

Exploring Digital Adoption and Media Impacts on Travel Decision Making in Indian Hospitality: An Empirical Multiple Regression Approach

Ch. Suman Swami Das & Dr. B. Raghava Reddy*

*School of Commerce & Management, Mohan Babu University, Sree Sainath Nagar,
Tirupati, Andhra Pradesh - 517102.*

***Corresponding Author: Dr. B. Raghava Reddy**

Abstract

The introduction of digital marketing strategies has led to a great change in the tourism and hospitality industry as it affects the choice of customers to travel by providing a better interaction, more personalized content, and real time interactions. This empirical research aims to examine how different digital marketing variables such as tech-driven effects, online persuasive effect, content effect and media effects on tourism, influence the customer decision making in the Indian setting. Based on the results of the study, which is based on the analysis of the survey data of 500 respondents, a strong positive relationship between the variables of digital engagement and trust and the decision-making in relation to the type of travel is observed. The main results are that tech-driven effects can be strongly predicted by the digital adoption ($\beta=0.658$, $p<0.001$) and the content influence has the essential role in developing the reliance. These findings highlight why tourism companies should use digital technology to promote immersive experiences and target promotions. Practitioner implications may be the incorporation of data driven approaches in an effort to increase customer loyalty and booking intentions. The study is relevant to the literature as it offers an inclusive model of digital impacts in tourism that can be updated to the new markets.

Keywords

Digital marketing, Tourism, Hospitality, Customer travel decisions, Digital engagement, Multiple regression, Empirical study

Introduction

Tourism and hospitality industry is one of the most important sectors of the global economies that undergo radical changes due to the active development of the digital technologies since the beginning of the 2000s. These innovations have transformed the way tourists explore, plan and experience destinations to create more accessibility and personalization on a global scale. The sector is even more essential in the context of India, the country that is known to be rich in cultural traditions and landscapes, rich in traditions, and diverse. The most recent estimates point to the fact that travel and tourism play an important role in the national economy as it represents about 6.6% of GDP in 2024, but it is expected to keep improving until 2025 and further (WTTC, 2024). This huge contribution highlights the strength and future of this sector since it sustains approximately 46.5 million jobs which is an indicator that it is a large job-creator in a highly populated nation such as India. There is an impressive pace, which has been witnessed in the integration of digital marketing in the tourism and hospitality sector in India after the economic liberalization policies, which commenced in the early 1990s. The use of digital marketing covers various types of innovative tools, such as social media, content marketing, search engine optimization (SEO), email marketing, collaborating with influencers, and immersive technology, including virtual reality (VR) experiences, and augmented reality tours (Buhalis and Leung, 2018). These applications enable the most personalized, interactive and real time interactions with

a potential traveler, which enables a business to personalize the offering to the specific interests, behavior and feedback of such potential travelers.

The extensive economic changes in India since the liberalization of 1991 have had an immense impact on the tourism industry to remove the long-standing and entrenched problems to establish a more efficient and strong structure. These are reforms led by the Government of India and can broadly be divided into two major time periods. The initial stage which started in the mid 1980s focused on productivity promotion and improvement by use of modern practices, importation of advanced technologies, and human resources optimization to promote tourism effectively (GoI, 1991). This trend aligned activities of India to the world strategies in destination marketing, service excellence and sustainable development. The next step which began in 1991-92 was about fiscal stabilization through the introduction of the economy to foreign direct investment especially in such sectors as hospitality infrastructure, ecotourism projects as well as associated services (Chawla, 2003). The restructuring of the financial and structural reforms of this transformative period has focused on three inter-related priorities: (i) enhancing the infrastructural bases of tourism, including airports, roads, and accommodations; (ii) optimizing the works of the administrative services, developing technological capacities, and investing in the training and development of the human resource; and (iii) making systemic changes, such as implementing digital booking systems and reservation systems (Kotler et al., 2017). These efforts have resulted in the fact that over the last decade the size and depth of tourism markets have grown significantly and that numerous advanced digital tools such as mobile applications, artificial intelligence-based personalized recommendations, chatbots to answer customer service queries, and data analytics to predictive marketing have been developed (Xiang et al., 2015). Services sector, including tourism and hospitality are the most vibrant part of the Indian economy, and have steadily contributed to the growth in GDP throughout the last 20 years due to innovativeness, export possibilities, and domestic consumption (RBI, 2024). Tourism companies, whether in the form of adventure operators, heritage site managers or even in luxury hotel chains, are becoming aware of the fact that it is digital experience that really matters when it comes to attracting and retaining customers. With the help of digital marketing, the concerned business are in a position to build more meaningful and satisfying relationships with tourists, which results in increased satisfaction, loyalty, and ultimately leads to increased profitability and efficiency in operations in a competitive global environment (Gretzel et al., 2015).

Figure 1: Conception Framework of the Measures that affect Digital Engagement and Trust on Tourism.

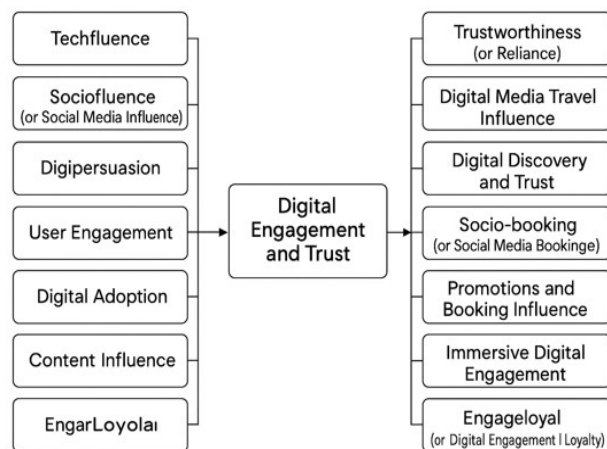


Figure 1 shows the hierarchical order of economic, technological, social, and decision-making actions that culminate in the adoption of digital, trust, and enjoyment in tourist-related settings.

Need for the Study

This is because the objectives of digital marketing systems in tourism are readily summed up in a single phrase, which is to deliver timely and precise information at the right time and right place at a minimal cost to the travel decision-makers. In particular, timeliness, accuracy, relevance and economicality of the information given must be met since travel preferences are not always predictable with an implicit aim of a flexible system capable of managing a host of circumstances and adapting readily to a given situation of change being the aim to change situations as they arise (Kumar and Katyayani, 2013). When online reviews, social media effects, and virtual tours are becoming more important to tourists, it is essential to comprehend how digital marketing affects travelers. The gaps in existing literature are the lack of empirical data in emerging markets such as India, where digital penetration is strong but disproportionate (Sigala, 2018). The current research will be addressing the gap to measure the effect of digital elements in influencing customer behaviors to help stakeholders maximize strategies in the post-pandemic recovery situation (Gössling, 2021).

Objectives of the Study

The current research has been conducted with the following goals: To identify the variables that affect effective online marketing in tourism and hospitality, To investigate the association between the variables of online engagement and customer travel choices, To provide evidence regarding the predicting power of technology-based and social media effects on booking intentions.

Review of Literature

A similar theme was presented in many studies in which it is argued that efficacy of digital marketing in the tourism and hospitality industry is considered a complex role influenced by multifaceted varying variables (DeLone and McLean, 2003). Shannon and Weaver (1949) provided the basics of information theory on which lots of further studies have been made to comprehend digital communication channels in the context of travel and tourism focusing on the effective conveyance of messages that can impact consumer perception and behavior. With this as a foundation, the importance of information systems in effecting an informed decision-making procedure among travelers, as the design and establishment of user-friendly marketing systems that are geared towards the end-user's accessibility and relevance has also been discussed (Wierenga and Ophuis, 1997).

In evaluating the role of digital systems in tourism organizations, academic focus has largely focused on the intrinsic performance features of such processing systems. Important metrics that are engineering related are the perceived usefulness of the system functions (Hiltz and Turoff, 1981), response time, and efficiency in providing information (Belardo et al., 1982), overall system flexibility in responding to system needs (Mahmood, 1987), and the convenience of access, which increases user perceptions of satisfaction and continued use (Bailey and Pearson, 1983). Moreover, Adams and his team (1992) emphasized ease of use as a crucial quality parameter in technology acceptance models, which is supported by Franz and Robey (1986) who preached the value of the expected facilities and features that are compatible with the expectations of users.

The identification of information quality as an element of the successful digital marketing initiatives is also important. Core dimensions include accuracy to establish reliable content, proper format to facilitate ease of reading (Magal, 1991; Rainer and Watson, 1995), currency and timeliness to update users with current information that is vital in planning a trip, precision,

completeness, conciseness, reliability and relevance, which in combination contribute to the trust and involvement of the users in digital platforms.

The modern empirical studies in the tourism field strengthen and widen these initial notions in order to illustrate their practical usability in a more digitized environment. As an example, a study on the role of digital content marketing in travel intentions constructs an in-depth framework based on the perceived value and customer loyalty, where a high-quality and targeted content can result in behavioral changes (Abdalla and Al-Bakri, 2025). In another study, the authors investigate the impact of sophisticated digital technologies on the travel intentions of consumers and notice that the immersive technologies like virtual reality (VR) and artificial intelligence (AI)-related personalization are associated with the positive correlation (Xiang et al., 2025). The data-driven solutions have been proved to be of great stimulus in increasing the level of engagement in the hospitality industry (Singh and Kumar, 2025), whereas the social media platforms have strong potential to influence consumer behavior and decision-making patterns by establishing the real-time communication and user-generated content (Moliner-Tena, 2024). Moreover, the online marketing is also perceived as a central mediator in the development of trust and visit intentions (Hassan and Soliman, 2024), and the digital strategies can also have a transformative effect on facilitating the perception of sustainability and responsible tourism. The promotional strength of the digital marketing, especially that of social media, is widely recorded in supporting business development and destination exposure (Kim and Lee, 2024). Bigger systems, like are postulated by Wierenga et al. (1999), claim that system quality and information quality are the major drivers of the digital marketing success in tourism, but Pitt et al., (1995) state that high quality of the services provided by digital providers is the key to the long-term success. Figure 2 builds upon these effects, infusing pathways associated with technological influences (techfluence) and social influences (sociinfluence) down to mechanisms that lead to immersive digital engagements and trust-building processes.

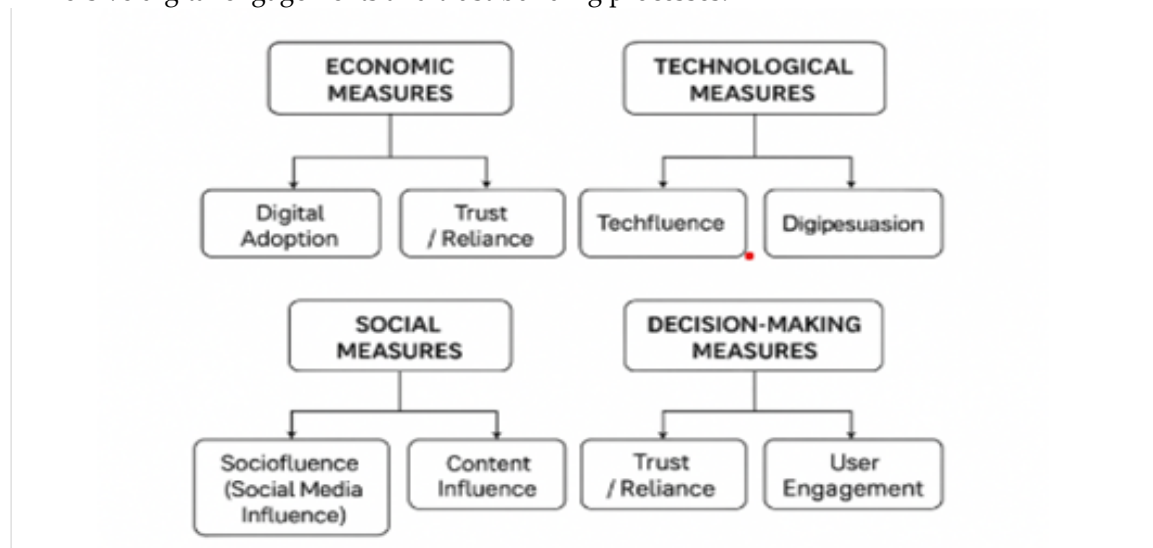


Figure 2: Detailed Model of Digital Engagement and Trust Factors

Research Hypothesis

According to the literature and the idea of the conceptual frameworks, the following hypotheses will be formulated:

H1: The effect of digital adoption has a positive relationship with the tech-based effects on travel judgment.

H2: The engagement and reliance of users are substantially predicted by social media and content.

H3: There are promotions and booking mediation between travel intentions and digital discovery.

H4: In general, digital engagement and trust variables are significant to predict a significant difference in customer travel choices.

Research Methodology

Data Collection

The data were collected via an administered offline questionnaire from a purposively selected sample of 604 travelers aged between 15 and above. To recruit participants, the questionnaire was made available in high-traffic physical points commonly used by the target population (e.g., airports, train stations, tourist information centers) and at large travel events or travel-themed festivals (i.e., travel expos, cultural fairs). In addition, recruitment was also enhanced through partnerships with local tourism organizations and clubs, as well as community associations that allowed access to its members or tourists. Participants were contacted in person for the provision of informed consent form (ICF), after trained researchers explained to them the aim of the study and checked their eligibility according to age and travel experience. The questionnaire was then distributed following Dillman et al., (2014), this method allowed engagement with the population of interest to be achieved effectively but within a convenience sampling approach.

Variables Measurement

Variables were measured on a 5-point Likert scale (1=Strongly Disagree to 5=Strongly Agree). Independent variables included Techfluence (or Social Media Influence), Digipersuasion, User Engagement, Digital Adoption, Content Influence, and Enga Loyol (Digital Engagement Loyalty). Dependent variables were grouped as D1=Digital Engagement and Trust, D2=User Engagement, D3=Digital Adoption, D4=social media, D5=Promotions and Booking Influences. Scales were adapted from established instruments (Hair et al., 2022), with Cronbach's alpha >0.7 for reliability.

Analysis

The multiple regressions were applied in SPSS to analyze the data. The model provided estimated coefficients of each factor where R-squared values can be described as power of explanation. Significance was tested at $p < 0.05$.

Findings

The multiple regression results are presented in Table 1.

Table 1: Multiple Regression Coefficients Model

Factor	Constant	D1	D2	D3	D4	D5	R	Adjusted R ²	Error of model estimation	F Value	P Value
Tech-Driven Impact	0.414	0.658	0.071	0.014	0.037	0.055	0.551	0.297	0.5523	52.02	.000
Online Convincing Power	1.313	0.430	0.044	0.059	0.027	0.028	0.480	0.224	0.4434	35.74	.000
Content Influence	0.261	0.165	0.008	0.085	0.013	0.432	0.540	0.286	0.7351	49.25	.003
Reliance	0.686	0.376	0.125	0.019	0.010	0.014	0.421	0.270	0.5806	25.76	.000
Media Impact on Tourism	1.517	0.013	0.077	0.151	0.152	0.115	0.306	0.086	0.5183	12.32	.002
Digital Discovery	0.819	0.057	0.084	0.125	0.116	0.219	0.365	0.126	0.5785	18.40	.000
Interactive Virtual Experience	0.414	0.283	0.124	0.139	0.022	0.022	0.390	0.145	0.6691	21.49	.000
Smart Digital travel and Tools	0.609	0.339	0.003	0.021	0.188	0.133	0.459	0.205	0.5691	32.06	.000
Online Interaction	0.551	0.650	0.022	0.062	0.012	0.009	0.646	0.413	0.4936	85.78	.000

The findings confirm H1, where Digital Engagement and Trust (D1) have the most significant coefficient (0.658) of Tech-Driven Impact ($p < 0.001$) with 29.7 percent variance explained. The content of H2 is established because Content Influence has a high beta of D5 (0.432). Media Impact on Tourism demonstrates moderate influences, which confirms H3, to some degree. In general, the most important models are significant ($F > 10$, $p < 0.05$) and Online Interaction shows the highest R (0.646), which means that it is a strong predictor of online factors in travel decisions (Hair et al., 2022). The findings rely on the recent research that digital content can boost travel intentions (Buhalis, 1998; Abdalla and Al-Bakri, 2025) and bring changes to consumer behaviors (Xiang et al., 2025).

The results of the multiple regression analysis are strong empirical support of the hypotheses that have been put forward and the revolutionary nature of digital marketing in influencing customer traveling choices in the Indian tourism and hospitality industry. Particularly, Hypothesis 1 (H1) received strong support as Digital Engagement and Trust (D1) proved to be the most powerful predictor of Tech-Driven Impacts and its standardized coefficient ($\beta = 0.658$, $p < 0.001$) is significant. This showed that increased digital interactions and the degree of trust developed as a result of online interaction had a big impact on the perceived impact of technology on travel decisions and explained about 29.7 percent of the variation with this dimension. The beta significance of building trust-based systems including trustful reviews, personalized recommendations, and uninterrupted digital interface was emphasized as such a high beta value. Hypothesis 2 (H2) is also valid; however, Content Influence seemed to have a significant beta value ($\beta = 0.432$) in predicting Promotions and Booking Influences (D5). This implied that high quality and compelling digital content that includes appealing visual narrative, user-created stories, and informative blogs was a key indicator in developing user dependence and stimulating engagement. Emotional or practically useful content seemed to close the distance between information feeding the initial interest and the actual booking action, which supports the idea that storytelling and authenticity are the key elements in the competitive digital environment.

The moderate effects of Media Impact on Tourism on Hypothesis 3 (H3) were somewhat supported to support the conclusion that the relationship between the digital discovery and

travel intentions had a subtle mediating effect of promotions and booking influences. Although social media and promotional campaigns have influence, it is mitigated, which could be due to information overload, different platform credibility or regional disparity in digital access amongst Indian consumers. However, the model significance (F -statistics > 10 , $p < 0.05$) and the maximum value of R-squared of Online Interaction (0.646) confirmed Hypothesis 4 (H4), which was that the variables of digital engagement and trust have a significant role in explaining the proportion of customer travel decisions. This predictive value means that almost two-thirds of changes on decisions as a result of interactive behaviors can be explained by integrated digital strategies, which provides a valid structure to predict consumer responses.

This is in line with accepted rules on interpreting the output of a regression (Hair et al., 2022), in which R-squared values of above 0.20 are treated as practicing significant in social sciences, and in this case, they are much higher. Additionally, the results echoed other literature on the impact of digital in tourism. As an example, the quality content positively affects the travel intentions through perceived value and loyalty (Abdalla and Al-Bakri, 2025), and more advanced technologies such as VR or AI are positively associated with consumer behaviors (Xiang et al., 2025). Previous background literature was also consistent, with the focus of strategic digital adoption to enjoy immersive experiences (Buhalis, 1998).

These observations are especially timely in the modern Indian reality. The tourism travel and tourism industry also played an important role in the economy with recent WTTC reports showing it as having a contribution of approximately 6.6 percent in the GDP and sustaining almost 46.5 million employment opportunities which are projected to grow even more in the year 2026. The contribution of the digital marketing to this growth has been experienced in recent researches that have reported positive effects in tourist purchasing behaviors, destination marketing (and particularly in areas such as Uttar Pradesh) and post-pandemic revival following social media and influencer marketing. The predictors can be used by tourism companies to focus on data based (content) personalization, AI-enhanced interactions, and trust-driven features to increase booking intentions and loyalty as domestic and international demand increases. In general, the research not only confirmed the hierarchical effects identified in the conceptual framework, but also offered the practitioners practical avenues through which they could explore the use of digital tools in attaining sustainable competitive advantage in a new market like India.

Conclusions

This paper has shown that digital marketing is a major factor in influencing customer travel choices in tourism and hospitality, and the aspects that play significant roles in the process are digital adoption, content influence, and interactive experiences. Tech oriented strategies should be of priority among tourism firms in order to promote trust and interaction which will result in increase in booking rates. This empirical model gives a roadmap of sustainable digital practices within the sector.

References

- Abdalla M, Al-Bakri A. The Impact of Digital Content Marketing on Travel Intentions to Tourist Destinations: A Proposed Model Based on Perceived Value and Loyalty. *Braz Adm Rev.* 2025; 22(2): e230207.
- Adams DA, Nelson RR, Todd PA. Perceived usefulness, ease of use, and usage of information technology: A replication. *MIS Q.* 1992; 16(2): 227-247.
- Al-Mamary YH, Abdul-Jabar AA. The role of digital marketing promoting tourism business. *World J Adv Res Rev.* 2023; 20 (3):1621-1629.
- Bailey JE, Pearson SW. Development of a tool for measuring and analyzing computer user satisfaction. *Manag Sci.* 1983; 29(5): 530-545.

- Belardo S, Karwan KR, Wallace WA. DSS component design through field experimentation: A demonstration experiment using the ADS approach. *Decis Sci.* 1982; 13(3): 436-455.
- Buhalis D, Leung R. Smart hospitality interconnectivity and interoperability towards an ecosystem. *Int J Hosp Manag.* 2018; 71: 41-50.
- Buhalis D. Strategic use of information technologies in the tourism industry. *Tour Manag.* 1998; 19(5) 409-421.
- Chawla R. *Tourism in India: Growth and Development.* New Delhi: Sonali Publications; 2003.
- DeLone WH, McLean ER. The DeLone and McLean model of information systems success: a ten-year update. *J Manag Inf Syst.* 2003; 19(4): 9-30.
- Franz CR, Robey D. Organizational context, user involvement, and the usefulness of information systems. *Decis Sci.* 1986; 17(3): 329-356.
- Gössling S. Tourism, technology and ICT: a critical review of affordances and concessions. *J Sustain Tour.* 2021; 29 (5):733-750.
- Government of India. *Economic Reforms in India.* New Delhi: Ministry of Finance; 1991.
- Gretzel U, Sigala M, Xiang Z, Koo C. Smart tourism: foundations and developments. *Electron Mark.* 2015; 25: 179-188.
- Hair JF, Hult GTM, Ringle CM, Sarstedt M. *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM).* 3rd ed. SAGE; 2022.
- Hassan S, Soliman M. The impact of online marketing on tourists' visit intention: mediating roles of trust. *Tour Manag.* 2024; doi:10.2139/ssrn.5065566.
- Hiltz SR, Turoff M. Structuring computer-mediated communication systems to avoid information overload. *Commun ACM.* 1985; 28(7): 680-689.
- Kim J, Lee H. Assessing the Effectiveness of Digital Marketing in Enhancing Tourists' Perceptions of Service Quality and Sustainability in the Hospitality Industry. *Adm Sci.* 2024; 14(11): 273.
- Kotler P, Bowen JT, Makens JC. *Marketing for Hospitality and Tourism.* 7th ed. Pearson; 2017.
- Kumar LK, Katayani J. Impact of MKIS on Indian financial service sector. *Int J Bus Manag Res.* 2013; 3(5):11-22.
- Magal SR. A model for evaluating information center success. *J Manag Inf Syst.* 1991; 8(1): 91-106.
- Mahmood MA. System development methods—a comparative investigation. *MIS Q.* 1987; 11(3): 293-311.
- Moliner-Tena MA, Navarro-García J, Ruiz-Resino C. Digital Marketing of Hospitality and Tourism Organizations. *Int J Inf Commun Appl Soc Environ Stud.* 2024; 8(1): 1-15.
- Pitt LF, Watson RT, Kavan CB. Service quality: a measure of information systems effectiveness. *MIS Q.* 1995; 19(2):173-187.
- Rainer RK Jr, Watson HJ. What does it take for successful executive information systems? *Decis Support Syst.* 1995; 14(2): 147-156.
- Reserve Bank of India. *Annual Report.* Mumbai: RBI; 2024.
- Shannon CE, Weaver W. *The Mathematical Theory of Communication.* Urbana: University of Illinois Press; 1949.
- Sigala M. New technologies in tourism: From multi-disciplinary to anti-disciplinary advances and trajectories. *Tour Manag Perspect.* 2018; 25: 151-155.
- Singh R, Kumar S. Impact of digital marketing in tourism industry: A data driven marketing strategy. *ACM Trans.* 2025; doi:10.1145/3726122.3726246.
- Venkatesh V, Morris MG, Davis GB, Davis FD. User acceptance of information technology: Toward a unified view. *MIS Q.* 2003; 27(3): 425-478.
- Wierenga B, Ophuis PAMO. Marketing decision support systems: Adoption, use, and satisfaction. *Int J Res Mark.* 1997; 14(3): 275-290.

Exploring Digital Adoption and Media Impacts on
Travel Decision Making in Indian Hospitality:
An Empirical Multiple Regression Approach

Wierenga B, van Bruggen GH, Staelin R. The success of marketing management support systems. *Mark Sci.* 1999; 18 (3):196-207.

World Travel & Tourism Council. Economic Impact Reports. London: WTTC; 2024.

Xiang Z, Magnini VP, Fesenmaier DR. Information technology and consumer behavior in travel and tourism: Insights from travel planning using the internet. *J Retail Consum Serv.* 2015; 22: 244-249.

Xiang Z, Stienmetz J, Fesenmaier DR. Analyzing the impact of digital technology on consumers' travel intentions. *J Hosp Tour Manag.* 2025; 63: 100-110.