

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 making them more satisfied and offering an online customer experience. Although various website attributes have been widely analysed in the literature based on traditional marketing theories, there are limited studies that have applied the holistic view to categorise these website attributes and online consumer experience regarding flow state. Inspired by the DeLone and Mclean IS model and flow theory, this study is the first study to analyse the influence of website quality as the unified perspective of information quality, system quality, and service quality on purchase intention, with the mediating role of flow experience and e-satisfaction.

In this study, an online survey was conducted with 442 individuals from Turkey who used an online travel agency last 12 months. Results confirm 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, but enjoyment did not affect it. E-satisfaction was strongly influenced by information quality. Service quality and system quality have a positive influence on satisfaction but create a less significant impact. As for the mediation effect, telepresence mediates the impact of system quality on purchase intention. E-satisfaction mediates the impact of information, system, and service quality on purchase intention. However, enjoyment has 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

INTRODUCTION

With the increasing use of the internet, consumers obtain the benefits to reach the product or service they prefer at any time avoiding any geographical limitation. Further e-commerce does not obtain any search cost that decreases the customer's spending time on searching products or services and comparing them. Thus, e-commerce enables customers to access the suitable price and information of the product/service from multiple e-retailers more conveniently and rapidly compared to traditional shopping (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 of competitive advantage because of the intense competition, existing challenges, and technological improvements (Ho and Lee, 2007).

Online users possess various website alternatives to purchase products and complete their online transactions. If the performance of the website is insufficient, the customers can switch to particular alternatives without any online limitations. The question is "Which attributes make a website effective?" Without replying to this issue, companies tend to waste their time, and investment to create websites. Hence, to attract customers to the websites, e-retailers attempt to construct acceptable websites and know some guidelines that satisfy customers' requirements (Cao et al., 2005). High-quality websites are more likely to attract customers compared to poor-quality ones and are regarded as a key to e-commerce success (Parasuraman et al., 2004). For instance, inadequate website quality causes a 50 per cent decrease in sales resulting from online customers being incapacitated to access what they desire, and a decrease of 40 per cent in revisit because of the initial adverse experience (Schwabe et al., 2021).

Figuring out users' perceptions on the website's attributes would assist e-retailers improve better marketing strategies, and optimize online users' experience, and revenues (Wong and Law, 2005). In support of the notion, previous researches have highlighted the multiple attributes of website quality impact on e-commerce achievement such as satisfaction, loyalty, and willingness to use and purchase (Aladwani and Palvia, 2002; Dickinger and Stangl, 2013; Goutam and Gopalakrishnan, 2018; Hwang and Kim, 2007; Koufaris, 2002; Lee and Lin, 2005; Liu and Arnet, 2000; Palmer, 2002; Park et al., 2007; Wolfinger and Gilly, 2003). However, these mentioned 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, the future literature has to offer a unified view in terms of website quality, and a certain frame to categorise the mentioned attributes for the assessment of its quality (Chang and Chen, 2009). 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. For the purpose of filling this research gap, this study emphasizes improving a unified website quality model based on the DeLone and McLean IS Model that integrates the several website quality features analysed by previous research.

In addition, the majority of studies have adopted traditional theories such as 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., 2011; 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. This requires many researchers have to improve web quality dimensions based on the flow theory complying with the aim of the sector. Essentially, the main contribution of this study is not only formulated on traditional theories as the Theory of Reasoned Action but also on the flow theory and the IS success model.

This study enables valuable contributions to existing online consumer behaviour literature. First, flow experience has been widely used in information systems and various online environments such as 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 relationship between websites and consumer behaviour in terms of flow experience have seldom been investigated. In this concern, this study will attempt to shed light on this case by examining the flow experience and website quality in online travel agencies.

Second, although most studies have focused on online bookstores, C2C retail, mobile payment services, and the airline industry (Cao et al., 2005; Fan and Kim, 2013; Gao and Li, 2018; Hwang and Kim, 2007; Lee and Lin, 2005; Zhou et al., 2010; Zhou, 2012), the tourism industry especially online travel agencies received less attention than others.

Third, most previous research considered the direct effect of satisfaction (Ali, 2016; Fan and Kim, 2013; Lau et al., 2011; Lee et al., 2022; Lee and Lin, 2005; Noronha and Rao, 2017; Parashar et al., 2017), perceived flow (Ali, 2018; Ettis, 2017; Fan and Kim, 2013; Hsu et al., 2011) 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.

Considering all of these, this study is the first study to analyse website quality based upon the unified perspective of information quality, system quality, and service quality, and their relationship to online purchasing intention, in light of the mediating role of customer satisfaction and flow experience as telepresence and enjoyment in online travel agencies.

Website quality

Aladwani and Palvia (2002) defined website quality as the “online user’s assessment of a website’s characteristics and attributes that meeting user’s requirements and reflecting whole excellence of the website”.

Many researchers evaluate the web-quality dimensions distributively rather than using an integrative approach (Astrid and Stangl, 2011; Aladwani and Palvia, 2002; Bai et al., 2008; Chang and Chen, 2009; Goutam and Gopalakrishna, 2018; Hyun and O’Keefe, 2012; Hwang and Kim, 2006; 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, security, information content, responsiveness, and visual appeal. The findings expose that ease of use navigation and information content as essential indicators for predicting willingness to use. 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 as interface quality and security, they claimed that other multi-faced components with an integrative approach can reveal different results.

It can be understood that 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 it is essential to apply a holistic concept rather than examining the website dimensions separately.

The state of flow

The flow theory was first defined by Csikszentmihalyi, (1975) and explained as a cognitive state where the individual is completely immersed in activity ignoring everything around them.

According to Hoffman and Novak (1996), customer experience in the online environment is a cognitive state experienced throughout a customer's interaction with the website. Indeed, creating an efficient website depends on the state of flow. Thus, they focused on understanding the navigation behaviour of customers in the online environment with practical and theoretical applications. Hence, Hsu et al., (2012) proposed that the improvements of online marketers are subject to their ability to construct opportunities for customers to experience flow.

Novak et al. (2000) improve the model which is relevant to the content of online flow, 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

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; Hwang et al., 2007; Kim et al., 2016; Lee et al., 2020; Ongsakul et al., 2020; Zhou et al., 2010). They find that perceived telepresence and enjoyment are sufficient to represent consumers' flow experience in the online environment. Thus, this research adopted these two factors as the dimensions of flow.

RESULTS

Data analysis technique

SmartPLS is a widely used technique for testing multivariate analysis, where multiple variables and various hypotheses are examined simultaneously (Hair et al., 2021). In addition, while the normality distribution assumption is required to progress in other data analysis programs, there is no requirement to test whether it has a normal distribution or not in the Smart PLS. Therefore, SmartPLS is conducted to analyse the data.

Measurement model

The initial stage of the measurement model is to evaluate the internal consistency as reliability and then construct validity before the testing hypothesis. Cronbach's Alpha value and Composite Reliability coefficient should exceed 0.7, additionally above 0.95 is not desirable (Hair et al., 2021). It can be observed that Table 2 Cronbach's Alpha values, CR coefficient for each construct are higher than 0.7. Hence, the findings demonstrate an **internal consistency**.

Next, to analyse the validation of the model, two main parts of the **construct validity** as convergent validity and discriminant validity were tested. **Convergent validity** is tested by average variance extracted (AVE). According to Hair et al. (2021) the criterion of the convergent validity is that AVE should be higher than 0.5. All of the item's AVE value exceed 0.5 (Table 2). Hence, the findings reveal a good convergent validity.

The second crucial part of construct validity is **discriminant validity**. To analyse the discriminant validity, three main methods as cross-loadings, Fornell-Larcker criterion, and heterotrait-monotrait ratio (HTMT) are tested.

The factor load 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). As presented in Table 3 the cross loadings criterion was supported.

As for the Fornell-Larcker Criterion, the square root of the average variance extracted coefficient of each factor needs to obtain a greater value when compared with the correlation coefficient of the other factor (Hair et al., 2021). As given in Table 4 Fornell-Larcker criterion was supported.

Heterotrait-monotrait ratio (HTMT) coefficients are the last criterion to provide discriminant validity. The coefficients should be below the value of .90 (Hair et al., 2021). Considering all of these criterion, there is a good discriminant validity of this study (see in Table 5).

Structural model

After testing the internal consistency and construct validity, model fit values of the path model were assessed. For model fit, SRMR should be less than or equal to 0.08, NFI should be more than or equal to 0.90, and the Chi-square value should be 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 acceptable according to model fit recommended values.

Figure 2 presents the findings of the structural model. The independent variables in the model explained %33 of the TEL, %45 of the EN, %72 of the ESAT. The dependent variables as TEL, EN and ESAT in the model explained %50 of the IPU.

It was found that Information quality has no positive influence on telepresence. Although accurate, up-to-date, relevant information increase customers' knowledge about the service, it does not emerge a feeling of physically being in the online environment. However, it was found that system quality positively influences telepresence, indicating that when engaging an online travel agency website which has a high quality system, it generates a feeling of telepresence. The result supports previous literature in the field (Kim and Hyun, 2016; Lee et al., 2019; Lee et al., 2020). Out of the three factors of telepresence, service quality was found to be strong positive indicator to telepresence. Thus Service quality is a strong determinant of telepresence in online travel agency websites that diminishes the feeling of being physically from the environment. Service quality is the main factor, making the customer feel like they were on the website and forgetting the physical environment they were in. This result was supported by the work of Moon and Armstrong, (2020) they claimed e-service is found to be a strong determinant of telepresence in the online travel agency websites. In addition, this positive relation is consistent with the findings of Gao et al. (2009). The findings suggested that service quality results in the feeling of telepresence. Thus the higher the standard of service quality such as quick response, rapid customer service, customization, and privacy protection on the website, the more customers feel themselves as in a real-world location.

This study cannot able to reveal a positive relationship between information quality and enjoyment. Accordingly, the study demonstrates that accurate, sufficient and updated information on the website does not affect the customers' emotions as feeling enjoyable. It was found that System quality positively influences enjoyment. This result is in agreement with the literature (Al-Debei, 2014; Nurkaliza, 2018; Qin et al., 2022, Wang et al, 2022) that has investigated the positive impact of system quality on enjoyment. Well-designed websites facilitate customers' enjoyment because they feel frustrated when they perceive slow and complex processing websites. In addition, service quality was found to be positively influencing enjoyment. This positive relationship is consistent with the literature (Jang and Noh, 2011; Seol et al., 2016). Both system quality and service quality remind positive emotions to customers by enhancing their instinct motivation as perceived enjoyment.

E-satisfaction is positioned at the centre of the research model, apart from telepresence and enjoyment. The component of e-satisfaction is integrated from the IS success model of the DeLone and Mclean. This study explains e-satisfaction very high with the value of R: 0.720 meaning that 72% of customers' satisfaction with the online travel agency website is explained in this model. In the current study, three contributors were used to forecast e-satisfaction. Information quality is the highest influence for e-satisfaction. Thus it is substantial to update, timely, and accurate travel information, unlike customers who are more likely to migrate to another website due to the rapid dynamic changes in tourism sector (Gao et al., 2014). These results is in agreement with the literature (Chen and Cheng, 2009; Chiu et al., 2007; Lian, 2018; Liu and Wang, 2021; Tam et al., 2019; Tseng et al., 2021; Wang et al., 2021). Further Delone and Mclean's IS model examined the effect of information quality, system quality, and service quality on e-satisfaction as in this study. They asserted that information, system, and service quality have an impact on user satisfaction and purchase intention. Poor quality leads to dissatisfaction and negative net benefits (DeLone and Mcleani 2003). The study results were able to support a positive relationship between system quality and e-satisfaction. When the website provides easy navigation and system to customers, they are more likely to experience flow and be satisfied with the website (Gao et al., 2014). The results are in agreement with the work of (Chiu et al., 2007; Lee and Chung, 2008; and Lian, 2008). Well-designed layout systems decrease customers' cost of searching time, resulting in a higher level of satisfaction (Jarvenpaa and Tood, 1997). Further, system quality with the transaction and privacy policies leads to customer satisfaction (Kim, 2020).

It was found that service quality positively influences e-satisfaction. This was confirmed in the work of various studies (Chen and Cheng, 2009; Chiu et al., 2007; Liu and Wang, 2021; Tam et al., 2019; Tseng et al., 2021; Wang et al., 2021). In addition to this, other studies integrated SERQUAL and TAM models to analyse the service quality and satisfaction instead of the IS model. Their results supported that service quality highly influenced customer satisfaction. (Goutam and Gopalakrishna, 2018; Lau 2011; Lee et al., 2022; Lee and Lin, 2005). If customers observe that a travel website with high system and service quality, then they tend to be satisfied with the website.

It was found that telepresence has no positive influence on e-satisfaction. This result was supported by the work of Lee et al., (2019). The results revealed that telepresence has a positive direct effect on intention to purchase. This means that as far as online consumers are immersed into the website as a virtual hotel destination, they are more likely to have high purchase intention. This result confirms the previous similar studies (Gao and Li, 2019, Lee, 2018; Ongsakul et al., 2021). Increasing the telepresence effect on hotel websites as 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.

The relationship between enjoyment and e-satisfaction was tested. The results support that if customers perceive that engaging with the website is enjoyment, then their e-satisfaction level enhance. The results are consistent with the literature (Ashfaq et al., 2019; Gharbi, 2012; Lee et al., 2018; Rekha et al., 2021). The study was unable to claim a positive relationship between enjoyment and intention to purchase.

The findings reveals a positive relationship between ESAT and IPU. This suggested that the main contributor that attracts customers to book their hotel reservations from the website is e-satisfaction. The more customers are satisfied with the online travel agency website, the more they are willing to process a purchase transaction. This positive significant finding is not coincidental and is consistent with previous work (Ali Abumalloh et al., 2020; Chi, 2018; Cronin and Taylor, 1992; LaBarbera and Mazursky, 1993; Noronha and Rao, 2017; Prashar et al., 2017; Zeithaml et al., 1993).

It can be understood that one of the purposes of the research was to examine the determinants influencing purchasing intention within online travel agencies. The model explains %50 of the customers' intention to book a hotel from the website. The model demonstrates that there are

three direct influencers to purchase intention. However, the results show that two factors TEL and ESAT explain IPU, whereas the EN factor does not have a significant impact on IPU.

Besides the direct effect, this study also examined the mediating role of telepresence, enjoyment, and e-satisfaction. This study was unable to reveal a mediation role of telepresence between information quality and intention to purchase. On the other hand, confirming that if customers perceive that the website has a quality system and that will increase their feeling of being in the online environment, then they will proceed the purchase. This result was consistent with (Ali, 2016; Lee et al., 2020). Service quality has no indirect effect on purchase intention through telepresence.

Within the online atmosphere, previous research have emphasized the importance of mediating the role of flow experience between website quality and shopping behaviour (Gao and Bai, 2014; Huang et al., 2017; Hsu et al., 2017, Patel et al., 2020). However, this study findings did not supported the mediation role of flow as enjoyment. It can be understood that enjoyment does not mediate the relationship between information, system, service quality and purchase intention in this study.

The important mediation role of e-satisfaction in the online environment was broadly addressed in the literature review section. In line with the literature review, it was found that e-satisfaction mediates the relationship between information quality and intention to purchase. Thus if customers believe that the website has clear, up-to-date, relevant hotel information, they become satisfied and they are more likely to book the hotel via the website. This result is in agreement with the literature (Pereira et al., 2021; Prashar et al., 2017; Shukla et al., 2010). In the same line, the results demonstrated the mediating role of e-satisfaction between system quality and intention to purchase. These empirical findings reveal that when customers consider a travel agency website to have an easy navigation and attractive image then this positively affects their satisfaction level, and hence result in purchases.

To conclude, it was found that there is an indirect effect from service quality to intention to purchase mediated by e-satisfaction. Service quality has an indirect effect on purchase intention through e-satisfaction which implies that a responsiveness, understanding of customers' needs, and customer service lead to purchase intention by satisfying them. Hence higher service quality encourages customers to be satisfied, increasing the probability that they purchase from the website. The empirical findings support previous studies work in this field (Aggarwal, 2020;

Alharthey, 2019; Bai et al., 2008; Hasanov and Khalid, 2015; Liao et al., 2022; Prashar et al., 2017; Shukla et al., 2010).

DISCUSSION

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 when engaging an online travel agency website which has a high-quality system, it generates a feeling of telepresence. Out of the three factors of telepresence, 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, customization, and privacy protection on the website, the more customers feel themselves as in a real-world location.

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

Moreover, the results of the study confirmed that if customers observe that a travel website with high system and service quality, then they tend to be satisfied with the website. It is substantial to update, timely, and accurate travel information, unlike customers tend to migrate to another website due to the rapid dynamic changes in the tourism sector. Poor quality website causes dissatisfaction and negative net benefits (DeLone and McLean, 2003). When the website provides easy navigation system to customers, they are more likely to experience flow and be satisfied with the website (Gao et al., 2014). Well-designed layout systems decrease customers' cost of searching time, resulting in a higher level of satisfaction (Jarvenpaa and Tood, 1997). Further, system quality with the transaction and privacy policies lead to customer satisfaction.

It can be understood from the results increasing the telepresence effect on hotel websites as 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 far 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 that engaging with the website is enjoyable, then their e-satisfaction level enhance. It also found that the main contributor that attracts customers to book their hotel reservations from the website is e-satisfaction. The more customers are satisfied with the online travel agency website, the more they are willing to process a purchase transaction.

When the mediator role is evaluated, this 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 the purchase. In addition, if customers believe that the website has clear, up-to-date, relevant hotel information, they become satisfied and they are more likely to book the hotel via the website. When customers consider a travel agency website to have an easy navigation and attractive image then this positively affects their satisfaction level, and hence result in purchases. Lastly, responsiveness, understanding of customers' needs, and customer service lead to purchase intention by satisfying them.

CONCLUSION

Theoretical implications

This study enables valuable theoretical implications. These implications addressed what was done differently from the previous studies and literature.

As for the theoretical perspective, the main contribution of the current study is the formation of the integrative model of website quality by incorporating the antecedents of flow experience and e-satisfaction. Few studies attempted to combine website quality dimensions as a unified view with online consumer behaviour. (e.g. (Chen et al., 2016; Hsu et al., 2016; Kuan et al., 2008; Lee et al., 2020; Tsao et al., 2016). Accordingly, this study extends the website quality dimensions to a unified view as information quality, system quality, and service quality based

on the DeLone and McLean IS model. Thus, this holistic perspective provides accurate marketing results and suggestions to academia and e-retailers.

A large amount previous studies have analysed online consumers' behaviours 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., 2011; Koppis et al., 2005; Lin and Lu, 2000). This is the first empirical research to bridge DeLone and McLean's IS success model, TRA, 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 provides a new 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, 2006; Hwang and Kim, 2006; 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 additional 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 gap in the literature, the application area of this study is an online travel agency.

Managerial implications

E-commerce experts in the tourism sector should know which website features they should have to make the customers more satisfied and provide them great online experience that results in sharp increases in their sales.

Online travel agencies should deliver clear, sufficient and relevant information rather than overloading information. Because too little and too much information on the website causes customers to bypass the page. Especially, the pricing in the tourism sector is dynamic and alters 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 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 websites that are highly responsive to customers' requirements. For instance, online travel agencies should use the FAQ section on the website to identify online users' primary concerns as privacy/security policies, cancellation process, and on-time delivery. They should provide live customer service including live text chat, banner ads, and placing a 'help' button on the. Further, stating clear privacy/security policies and advanced security technologies may result in customer satisfaction. Customers who are satisfied with the service quality of the website 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 bird-view, and customized tour options that can assist customers live the experience. These attributes provide them with realistic destination experiences eventually leading to the intention to book their reservation from the website.

Limitations and further research direction

There are several limitations of this study which offer further research direction. First, this research concentrates on the tourism sector as an online travel agencies and it is not suitable to

generalize and apply these analytical results to other online services. It is suggested that future studies might analyse and confirm this relationship in other tourism and travel sectors such as car rentals, hotel websites, airline websites as well as other e-commerce sectors.

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

Third, the model can be improved by adding other constructs, such as the effect of price, playfulness, and e-trust which influence customers' behaviour. Future studies could extend the same model context to omnichannel marketing by adding variables such as physical store quality to analyse consumer behaviour.

Finally, respondents completed the online survey questionnaire based on various online travel agency websites instead of responding to the survey in accordance with a specific website. To focus on the distinctive online travel agency website might impact customers' perception differently than this study. Thus, future studies organise the survey questionnaire by considering just a specific website rather than multiple choice.

REFERENCES AND NOTES

- Ahn, T., Ryu, S., and Han, I. (2007). The impact of Web quality and playfulness on user acceptance of online retailing. *Information & Management*, 44(3), 263–275.
- Aladwani, A. M., and Palvia, P. C. (2002). Developing and validating an instrument for measuring user-perceived web quality. *Information & Management*, 39(6), 467–476.
- Al-Debei, M. (2014) The Quality and Acceptance of Websites: an Emprical Investigation in the Context of Higher Education. *International Journal of Business Information System*, 15(2), 170-188.
- Aldholay, A. H., Abdullah, Z., Ramayah, T., Isaac, O., and Mutahar, M. (2018). Online Learning Usage and Performace Among Students within Public Universities in Yemen. *International Journal of Services and Standards*, 12(2), 163.
- Ali, F. (2016). Hotel website quality, perceived flow, customer satisfaction and purchase intention. *Journal of Hospitality and Tourism Technology*, 7(2), 213–228.
- Ameen, N., Tarhini, A., Shah, M., and Madichie, N. O. (2020). Going with the Flow: Smart Shopping Malls and Omnichannel Retailing. *Journal of Services Marketing*, 35(3), 325-348.
- An, S., Choi, Y., & Lee, C. K. (2020). Virtual travel experience and destination marketing: Effects of sense and information quality on flow and visit intention. *Journal of Destination Marketing & Management*, 19, 100-492.
- Ashfaq, M., Yun, J., Waheed, A., Khan, M. S., and Farrukh, M. (2019). Customers' Expectation, Satisfaction, and Repurchase Intention of Used Products Online: Empirical Evidence From China. *SAGE Open*, 9(2), 1-14.
- Bai, B., Law, R., and Wen, I. (2008). The impact of website quality on customer satisfaction and purchase intentions: Evidence from Chinese online visitors. *International Journal of Hospitality Management*, 27(3), 391–402
- Cai, S., and Jun, M. (2003). Internet users' perceptions of online service quality: a comparison of online buyers and information searchers. *Managing Service Quality: An International Journal*, 13(6), 504–519.

- Cao, M., Zhang, Q., and Seydel, J. (2005). B2C e-commerce web site quality: an empirical examination. *Industrial Management & Data Systems*, 105(5), 645–661.
- Chang, H. H., and Chen, S. W. (2009). Consumer perception of interface quality, security, and loyalty in electronic commerce. *Information & Management*, 46(7), 411–417.
- Ghani, J., Supnick, R., and Rooney, P. (1991). The Experience of Flow in Computer-mediated and in Face-to-Face Groups. *International Conference on Systems*, New York, USA
- Chen, C. W. D., and Cheng, C. Y. J. (2009). Understanding consumer intention in online shopping: a respecification and validation of the DeLone and McLean model. *Behaviour & Information Technology*, 28(4), 335–345.
- Chen, X., Huang, Q., and Davison, R. M. (2017). The role of website quality and social capital in building buyers' loyalty. *International Journal of Information Management*, 37(1), 1563–1574.
- Csikszentmihalyi, M (1975). *Beyond Boredom and Anxiety. 25th Anniversary Edition Jossey-Bass.*
- Csikszentmihalyi, M., and Csikszentmihalyi, S., (1988). *Optimal Experience. Cambridge University Press.*
- Csikszentmihalyi, M. (1990). *Flow: The Psychology of Optimal Experience. New York Harper and Row Publishers.*
- Csikszentmihalyi, M. (1997). *Finding Flow: The psychology of engagement with everyday life. Basic books.*
- DeLone, W. H., and McLean, E. R. (1992). Information Systems Success: The Quest for the Dependent Variable. *Information System Research*, 3(1), 60-95.
- DeLone, W. H., and McLean, E. R. (2004). Measuring e-Commerce Success: Applying the DeLone & McLean Information Systems Success Model. *International Journal of Electronic Commerce*, 9(1), 31–47.
- DeLone, W. H., and McLean, E. R. (2014) The DeLone and McLean Model of Information Systems Success: A Ten-Year Update. *Journal of Management Information Systems*, 19(4), 9–30.

- Dickinger, A., and Stangl, B. (2013). Website performance and behavioral consequences: A formative measurement approach. *Journal of Business Research*, 66(6), 771–777.
- Esteban-Millat, I., Martinez-Lopez, F. J., Huertas-Garcia, R., and Rodriguez-Ardura, I. (2014). Modelling Students' Flow Experience in an Online Learning Environment. *Computers and Education*, 71, 111-123.
- Ettis, A., (2017). Examining the Relationship Between Online Stores Atmospheric Color, Flow Experience and Consumer Behaviour. *Journal of Retailing and Consumer Services*, 37, 43-55.
- Fan, Q., Yul Lee, J., and In Kim, J. (2013). The impact of web site quality on flow-related online shopping behaviors in C2C e-marketplaces. *Managing Service Quality: An International Journal*, 23(5), 364–387.
- Gao, L., Bai, X., and Park, A. T. (2014). Understanding Sustained Participation in Virtual Travel Communities from the Perspectives of its Success Model and Flow Theory. *Journal of Hospitality & Tourism Research*, 41(4), 475–509.
- Gao, W., and Li, X. (2018). Building presence in an online shopping website: the role of website quality. *Behaviour & Information Technology*, 38(1), 28–41.
- Ghani, J. A., and Deshpande, S. P. (1994). Task Characteristics and the Experience of Optimal Flow in Human Computer Interaction. *The Journal of Psychology*, 128(4), 381–391.
- Giao, H. N. K., Vuong, B. N., & Quan, T. N. (2019). The influence of website quality on consumer's e-loyalty through the mediating role of e-trust and e-satisfaction: An evidence from online shopping in Vietnam. *Uncertain Supply Chain Management*, 351–370.
- Goutam, D., and Gopalakrishna, B. V. (2018). Customer loyalty development in online shopping: An integration of e-service quality model and commitment-trust theory. *Management Science Letters*, 8(11), 1149–1158.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., and Ray, S. (2022). A Primer on *Partial Least Squares Structural Equation Modeling (PLS-SEM)*. 3rd Edition Using R. Springer Nature.

- Hausman, A. V., and Siekpe, J. S. (2008). The effect of web interface features on consumer online purchase intentions. *Journal of Business Research*, 62(1), 5–13.
- Hoffman, D. L., and Novak, T. P. (1996). Marketing in Hypermedia Computer-Mediated Environments: Conceptual Foundations. *Journal of Marketing*, 60(3), 50.
- Hsu, C. L., Chang, K. C., and Chen, M. C. (2012). The impact of website quality on customer satisfaction and purchase intention: perceived playfulness and perceived flow as mediators. *Information Systems and e-Business Management*, 10(4), 549–570.
- Huang, D., Li, Z., Mou, J., and Liu, X. (2017). Effects of flow on young Chinese consumers' purchase intention: a study of e-servicescape in hotel booking context. *Information Technology & Tourism*, 17(2), 203–228.
- Hwang, Y., and Kim, D. J. (2007). Customer self-service systems: The effects of perceived Web quality with service contents on enjoyment, anxiety, and e-trust. *Decision Support Systems*, 43(3), 746–760.
- Hyun, M. Y., and O'Keefe, R. M. (2012). Virtual destination image: Testing a telepresence model. *Journal of Business Research*, 65(1), 29–35.
- Jang, H. Y., and Noh, M. J. (2011). Customer acceptance of IPTV service quality. *International Journal of Information Management*, 31(6), 582–592.
- Jarvenpaa, S. L., and Todd, P. A. (1996). Consumer Reactions to Electronic Shopping on the World Wide Web. *International Journal of Electronic Commerce*, 1(2), 59–88.
- Kazancoglu, I., and Demir, B. (2021). Analysing flow experience on repurchase intention in e-retailing during COVID-19. *International Journal of Retail & Distribution Management*, 49(11), 1571–1593.
- Kim, H. W., Xu, Y., & Koh, J. (2014). A Comparison of Online Trust Building Factors between Potential Customers and Repeat Customers. *Journal of the Association for Information Systems*, 5(10), 392–420.
- Kim, H.C., and Hyun, M. Y. (2016). Predicting the Use of Smartphone-Based Augmented Reality: Does Telepresence Really Help? *Computers in Human Behaviour*, 5(9), 28-38.

- Koufaris, M. (2002). Applying the Technology Acceptance Model and Flow Theory to Online Consumer Behavior. *Information Systems Research*, 13(2), 205–223.
- Koufaris, M., Kambil, A., and Labarbara, P. A. (2001). Consumer Behaviour in Web-based Commerce: An Empirical Study. *International Journal of Electronic Commerce*, 6(2), 115-138.
- Kuan, H. H., Bock, G. W., and Vathanophas, V. (2008). Comparing the effects of website quality on customer initial purchase and continued purchase at e-commerce websites. *Behaviour & Information Technology*, 27(1), 3–16.
- Kumar Roy, S., M. Lassar, W., and T. Butaney, G. (2014). The mediating impact of stickiness and loyalty on word-of-mouth promotion of retail websites. *European Journal of Marketing*, 48(9/10), 1828–1849.
- Lau, T. C., Kwek, C. L., and Tan, H. P. (2011). Airline e-Ticketing Service: How e-Service Quality and Customer Satisfaction Impacted Purchase Intention. *International Business Management*, 5(4), 200–208.
- Law, R., Qi, S., and Buhalis, D. (2010). Progress in tourism management: A review of website evaluation in tourism research. *Tourism Management*, 31(3), 297–313.
- Lee, G., and Lin, H. (2005). Customer Perception of E-service Quality in Online Shopping. *International Journal of Retail and Distribution Management*, 33(2), 161-176.
- Lee, K. C., and Chung, N. (2009). Understanding factors affecting trust in and satisfaction with mobile banking in Korea: A modified DeLone and McLean’s model perspective. *Interacting With Computers*, 21(5–6), 385–392.
- Lee, M., Lee, S. A., Jeong, M., and Oh, H. (2020). Quality of virtual reality and its impacts on behavioral intention. *International Journal of Hospitality Management*, 90, 102595.
- Lee, S. A. (2018). Investigating Antecedents and Outcome of Telepresence on a Hotel’s Websites. *International Journal of Contemporary Hospitality Management*, 30(2), 757-775.
- Lee, Y. J., Ha, S., and Johnson, Z. (2019). Antecedents and consequences of flow state in e-commerce. *Journal of Consumer Marketing*, 36(2), 264–275.

- Lin J. C., and Lu, H. (2000). Towards and Understanding of the Behavioural Intention to Use a Web Site. *International Journal of Information Management*, 20(3), 197-208.
- Liu, C., and Arnett, K. P. (2000). Exploring the factors associated with Web site success in the context of electronic commerce. *Information & Management*, 38(1), 23–33.
- Lu, Y., Zhou, T., and Wang, B. (2009). Exploring Chinese users' acceptance of instant messaging using the theory of planned behavior, the technology acceptance model, and the flow theory. *Computers in Human Behavior*, 25(1), 29–39.
- Noronha, A., and Rao, P. (2017). Effect of Website Quality on Consumer Satisfaction and Purchase Intention in Online Travel Ticket Booking Websites. *Department of Humanities and Management*, 7(5), 168-173.
- Novak, T. P., Hoffman, D. L., and Yung, Y. F. (1998). Modelling the Structure of the Flow Experience Among Web User. *Marketing Science and the Mini-conference*.
- Novak, T. P., Hoffman, D. L., and Yung, Y. F. (2000). Measuring the Customer Experience in Online Environments: A Structural Modeling Approach. *Marketing Science*, 19(1), 22–42.
- Nurkaliza, K., (2018). The Role of Perceived Usefulness and Perceived Enjoyment in Assessing Student's Intention to Use LMS Using 3-TUM. *Global Summit on Education Conference*, Lumper, Malaysia.
- Nusair, K. and Kandampully, J. (2008) The Antecedents of Customer Satisfaction with Online Travel Services: A Conceptual Model. *European Business Review*, 12(4), 4-19.
- Ongsakul, V., Ali, F., Wu, C., Duan, Y., Cobanoglu, C., and Ryu, K. (2020). Hotel website quality, performance, telepresence and behavioral intentions. *Tourism Review*, 76(3), 681–700.
- Palmer, Jonathan W. (2002) Web Site Usability, Design, and Performance Metrics. *Information Systems Research*, 13(2), 151–167.
- Park, Y. A., Gretzel, U., and Sirakaya-Turk, E. (2007). Measuring Site Quality for Online Travel Agencies. *Journal of Travel and Tourism Marketing*, 23(1), 15-30.

- Pereira, T., Limberger, D. and Ardigo, D., (2021). The Moderating Effect of the Need for Interaction with a Service Employee on Purchase Intention in Chatbots. *Telematics and Information Reports*, 1(4), 10003.
- Prashar, S., Sai Vijay, T., and Parsad, C. (2017). Effects of Online Shopping Values and Website Cues on Purchase Behaviour: A Study Using S–O–R Framework. *The Journal for Decision Makers*, 42(1), 1–18.
- Ranganathan, C., and Ganapathy, S. (2002). Key Dimensions of Business-to-Customer Websites. *Information and Management*, 42(1), 1-18.
- Rekha, I.S., Shetty, J., and Basri, S. (2022). Students' Continuance Intention to use MOOCs: Empirical Evidence from India. *Education and Information Technologies*, 28(4), 4265-4286.
- Schwabe, A., Bruckschloegl, A., Hohenleitner, F., Kalus, M., Stueckle, F., and Schmidhuber, K. (2021). The Real Cost of Poor Website Quality. Retrieved from <https://www.bcg.com/publications/2020/real-cost-poor-website-quality>
- Tam, C., Loureiro, A., and Oliveira, T. (2019). The individual performance outcome behind e-commerce. *Internet Research*, 30(2), 439–462.
- Thatcher, A., Wretschko, G., and Frisjhon, P. (2008). Online Flow Experiences, Problematic Internet Use and Internet Procrastination. *Computers in Human Behaviour*, 24(5), 2236-2254.
- Tsao, W. C., Hsieh, M. T., and Lin, T. M. (2016). Intensifying online loyalty! The power of website quality and the perceived value of consumer/seller relationship. *Industrial Management & Data Systems*, 116(9), 1987–2010.
- Tseng, T. H., Lee, C. T., Huang, H. T., and Yang, W. H. (2021). Success factors driving consumer reuse intention of mobile shopping application channel. *International Journal of Retail & Distribution Management*, 50(1), 76–99.
- Voiskounsky, A., Mitina, O., and Avetisova, A. (2004). Playing Online Games: Flow Experience. *PsychNology Journal*, 2(3), 259-281.

- Wang, J., Shen, X., Huang, X., and Liu, Y. (2021). Influencing Factors of the Continuous Usage Intention of Consumers of Online Food Delivery Platform Based on an Information System Success Model. *Frontiers in Psychology, 1*(2), 15-20.
- Wang, Y. S., and Tang, T. I. (2003). Assessing Customer Perceptions of Website Service Quality in Digital Marketing Environments. *Journal of Organizational and End User Computing, 15*(3), 14–31.
- Wang, Y., Lin, S., Li, C., Tseng, T. H., and Lee, J. (2018). Developing and validating a physical product e-tailing systems success model. *Information Technology and Management, 19*(4), 245–257.
- Wolfenbarger, M., and Gilly, M. C. (2003). eTailQ: dimensionalizing, measuring and predicting retail quality. *Journal of Retailing, 79*(3), 183–198.
- Won, D., Chiu, W., and Byun, H. (2022). Factors influencing consumer use of a sport-branded app: the technology acceptance model integrating app quality and perceived enjoyment. *Asia Pacific Journal of Marketing and Logistics, 35*(5), 1112–1133.
- Wong, J., and Law, R. (2005). Analysing the intention to purchase on hotel websites: a study of travellers to Hong Kong. *International Journal of Hospitality Management, 24*(3), 311–329.
- Yu, T., and Wu, G. (2007). Determinants of Internet Shopping Behaviour: An Application of Reasoned Behaviour Theory. *International Journal of Management, 24*(4), 744.
- Zhao, X., Lynch, J. G., and Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and Truths about Mediation Analysis. *Journal of Consumer Research, 37*(2), 197–206.
- Zhou, T. (2013). An empirical examination of continuance intention of mobile payment services. *Decision Support Systems, 54*(2), 1085–1091.
- Zhou, T., Li, H., and Liu, Y. (2010). The effect of flow experience on mobile SNS users' loyalty. *Industrial Management & Data Systems, 110*(6), 930–94.

TABLES and FIGURES

Tables

Table 1 Descriptive Statistics

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

Table 2

NOTE: This preprint reports new research that has not been certified by peer review and should not be used as established information without consulting multiple experts in the field

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			

Table 3 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

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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

Table 4 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 5 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	

Table 6

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

Figures

Figure 1 Developed Model for This Research

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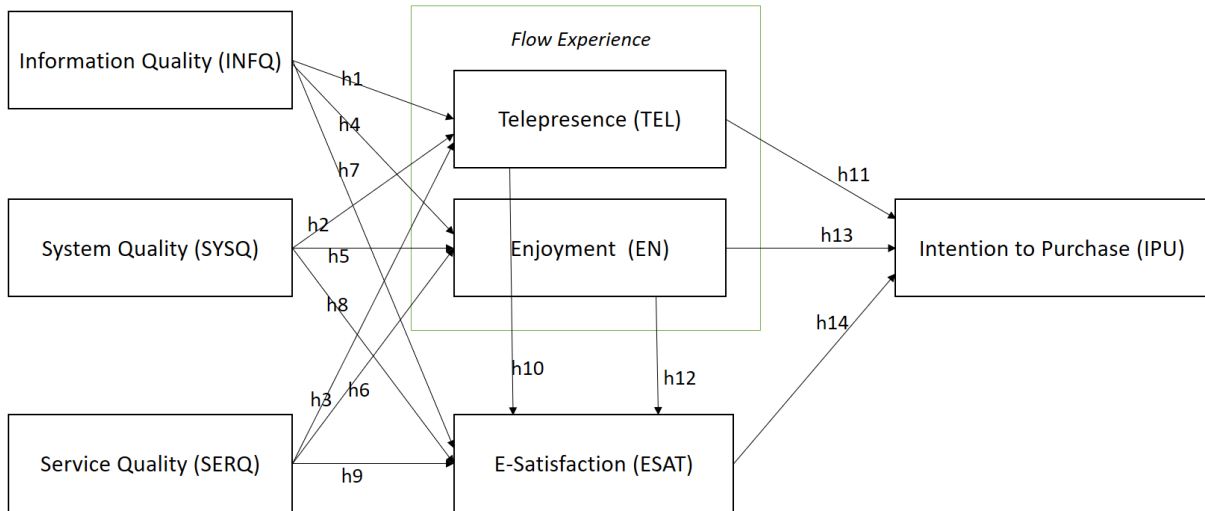
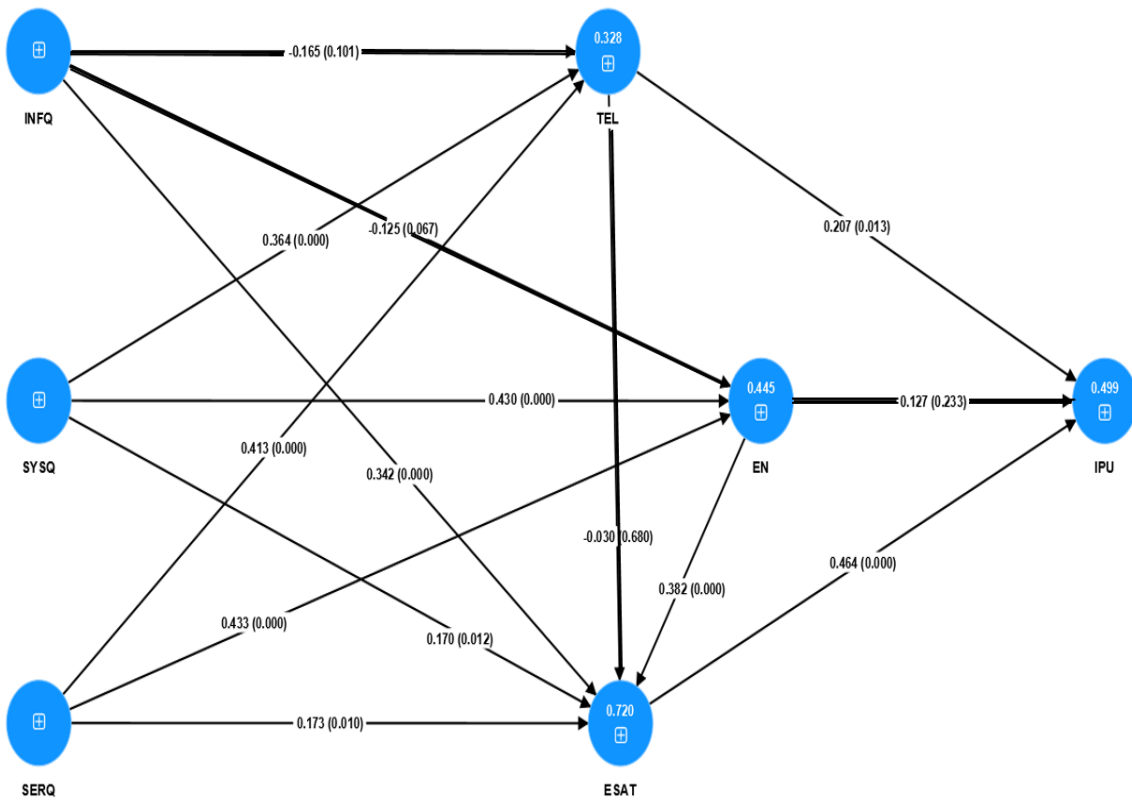


Figure 2 Path Model of the Study



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