

Research Paper

Constructing Loyalty Through Brand Innovativeness in Online-booking Services: The Mediating Effect of Online Brand Experience

Tran Lan-Anh Phan and Chang Ting-Yueh

Southern Taiwan University of Science and Technology, Taiwan

© The Author(s) 2022. This article is published with open access by Taylor's Press.

Abstract: Owing to the fierce competition in the tourism sector, a growing body of literature has emphasised the importance of brand innovativeness on customer behaviours to gain a competitive advantage. Drawing upon the Stimulus-Organism-Response framework and Signaling theory, a proposed mediation model aims to enrich extant knowledge by stressing the influence of brand innovativeness on brand loyalty through individual dimensions of online brand experience in the context of online booking. Through an online self-administered survey, we obtained data from 315 Vietnamese respondents to evaluate Structural Equation Modeling using AMOS ver 24. The results indicate that sensory, affective, and behavioral experiences are the most dominant factors in the formation of brand loyalty, respectively. In addition, the findings reveal the full mediating effects of online brand experience dimensions on the relationship between brand innovativeness and brand loyalty. In light of this, our study provides several theoretical and practical implications.

Keywords: Online brand experience, brand innovativeness, signaling theory, mobile booking applications, the Stimulus-Organism-Response (SOR) model, online consumer behavior

Suggested citation: Tran, L-A. P., & Chang T-Y. (2022). Constructing loyalty through brand innovativeness in online-booking services: The mediating effect of online brand experience. *Asia-Pacific Journal of Innovation in Hospitality and Tourism*, 11(1), 219–239.

Introduction

The tourism industry's transformations in Industry 4.0 have resulted in the emergence of new distribution channels that allow suppliers to reach consumers directly, consequently eroding consumer loyalty to traditional travel agencies. In addition, numerous travellers are increasingly embracing various digital platforms, such as websites or mobile apps, to search for travel information and to make reservations (Wu & Law, 2019). According to Markets Insider (2019), the mobile booking sector

Correspondence: Tran Lan-Anh, Southern Taiwan University of Science and Technology, Taiwan.
Email: da81g203@stust.edu.tw

in Vietnam can potentially reach a compounded annual growth rate (CAGR) of 23.4% with \$1.489 billion by 2025, while the mobile wallet payment for tourism can yield a CAGR of 25.9% for the period of 2018–2025. Similarly, Nguyen (2022a) reported an optimistic recovery of e-tourism by predicting an annual gross merchandise volume (GMV) of \$9 billion in value. In this sense, it is worthwhile to research consumer behaviours in such a promising market.

Notably, Bilgihan, Kandampully, and Zhang (2016) claimed that poor online experiences cost 24% of yearly online global sales, thereby emphasising the significance of the online brand experience (OBE) to maintain customer relationships. Not surprisingly, prior studies have strongly contended that favourable experiences enhance brand trust, purchase intention, and brand loyalty (Bilgihan & Bujisic, 2015; Ozkara, Ozmen, & Kim, 2017). A growing body of literature has discussed various aspects of brand experience (Brakus, Schmitt, Zarantonello, & Simon, 2009; Schmitt, 1999), ways to generate superior brand experience (Verhoef et al., 2009), and the potential outcomes of brand experience (Biedenbach & Marell, 2010). According to Nysveen, Pedersen, and Skard (2013), marketing and brand managers should understand how to promote customer-centred outcomes such as brand personality, satisfaction, or loyalty by constructing brand experiences across five distinct dimensions rather than on a general concept. Nonetheless, such a research direction remains lacklustre in the context of online tourism. Given that online tourists tend to depend on innovative technologies, self-service platforms, and personal reservation tools (Osei, Ragavan, Mensah, & Kandappan, 2020), it is imperative to unearth how their behavioural changes influence their intentions in the mobile booking context. In light of this, we purposefully study the association between each component of brand experience on brand loyalty to bridge the gap between literature and practical concerns.

Along with this, we also consider the antecedents of OBE dimensions to approach a more comprehensive picture. Given the fierce competition, online travel agency (OTA) brands encounter increased pressure of being innovative to create a unique experience for customers in the e-tourism industry, fuelled by the recognition that brand innovativeness is identified as a differentiation strategy to gain competitive advantage (Keller & Aaker, 1998). Notably, it is argued that brand innovativeness could not directly lead to brand loyalty without the presence of perceived quality (Pappu & Quester, 2016). As customers typically gain the perception of quality by experiencing the brand (Klabi, 2020), we assume online brand experience as a prominent mediator that significantly conveys the impact of brand innovativeness on brand loyalty.

Accordingly, we developed these concepts drawing on the stimulus–organism–response model, which focuses on research threefold: (a) the importance of each OBE dimension in the formation of brand loyalty, (b) a direct association between brand innovativeness and brand loyalty, (c) multiple mediating effects of OBE dimensions

in the context of online booking. In such respect, our study makes several theoretical contributions. First, we enrich the extant literature of online brand experience by investigating the individual impacts of each dimension on brand loyalty as a response to Nysveen et al.'s (2013) call. Second, we broaden the knowledge of the relationship between brand innovativeness and brand loyalty in the context of online tourism. Although the importance of brand innovativeness has been widely documented in various offline contexts, its impact on brand loyalty of mobile bookers has received less attention. In this sense, our investigation aims to clarify this under-researched association, thereby revising the significance of brand innovativeness on online behaviours.

Finally, we shed light on how online brand experience mediates the relationship between brand innovativeness and brand loyalty. To our knowledge, there is a lack of such an exploration in previous studies. In light of this, our findings contribute to the reference literature by highlighting the mediating effect of online brand experience, ultimately encouraging further research on this issue. Along with theoretical contributions, we also provide several practical insights in greater depth. Given the fierce competition of e-tourism, such as the Vietnam market, our findings are fruitful for OTA brands to determine primary factors affecting the behaviours of mobile bookers (m-bookers) and thereby, create more efficient brand-related strategies.

Theoretical Background

The Stimulus – Organism – Response Model

The stimulus–organism–response model (S–O–R) was first introduced in environmental psychology (Mehrabian & Russell, 1974) and subsequently, gained popularity in marketing research. In this paradigm, the stimulus (S) in a given environment may evoke internal states of individuals (O), which in turn, drives specific behavioural outcomes (R). Prior studies initially applied the S–O–R ideology to investigate the influence of in-store atmospheric cues on offline buying behaviour (Kaur, Lal, & Bedi, 2017). The model has since been expanded to embrace online shopping behaviour (Peng & Kim, 2014). Accordingly, we adopted the “S–O–R model” to investigate the association among brand innovativeness, online brand experience, and brand loyalty in the online context of tourism.

According to the signalling theory, the failure to judge the quality of an offering is due to “information asymmetry,” in which customers could not access the complete information required to make decisions (Spence, 1974). Consequently, they tend to depend on other relevant information delivered by the brand (Pappu & Quester, 2016). As brand innovativeness reflects the ability of a brand to create and launch an innovation that embraces brand messages to customers, it might appear like a valuable signal for customers (Shams, Alpert, & Brown, 2015). In this regard, perceived brand innovativeness is subjective, which depends on customer

judgments of product attributes, technology, or relevant messages of a brand image. Furthermore, customers typically regard companies with a high level of innovation as more appealing and trustworthy (Aaker, 2007), encouraging them to remain loyal (Pappu & Quester, 2016). Following this vein, we propose brand innovativeness as a stimulus (S) that triggers consumers' reactions to a brand.

Within this context, OBE emerges as an organismic variable (O) that intervenes between environmental stimuli and the responses emitted. Brakus et al. (2009) initially described brand experience as customers' internal responses evoked by stimuli associated with a brand. This concept was later extended in the online context that alludes to the flow of brand meanings when customers connect with technology platforms (e.g., websites, mobile apps, or social networks) (Zha, Melewar, Foroudi, & Jin, 2020). Despite the fact that multiple dimensions have been proposed, there is considerable consensus on the essential aspects of the consumer experience. Generally, Brakus et al. (2009) conceptualised brand experience into four underlying dimensions: affective, behavioural, cognitive, and sensory experience. With the advantages of augmented reality technologies, several limitations of the online environment have been partially eliminated. Therefore, numerous tourism researchers believe that adopting Brakus et al.'s (2009) measurements is valuable for investigating customer behaviour in the online context (e.g., Cleff, Walter, & Xie, 2018; Jiménez-Barreto, Rubio, Campo, & Molinillo, 2020).

Notably, in the tourism and hospitality literature, previous research has heightened the importance of an additional dimension of online brand experience, namely social/relational experience, in consideration of the presence of other users during the tourists' experience (Brun, Rajaobelina, Ricard, & Amiot, 2020). In particular, tourism experience is the cumulative result of searching for a prospective journey and sharing about a previous one through the information-sharing network rather than merely derived from on-site activities (Munar & Jacobsen, 2014). Moreover, previous studies have revealed that consumers' perceptions of brands and purchase decisions are significantly influenced by online reviews (Filieri, 2016; Gavilan, Avello, & Martinez-Navarro, 2018) and community commitment (Zhou & Omar, 2015). On this basis, we employed five dimensions as organisms through which brand innovativeness affects brand loyalty.

On another note, an increasing amount of literature has been devoted to brand loyalty as a valuable outcome (R) of online brand experience (Khan, Rahman, & Fatma, 2016). Generally, brand loyalty is defined as the characteristic of customers who have a solid commitment to a brand as they perceive it to be superior to the alternatives. This perception is reinforced by frequent use (Jacoby & Chestnut, 1978). Furthermore, recognising that attracting potential users to an online platform is increasingly complex and costly as online competition grows, marketers are urged to place a greater emphasis on brand loyalty (Holland & Menzel Baker, 2001). In

light of this, e-businesses are required to determine how customers form their loyalty. Thus, it is plausible to consider brand loyalty as an essential response in the model. By doing that, our proposed model provides a deeper and more nuanced understanding of customer-centred variables in the context of online booking.

Hypotheses Development

Brand Innovativeness – Online Brand Experience

As the first stage in the S–O–R model, direct relationships between brand innovativeness and five OBE dimensions should be initially clarified. Recently, an increasing amount of literature has been devoted to brand innovativeness as a valuable tool to evoke different brand experience dimensions. For example, in terms of affective experience, Shams et al. (2015), drawing on the associative network model of memory, stated that highly innovative brands have stronger and more favourable associations in customers' minds, which entails feelings of fun and excitement for them. In other words, innovative offers excite consumers, which are associated with surprise (Shams et al., 2015). This is consistent with Molina-Castillo & Munuera-Aleman's (2009) argument that innovativeness evokes sound emotions in customers' minds, which improves the consumption experience.

Indeed, increased levels of service innovation result in more connections between consumers and service personnel, entailing relational, affective, and cognitive stimulation (Nysveen, Oklevik, & Pedersen, 2018). Notably, Kunz, Schmitt, & Meyer (2011) revealed that brand innovativeness enhances emotional satisfaction through an affective-experiential route and contributes to the formation of cognitive satisfaction through functional-cognitive values. Undoubtedly, customers' sense of curiosity is enhanced by the novelty provided by a brand. In such respect, brand innovativeness might evoke users' capability of thinking and problem-solving to adapt to changes. Ideally, innovative brands tend to offer more action-oriented programs to encourage customer engagement for their understanding. Thus, it is plausible that brand innovativeness entails behavioural experience.

On another note, given that sensory experience embodies the intensity of the brand's impression on customers, innovations involving new colours, materials, forms, and textures are supposed to stimulate consumers' senses (Long, 2002). Moreover, for online services that lack physical interaction, it is expected that customers tend to search for more auditory and visual information to visualise their purchase. In this sense, innovative brands might fulfil such a demand by providing augmented reality technologies to attract tourists from the get-go. This is supported by Bilgihan (2016), who opined that a tourist might be immersed in the prospect of his upcoming trip by viewing vivid photos and videos of tourism locations on the website.

Finally, it is argued that establishing a social identity through connections with innovative brands gives customers a sense of status ostentation and offers them other social goals (Perry-Smith & Mannucci, 2017). That is, these novel attributes, from the standpoint of an online user, denote the possibility of attaining goal-congruent outcomes, such as portraying oneself as a tech-savvy person (Fazal-e-Hasan, Ahmadi, Kelly, & Lings, 2019). This aligns with Osei et al. (2020) who highlighted that innovative technologies are more likely to create authentic experiences while preserving the sight of human values and interactions. Thus, the effects of brand innovativeness should occur across different individual dimensions of brand experiences in such an experience-rich context as tourism (Nysveen et al., 2018). Accordingly, we posit the following hypothesis:

H1a-e Brand innovativeness positively influences all dimensions of online brand experience.

Online Brand Experience – Brand Loyalty

In the era of e-marketing, online brand experience has been recognised as a valuable controller of customer behaviours, instead of just prices (Ye, Barreda, Okumus, & Nusair, 2019). According to Brakus et al. (2009), a better understanding of value perception gained through brand experience enhances brand loyalty. In particular, affective experiences entail inferences about a brand's sincerity; sensory experiences, on the other hand, might lead to speculations about a brand's impression. Cognitive experiences, meanwhile, produce inferences about brand competence; and behavioural experiences result in stereotypes about excitement (Nysveen et al., 2013, p. 411). Indeed, consumers might obtain more information or even earn rewards (for example, discounts, vouchers) by interacting with the brands. On this basis, the bond between customers and a brand becomes more substantial and more sustainable as the frequency and length of interactions increase (Kim & Ah Yu, 2016). Relatedly, Gentile, Spiller, and Noci (2007) indicated that customers with satisfactory experiences might generate an emotional connection with a brand, ultimately enhancing their loyalty. As such, the more experiential attributes a brand produces, the higher the possibility for customers to revisit or re-immense in the experience over time, contributing to brand loyalty formation.

Within the context of e-commerce in tourism, though OBE omits the physical presence of entities such as a store, there is an opportunity to develop brand experiences through visual, audible, or community-based features in a virtual environment. All of these ultimately lead to improved brand perception and brand loyalty (Cleff et al., 2018). Similarly, previous studies on destination website have empirically confirmed the influence of sensory and cognitive experience on customer intentions of visiting/ revisiting and recommending the destination (Jiménez-Barreto et al., 2020; Lee &

Gretzel, 2012); earlier mentioned as attributes of online brand loyalty in the present research. In this sense, we hypothesise that:

H2a-e. All dimensions of online brand experience positively influence brand loyalty.

Brand Innovativeness – Brand Loyalty

Literature supports the assertion that brand innovativeness influences brand loyalty in a variety of contexts, such as tourism and hospitality (Kim, Nicolau, & Tang, 2021; Nysveen et al., 2018), green branding (Lin, Lobo, & Leckie, 2019) and global branding (Pappu & Quester, 2016). Studies have found that brand loyal is directly influenced by the perception of innovativeness as consumers perceive innovative brands to be capable of satisfying their expectations, thereby becoming more committed to these brands (Eisingerich & Rubera, 2010). Alternatively, by providing adequate and novel solutions, innovative brands could gain customer satisfaction and trust, which encourages them to stay loyal (Chen, 2015). According to Fazal-e-Hasan et al. (2019), brand innovativeness alludes to the distinctive qualities of a product or service that are valuable to the consumer. In this respect, Pappu & Quester (2016) posited that brand innovativeness enhances brand loyalty, subject to the degree of perceived quality. Accordingly, we suppose that:

H3. Brand innovativeness positively influences brand loyalty.

On another note, Shams et al. (2017) revealed that a highly innovative brand generates higher levels of purchase intention via hedonic and cognitive feelings. Following this vein, we suppose that online brand experience appears as a mechanism through which the influence of brand innovativeness on brand loyalty is transmitted. This is fuelled by the recognition that experiencing the brand's stimuli might constitute a requisite for establishing and maintaining sustainable customer-brand relationships (Schmitt, 2013). Moreover, Spieth, Roeth, and Meissner (2019) contended that the perception of brand innovativeness alone is insufficient to enhance brand trust, widely considered a valuable determinant of brand loyalty in the literature. In other words, customers are hesitant to form their favourable attitudes once they have no inferences, associations, and thoughts toward a brand. According to Rathakrishnan et al. (2020), tourists habitually recall their previous experiences to decide their future purchases. As such, with the favourable experience evoked by brand innovativeness, m-bookers supposedly repeat their reservations on the app. Considering this, we suggest that:

H4. All dimensions of online brand experience mediate the effect of brand innovativeness on brand loyalty.

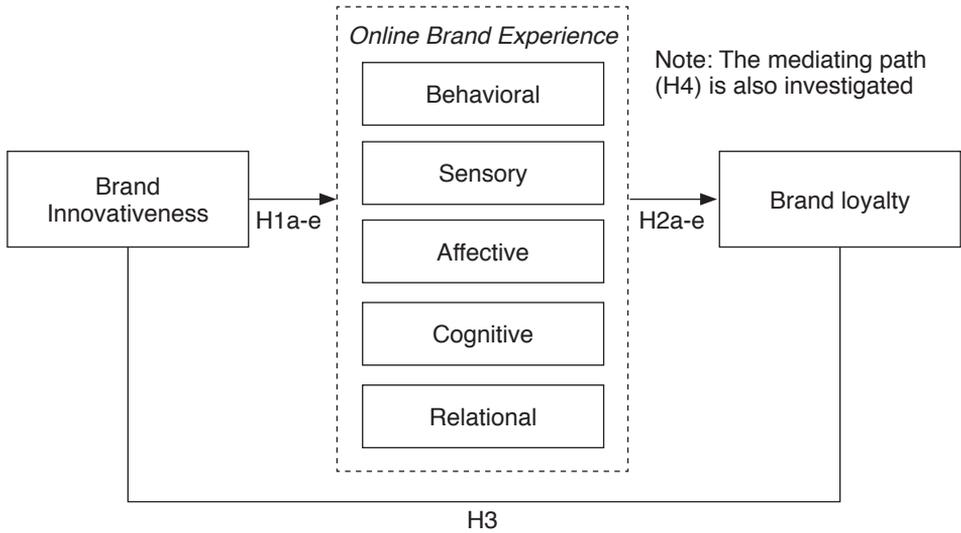


Figure 1. Proposed conceptual model

Methodology

Measurement Scale

Based on a thorough assessment of the relevant literature, a structured survey instrument was created. In our study, all factors were measured on a 5-point Likert scale, with responses ranging from (1) "Strongly disagree" to (5) "Strongly agree". Particularly, a four-item scale of Shams et al. (2015) was used to measure brand innovativeness as an exogenous variable. In this multiple mediation model, five specific dimensions of online brand experience were adapted from Cleff et al.'s (2018) measurement scale, including three items for behavioural experience, three items for cognitive experience, four items for sensory experience, four items for affective experience, and three items for relational experience. Meanwhile, brand loyalty was examined by a comprehensive scale with four items from previous studies (Bidmon, 2017; Lau, Lee, & Manager, 1999; So, King, Sparks, & Wang, 2013).

To achieve consistency in presenting concepts in both languages, we translated the questionnaire back and forth between English and Vietnamese. One associate professor and two PhD candidates were engaged in the designing procedure to avoid bias. As advised, we also conducted a 50-sample pilot test to diagnose the validity of measurement scales before distributing the final survey. As favourable results of Cronbach's Alpha tests established the validity of the measurement scales, we consequently retained this version as our official questionnaire to distribute.

Sampling and Data Collection

The self-administered questionnaire approach was utilised to obtain survey data for our study. In April 2021, we distributed online Google Forms questionnaires to Facebook travel groups, which guaranteed the anonymity of the sample. In addition, some incentives were provided at random to encourage participation. For research questions, respondents were asked to select the OTA brand they had used in the past 12 months from a list of four OTA brands with high usage rates in Vietnam: Booking.com, Agoda, Traveloka, and Tripadvisor (Nguyen, 2022b). Consequently, 339 questionnaires were collected by the end of the data collection period.

Data Analysis

Prior to analysing SEM, we utilised SPSS version 26 for data screening to process missing values and outliers. After removing 24 unusable survey responses, a total of 315 valid questionnaires were collected for processing, yielding a 92.9 % of usability rate. Accordingly, a descriptive analysis of respondent profiles was provided. We also assessed an initial reliability scale through Cronbach's Alpha test. After a purification procedure, a total of 24 items were retained (see Table 2 for details). Then, a confirmatory factor analysis (CFA) was produced to confirm the reliability and validity of the constructs. On another note, we ran maximum likelihood estimation through AMOS 24.0 to examine the structural model. Meanwhile, regarding mediation analysis, the bias-corrected bootstrapping procedure of 1,000 samples was adopted. Finally, for a robust conclusion, our study embraced the comparison of competitive models to confirm the type of mediation, as suggested by Baron & Kenny (1986).

Results and Discussion

Respondent Profile

Table 1 shows the demographic characteristics of the sample. Accordingly, females represent approximately 50.79%, while males comprise 49.21% of the total number of respondents. Furthermore, the sample size was found to be skewed to the group of millennials. Specifically, 39.05% were aged 26 to 35 years old, 31.43% aged 36 to 45, and 29.52% aged 16 to 25. In terms of education level, the results indicate 53.02% had a bachelor's degree, 34.60%, a postgraduate degree, 8.57%, a vocational qualification, and 3.81%, a high school diploma. On another note, the majority of the sample (44.44%) earned 20 million VND or above per month, 36.60%, 10 to 20 million VND, 16.83%, 5 to 10 million VND, and 4.13%, under 5 million VND. Traveloka was identified as the most used OTA brand with 146 votes (46.35%), followed by Agoda with 96 votes (30.48 %) and Booking.com with 41 votes (13.02%).

Table 1. Profile data

Demographic profile		Frequency (n=315)	Percentage (%)
Gender	Male	155	49.21
	Female	160	50.79
Age	16 to 25	93	29.52
	26 to 35	123	39.05
	36 to 45	99	31.43
Education	High school diploma	12	3.81
	Vocational qualification	27	8.57
	Undergraduate	167	53.02
	Postgraduate	109	34.60
Income (VND/month) ^a	Under 5 million	13	4.13
	From 5 to 10 million	53	16.83
	From 10 to 20 million	109	34.60
	Above 20 million	140	44.44
OTA brand ^b	Traveloka	146	46.35
	Booking.com	41	13.02
	Agoda	96	30.48
	Tripadvisor	32	10.16

Notes :

^a VND represents Vietnam dong, the currency of Vietnam

^b Respondents were required to choose one brand that they had used in last 12 months from the list

Measurement Validation

In our research, three types of fit indices (absolute, incremental, and parsimonious) were employed to assess the measurement model fit. Accordingly, the measurement model showed an adequate fit, with a chi-square (χ^2)/df statistic of 1.625; comparative fit index (CFI) = 0.964; goodness of fit index (GFI) = 0.894; incremental fit index (IFI) = 0.964; and root mean square error of approximation (RMSEA) = 0.045 <0.05 (Browne & Cudeck, 1993).

To assess the scale’s internal consistency reliability, we considered Cronbach’s alpha and composite reliabilities. Cronbach’s alpha reliability values, which ranged from 0.804 to 0.898 for all constructs, were satisfactory (Nunnally, 1978). Furthermore, the composite reliabilities indices (CR) of seven constructs were greater than the suggested limit of 0.7, with values ranging from [0.805;0.899] (Gefen & Straub, 2005). Overall, these findings suggest a sufficient internal consistency.

For convergent validity testing, the Average Variance Extracted (AVE) should be equal to or greater than 0.5, and standardised factor loadings should be larger than the 0.7 threshold recommended by Fornell & Larcker (1981). With AVE values in the range of [0.569;0.689] and factor loadings in the range of [0.705;0.850], the measurement model exhibits a verified convergent validity.

Table 2. Measurement model assessment

Construct	Code	Construct/indicator	Factor loading	Cronbach alpha	Composite reliability	AVE
Regarding [X] as the brand of a travel mobile app that a respondent had used in the past 12 months			(≥ 0.70)	(≥ 0.70)	(≥ 0.70)	(≥ 0.50)
Affective experience	AF1	I feel secure to purchase through [X]’s app	0.731	0.804	0.805	0.579
	AF2	I feel [X]’s app inspiring	0.793			
	AF3	[X]’s app evokes my curiosity	0.757			
	AF4*	I feel the time pass quickly when I browse [X]’s app*				
Behavioural experience	BE1	I make comments on [X]’s app	0.799	0.862	0.862	0.675
	BE2	I post my experiences (pictures, travel tips) on [X]’s app	0.816			
	BE3	I am always interested in participating [X]’s promotion programs	0.850			
Cognitive experience	CO1	I find [X]’s app informative and educating	0.759	0.833	0.834	0.627
	CO2	I find the information valuable and stimulate thinking	0.826			
	CO3	I have gained a better understanding about the offers	0.789			
Relational experience	RE1	I find that I share a similar interest with other users	0.777	0.840	0.841	0.638
	RE2	I feel connected to other users while reviewing their experiences through [X]’s app	0.785			
	RE3	I share a similar lifestyle with other users	0.833			
Sensory experience	SE1	I find [X]’s app visually impressive	0.819	0.892	0.892	0.675
	SE2	I like the design of [X]’s app (app layout, color)	0.840			
	SE3	The pictures on the website/ app are eye-catching and vivid	0.823			
	SE4	There is no disturbing advertisement on [X]’s app	0.803			

Table 2 (con't)

Construct	Code	Construct/indicator	Factor loading	Cronbach alpha	Composite reliability	AVE
Brand innovativeness	BI1	[X] sets itself apart from other brands in the online booking industry	0.705	0.839	0.840	0.569
	BI2	New services or products provided by [X] make me feel "Wow!"	0.743			
	BI3_re	[X] is not a cutting-edge brand ®	0.829			
	BI4	[X] constantly generates new ideas	0.734			
Brand loyalty	BL1	I seldom consider switching to another website	0.826	0.898	0.899	0.689
	BL2	I would consider [X] as my first choice for the online booking service	0.841			
	BL3	I would recommend [X] to someone who seeks my advice	0.820			
	BL4	I would do more business with [X] in the next few years	0.833			

Note: ®: reversed item, *: removed after the scale purification
 AF: Affective experience, BE: Behavioural experience, CO: Cognitive experience, RE: Relational experience, SE: Sensory experience, BI: Brand innovativeness, BL: Brand loyalty; AVE: Average Variance Extracted

On another note, inter-construct correlation was compared to the square root of the average variance (i.e., variance extracted estimate) for each factor to determine discriminant validity (Hatcher, 1994). As a result, the constructs' discriminant validity is validated because all AVE values were higher than their squared correlations (Fornell & Larcker, 1981). Table 3 provides a detailed overview.

Table 3. Discriminant validity

	AF	BE	CO	RE	SE	BI	BL
AF	0.761						
BE	0.421	0.822					
CO	0.510	0.405	0.792				
RE	0.534	0.372	0.597	0.799			
SE	0.557	0.418	0.483	0.370	0.821		
BI	0.462	0.527	0.454	0.459	0.411	0.754	
BL	0.657	0.575	0.622	0.588	0.653	0.534	0.830

Note: AF: Affective experience, BE: Behavioural experience, CO: Cognitive experience, RE: Relational experience, SE: Sensory experience, BI: Brand innovativeness, BL: Brand loyalty
 The number in bold = the square root of Average Variance Extracted and the off-diagonal number = correlations between constructs

Regarding potential problems of common method variance (CMV), we employed Harman’s single-factor test to check CMV’s presence. Each measure was effectively loaded in exploratory factor analysis (Chang, Van Witteloostuijn, & Eden, 2010). The findings reveal that the common variance explained by a single factor is 36.351%, which is less than 50% (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). As a result, there was no general factor found in our data. In addition, the correlation matrix was investigated. The findings of this matrix reveal that no pair of variables were significantly correlated (i.e., 0.90 or higher). Therefore, CMV is not a significant problem with the data gathered in our study (Podsakoff et al., 2003).

Structural Equation Modelling Analysis

Our study employed maximum likelihood estimation in AMOS 24.0 to examine the structural model. The results demonstrate that the overall fit is satisfactory, meeting the fit standards specified in the literature.: $\chi^2 = 464.711$, $\chi^2/df = 1.625$; CFI = 0.957; TLI = 0.951; RMSEA = 0.045 with PCLOSE = 0.886. Table 4 demonstrates detailed results of the model testing. Interestingly, the standardised path coefficient between brand innovativeness (BI) and brand loyalty (BL) is negative and insignificant ($\beta = 0.046$, p -value = $0.366 > 0.05$). Meanwhile, BI yields a significant influence on all dimensions of OBE. Particularly, the predicting powers of BI on behavioural, affective, and cognitive experience ($\beta = 0.588, 0.580, 0.569$, respectively) are stronger than those of BI on relational ($\beta = 0.563$) and sensory experience ($\beta = 0.517$). In addition, these variables exert a positive and significant influence on brand loyalty, as expected. Specifically, sensory, affective, and behavioural experience appear as three dominating dimensions in the formation of brand loyalty with path coefficient values of 0.318, 0.235, and 0.226, respectively.

Table 4. SEM results

Latent variables				β	S.E.	C.R.	p -values	Supported
H1a	BI	→	AF	0.580	0.075	7.619	***	Yes
H1b	BI	→	BE	0.588	0.084	8.305	***	Yes
H1c	BI	→	CO	0.569	0.077	7.950	***	Yes
H1d	BI	→	RE	0.563	0.092	7.788	***	Yes
H1e	BI	→	SE	0.517	0.080	7.603	***	Yes
H2a	AF	→	BL	0.235	0.059	3.736	***	Yes
H2b	BE	→	BL	0.226	0.047	3.759	***	Yes
H2c	CO	→	BL	0.197	0.052	3.315	***	Yes
H2d	RE	→	BL	0.195	0.043	3.312	***	Yes
H2e	SE	→	BL	0.318	0.044	5.703	***	Yes
H3	BI	→	BL	0.015	0.096	0.144	0.885	No

Note: AF: Affective experience, BE: Behavioural experience, CO: Cognitive experience, RE: Relational experience, SE: Sensory experience, BI: Brand innovativeness, BL: Brand loyalty, β : Path coefficient, S.E: Standard error, C.R: Critical ratio

Mediation Analysis

To check a mediation model, we employed the bias-corrected bootstrapping procedure in AMOS version 24. Drawing 1,000 bootstrap samples with a 95% bias-corrected confidence, the results reveal that there is no significant direct relationship between brand innovativeness and brand loyalty ($\beta = 0.015$, two-tailed p -value = $0.930 > 0.05$, 95% CI: [-0.166;0.179]). In contrast, the influence of brand innovativeness on brand loyalty is significantly transmitted through all dimensions of online brand experience ($\beta = 0.656$, two-tailed p -value = $0.001 < 0.05$, 95% CI: [0.519;0.824]). Along with a favourable value of total effect ($\beta = 0.751$, two-tailed p -value = $0.002 < 0.05$, 95% CI: [0.566;0.757]), a full mediation model was established, as suggested by Rucker, Preacher, Tormala, and Petty (2011).

For a precise conclusion, we follow the suggestion of Baron & Kenny (1986), that a complete mediation should be drawn once a partial mediation model with direct effects of OBE dimensions on brand loyalty shows no significant improvement in the fit. Although both models reveal adequate indices of fit (full mediation model with $\chi^2/df = 1.619$, CFI = 0.964, RMSEA = 0.044, and BIC = 725.350; and partial mediation model with $\chi^2/df = 1.625$; CFI = 0.964; RMSEA = 0.045, and BIC = 731.069), a full mediation model with a lower value of BIC is retained. Furthermore, we consider the non-mediation model, limiting the influence of brand innovativeness on OBE to zero. The non-mediation model is eliminated due to a poor model fit ($\chi^2/df = 2.935$, CFI = 0.885, RMSEA = 0.079, and BIC = 1032.707). As a result, a full mediation model is once again affirmed.

Discussions and Conclusion

Theoretical Implications

For the theoretical contribution, our paper aims to enrich the online branding literature by investigating the importance of online brand experience concerning brand innovativeness as its antecedent and brand loyalty as its valuable outcome. As a result, our study confirms a positive direct impact of brand innovativeness on specific aspects of online brand experience. Notably, we find that behavioural, affective, and cognitive experiences are most affected by brand innovativeness, while relational and sensory experiences are affected the least. As mentioned earlier, online users tend to develop a sense of curiosity and want to learn more about the brand's novelty and differentiation. Consequently, this stimulates action-oriented interactions between creative brands and customers. Once brand innovativeness is aligned with the expectations of customers, affective experiences should entail. In contrast, relational experience might mainly stem from relationships with other users in a group. Innovative brands merely assist in creating an environment to stimulate these relationships rather than influencing them directly. An explanation for the

lowest impact of the brand innovativeness on sensory experience is that customers might regard the visual and audio impression as a must for any innovative brand in online booking service to attract and retain them.

Moreover, the influence of each OBE dimension on the formation of brand loyalty has been confirmed in our research. Specifically, sensory, affective, and behavioural experiences are identified as three prominent factors that drive brand loyalty. This is consistent with other findings in the tourism and hospitality literature (Cleff et al., 2018). Meanwhile, cognitive and relational experiences are less meaningful in the formation of brand loyalty compared to others. According to Nysveen et al. (2012), customers might encounter complexity or lack an intuitive interface with a brand as the brand provokes an overload of thinking. Furthermore, Cleff et al. (2018) explained that a less critical role of relational experience is due to the heavy focus of customers on mood and sensations about their prospects of traveling.

On another note, our study clarifies the association between brand innovativeness and brand loyalty in the context of online booking. Lin et al. (2019) revealed that brand innovativeness significantly positively influences brand loyalty in the branding literature. Similarly, brand innovativeness has been found as a powerful predictor of purchase intention in the context of mobile phone products (Shams et al., 2017). In contrast, we confirm a positive but insignificant effect of brand innovativeness on brand loyalty. This is in line with Pappu & Quester's (2016) findings that a certain degree of brand innovativeness could not directly entail brand loyalty regarding global high-technology branding. One explanation is that customers might not be capable of verifying the authenticity of brand innovativeness if they have not experienced it before. In this case, brand innovativeness alone, therefore, is insufficient to produce brand loyalty.

In light of this, the present study establishes the second contribution by examining a full mediation model. According to the results, brand innovativeness exerts a significant influence on OBE dimensions that positively affect brand loyalty. Meanwhile, as stated earlier, there is an insignificant impact of brand innovativeness on brand loyalty. Consequently, OBE dimensions are concluded as a mechanism through which the influence of brand innovativeness is transmitted to brand loyalty. Theoretically, such a conclusion sheds light on the two research questions mentioned earlier. Furthermore, it encourages a discussion for the relationship between brand innovativeness and brand loyalty in other contexts.

Managerial Implications

In addition to theoretical contributions, our research draws several managerial implications that can help tourism managers build effective marketing strategies. Considering the full mediating effects of OBE dimensions, we strongly recommend that OTA brands continuously cultivate an image of innovativeness to evoke

different customer experiences, which reap their commitment toward the brand. Since behavioural and affective experiences appear as two factors that are easily stimulated by brand innovativeness and are valuable in forming loyalty, managers should focus on exploiting these two aspects of online brand experience. In this regard, OTA marketers might provide more action-oriented programs to encourage customer engagement on their apps. Besides, innovative adjustments in service quality throughout consumption stages (i.e., before, during, and after purchase) are likely to promote favourable emotional states of customer towards the brand.

More importantly, though sensory experience is the least prominent but still significant outcome of brand innovativeness, this dimension should be paid more attention as it gives the most significant contribution to forming brand loyalty. That is, the brand's image of innovativeness needs a certain degree of visual impression. Therefore, in addition to applying modern virtual technologies, OTA brands might periodically alter the theme style on their applications to avoid visual boredom. Additionally, to provide favourable cognitive experiences, the information on the application should be simplified clearly and consistently for customers to follow their innovations at ease. Meanwhile, our results also reveal that the importance of relational experience is slightly lower than those of other dimensions. It might be inferred that this construct is strongly affected by the presence of others rather than merely brand innovativeness itself. Nevertheless, the perception of brand innovativeness still brings customers a sense of identification that they belong to a highly innovative group. In this sense, OTA managers could enhance such a process by applying more novel technologies.

Limitations and Future Research

Despite the theoretical and practical contributions, our research should be considered with caution regarding several limitations. First, the findings should not be assumed generalisable due to methodological shortcomings. Our research merely concentrates on a single context, that is, online booking on mobile travel applications. In this sense, the experiential focus of customers might vary across types of services, subject to their industrial characteristics. Moreover, in the period that the survey was conducted, the industry of e-tourism had suffered from the impacts of the COVID-19 pandemic. The overload of cancelled flights or room reservations might cause a late response from customer services, consequently harming customer judgments toward the brand. Thus, our findings should be interpreted with caution. In this respect, tourism scholars are urged to examine whether dissatisfactory events play any role in their model in further studies.

Second, we disregarded examining the differences of groups (e.g., age, gender, or cultural factors). For instance, it would be interesting to investigate whether

the impact of brand innovativeness on brand loyalty through brand experience dimensions is similar among different nationalities. As our study solely focused on Vietnamese respondents, the managerial implications, therefore, are highly valuable for OTA brands targeting the Vietnam market. Inferences for other international markets should be drawn with caution. Further investigations are recommended to expand the research scope that covers multi-national level data.

Finally, there was a lack of potential mediators in our model. Shams et al. (2017) posited that the influence of brand innovativeness on customer-centred variables might be moderated by a degree of customer innovativeness. Exploring these differences probably will help tourism marketers determine their target segments more accurately, thereby creating efficient marketing strategies. Altogether, such potential multiple moderating effects should be promising for further research.

Open Access: This article is distributed under the terms of the Creative Commons Attribution License (CC-BY 4.0) which permits any use, distribution and reproduction in any medium, provided the original author(s) and the source are credited.

References

- Aaker, D. (2007). Innovation: Brand it or lose it. *California Management Review*, 50(1), 8–24.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173–1182.
- Bidmon, S. (2017). How does attachment style influence the brand attachment — brand trust and brand loyalty chain in adolescents? *International Journal of Advertising*, 36(1), 164–189.
- Biedenbach, G., & Marell, A. (2010). The impact of customer experience on brand equity in a business-to-business services setting. *Journal of Brand Management*, 17(6), 446–458.
- Bilgihan, A. (2016). Gen Y customer loyalty in online shopping: An integrated model of trust, user experience and branding. *Computers in Human Behavior*, 61, 103–113.
- Bilgihan, A., & Bujisic, M. (2015). The effect of website features in online relationship marketing: A case of online hotel booking. *Electronic Commerce Research and Applications*, 14(4), 222–232.
- Bilgihan, A., Kandampully, J., & Zhang, T. C. (2016). Towards a unified customer experience in online shopping environments: Antecedents and outcomes. *International Journal of Quality and Service Sciences*, 8(1), 102–119.
- Brakus, J., Schmitt, B. H., Zarantonello, L., & Simon, W. E. (2009). Brand experience: What is it? How is it measured? Does it affect loyalty? *Journal of Marketing*, 73, 1547–17185.
- Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), *Testing structural equation models* (pp. 136–162). California: Sage.

- Brun, I., Rajaobelina, L., Ricard, L., & Amiot, T. (2020). Examining the influence of the social dimension of customer experience on trust towards travel agencies: The role of experiential predisposition in a multichannel context. *Tourism Management Perspectives*, 34, 100668.
- Chang, S. J., Van Witteloostuijn, A., & Eden, L. (2010). From the editors: Common method variance in international business research. *Journal of International Business Studies*, 41(2), 178–184.
- Chen, R. J. C. (2015). From sustainability to customer loyalty: A case of full service hotels' guests. *Journal of Retailing and Consumer Services*, 22, 261–265.
- Cleff, T., Walter, N., & Xie, J. (2018). The effect of online brand experience on brand loyalty: A web of emotions. *IUP Journal of Brand Management*, 15(1), 7–24.
- Eisingerich, B. A., & Rubera, G. (2010). Drivers of brand commitment: A cross-national investigation. *Journal of International Marketing*, 18(2), 64–79.
- Fazal-e-Hasan, S. M., Ahmadi, H., Kelly, L., & Lings, I. N. (2019). The role of brand innovativeness and customer hope in developing online repurchase intentions. *Journal of Brand Management*, 26(2), 85–98.
- Filieri, R. (2016). What makes an online consumer review trustworthy? *Annals of Tourism Research*, 58, 46–64.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.
- Gavilan, D., Avello, M., & Martinez-Navarro, G. (2018). The influence of online ratings and reviews on hotel booking consideration. *Tourism Management*, 66, 53–61.
- Gefen, D., & Straub, D. (2005). A practical guide to factorial validity using PLS-Graph: Tutorial and annotated example. *Communications of the Association for Information Systems*, 16(1), 5.
- Gentile, C., Spiller, N., & Noci, G. (2007). How to sustain the customer experience: An overview of experience components that co-create value with the customer. *European Management Journal*, 25(5), 395–410.
- Hatcher, L. (1994). *A step-by-step approach to using the SAS system for factor analysis and structural equation modeling*. North Carolina: SAS Institute Inc.
- Holland, J., & Menzel Baker, S. (2001). Customer participation in creating site brand loyalty. *Journal of Interactive Marketing*, 15(4), 34–45.
- Jacoby, J., & Chestnut, R. W. (1978). *Brand loyalty: Measurement and management*. Hoboken, NJ: John Wiley & Sons.
- Jiménez-Barreto, J., Rubio, N., Campo, S., & Molinillo, S. (2020). Linking the online destination brand experience and brand credibility with tourists' behavioral intentions toward a destination. *Tourism Management*, 79, 104101.
- Kaur, S., Lal, A. K., & Bedi, S. S. (2017). Do vendor cues influence purchase intention of online shoppers? An empirical study using SOR framework. *Journal of Internet Commerce*, 16(4), 343–363.
- Keller, K. L., & Aaker, D. A. (1998). The impact of corporate marketing on a company's brand extensions. *Corporate Reputation Review*, 1(4), 356–378.

- Khan, I., Rahman, Z., & Fatma, M. (2016). The concept of online corporate brand experience: an empirical assessment. *Marketing Intelligence & Planning*, 34(5), 711–730.
- Kim, E., Nicolau, J., & Tang, L. (2021). The impact of restaurant innovativeness on consumer loyalty: The mediating role of perceived quality. *Journal of Hospitality & Tourism Research*, 45(8), 1464–1488.
- Kim, J., & Ah Yu, E. (2016). The holistic brand experience of branded mobile applications affects brand loyalty. *Social Behavior and Personality: An International Journal*, 44(1), 77–87.
- Klabi, F. (2020). Self-image congruity affecting perceived quality and the moderation of brand experience: The case of local and international brands in the Kingdom of Saudi Arabia. *Journal of Global Marketing*, 33(2), 69–83.
- Kunz, W., Schmitt, B., & Meyer, A. (2011). How does perceived firm innovativeness affect the consumer? *Journal of Business Research*, 64(8), 816–822.
- Lau, G. T., Lee, S. H., & Manager, M. (1999). Consumers' trust in a brand and the link to brand loyalty. *Journal of Market Focused Management*, 4, 341–370.
- Lee, W., & Gretzel, U. (2012). Designing persuasive destination websites: A mental imagery processing perspective. *Tourism Management*, 33(5), 1270–1280.
- Lin, J., Lobo, A., & Leckie, C. (2019). The influence of green brand innovativeness and value perception on brand loyalty: the moderating role of green knowledge. *Journal of Strategic Marketing*, 27(1), 81–95.
- Long, J. (2002). Continuous learning: The creative journey from research to innovation and invention. *Design Management Journal (Former Series)*, 13(2), 20–23.
- Markets Insider. (2019, Sep 25). Analysis on Vietnam's \$1.48Bn mobile travel booking market (2016-2025): Market size & forecast, retail spend analysis, and consumer attitude & behaviour. Retrieved from <https://markets.businessinsider.com/news/stocks/analysis-on-vietnam-s-1-48bn-mobile-travel-booking-market-2016-2025-market-size-forecast-retail-spend-analysis-and-consumer-attitude-behaviour-1028551953>
- Mehrabian, A., & Russell, J. A. (1974). *An approach to environmental psychology*. Cambridge, MA: MIT Press.
- Molina-Castillo, F. J., & Munuera-Aleman, J. L. (2009). The joint impact of quality and innovativeness on short-term new product performance. *Industrial Marketing Management*, 38(8), 984–993.
- Munar, A. M., & Jacobsen, J. K. S. (2014). Motivations for sharing tourism experiences through social media. *Tourism Management*, 43, 46–54.
- Nguyen, M-N. (2022a, Feb 4). GMV of online travel sector in Vietnam 2015-2025. *Satista*. Retrieved from <https://www.statista.com/statistics/1245329/vietnam-gmv-online-travel/?fbclid=IwAR2cUSLkiTiOkB5DIuD2grLh6qloZ3YigTtWbyCYoHGFpQ7NvLEPB70RjlQ>
- Nguyen, M-N. (2022b, Feb 15). Online travel agency usage in Vietnam as of November 2020. *Satista*. Retrieved from <https://www.statista.com/statistics/1201329/vietnam-online-travel-agency-usage/>
- Nunnally, J. C. (1978). *Psychometric theory* (2d Ed). New York, NY: McGraw-Hill.

- Nysveen, H., Oklevik, O., & Pedersen, P. E. (2018). Brand satisfaction: Exploring the role of innovativeness, green image and experience in the hotel sector. *International Journal of Contemporary Hospitality Management*, 30(9), 2908–2924.
- Nysveen, H., Pedersen, P. E., & Skard, S. (2013). Brand experiences in service organizations: Exploring the individual effects of brand experience dimensions. *Journal of Brand Management*, 20(5), 404–423.
- Osei, B.A., Ragavan, N. A., Mensah, H.K., & Kandappan, B. (2020). “Hospitality Revolution 4.0”: A literature review on a unified typology of IR 4.0 technologies for the tourism and hospitality industry in the era of COVID-19. *Asia-Pacific Journal of Innovation in Hospitality and Tourism*, 9(1), 25–45.
- Ozkar, B. Y., Ozmen, M., & Kim, J. W. (2017). Examining the effect of flow experience on online purchase: A novel approach to the flow theory based on hedonic and utilitarian value. *Journal of Retailing and Consumer Services*, 37, 119–131.
- Pappu, R., & Quester, P. G. (2016). How does brand innovativeness affect brand loyalty? *European Journal of Marketing*, 50(1–2), 2–28.
- Peng, C., & Kim, Y. G. (2014). Application of the stimuli-organism-response (SOR) framework to online shopping behavior. *Journal of Internet Commerce*, 13(3–4), 159–176.
- Perry-Smith, J. E., & Mannucci, P. V. (2017). From creativity to innovation: The social network drivers of the four phases of the idea journey. *Academy of Management Review*, 42(1), 53–79.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903.
- Rathakrishnan, T., Ramachandran, S., Siow, M. L., Shuib, A., Mohammad Afandi, S.H., Kunasekaran, P., & Prabhakaran, S. (2020). Wildlife memorable tourism experiences as antecedents of visitor loyalty at Sepilok Orangutan Rehabilitation Centre (SORC), Sabah, Malaysia. *Asia-Pacific Journal of Innovation in Hospitality and Tourism*, 9(1), 47–71.
- Rucker, D. D., Preacher, K. J., Tormala, Z. L., & Petty, R. E. (2011). Mediation analysis in social psychology: Current practices and new recommendations. *Social and Personality Psychology Compass*, 5(6), 359–371.
- Schmitt, B. (1999). Experiential marketing. *Journal of Marketing Management*, 15(1–3), 53–67.
- Schmitt, B. (2013). The consumer psychology of customer–brand relationships: Extending the AA Relationship model. *Journal of Consumer Psychology*, 23(2), 249–252.
- Shams, R., Alpert, F., & Brown, M. (2015). Consumer perceived brand innovativeness: Conceptualization and operationalization. *European Journal of Marketing*, 49(9–10), 1589–1615.
- Shams, R., Brown, M., & Alpert, F. (2017). The role of brand credibility in the relationship between brand innovativeness and purchase intention. *Journal of Customer Behaviour*, 16(2), 145–159.

- So, K. K. F., King, C., Sparks, B., & Wang, Y. (2013). The influence of customer brand identification on hotel brand evaluation and loyalty development. *International Journal of Hospitality Management*, 34(1), 31–41.
- Spence, M. (1974). *Market signaling: Informational transfer in hiring and related screening processes*. Cambridge, MA: Harvard University Press.
- Spieth, P., Roeth, T., & Meissner, S. (2019). Reinventing a business model in industrial networks: Implications for customers' brand perceptions. *Industrial Marketing Management*, 83, 275–287.
- Verhoef, P. C., Lemon, K. N., Parasuraman, A., Roggeveen, A., Tsiros, M., & Schlesinger, L. A. (2009). Customer experience creation: Determinants, dynamics and management strategies. *Journal of Retailing*, 85(1), 31–41.
- Wu, J. S., & Law, R. (2019). Analysing behavioural differences between e-and m-bookers in hotel booking. *International Journal of Hospitality Management*, 83, 247–256.
- Ye, B. H., Barreda, A. A., Okumus, F., & Nusair, K. (2019). Website interactivity and brand development of online travel agencies in China: The moderating role of age. *Journal of Business Research*, 99, 382–389.
- Zha, D., Melewar, T. C., Foroudi, P., & Jin, Z. (2020). An assessment of brand experience knowledge literature: Using bibliometric data to identify future research direction. *International Journal of Management Reviews*, 22(3), 287–317.
- Zhou, Y. & Omar, R. (2015). Online community commitment and member loyalty: A PLS-based study to examine Chinese travel and tourism-related online communities. *Asia-Pacific Journal of Innovation in Hospitality and Tourism*, 4(1), 43–62.