider a travel agency website to have easy navigation and attractive visuals, this positively affects their satisfaction level, resulting in actual purchases. Lastly, other qualities such as responsiveness, understanding of customers' needs, and superior customer service lead to purchase intention by satisfying them.

5.2 Theoretical implications

This study provides several unique theoretical implications, distinguishing it from outdated studies. The main contribution of the study is to form an integrative framework of website quality by incorporating the antecedents of flow experience and e-satisfaction. Few studies (Chen et al., 2016; Hsu et al., 2016; Kuan et al., 2008; Lee et al., 2020; Tsao et al., 2016) attempted to combine website quality dimensions as a unified view with online consumer behaviour. Accordingly, this study expands the website quality dimensions to a unified view of information quality, system quality, and service quality based on the DeLone and McLean IS model. Thus, academia and e-retailers benefit from this holistic perspective to obtain accurate marketing results.

A large body of previous studies have analysed online consumers' behaviour based on traditional models, especially the Technology Acceptance Model, Expectation Confirmation Theory and

Stimulus Organism Response Model (Cao et al., 2005; Gao et al., 2014; Goutam and Gopalakrishna, 2018; Hsu et al., 2012; Koppis et al., 2005; Lin and Lu, 2000). This is the first empirical research to bridge DeLone and McLean's IS success model and flow theory in exploring the function of website quality scales on consumer behaviour by investigating the mediation role of telepresence and enjoyment in the tourism sector as an online travel agency.

Although the flow experience has been widely used in several online environments such as online (Voiskounsky et al., 2004), online banking (Zhou, 2013), omnichannel (Ameen et al., 2020), online learning (Esteban-Millat et al., 2014; Rodriguez-Ardura et al., 2015), internet usage (Thatcher et al., 2008) there are limited studies analysing the flow in the different context. Thus this study provides another contribution by developing an understanding of online flow experience in terms of website quality.

Apart from integrating the flow into the research model, Ali (2018) and Hausman and Siekpe (2008) asserted that future studies should involve emotional components to analyse their effect on satisfaction and purchase intention. Hence, this study anebles a recent direction on how telepresence and enjoyment affect purchase intention.

Most studies have been focused on service quality without evaluating information quality and system quality (Cai and Jun, 2012; Ho and Lee, 2007; Lau et al., 2011; Lee et al., 2022; Lee and Lin, 2005; Wang and Tang, 2003; Zeithaml et al., 2000). This study offers more detailed and richer scales to examine web quality by integrating information quality and system quality into the research model. Further, this study provides insight into website quality with multiple mediation analyses. Lastly, little research has been conducted in the tourism sector, especially online travel agencies. To fill this literature gap, this study's application area is an online travel agency.

5.3 Managerial implications

Apart from theoretical implications, the findings also offer effective marketing tools for both the e-commerce environment and companies. E-commerce experts in the tourism sector should be cognizant of which website features they need in order to offer overall customer satisfaction as well as a fulfilled online experience that increases their sales figures. To prevent customers from bypassing the page, online travel agencies should deliver a clear, sufficient, relevant and optimum amount of information rather than overloaded or too little information. Especially, the pricing in the tourism sector is dynamic and fluctuates frequently. Hence online travel agencies should provide the latest and up-to-date information to satisfy customers' requirements and obtain the optimum deals. As for system quality, e-retailers should update their system structure and provide visually well-designed websites with fast loadings of text/graphics and easy-to-use navigation features. The page layout should be designed consistently throughout the website. For example, back and forward buttons should be posited in the same place on each page and have the same shape and coloured buttons. Hence, easy navigation, well-designed, and speed of webpages are strong factors in impacting satisfaction and purchase intention.

Moreover, they should build highly responsive websites to customers' requirements. For instance, online travel agencies should use the FAQ (Frequency Asked Question) section on the website to identify online users' primary concerns, such as privacy/security policies, cancellation process, and on-time delivery. They should provide live customer service, including live text chat and banner ads, and place a 'help' button. Further, stating clear privacy/security policies and advanced security technologies may result in customer satisfaction. Customers who are fulfilled with the website service quality are more likely to obtain purchase intention and make actual purchases.

In addition, this study proposed that telepresence with hotel website system quality can increase the likelihood of purchasing from the online travel agency website. Hence, the hotel website should obtain various sensory attributes such as video

clips, interactive visuals, destination birdview, and customised tour options that can assist customers live the experience. These attributes provide them with realistic destination experiences, eventually leading to their intention to book their reservation from the website.

5.4 Limitations and further research directions

As with all research, the study has a few limitations, which may offer further research directions. First, this research concentrates on the tourism sector as an online travel agency. As such, it is not suitable to generalise and apply these analytical results to other online services. Future studies might analyse and confirm the relationship addressed in this study in other tourism industry and travel sectors, such as car rentals, hotel websites, airline websites, and other e-commerce segments.

Second, the determinants may be influenced by cultural factors since the survey respondents were people living in Turkey. Accordingly, testing the same model for different countries and conducting cross-cultural studies is recommended to extend the model's generalizability.

Third, the model can be improved by adding other constructs, such as price, playfulness, and etrust, influencing customers' behaviour. Future studies could advance the same framework to omnichannel marketing by adding variables such as physical store quality to analyse consumer behaviour.

Finally, respondents completed the online survey questionnaire based on a plurality of online travel agency websites instead of responding to a survey focused on a singular website, which would yield different results regarding customers' perceptions. Future studies may consider designing the survey questionnaire around a particular website.

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