Navigating the tourism digital landscape: The interrelationship of online travel sites' affordances, technology readiness, online purchase intentions, trust, and E-loyalty

Nur Shahirah Mior Shariffuddin [a,*], Muaz Azinuddin [a], Nurul Ezzah Yahya [a], Mohd Hafiz Hanafiah [b]

[a] Faculty of Applied Social Sciences, Universiti Sultan Zainal Abidin, Kuala Nerus, Malaysia
[b] Faculty of Hotel and Tourism Management, Universiti Teknologi MARA, Puncak, Alam, Malaysia

ARTICLE INFO

ABSTRACT

This study investigates the relationship between online travel sites' affordances (OTSA), technology readiness (TR), and their impact on tourists' online purchase intentions (OPI), as well as the moderating role of trust on OPI and e-loyalty. The survey was conducted online from September 2022 until November 2022 on 306 participants who were selected purposively. The collected data was analyzed using Partial Least Squares-Structural Equation Analysis (PLS-SEM). The findings indicated that OTSA has a greater influence on OPI in comparison to TR. Specifically, OTSA's level of interactivity and stickiness had a noteworthy impact on OPI, while only the innovativeness of TR had a positive effect on OPI. The results of the moderating role of trust indicated that OPI negatively affects e-loyalty in the presence of trust. The research conducted in this study has yielded valuable insights that hold theoretical and practical significance, particularly for local governments and tourism agencies operating in the realm of online travel sites. A key finding of the study emphasizes the importance of improving technology adoption and user experience to facilitate greater comfort and confidence among tourists in using these platforms. Establishing trust between tourists and online travel sites emerges as a critical factor in shaping the success of the tourism industry. By prioritizing trust and transparency, tourism agencies and online travel sites can forge robust relationships with their customers and promote the growth of the tourism industry toward digitalization.

1. Introduction

The rapid progress of technology has exerted a profound impact on the ever-expanding tourism industry. Among these technological advancements, the Internet stands out as one of the most crucial drivers shaping the tourism industry. It has made it simpler for tourists to plan vacations, compare pricing, and make online reservations for flights, lodging, and activities. The Internet has brought significant changes in the way that tourists book their trips through online booking platforms such as Expedia, Booking.com, and Airbnb. These platforms have gained popularity due to their convenient use and inexpensive, which has subsequently increased competition in the tourism industry. Businesses must compete globally by offering similar services as the tourism industry is witnessing

---

the new trend of online booking. For instance, Airbnb's innovative business model is appreciated by both tourists who find it enjoyable, refreshing, and cost-effective, as well as hosts and investors who are hopeful about the potential financial gains [1].

The revolutionized way tourists plan, book, and experience their trips have now had access to more immersive and tailored experiences. This is because of the emergence of innovative technologies like artificial big data analytics, virtual reality (VR), and intelligence (AI) [2]. Such technology as VR can simulate environments that tourists would not otherwise be able to visit, while augmented reality can add digital information to real-world locations [3]. These platforms allow the key players to use big data analytics to generate data from tourists, including online reviews, social media, and mobile devices, to understand consumer behavior and preferences better. By examining this data, travel companies can enhance their ability to deliver customized and pertinent products and services to their customers, ensuring a more personalized and fitting experience for each individual [4].

The emergence of digital culture has presented its fair share of difficulties, revealing specific detrimental impacts on the tourism sector, notably the risk of fraudulent activities and scams. As a result, tourism businesses must adapt to the online marketplace to remain competitive. Given the abundance of online booking platforms, it becomes challenging for travelers to differentiate between trustworthy and deceptive websites. Notably, tourists are susceptible to falling prey to scams, wherein they make payments for travel arrangements that may not exist or match the descriptions provided. In a study conducted by Xiang et al. [4], it was discovered that fraud was the primary challenge encountered by individuals who made travel arrangements online. Many travelers fell victim to deceptive online platforms offering nonexistent hotel reservations or booking services [5]. These scams targeting tourists are prevalent in the tourism industry, and they have been reported worldwide, with various methods employed to deceive visitors [6].

Tourists rely heavily on information provided online to make decisions about their travel plans, and this information must be trustworthy to ensure that tourists are not misled or deceived. Hence, addressing the concerns and distrust resulting from fraudulent events in online travel arrangements is crucial. If online information is untrustworthy, tourists may be misled or deceived, leading to negative experiences and potential financial losses [7]. With the anonymity and lack of face-to-face interaction in online transactions, there is an increased sense of uncertainty and mistrust among tourists, making it difficult for them to trust online information sources. Evidently, trust is a vital factor in tourists' decision-making processes, especially in online tourism, where they often lack personal experience with the destination and must rely on online information for their travel choices [7]. By addressing and mitigating fraudulent practices and improving the reliability of online information, the tourism industry can foster a safer and more trustworthy environment for travelers, enhancing their overall travel experiences.

Trust, affordances, and technology readiness are all critical factors influencing how tourists interact with technology in the tourism industry. Trust influences the adoption and use of technology, and affordances influence tourists' perceptions of the usefulness and usability of technology, and technology readiness influences tourists' willingness and ability to adopt and use technology. Affordances refer to technology's perceived possibilities for action [8]. In tourism, affordances can include features such as the ability to book travel arrangements online, access to user reviews, and interactive maps. These affordances can influence tourists' perceptions of the usefulness and usability of technology in the tourism industry [9].

Furthermore, Lei et al. [10] highlighted that affordances might help to distinguish or characterize tourist behavior. In the same vein, TRI can be used to understand how tourists' attitudes and behaviors are influenced by technology. It measures the degree to which a person is open to and comfortable with technology and is often used to predict the adoption and usage of new technologies [11]. With this, both theories depict an individual's behavior which consequently represents TPB as a social psychological theory that explains human behavior in terms of attitudes, subjective norms, and perceived behavioral control [12]. In consonance with this, the primary adoption technology for addressing tourists' multifaceted attitudes can be applied through the Theory of Planned Behavior (TPB) with the integration of the Affordance Theory (AT) and Technology Readiness Index (TRI).

The purpose of this study is to examine the interrelationships between online travel sites' affordances (OTSA) and technology readiness (TR) in predicting tourists' online purchase intentions (OPI) while also considering trust as a moderator between OPI and e-loyalty in Kuala Lumpur, Malaysia. Specifically, the study's framework integrates affordances and technology readiness dimensions through OTSA (as an external factor), TR (as an internal factor), online purchase intentions (OPI), trust, and e-loyalty. To the best of our understanding, there is a research gap in exploring the fundamental frameworks encompassing these theories and the interconnectedness between these relevant variables in the tourism context. A thorough review of the existing literature has called for more studies on affordances, as they hold great significance and practicality in tourism behavior perspectives [13,14]. Besides, studies indicate a growing recognition of the necessity of expanding understanding regarding the affordances present in online sites [15]. Additionally, the inclusion of OPI, TR, trust, and e-loyalty in the present study contributes a new perspective, as previous research has primarily focused on satisfaction rather than the latter constructs, which have yet to be studied.

Specifically, Kuala Lumpur was selected as the study setting for several justifiable reasons. Firstly, the purpose of the study is to explore the interrelationships between online travel sites' affordances (OTSA) and technology readiness (TR) in predicting tourists' online purchase intentions (OPI), with trust acting as a moderator between OPI and e-loyalty. As a bustling tourist destination in Malaysia, Kuala Lumpur provides an excellent context to investigate these interactions in a tourist setting. Moreover, the study aims to fill a research gap by integrating the affordances and technology readiness dimensions through OTSA and TR. This comprehensive framework is novel in the tourism context and requires empirical investigation. Kuala Lumpur is a suitable site for this exploration due to its active efforts to implement Smart City initiatives and capabilities for sustainable urbanization. KL City Hall's Smart City Master Plan outlines a coordinated and integrated approach toward becoming a smart city from 2021 to 2025 [16]. The city employs advanced technologies such as virtual reality (VR), mobile apps, and smart kiosks to provide tourists with immersive experiences and easy access to information, events, transportation, and restaurant recommendations. Promoting e-wallets and cashless payments indicates the city's commitment to adopting modern digital solutions for convenient transactions. This indicates a progressive use of technology and online platforms in the city, making it relevant for studying the interplay between technology readiness, affordances,

and tourists' online purchase intentions. Furthermore, including OPI, TR, trust, and e-loyalty in the study contributes to a new perspective, as previous research has primarily focused on satisfaction rather than these specific constructs. By examining these interconnected variables in Kuala Lumpur, the study can provide valuable insights and implications for smart city planning and approaches that benefit tourists and stakeholders.

The subsequent part of the paper thoroughly reviews existing literature and explains this study's theoretical and conceptual frameworks and methodologies. In order to examine the research hypotheses and establish the connections between the research constructs, the study utilized Partial Least Square Structural Equation Modeling (PLS-SEM). The results and discussion of the study are presented, followed by an exploration of the theoretical and managerial implications of the research.

2. Theoretical background

TPB is expanded in this study by utilizing the affordances theory and TRI perspectives to establish the links between OTSA, TR, OPI, trust, and e-loyalty. Based on the Theory of Affordances, opportunities for action signify the most advanced level of mental engagement that motivates users to perform actions that necessitate cognitive involvement [17]. In the context of this study, OTSA represents the various opportunities for action that online travel sites offer to potential tourists. At the same time, TR reflects the tourists' readiness to adopt and use technology in their travel planning and decision-making process. Simultaneously De Boer [18][, pp. 9] suggested that the affordance theory can explain the impact of the environment on human behavior when it comes to the use of technology, which considers the environment as a "rich landscape of affordances". It recognizes that human behavior is shaped not only by the physical environment but also by social norms and expectations. To effectively leverage OTSA and TR to predict tourists' online purchase intentions and e-loyalty, it is vital to ensure that the design of the online travel sites is easily understandable and apparent to potential customers.

The affordance theory also complements the TPB perspective by emphasizing the importance of the environmental cues that influence the perception of an individual's ability to control their behavior, as TPB predicts individuals' resistance to change based on their behavior [19]. Their attitude towards that behavior influences the intention behind a person's behavior towards a destination, the social norms they perceive, and their belief in the capability to manage their actions [20]. Specifically, the affordances provided by an online platform, such as ease of use, security, and convenience, can significantly affect a consumer's subsequent behavior. This implies that a comprehensive understanding of technology usage is crucial in this study, connecting various theories as tourists assimilate, select, organize, and comprehend information through multiple interactions with the destination. The perception of a destination's value and reputation, formed by tourists throughout this process, significantly impacts their e-loyalty outcome.

2.1. Online travel sites affordance and online purchase intentions

Gaver [21] researched the affordances of technology and asserted that it is essential to consider the interactions between technologies and users rather than just examining one or the other in isolation. Although scholars may approach the subject of affordances from different angles and have varying interpretations, the concept inherently depends on the context in which it is applied [22]. Affordances are not isolated or fixed but somewhat interconnected and influenced by various factors, such as the intentions of human agents, the historical context, and the socio-institutional setting. Therefore, to comprehensively understand the affordances of online travel sites, one must consider the technological and user-related aspects as well as the environmental factors that impact their interaction. Online travel site affordances refer to the design features that enable users to perform specific actions on the website, such as searching for flights, hotels, and rental cars, comparing prices, and making reservations [9].

This study hypothesized that the interactivity of online travel sites, as a crucial attribute of OTSA, positively influences customer purchase intention. Interactivity pertains to the extent to which users are able to engage and interact with the sites and their features [23]. This is supported by previous studies indicating that affordances derived from the design and features of online travel sites significantly impact customer purchase intention and market share [24,25]. On the other hand, this study hypothesized that stickiness, characterized by the elements of a website that attract and maintain user interest, positively affects user engagement, loyalty, and purchasing behavior on online travel sites. Stickiness is defined as the elements of a website that attract and maintain a user's interest, including how long or how often they visit the site [Chiang and Hsiao 2015; Zhang et al., 2017, as cited in [26]. Previous research has established that stickiness is a significant determinant of profitability for online travel sites, as it encourages users to spend more time interacting with the platform and engage in repeat purchases, utilize additional services, view more advertisements, and participate in various activities on the site [Lin, 2007; Chiang and Hsiao, 2015; Zhang et al., 2017, as cited in [26].

In addition, this study assumes that a "sticky" site, characterized by users' higher level of dependence and comfort with the platform, leads to purchase intention. This hypothesis is grounded in the suggestion by Lin et al. [24] that a more "sticky" site indicates users' higher level of comfort and familiarity with the platform, which in turn facilitates consumer understanding of the seller's conduct and perspectives. This study also hypothesized that OTSA's word-of-mouth applications, specifically those providing consumers with an elevated level of comfort through product ratings, positively influence consumers' purchase behavior. The rise of social media and online communities has made it easier for consumers to share their opinions and experiences with others, leading to an increased reliance on word-of-mouth recommendations and reviews as consumers seek information and validation from their peers before making online travel-related purchases [27]. As a result of the aforementioned discussion, this research formulated the subsequent hypotheses.

Hypothesis 1a (H1a). Online travel sites affordances' interactivity influences online purchase intentions.

Hypothesis 1b (H1b).   Online travel sites affordances' stickiness influences online purchase intentions.

Hypothesis 1c (H1c).   Online travel sites affordances' word of mouth influences online purchase intentions.

2.2. Technology readiness and online purchase intention

Parasuraman [11] defines TR as an individual's willingness and ability to adopt and use technology for travel-related purposes. This includes mobile devices, online booking platforms, and social media [4]. TR explains how consumers feel comfortable using technology for online transactions and information-seeking. This, in turn, has been found to influence the likelihood of making an online purchase, as discussed by Chen et al. [28]. It is also important to note that this relationship may be complex as the definition and operationalization of TR may vary across studies, and different aspects of this construct (such as perceived ease of use or perceived usefulness) may have other effects on OPI. According to Wang et al. (as cited in 29), TR is a complex concept encompassing favorable and unfavorable perceptions of technology. More specifically, it can be measured using the TRI, which consists of two positive factors (innovativeness and optimism) and two negative factors (discomfort and insecurity) [30].

Innovativeness in TR refers to an individual embracing and adapting to new technological developments with greater ease and enthusiasm than less innovative ones [11]. In other words, individuals who demonstrate innovativeness in TR tend to be more receptive to new ideas and technologies and are more likely to experiment with new tools and approaches to problem-solving. Extensive research has consistently shown that innovativeness in relation to embracing technology, particularly TR, has a significant positive impact on individuals' attitudes and intentions toward technology [31,32]. Similarly to how innovativeness can affect individuals' behavior, TR's optimism has been found to have a similar effect. A study by Kim et al. [33] demonstrated that individuals with high optimism and innovativeness showed more robust well-being and behavioral intention. In addition, individuals with an optimistic outlook on technology are more inclined to utilize it as they recognize its advantages.

Forms of TR that have a negative connotation include discomfort and insecurity. The concept of discomfort towards technology refers to feeling overwhelmed and perceiving a lack of control over technology [11]. This discomfort can lead to frustration, anxiety, and fear and can manifest as avoidance behavior. One possible explanation for discomfort towards technology is a lack of familiarity or understanding of how technology works, which can result in confusion and a sense of powerlessness. In addition, the rapid evolution of technology can make it challenging for individuals to keep up with the latest advancements, further contributing to their discomfort [11]. In comparison, insecurity in relation to TR refers to an individual's lack of trust and doubtful perception about the ability of technology to function correctly [11]. According to Wang et al. [32], consumers with a high level of insecurity tend to view technology as unreliable and unstable. Such consumers lack confidence in the security of technology-based services and are inclined to reject adopting new services, resulting in reduced consumer behavioral intentions [34]. According to Parasuraman and Colby [30], each dimension of TR is unique, and individuals have varying combinations of these dimensions. The subsequent hypotheses are posited based on the comprehensive interactions of the constructs.

Hypothesis 2b (H2a).   Technology readiness's innovativeness influences online purchase intentions.

Hypothesis 2b (H2b).   Technology readiness's discomfort influences online purchase intentions.

Hypothesis 2c (H2c).   Technology readiness's optimism influences online purchase intentions.

Hypothesis 2d (H2d).   Technology readiness's insecurity influences online purchase intentions.

2.3. Online purchase intention and E-loyalty

In e-commerce, two vital constructs are tourists' online purchase intentions (OPI) and electronic loyalty (e-loyalty). OPI refers to the willingness of consumers to purchase tourism products or services through online platforms [23], while e-loyalty involves consumers' inclination to engage in repeat purchases on the same website or recommend it to others, regardless of whether they buy the same item or different ones [23]. The interplay between OPI and e-loyalty has been well-documented across various industries, and this relationship extends to the tourism sector in the context of e-commerce [35]. Notably, customers with a higher intention to purchase tourism products or services online tend to exhibit e-loyalty behaviors, such as making repeat purchases, engaging in positive word-of-mouth, and displaying a willingness to recommend the website or service to others [36]. Numerous previous studies have also highlighted that OPI is a critical predictor of online purchase behavior [37]. Based on this understanding, the following hypothesis is developed for this study.

Hypothesis 3 (H3).   Online purchase intentions influence e-loyalty.

2.4. Moderating effect of trust

Trust has been widely acknowledged as a crucial factor influencing individuals' intentions to purchase online [38]. In this context, trust revolves around the expectations and perceptions of the parties involved in a transaction [39]. It represents the level of confidence each party has in the other's capability and willingness to fulfill obligations and conduct business in an honest and reliable manner. This leads to customers' higher likelihood of purchasing when they perceive the website as trustworthy and credible [40].

Several studies have found a positive relationship between trust and OPI. For example, a survey by Lăzăroiu et al. [41] conducted a study demonstrating that consumer trust significantly influences decision-making in social commerce. Similarly, a study by Gefen [42]

found that trust significantly positively affects OPI. Retailers can improve their reputation and encourage repeat business by fostering a sense of trust among consumers. The authors found that consumers are likelier to purchase when they trust a website. This is because trust acts as a psychological safety net for consumers, giving them the confidence and reassurance they need to take the plunge and purchase.

In tourism, trust has been identified as a critical factor influencing whether e-service users in the hospitality industry book hotel accommodations [43]. Furthermore, previous research has found that trust positively influences tourists' OPI for tourism products such as flights, accommodations, and tours [44]. Therefore, it is hypothesized that there is a positive relationship between trust and OPI for tourism. Specifically, this study hypothesized that consumers who trust online travel websites are more likely to have positive attitudes toward online tourism purchases and a higher intention to purchase tourism products online.

Hypothesis 4 (H4). Trust moderates the relationship between online purchase intentions and e-loyalty.

The study framework is depicted below based on the underpinning theories and the study hypotheses (see Fig. 1):

3. Methodology

This study employed a quantitative and cross-sectional methodology as the primary approach to examine the impacts of several factors of OTSA, TR, OPI, and trust on e-loyalty. The data was collected from September 2022 until November 2022 by sending the questionnaire link through the Google Form application. The link was disseminated on social media applications such as WhatsApp, Instagram, and Facebook. The study focuses on tourists aged 18 years or older with previous experience using online travel sites and visiting Kuala Lumpur, Malaysia. Kuala Lumpur was chosen as the study site due to its recognition as a smart tourism destination and its significance as a central tourist hub. In order to ensure the eligibility and validity of the participants in this study, a purposive sampling methodology was utilized.

The GPower software was then employed to determine the appropriate sample size, which recommended a minimum of 166 respondents. 15% of the sample size (25 respondents) was added to accommodate potential problems like non-response rates and invalid questionnaires. As a result, the study intended to disseminate approximately 191 questionnaires, but 306 were returned and analyzed after accounting for those that were inadequately filled out or incomplete.

The SPSS Statistics 27 software was used for data entry and descriptive analysis, while SmartPLS 3.1.1 was used to confirm the reliability of the study framework and test the hypotheses. The Partial Least Squares-Structural Equation Modeling (PLS-SEM) has been commonly used in numerous tourism-based research [45,46]. It enables researchers to analyze both the measurement and structural models. PLS-SEM offers several advantages [47], as it effectively handles data with complex hierarchical models, even with a small sample size, and it is suitable for data that does not follow a normal distribution [33]. In this study, the structural model is complex, and since the objective was to explore the intricate relationship among the dimensions of the constructs; hence, selecting PLS-SEM was considered appropriate [47].

Accordingly, PLS-SEM tests the measurement and study hypotheses in two steps: assessing the measurement and structural models. SmartPLS was employed to evaluate reliability and validity in the measurement model assessment. First, the measurement model was assessed by analyzing the convergent validity, discriminant validity, composite reliability (CR), average variance extracted (AVE), and Heterotrait-Monotrait (HTMT) of the constructs and measurement items. The structural model was subsequently assessed using path analysis and the coefficient of determination.
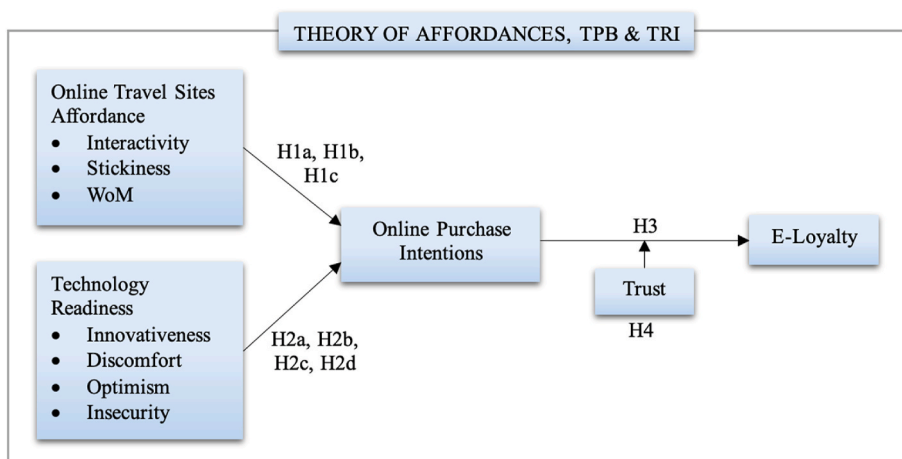

Fig. 1. Study framework.

3.1. Measurement

The study questionnaire was created in English and included six sections. The first section (Section A) focused on gathering information about the respondents' demographic profiles, such as their age, gender, nationality, purpose of travel, and frequency of using online travel sites. The subsequent sections of the survey evaluated the respondents' perception of OTSA in Section B using eleven items [24], fourteen items related to TR [29], two items concerning OPI [23], five items regarding trust [48] and e-loyalty using two items [23]. All constructs from the second to fifth sections were assessed using a five-point Likert scale, ranging from 1 = strongly disagree to 5 = strongly agree. In order to establish the face validity of the scale, three experts in the fields of tourism and technology were consulted. They were given a questionnaire to evaluate the appropriateness of the measurements. A pilot study was also conducted to ensure the questionnaire's effectiveness and comprehensibility.

3.2. Validity and reliability

Before the primary survey, a pilot study was conducted to minimize errors and assess the accuracy and relevance of the items that measure OTSA, TR, OPI, and trust in e-loyalty. For this purpose, 20 questionnaires were distributed to tourists and 10 to tourism and hospitality industry professionals who visited Kuala Lumpur and used online travel websites during their trip. The pilot study produced Cronbach's Alpha values that surpassed the minimum threshold of 0.70, indicating strong internal consistency. Based on the feedback, slight revisions were made to enhance clarity, resulting in minimal item rewording and modifications.

3.3. Ethical measures

This study is considered a minimal risk; henceforth, ethics application was not applicable. Nonetheless, this study's data treatment complies with the Malaysian Personal Data Protection Act 2010. Before data collection, the respondents received a brief explanation of the study, including a description of the question characteristics and the time needed to complete the questionnaire. This statement must be accepted by the respondents and regarded as their consent. The participants were also explicitly informed that the information they disclosed would solely serve academic purposes and would be presented collectively in a summarized manner. It is crucial to note that the research committee of the Universiti Sultan Zainal Abidin, Malaysia, approved the research proposal, which included data-gathering methods and ethical considerations, before collecting data. Additionally, the accuracy of citations and acknowledgment of all sources employed in the research were ensured.

Table 1
Respondents profiles.

Variable	Category	N	% of respondents
Gender	Male	126	41.2
	Female	180	58.8
Age	18–24	180	58.8
	25–34	50	16.3
	35–49	36	11.8
	50–64	36	11.8
	Over 64	4	1.3
Origin	Asia	300	98.0
	Europe	5	1.7
	North America	1	0.3
Frequency of visit to online travel sites	1st time	107	35.0
	2nd time	47	15.4
	3rd time	38	12.4
	4th time	34	11.1
	5th time and more	80	26.1
Last visit to online travel sites	This year	234	76.4
	1 year ago	35	11.4
	2 years ago	31	10.1
	3 years ago and above	6	2.1
Purpose of travel	Leisure	189	61.8
	Business	24	7.8
	Visiting family or friends	84	27.5
	Academic	8	2.6
	Healthcare	9	0.3

4. Analysis and findings

4.1. Respondents profiles

The survey result in Table 1 showed that the majority of tourists who responded were female (58.8%) aged between 18 and 24 (58.8%). Almost all those surveyed were from Asia (98%) and were visiting Kuala Lumpur. For 35% of these travelers, it was their first time using an online travel site, where 76.4% of them have been visiting travel sites online. Additionally, many respondents were visiting for leisure purposes (61.8%).

4.2. Descriptive statistics

The respondents were assessed on their perceptions of online travel sites affordances (OTSA) through eleven items. All of the items reported relatively good mean scores, with the three highest scores from interactivity, where tourists feel they can freely choose what they want to see on online travel sites (Mean (M) 1/5 4.23, Standard Deviation (SD) 1/5 0.968), they can get information from online travel sites very rapidly (M 1/5 4.12, SD 1/5 0.933) and service providers in online travel sites give visitors the opportunity to talk to them (M 1/5 4.07, SD 1/5 0.945).

The technology readiness (TR) dimension was assessed using fourteen items. All items had comparatively high mean scores, with the highest three scores reflecting optimism. These scores represent how new technologies contribute to a better quality of life (M 1/5 4.11, SD 1/5 0.941), technology gives them more freedom of mobility (M 1/5 4.07, SD 1/5 0.933), and technology makes them more productive in their personal life (M 1/5 3.97, SD 1/5 0.976).

Correspondingly, the respondents analyzed trust preferences using five items and found that the majority of them scored high mean

Table 2
Descriptive statistics result.

Construct	Code	Question	M[a]	SD[b]
Online Travel Sites Affordances (OTSA)				
Interactivity (INTE)	INTE1	I can freely choose what I want to see on online travel sites.	4.23	.968
	INTE2	Online travel sites have two-way communication between themselves and visitors.	4.01	.927
	INTE3	Service providers in online travel sites give visitors the opportunity to talk to them.	4.07	.945
	INTE4	Service providers in online travel sites respond to my questions very quickly.	3.79	1.011
	INTE5	I can get information from online travel sites very rapidly.	4.12	.933
Stickiness (STICK)	STICK1	I intend to spend more time on online travel sites.	3.60	1.109
	STICK2	I use online travel sites as often as I can.	3.57	1.170
	STICK3	I use online travel sites every time I am online.	3.38	1.259
Word of mouth (WOM)	WOM1	I have heard from others that online travel sites are very useful.	3.87	1.004
	WOM2	I have heard from others that online travel sites are very easy to use.	3.90	.932
	WOM3	I have heard from others that online travel sites are very reliable.	3.65	1.018
Technology Readiness (TR)				
Innovativeness (INNO)	INNO1	Other people come to me for advice on new technologies.	3.69	1.036
	INNO2	In general, I am among the first in my circle of friends to acquire new technology when it appears.	3.43	1.181
	INNO3	I can usually figure out new high-tech products and services without help from others.	3.69	1.070
	INNO4	I keep up with the latest technological developments in my areas of interest.	3.80	1.031
Discomfort (DISC)	DISC1	When I get technical support from a provider of a high-tech product or service, I sometimes feel as if I am being taken advantage of by someone who knows more than I do. (R)	3.50	1.180
	DISC2	Technical support lines are not helpful because they do not explain things in terms understand. (R)	3.52	1.102
	DISC3	Sometimes, I think that technology systems are not designed for use by ordinary people. (R)	3.57	1.127
Optimism (OPT)	OPT1	New technologies contribute to a better quality of life.	4.11	.941
	OPT2	Technology gives me more freedom of mobility.	4.07	.933
	OPT3	Technology gives people more control over their daily lives.	3.94	.977
	OPT4	Technology makes me more productive in my personal life.	3.97	.976
Insecurity (INSE)	INSE1	Too much technology distracts people to a point that is harmful. (R)	3.86	1.065
	INSE2	Technology lowers the quality of relationships by reducing personal interaction. (R)	3.77	1.134
	INSE3	I do not feel confident doing business with a place that can only be reached online. (R)	3.63	1.144
Trust				
	TRUST1	The chance of having a technical failure in an online transaction is quite small.	3.59	1.098
	TRUST2	I believe most online travel sites will perform to the outmost of the customers' benefit.	3.94	.956
	TRUST3	I believe online travel sites are trustworthy.	3.75	.998
	TRUST4	Online travel sites are unreliable. (R)	3.43	1.121
	TRUST5	Online travel sites cannot be trusted, there are too many uncertainties. (R)	3.55	1.095
Online Purchase Intentions (OPI)				
	OPI1	I intend to purchase tourist products over the online travel sites.	3.80	1.017
	OPI2	There is a possibility that I will purchase through the online travel sites.	3.86	.988
E-loyalty				
	LOY1	I would recommend the online travel sites where I purchased the tourism products and services.	3.96	.979
	LOY2	I would repeat the purchase of the tourism products and services on the same online travel sites.	3.99	.929

[a] Mean Score.
[b] Standard Deviations.

scores. They believe most online travel sites will perform to the utmost of the customers' benefit (M 1/5 3.94, SD 1/5 0.956), they believe online travel sites are trustworthy (M 1/5 3.75, SD 1/5 0.998), and the chance of having a technical failure in an online transaction is quite small (M 1/5 3.59, SD 1/5 1.098), The respondents also reported decently positive views of the rest dimensions representing online purchase intentions (OPI) and e-loyalty, as depicted in Table 2.

4.3. Measurement model

The reliability, convergence, and discriminant validity were assessed through a measurement model [47]. All outer loadings are above 0.7 after removing two items of trust. This step is undertaken to establish the measurement model's reliability. The test results for reliability and validity indicated that the CR for each construct ranged from 0.913 to 0.971, surpassing the threshold value of 0.7 and indicating satisfactory levels [49]. Table 3 presents the details of the reliability and validity of the collected data, as verified through the calculation of Cronbach's Alpha (CA). The resulting values, ranging from 0.881 to 0.962, were found to be acceptable, indicating satisfactory reliability.

The extent to which the construct converges to explain the variance of its indicators is referred to as convergent validity and can be assessed through AVE [47]. The AVE for each construct ranged from 0.677 to 0.937, exceeding the threshold of 0.5. These cut-off values indicate that the set of indicators explains at least 50% or more of the variances in the construct. All AVE values exceeded 0.5, which confirmed the model's convergent validity [45,50]. Based on their parameter estimates and statistical significance, the

Table 3
First-order measurement model assessment.

Construct/associated item	Outer Loading	Cronbach's alpha	Composite Reliability	AVE
Online Travel Sites Affordances (OTSA)				
Interactivity		0.919	0.939	0.756
INTE1	0.817			
INTE2	0.863			
INTE3	0.905			
INTE4	0.872			
INTE5	0.888			
Stickiness		0.909	0.943	0.847
STICK1	0.894			
STICK2	0.947			
STICK3	0.919			
Word of Mouth		0.906	0.941	0.842
WOM1	0.930			
WOM2	0.931			
WOM3	0.892			
Technology Readiness (TR)				
Innovativeness		0.928	0.949	0.822
INNO1	0.886			
INNO2	0.914			
INNO3	0.928			
INNO4	0.898			
Discomfort		0.907	0.941	0.843
DISC1	0.916			
DISC2	0.933			
DISC3	0.905			
Optimism		0.905	0.934	0.779
OPT1	0.868			
OPT2	0.901			
OPT3	0.886			
OPT4	0.873			
Insecurity		0.881	0.926	0.808
INSE1	0.874			
INSE2	0.904			
INSE3	0.912			
Trust		0.881	0.913	0.677
TRUST1	0.842			
TRUST2	0.882			
TRUST3	0.911			
Online Purchase Intentions		0.933	0.968	0.937
OPI1	0.968			
OPI2	0.968			
E-loyalty		0.928	0.965	0.932
LOY1	0.966			
LOY2	0.965			

measurement model results demonstrate that all the constructs are valid measures [51].

The study utilized the heterotrait-monotrait (HTMT) ratio of correlations to examine discriminant validity. Additionally, discriminant validity was assessed to ensure the absence of multicollinearity issues [51]. An HTMT value below 0.9 indicates that discriminant validity has been established in such instances. For conceptually more distinct constructs, it is recommended to use a lower, more cautious threshold value, such as 0.85 [52]. Consequently, to further evaluate discriminant validity, the HTMT ratio (refer to Table 4) was calculated for each pair of constructs based on item correlations. The results demonstrate that the statistical evidence supports the discriminant validity of the measurement scale and confirms the absence of overlapping constructs.

4.4. Structural model

The bootstrapping procedure was employed to validate the structural model and evaluate the importance and strength of the proposed connections. This involved analyzing the path analyses within the structural model, specifically examining metrics such as beta (β), p-value, confidence interval (bias-corrected), explanatory variance (R^2), effect size (f^2), and the blindfolding method (Q^2) using the PLS algorithm. The findings of the bootstrapping technique are presented in Table 5. Fig. 2 illustrates the outcome.

It can be verified that dimensions of OTSA and TR can statistically significantly explain the 55.4% ($R^2 = 0.554$) variance of OPI, which can be considered a strong explanatory power. Out of the four dimensions of OTSA, the interactivity ($\beta = 0.151^*$) and stickiness ($\beta = 0.210^{**}$) appeared to impact OPI significantly. As for TR, only innovativeness ($\beta = 0.263^{**}$) has a statistically significant impact on OPI. When the significance of OTSA and TR is compared, the two dimensions of the former and one dimension of the latter significantly affect OPI, suggesting a more significant role of the external construct in shaping the tourists' online purchasing intention. However, a closer examination of the beta values shows that the innovativeness of TR makes the strongest unique contribution to explain OPI, and this is followed by the two OTSA's dimensions of stickiness and interactivity. The results mean that H1a, H1b, and H2a are supported. Regarding e-loyalty, the construct's variance can be significantly explained by OPI and trust at 44.9% ($R^2 = 0.449$). Within this dynamic, the effect of OPI on e-loyalty was significantly moderated by trust. Therefore, the results show that H3 and H4 are not rejected.

The effect size, referred to as an f^2, is ranked as small, medium, and large. Values above 0.02 and up to 0.15 are considered small; values of 0.15 and up to 0.35 are medium; and values of 0.35 and above are significant effects [47,53]. In line with the suggestion, innovativeness ($f^2 = 0.063$), interactivity ($f^2 = 0.026$), and stickiness ($f^2 = 0.044$) are found to have a small effect size on OPI. While in the context of OPI and e-loyalty ($f^2 = 0.288$), the effect size is medium. With regards to the model's predictive relevance, the constructs' Q^2 values need to be above zero, as per Pai et al. [54]. The scores of predictive relevance for OPI and e-loyalty are 0.491 and 0.554, correspondingly, thus rendering the research model a substantial predictive model.

5. Discussion

The main objective of this study was to explore how the four attributes of OTSA as proposed by Lin et al. [24], and the four dimensions of TR, according to Hailey Shin et al. [29], influence online purchase intentions and trust in e-loyalty. This study confirmed a significant relationship between OTSA towards OPI through the attributes of interactivity and stickiness. This is consistently shown that online travel sites have the ability to shape consumers' purchase intention by providing them with various affordances, such as personalized recommendations, reviews and ratings, and user-friendly interfaces. For example, Tuncer [25] found that the ease of use of online travel sites significantly influenced consumers' purchase intention, with users being more likely to book a trip if the site was easy to navigate. Similarly, Sun et al. [55] found that online travel sites that provided personalized recommendations and social networking features were more likely to encourage users to make a purchase.

As for TR, innovativeness is the only attribute that significantly impacts OPI. This suggests that more innovative individuals willing to try new things are more likely to make online purchases through travel sites. Other attributes of TR, such as optimism, discomfort, and insecurity, did not significantly influence OPI. This could be because these attributes relate more to personal attitudes and perceptions toward technology rather than the actual behavior of using technology to make online purchases. According to Kim et al. [56]

Table 4
Heterotrait-Monotrait ratio (HTMT) analysis.

	DISC	LOY	INNO	INSE	INTE	OPI	OPT	STICK	TRUST	WOM
DISC										
LOY	0.563									
INNO	0.717	0.680								
INSE	0.660	0.563	0.595							
INTE	0.569	0.685	0.598	0.504						
OPI	0.569	0.782	0.693	0.510	0.652					
OPT	0.598	0.733	0.657	0.600	0.705	0.607				
STICK	0.602	0.626	0.679	0.443	0.673	0.678	0.577			
TRUST	0.730	0.769	0.799	0.606	0.701	0.766	0.769	0.709		
WOM	0.534	0.680	0.646	0.538	0.727	0.656	0.661	0.717	0.721	

Note: DISC: TR Discomfort; LOY: E-loyalty; INNO: TR Innovativeness; INSE: TR Insecurity; INTE: OTSA Interactivity; OPI: Online Purchase Intentions; OPT: TR Optimism; STICK: OTSA Stickiness; WOM: Word of mouth.

Table 5
Structural estimates (path analysis).

Hyphotheses	Path Analysis	Decision	Beta (β)	Confidence Interval (Bias Corrected)		f^2	R^2	Q^2
				2.5%	97.5%			
H1a	**INTE - > OPI**	**Supported**	**0.165***	**0.004**	**0.285**	**0.026**	0.554	0.491
H1b	**STICK - > OPI**	**Supported**	**0.210****	**0.076**	**0.358**	**0.044**		
H1c	WOM - > OPI	Not supported	0.118	−0.020	0.245	0.013		
H2a	**INNO - > OPI**	**Supported**	**0.263****	**0.069**	**0.451**	**0.063**		
H2b	DISC - > OPI	Not supported	0.007	−0.136	0.147	0.000		
H2c	OPT - > OPI	Not supported	0.078	−0.088	0.242	0.006		
H2d	INSE - > OPI	Not supported	0.072	−0.054	0.179	0.006		
H3	**OPI - > LOY**	**Supported**	**0.467*****	**0.323**	**0.600**	**0.288**	0.605	0.554
H4	**OPI*TRUST - > LOY**	**Supported**	**−0.058***	**−0.116**	**−0.007**	**0.015**		

Note: ***(p < 0.001) **(p < 0.01) *(p < 0.05).
INTE: OTSA Interactivity; OPI: Online Purchase Intentions; STICK: OTSA Stickiness; WOM: Word of mouth; INNO: TR Innovativeness; DISC: TR Discomfort; OPT: TR Optimism; INSE: TR Insecurity; LOY: E-loyalty; f^2: Effect size; R^2: Explanatory variance; Q^2: blindfolding.
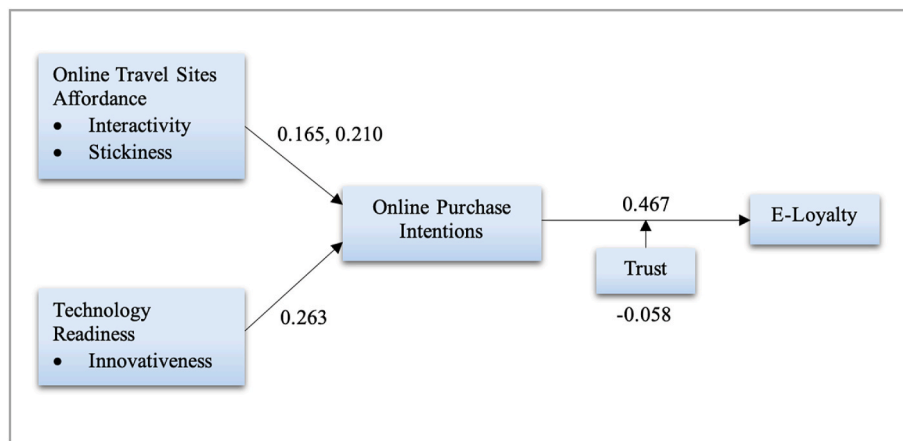

Fig. 2. PLS-SEM results.

and Wang et al. [32], numerous comprehensive investigations have consistently demonstrated that the propensity to embrace technology has shown that innovativeness has a noteworthy and favorable effect on individuals' attitudes and intentions toward technology. Similar to the findings by Rojas-Mendez et al. [57], individual innovativeness is significantly influencing consumers' adoption of new technologies.

The significant moderating impact of trust can provide a grasp of the comprehensive and dynamic variables that enhance the tourists' behavioral intention. The result shows that trust significantly influences the relationship between OPI and trust. This result is supported by the evidence from Calvo Porral and Levy-Mangin [58], implying that the extent of consumer trust may influence the level of purchase intention and consumer loyalty. This also suggests that tourists' level of trust leads to distinct consumer behaviors. In a similar vein, the findings of Alam et al. [59] discovered a significant and noteworthy correlation between trust and loyalty, further solidifying the importance of trust in fostering enduring relationships with consumers.

6. Conclusions and implications

6.1. Conclusions

The main objective of this study is to examine the interconnectedness between Online Tourism Service Agents (OTSA), Technology Readiness (TR), Online Perceived Interactivity (OPI), trust, and electronic loyalty (e-loyalty). The research model used in this study encompasses all these constructs and is based on the Theory of Planned Behavior (TPB), which is further enriched by the inclusion of affordance theory and the Technology Readiness Index (TRI). The findings of the study demonstrate that the innovativeness of TR and the interactivity and stickiness of OTSA significantly influence Online Perceived Interactivity (OPI). Subsequently, OPI significantly impacts e-loyalty, with trust playing a significant moderating role in this relationship. These studies have elaborated the theoretical and practical implications for enhancing e-loyalty among tourists, particularly in managing OTSA and TR.

From this, there are a few limitations that need to be considered. First, the study used purposive sampling to collect the data, which led to the lack of generalization beyond the study respondents. This means that the findings should be treated with caution. However, the research model in this study went through several reliability and validity procedures that can still provide confidence in its results

and interpretations. Second, despite the overall model explaining 55.4% and 60.5% variance in OPI and e-loyalty, respectively, there are possibilities for consideration of other related factors. Future research should consider integrating the emotional and motivational-based constructs to further enrich the explanatory power of the research model from tourists' psychological and behavioral perspectives. Furthermore, the addition of branding elements or perceived value to the research model will also increase the understanding behind the dynamics that will improve the performance-based variables such as electronic word of mouth, visit intention, or destination image. Despite the suggestions, the current study still improves our understanding of the dynamics of OTSA and TR, where the empirical evidence in this study is worthy of future investigation as online travel sites are an inescapable reality for the foreseeable future.

6.2. Theoretical implications

This study expands TPB with the integration of affordance theory and TRI to develop a research model in analyzing the impacts of OTSA, TR, OPI, trust, and e-loyalty in Kuala Lumpur, Malaysia. The integration of both elements enables the generation of comprehensive insights into the dynamics of internal and external perspectives that shape OPI and e-loyalty simultaneously. This is a significant contribution to the tourism body of knowledge because few studies explore both external components of tourism technology and the internal inclinations of tourists [23]. This scarcity is particularly evident within the existing body of knowledge on tourism as some studies focus solely on the technological aspects of tourism, while others concentrate only on understanding tourists' motivations, desires, and behaviors. This study operationalizes both perspectives at the dimension level to assess how OPI can be impacted by three intrinsic attributes of OTSA and four extrinsic attributes of TR.

The second theoretical contribution of the study confirm differing significances and strengths of internal and external attributes of OTSA and TR, respectively. Such empirical verifications reflect the individual importance of TR's innovativeness and OTSA's interactivity and stickiness in shaping tourists' traveling decision-making through OPI and their e-loyalty. While the third theoretical contribution comes from the subsequent moderating effect of trust between the construction of OPI from different attributes of OTSA, TR and e-loyalty. This highlights the importance of trust in cultivating positive views and tourists' loyalty toward a technology's capability to facilitate the purchasing process in the tourism technological and readiness context. Trust plays a critical role in shaping tourists' perceptions and impacting their choices, forming the basis for successful interactions and transactions between tourists and technology.

6.3. Practical implications

The nature of the results shed light on how destination managers and marketers can curate their online traveling sites to enhance tourists purchasing intention and their subsequent loyalty. Specifically, it provides destination managers and marketers with practical recommendations to improve tourists' loyalty from both internal and external perspectives. It is important to note that being the most important contributor to OPI, destination managers, and marketers can develop suitable promotions and strategies for innovative tourists as they are more receptive to exploring and adapting to new technologies. Therefore, identifying tourists' profiles inclined to use technology is crucial, and the need for increased awareness to shape this inherent characteristic among other marketing segments should be realized accordingly.

On the other hand, there will be a higher probability of improving innovative tourists' satisfaction with the right promotions and personalized traveling packages. To achieve this, it is important to ensure that online travel sites can assist their target market in rapidly fulfilling their informational needs. This heightens the need for operators of online travel sites to be knowledgeable, engaging, practical, and have certain autonomy to provide solutions for tourists in synchronous and asynchronous interactions. Therefore, the management of reviews and comments, as well as interactive question-and-answer content posted on online travel sites can be enhanced in terms of efficiency and effectiveness.

7. Limitations and future research

It is imperative to recognize the limitations of this study. The small sample size and purposive sampling approach may restrict the generalizability of the findings. The external validity of the results may be affected as the 306 participants may not represent the diversity of all potential online travel site users. Therefore, it is crucial for future studies to consider larger and more diversified samples to improve the generalizability of the findings. It is also important to note that the cross-sectional design used in this study only captures a snapshot of the relationship between variables at a specific time. As a result, the study cannot establish causal relationships, and the dynamic nature of the relationships over time is not explored. To address this limitation, future research can adopt a longitudinal design to examine changes in tourists' online purchase intentions and e-loyalty concerning technology adoption and trust levels. Furthermore, while this study focuses on the relationship between OTSA, TR, OPI, and e-loyalty, it is crucial to acknowledge that other factors may influence online purchase intentions and e-loyalty. Future research can consider variables such as website usability, customer service quality, and perceived value to provide a more comprehensive understanding of the factors affecting tourists' decisions in the online travel context.

To expand knowledge in this area, future research should explore several avenues. Longitudinal studies can provide insights into the changes in tourists' online purchase intentions and e-loyalty concerning technology adoption and evolving trust levels. Cross-cultural studies can also explore the relationships between OTSA, TR, OPI, and e-loyalty across diverse cultural contexts. Comparative studies between different countries or regions can uncover variations in user behavior and preferences, contributing to a deeper

understanding of these phenomena. Moreover, future studies can investigate potential mediating variables, such as customer satisfaction or perceived risk, to gain a deeper understanding of the mechanisms through which OTSA, TR, and trust influence online purchase intentions and e-loyalty. Identifying other moderating factors apart from trust that could influence the relationship between OTSA, TR, OPI, and e-loyalty would offer a more comprehensive picture and may reveal unique insights for specific market segments.

By addressing these limitations and pursuing these future research directions, scholars and industry practitioners can further advance the understanding of the dynamics between online travel sites, technology readiness, trust, online purchase intentions, and e-loyalty. Ultimately, this will contribute to the enhancement of the online tourism experience and support the growth of the tourism industry in the digital age.

Funding statement

Author contribution statement

Nur Shahirah Mior Shariffuddin: Conceived and designed the experiments; Analyzed and interpreted the data; Wrote the paper.

Muaz Azinuddin: Performed the experiments; Analyzed and interpreted the data; Contributed reagents, materials, analysis tools or data.

Nurul Ezzah Yahya: Performed the experiments; Contributed reagents, materials, analysis tools or data.

Mohd Hafiz Hanafiah: Conceived and designed the experiments.

Data availability statement

Data will be made available on request.

Declaration of competing interest

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests: Nur Shahirah Mior Shariffuddin reports financial support was provided by Universiti Sultan Zainal Abidin (UniSZA), Malaysia. Nur Shahirah Mior Shariffuddin reports a relationship with Universiti Sultan Zainal Abidin, Malaysia that includes: employment and funding grants. Co-author is an employee from the organisation that provides the funding - M.A co-author is a graduate research assistant from the organisation that provides the funding - N.E.Y.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.heliyon.2023.e19135.

References

[1] T. Tiamiyu, F. Quoquab, J. Mohammad, To switch or not to switch: the role of tourists' psychological engagement in the context of Airbnb Malaysia, International Journal of Tourism Cities 6 (1) (2020) 175–196, https://doi.org/10.1108/IJTC-09-2019-0158. Feb 25.

[2] H. Go, M. Kang, S.C. Suh, Machine learning of robots in tourism and hospitality: interactive technology acceptance model (iTAM)–cutting edge, Tour. Rev. 75 (4) (2020) 625–636, https://doi.org/10.1108/TR-02-2019-0062. Feb 5.

[3] X. Fan, X. Jiang, N. Deng, Immersive technology: a meta-analysis of augmented/virtual reality applications and their impact on tourism experience, Tourism Manag. 91 (2022), 104534, https://doi.org/10.1016/j.tourman.2022.104534. Aug 1.

[4] Z. Xiang, Q. Du, Y. Ma, W. Fan, A comparative analysis of major online review platforms: implications for social media analytics in hospitality and tourism, Tourism Manag. 58 (2017) 51–65, https://doi.org/10.1016/j.tourman.2016.10.001. Feb 1.

[5] T.P. Ly, K.Q. Yi, H.H. Fok, Returning to a scamming destination: insights from vung tau, vietnam, International Journal of Tourism Cities 8 (1) (2022) 107–124, https://doi.org/10.1108/IJTC-06-2021-0099. Jan 31.

[6] D. Xu, L. Murphy, T. Chen, P.L. Pearce, Differentiating tourist scam cases: towards a taxonomy of deceptive schemes, J. Hospit. Tourism Manag. 50 (2022) 159–167, https://doi.org/10.1016/j.jhtm.2022.01.011. Mar 1.

[7] X. Zhang, Ongoing trust and tourism O2O platform continuance: a two-trustee involved model with moderating variable, Sage Open 10 (2) (2020 May), 2158244020920659, https://doi.org/10.1177/2158244020920659.

[8] J. Gibson, The Theory of Affordances. Perceiving, Acting and Knowing, Lawrence Erlbaum, Hillside, NJ, 1977.

[9] R. Law, D. Buhalis, C. Cobanoglu, Progress on information and communication technologies in hospitality and tourism, Int. J. Contemp. Hospit. Manag. 26 (5) (2014) 727–750, https://doi.org/10.1108/IJCHM-08-2013-0367. Jul 8.

[10] S.I. Lei, D. Wang, R. Law, Perceived technology affordance and value of hotel mobile apps: a comparison of hoteliers and customers, J. Hospit. Tourism Manag. 39 (2019) 201–211, https://doi.org/10.1016/j.jhtm.2019.02.006. Jun 1.

[11] A. Parasuraman, Technology Readiness Index (TRI) a multiple-item scale to measure readiness to embrace new technologies, J. Serv. Res. 2 (4) (2000 May) 307–320.

[12] I. Ajzen, From Intentions to Actions: A Theory of Planned Behavior. InAction Control: from Cognition to Behavior, Springer Berlin Heidelberg, Berlin, Heidelberg, 1985, pp. 11–39, https://doi.org/10.1007/978-3-642-69746-3_2. Jan 22.

[13] R. Buckley, M. Akhoundogli, Tourism affordances as a research lens, J. Trav. Res. 59 (7) (2020 Sep) 1331–1334, https://doi.org/10.1177/0047287519877241.

[14] M. Azinuddin, M.H. Hanafiah, N.S. Mior Shariffuddin, M.K. Kamarudin, A.P. Mat Som, An exploration of perceived ecotourism design affordance and destination social responsibility linkages to tourists' pro-environmental behaviour and destination loyalty, J. Ecotourism (2022) 1–24, https://doi.org/10.1080/14724049.2022.2085283. Jun 30.

[15] Y. Song, R. Xu, Affective ties that bind: investigating the affordances of social networking sites for commemoration of traumatic events, Soc. Sci. Comput. Rev. 37 (3) (2019 Jun) 333–354, https://doi.org/10.1177/0894439318770960.

[16] Dewan Bandaraya Kuala Lumpur, Kuala Lumpur Smart City Master Plan 2021-2025, Kuala Lumpur, Dewan Bandaraya Kuala Lumpur, Malaysia, 2021. June. 24 pp..

[17] W. Al-Maawali, Affordances in educational technology: perceptions of teachers and students in Oman, J. Inf. Technol. Educ. 19 (2020) 931, https://doi.org/10.28945/4662.

[18] B. De Boer, Explaining Multistability: Postphenomenology and Affordances of Technologies, AI & SOCIETY, 2021, https://doi.org/10.1007/s00146-021-01272-3. Sep 6:1-1.

[19] K. Zheng, J. Kumar, P. Kunasekaran, M. Valeri, Role of smart technology use behaviour in enhancing tourist revisit intention: the theory of planned behaviour perspective, Eur. J. Innovat. Manag. (2022), https://doi.org/10.1108/EJIM-03-2022-0122. Sep 21(ahead-of-print).

[20] D. Hrubes, I. Ajzen, J. Daigle, Predicting hunting intentions and behavior: an application of the theory of planned behavior, Leisure Sci. 23 (3) (2001) 165–178, https://doi.org/10.1080/014904001316896855. Jul 1.

[21] W.W. Gaver, Technology affordances, s (1991) 79–84. Mar 1 (InProceedings of the SIGCHI conference on Human factors in computing system.

[22] S. Xue, D. Churchill, A review of empirical studies of affordances and development of a framework for educational adoption of mobile social media, Educ. Technol. Res. Dev. 67 (2019 Oct) 1231–1257, https://doi.org/10.1007/s11423-019-09679-y.

[23] D. Buhalis, E.P. López, J.A. Martinez-Gonzalez, Influence of young consumers' external and internal variables on their e-loyalty to tourism sites, J. Destin. Market. Manag. 15 (2020), 100409, https://doi.org/10.1016/j.jdmm.2020.100409. Mar 1.

[24] J. Lin, Z. Luo, X. Cheng, L. Li, Understanding the interplay of social commerce affordances and swift guanxi: an empirical study, Inf. Manag. 56 (2) (2019) 213–224, https://doi.org/10.1016/j.im.2018.05.009. Mar 1.

[25] I. Tuncer, The relationship between IT affordance, flow experience, trust, and social commerce intention: an exploration using the SOR paradigm, Technol. Soc. 65 (2021), 101567, https://doi.org/10.1016/j.techsoc.2021.101567. May 1.

[26] Z. Shao, L. Zhang, K. Chen, C. Zhang, Examining user satisfaction and stickiness in social networking sites from a technology affordance lens: uncovering the moderating effect of user experience, Ind. Manag. Data Syst. 120 (7) (2020) 1331–1360, https://doi.org/10.1108/IMDS-11-2019-0614. Jul 18.

[27] C. Ngarmwongnoi, J.S. Oliveira, M. AbedRabbo, S. Mousavi, The implications of eWOM adoption on the customer journey, J. Consum. Market. 37 (7) (2020) 749–759, https://doi.org/10.1108/JCM-10-2019-3450. Oct 13.

[28] S.C. Chen, S.H. Li, S.C. Liu, D.C. Yen, A. Ruangkanjanases, Assessing determinants of continuance intention towards personal cloud services: extending utaut2 with technology readiness, Symmetry 13 (3) (2021) 467, https://doi.org/10.3390/sym13030467. Mar 12.

[29] H. Hailey Shin, M. Jeong, M.H. Cho, The impact of smart tourism technology and domestic travelers' technology readiness on their satisfaction and behavioral intention: a c ross-country comparison, Int. J. Tourism Res. 23 (5) (2021 Sep) 726–742, https://doi.org/10.1002/jtr.2437.

[30] A. Parasuraman, C.L. Colby, An updated and streamlined technology readiness index: TRI 2.0, J. Serv. Res. 18 (1) (2015 Feb) 59–74, https://doi.org/10.1177/1094670514539730.

[31] J.J. Kim, M.J. Lee, H. Han, Smart hotels and sustainable consumer behavior: testing the effect of perceived performance, attitude, and technology readiness on word-of-mouth, Int. J. Environ. Res. Publ. Health 17 (20) (2020) 7455, https://doi.org/10.3390/ijerph17207455. Oct.

[32] Y. Wang, K.K. So, B.A. Sparks, Technology readiness and customer satisfaction with travel technologies: a cross-country investigation, J. Trav. Res. 56 (5) (2017 May) 563–577, https://doi.org/10.1177/0047287516657891.

[33] Y. Wang, J. Gu, S. Wang, J. Wang, Understanding consumers' willingness to use ride-sharing services: the roles of perceived value and perceived risk, Transport. Res. C Emerg. Technol. 105 (2019) 504–519, https://doi.org/10.1016/j.trc.2019.05.044. Aug 1.

[34] C. Flavián, A. Pérez-Rueda, D. Belanche, L.V. Casaló, Intention to use analytical artificial intelligence (AI) in services–the effect of technology readiness and awareness, J. Serv. Manag. 33 (2) (2022) 293–320, https://doi.org/10.1108/JOSM-10-2020-0378. Feb 28.

[35] S. Laparojkit, M. Suttipun, The influence of customer trust and loyalty on repurchase intention of domestic tourism: a case study in Thailand during COVID-19 crisis, J. Asian Finance, Economics and Business 8 (5) (2021) 961–969, https://doi.org/10.13106/jafeb.2021.vol8.no5.0961.

[36] B. Kaya, E. Behravesh, A.M. Abubakar, O.S. Kaya, C. Orús, The moderating role of website familiarity in the relationships between e-service quality, e-satisfaction and e-loyalty, J. Internet Commer. 18 (4) (2019) 369–394, https://doi.org/10.1080/15332861.2019.1668658. Oct 2.

[37] N. Peña-García, I. Gil-Saura, A. Rodríguez-Orejuela, J.R. Siqueira-Junior, Purchase intention and purchase behavior online: a cross-cultural approach, Heliyon 6 (6) (2020 Jun 1), https://doi.org/10.1016/j.heliyon.2020.e04284.

[38] Y. Jadil, N.P. Rana, Y.K. Dwivedi, Understanding the drivers of online trust and intention to buy on a website: an emerging market perspective, Inter. J. Inform. Manag. Data Insights 2 (1) (2022), 100065, https://doi.org/10.1016/j.jjimei.2022.100065. Apr 1.

[39] M. Deutsch, Trust and suspicion, J. Conflict Resolut. 2 (4) (1958 Dec) 265–279, https://doi.org/10.1177/002200275800200401.

[40] A. Bhattacherjee, Individual trust in online firms: scale development and initial test, J. Manag. Inf. Syst. 19 (1) (2002) 211–241, https://doi.org/10.1080/07421222.2002.11045715. Jul 1.

[41] G. Lăzăroiu, O. Neguriţă, I. Grecu, G. Grecu, P.C. Mitran, Consumers' decision-making process on social commerce platforms: online trust, perceived risk, and purchase intentions, Front. Psychol. 11 (2020) 890, https://doi.org/10.3389/fpsyg.2020.00890. May 15.

[42] D. Gefen, Reflections on the dimensions of trust and trustworthiness among online consumers, ACM SIGMIS - Data Base: the DATABASE for Advances in Information Systems 33 (3) (2002) 38–53, https://doi.org/10.1145/569905.569910. Aug 29.

[43] M. Sharma, R. Antony, R. Sehrawat, A.C. Cruz, T.U. Daim, Exploring post-adoption behaviors of e-service users: evidence from the hospitality sector/online travel services, Technol. Soc. 68 (2022), 101781, https://doi.org/10.1016/j.techsoc.2021.101781. Feb 1.

[44] C.R. Jeng, The role of trust in explaining tourists' behavioral intention to use e-booking services in Taiwan, J. China Tourism Res. 15 (4) (2019) 478–489, https://doi.org/10.1080/19388160.2018.1561584. Oct 2.

[45] B. Koc, K.G. Kucukergin, F. Dimanche, How destructive are negative tourist-to-tourist interactions despite the mitigating effect of optimism? J. Destin. Market. Manag. 23 (2022), 100693 https://doi.org/10.1016/j.jdmm.2022.100693. Mar 1.

[46] A. Usakli, K.G. Kucukergin, Using partial least squares structural equation modeling in hospitality and tourism: do researchers follow practical guidelines? Int. J. Contemp. Hospit. Manag. 30 (11) (2018) 3462–3512, https://doi.org/10.1108/IJCHM-11-2017-0753. Nov 20.

[47] J.F. Hair Jr, M.C. Howard, C. Nitzl, Assessing measurement model quality in PLS-SEM using confirmatory composite analysis, J. Bus. Res. 109 (2020 Mar 1) 101–110, https://doi.org/10.1016/j.jbusres.2019.11.069.

[48] S. Amaro, P. Duarte, An integrative model of consumers' intentions to purchase travel online, Tourism Manag. 46 (2015) 64–79, https://doi.org/10.1016/j.tourman.2014.06.006. Feb 1.

[49] X. Wang, Y. Yu, Z. Zhu, J. Zheng, Visiting intentions toward theme parks: do short video content and tourists' perceived playfulness on TikTok matter? Sustainability 14 (19) (2022), 12206 https://doi.org/10.3390/su141912206. Sep. 26.

[50] C. Fornell, D.F. Larcker, Evaluating structural equation models with unobservable variables and measurement error, J. Market. Res. 18 (1) (1981 Feb) 39–50, https://doi.org/10.1177/002224378101800104.

[51] N.N. Rahim, N. Humaidi, S.R. Aziz, N.H. Zain, Moderating effect of technology readiness towards open and distance learning (ODL) technology acceptance during COVID-19 pandemic, Asian Journal of University Education 18 (2) (2022) 406–421, https://doi.org/10.24191/ajue.v18i2.17995. Apr 30.

[52] J. Henseler, C.M. Ringle, M. Sarstedt, A new criterion for assessing discriminant validity in variance-based structural equation modeling, J. Acad. Market. Sci. 43 (2015) 115–135. Jan.

[53] J. Cohen, Statistical Power Analysis for the Behavioural Sciences, second ed., Lawrence Erlbaum Associates, Hillsdale, NJ, 1988.

[54] C.K. Pai, Y. Liu, S. Kang, A. Dai, The role of perceived smart tourism technology experience for tourist satisfaction, happiness and revisit intention, Sustainability 12 (16) (2020) 6592, https://doi.org/10.3390/su12166592. Aug 14.

[55] Y. Sun, X. Shao, X. Li, Y. Guo, K. Nie, How live streaming influences purchase intentions in social commerce: an IT affordance perspective, Electron. Commer. Res. Appl. 37 (2019), 100886, https://doi.org/10.1016/j.elerap.2019.100886. Sep. 1.

[56] M.J. Kim, C.K. Lee, M.W. Preis, The impact of innovation and gratification on authentic experience, subjective well-being, and behavioral intention in tourism virtual reality: the moderating role of technology readiness, Telematics Inf. 49 (2020), 101349, https://doi.org/10.1016/j.tele.2020.101349. Jun 1.

[57] J.I. Rojas-Mendez, A. Parasuraman, N. Papadopoulos, Demographics, attitudes, and technology readiness: a cross-cultural analysis and model validation, Market. Intell. Plann. 35 (1) (2017) 18–39, https://doi.org/10.1108/MIP-08-2015-0163. Feb 6.

[58] C. Calvo Porral, J.P. Levy-Mangin, Food private label brands: the role of consumer trust on loyalty and purchase intention, Br. Food J. 118 (3) (2016) 679–696. Mar 7.

[59] M.M. Alam, R.A. Karim, W. Habiba, The relationship between CRM and customer loyalty: the moderating role of customer trust, Int. J. Bank Market. 39 (7) (2021) 1248–1272, https://doi.org/10.1108/IJBM-12-2020-0607. Oct 28.