



# The digital transformation of tourism: a study of tourist behaviour and preferences in the age of technology in Bangladesh

Md Istiaq Mohhamad Shuvo & Md Jamsedul Islam

To cite this article: Md Istiaq Mohhamad Shuvo & Md Jamsedul Islam (2024) The digital transformation of tourism: a study of tourist behaviour and preferences in the age of technology in Bangladesh, Research in Hospitality Management, 14:3, 236-244, DOI: [10.1080/22243534.2024.2419366](https://doi.org/10.1080/22243534.2024.2419366)

To link to this article: <https://doi.org/10.1080/22243534.2024.2419366>



© 2025 The Author(s). Co-published by NISC Pty (Ltd) and Informa UK Limited, trading as Taylor & Francis Group



Published online: 07 Feb 2025.



Submit your article to this journal [↗](#)



Article views: 91



View related articles [↗](#)



View Crossmark data [↗](#)

# The digital transformation of tourism: a study of tourist behaviour and preferences in the age of technology in Bangladesh

Md Istiaq Mohhamad Shuvo\*  & Md Jamsedul Islam 

Department of Tourism and Hospitality Management, Noakhali Science and Technology University, Noakhali, Bangladesh

\*Correspondence: [istaiqmohamad@gmail.com](mailto:istaiqmohamad@gmail.com)

**ABSTRACT:** The rapid development of technology has profoundly altered tourist behaviour and trends, yet there is a notable gap in understanding how these changes affect tourists in Bangladesh. Existing research focuses on developed markets, overlooking Bangladesh's unique sociocultural and economic factors. Consequently, there is limited knowledge about how Bangladeshi tourists interact with digital platforms. This study explores the digital transformation of tourism in Bangladesh, identifying significant links between technology acceptance, social media usage and travel experiences. Results show a strong connection between the use of travel technology and reliance on social media for decisions, with comfort in technology correlating with satisfaction in personalised travel platforms. Social media facilitates trip planning and booking, with tourists showing increased trust in online tools. The study underscores the transformative potential of digital technology in reshaping the travel landscape, urging industry players to innovate to meet evolving consumer expectations through quantitative analysis by using structural equation modelling (SEM) to examine the relationships among the variables. Further research is essential to provide insights for policymakers and industry stakeholders in Bangladesh to understand how Bangladeshi tourists interact with digital platforms.

**KEYWORDS:** digital marketing, digital tourism trends, e-tourism, online booking, social media

## Introduction

Digital technology is developing at a quick pace, which has changed travel by giving travellers the ability to customise their experiences, make intelligent choices, and engage with destinations via social media and other platforms (Pencarelli, 2020). The tourism business is currently experiencing a deep change driven by rapid technological developments (Cai et al., 2019). Extensive studies going back to the 1980s have focused on understanding the role of information technology in tourism (Buhalis & Law, 2008). The behaviour and interests of tourists are greatly influenced by social media, travel websites and smartphone applications (Fotis et al., 2012). Tourists use these platforms to share their experiences with a worldwide audience to share and meet information needs and make judgements (Kim et al., 2008). The emergence of the Fourth Industrial Revolution, as noted by Islam et al. (2022), has brought new changes, changing tourist management and marketing tactics on a global scale. Asian countries like Singapore, South Korea and Hong Kong use technology to boost sustainability, but face challenges with virtual reality in enhancing tourist experiences (Li et al., 2020). Of particular importance is the growth of video technology, which has had a significant impact on the tourist business (Condratov, 2013). Notably, Nunez San Juan's key work (2017) underscores the broad acceptance of this phenomenon, suggesting a significant rise in fame and its consequent control in the dynamic environment of the tourist sector. The digital

change is altering how modern travellers interact with their travel experiences throughout the entire trip, from pre-planning to post-visit thoughts (Rahman & Saima, 2021). Adaptive leadership, efficient knowledge management, ethical concerns and a focus on creativity and innovation in the creation of new business models are essential for the successful digital transformation of the tourist industry (Pesonen, 2020).

This paradigm shift presents both challenges and opportunities for tourist sites and environments, necessitating the adoption of clever strategies to improve overall tourism experiences (Pencarelli, 2020). Jørgensen's insightful study (2017) reveals the complicated nature of tourism distribution, defined by constant bargaining and information exchange among tourists, middlemen and sellers. These complicated network interactions greatly add to the general complexity of the tourist environment. The pervasive presence of digital platforms, coupled with the ubiquity of smartphones and seamless internet connectivity, has redefined how tourists interact with travel-related information and services in today's era of technological evolution (Neuhofer et al., 2015a; Buhalis & Sinarta, 2021). Thus, getting an advanced understanding of how tourists utilise digital tools, handle decision-making processes, and shape their travel experiences is important for strategic tourism stakeholders (Xiang et al., 2017).

Positioned at the head of this digital paradigm shift, Bangladesh, known for its rich cultural history and various geographical settings, stands ready to harness technology to improve its tourist sector (Roy & Roy, 2015; Hassan, 2021).

The growth of technology-driven platforms and services has significantly affected tourist habits and tastes, opening up new paths for exploration and connection within the country's borders (Rahman & Saima, 2021). According to Kakon (2022), despite experiencing a noticeable uptick in technology-dependent tourists, Bangladesh's tourism and hotel industry grapples with hurdles relating to the ease and acceptance of cutting-edge technologies. This difference between expected and actualised tourist experiences underscores the urgent need to solve this digital divide quickly. In line with the dynamic trends creating technology-driven tourism, it is important for Bangladesh to not only improve tourist happiness, but also to stay competitive in the changing global tourism environment (Rahman & Hassan, 2021). Technological advances in tourism serve as vital drivers for sustainability, economic difference and the delivery of unique experiences. Ranging from social media and artificial intelligence to bitcoin, virtual reality and smart tourist technologies, these developments hold vast potential to change the industry. Enterprises working in the tourism sector must effectively study, understand, and accept these technologies, while also planning for future advancements, especially in light of the lasting impact of the COVID-19 pandemic (Wah et al., 2022). Information and communication technology (ICT) appears as a cornerstone backing the practical parts of tourist and hospitality businesses, spanning e-marketing, strategy management, security measures and service delivery mechanisms. The careful utilisation of ICT can increase its effectiveness in the sector, providing a strong basis for the creation and execution of successful developmental plans and strategies in Bangladesh (Sazu Sardar et al., 2021).

The literature remains silent in understanding tourist behaviour and tastes in Bangladesh's changing technological environment amidst the global digital change in tourism. While digital technologies are widely accepted, research studies focusing on their impact on tourists' decision-making processes and trip experiences are missing. The existing research largely focuses on developed tourist markets, ignoring Bangladesh's unique sociocultural and economic factors. Consequently, there is a lack of knowledge about how Bangladeshi tourists interact with digital platforms and manage the digital tourism environment. Therefore, completing a thorough study into the digital change of tourism in Bangladesh is vital to bridge this gap, giving useful insights for lawmakers, tourist industry players and digital service providers aiming to cater to the Bangladeshi market.

The tourist industry is mainly made up of small businesses with limited investment powers and poor human resource practices, possibly hindering effective knowledge management (Ibrahim & Islam, 2024). Moreover, while digital technology offers significant benefits in tourist education, there are still unsolved problems concerning digital skills among students and trainers (Balula et al., 2019). The study investigates how travellers interact with digital platforms, such as social media and travel technology, and how these elements affect their confidence in online services, satisfaction with personalised travel experiences, and trust in online recommendations. It provides insight into how service providers in Bangladesh can properly adapt to the ongoing global digital transformation of the tourism sector.

## Literature review

The global community has taken notice of the digital transformation of tourism as an important area of study, which

reflects the expanding dependence on technology in many facets of travel and tourism (Cuomo et al., 2021). In Bangladesh, where the tourism industry is experiencing significant growth, it is imperative to comprehend the preferences and behaviour of tourists in the technological age to ensure the sector's sustainable development (Das & Chakraborty, 2012).

### *The evolution of travel and tourism on the internet*

The change from paper-based to digital travel planning has completely changed the tourist business. As Buhalis and Law (2008) pointed out, the internet is an important part of every part of the travel experience. Internet booking systems, Werthner and Ricci (2004) point out, have made planning trips easier and more flexible. The impact of digital change is shown by ideas like "tourist 4.0" and "Smart Tourism", which combine the real and digital worlds with technologies like the Internet of Things (IoT). Živković et al. (2014) and Wirtz and Göttel (2016) argue that the reciprocal association between technology and social media is causing a paradigm shift in the tourism industry. Propelled by data analytics and artificial intelligence, technological developments allow the acquisition and analysis of vast quantities of traveller data. This capability enables the delivery of personalised ideas and prompt assistance that is tailored to particular inclinations (Neuhofer et al., 2015b). According to Condratov (2013), the internet has become the main way people find and book travel. The future of tourism depends on the technology that is focused on the customer, useful ICT applications and strong social media use. The tourism sector, an early user of ICT, is managing radical changes, leading to a complicated "informative syndrome" as globalisation and digitalisation reshape power relations (Sciarelli et al., 2018). The development of tourist sales channels has resulted in a complicated global network of middlemen, emphasising the lasting significance of human contact, customer trust and branding. While leveraging technology is crucial for successful distribution channel use, challenges such as information overload and privacy issues need to be handled for lasting growth (Buhalis, 2003). The rise of price-focused meta-search engines and online travel planners presents a danger to brand importance, but study in this area remains restricted and narrow in viewpoint (Kracht & Wang, 2010). Meneses et al.'s (2023) study on wine tourism finds factors affecting happiness and dissatisfaction, confirming online reviews and stressing the role of user-generated content (UGC). Cox et al. (2009) note that, while UGC sites are reviewed in trip planning, travellers consider non-UGC sources more trustworthy, depending on UGC mainly for hotel details after picking a destination. Buhalis et al. (2017) highlight the deep effect of technology on tourism, promoting better customer relations and needing new marketing approaches. Serbian tourists, as noted by Kalinić and Novaković (2019), show a preference for well-established foreign platforms like Booking.com and Airbnb for online bookings, especially for shorter and budget-friendly trips. The key benefits mentioned include a bigger range of choices and major time and cost savings. The tourism industry, a vital economic force promoting social development, is experiencing trends like responsible tourism, health, youth travel, family experiences and technology integration, such as the Internet of Things (Sofronov, 2018). So, our first hypothesis can be stated as:

- H1: People who are open to using travel technology rely on social media to make travel decisions.

### ***Social media influences on travel decision-making***

Social media platforms, including Instagram, Facebook and X (formerly Twitter), have developed into powerful tools for location marketing, allowing users to share and find trip experiences (Zeng & Gerritsen, 2014). This digital change has created new professional roles, such as social media managers and Big Data scientists, showing the dynamic growth of the tourist business (Condratov, 2013). Generation Y heavily relies on platforms like Facebook, YouTube and Instagram for travel choices, actively sharing thoughts that impact peer views, despite their knowledge of controlled content (Werenowska & Rzepka, 2020). Travellers utilise social media platforms as conduits to disseminate their insights and endorsements, thereby having an impact on the travel choices of others and motivating them to embark on customised itineraries (Alghizzawi et al., 2018). The convergence of social media and technology forms an ever-evolving ecosystem in the travel industry, allowing individuals to create significant and memorable experiences to their tastes and preferences (Aldahdouh et al., 2020; Van Nuenen & Scarles, 2021). The internet has changed travel decision-making, with Wang and Fesenmaier (2007) noting the impact of online reviews and user-generated content (UGC) on tourist choices, particularly depending on peer suggestions. Marchiori and Cantoni (2015) show that exposure to online UGC significantly affects opinion change about a location, with non-visitors having a substantial rise, particularly in aspects like "value for money" and "culture and habits". User-generated platforms, as explored by Lam et al. (2020), play a crucial role in shaping travel places through online co-creation, where perceived value and beauty shape the process, changing how individuals view and enjoy their travel experiences. Narangajavana Kaosiri et al. (2019) highlight the significant impact of UGC on social media on tourist satisfaction, especially in the pre-travel phase, where different ties, such as strong ties (friends, family), weak ties (acquaintances) and tourism ties (organisations), shape expectations and decision-making. Social media significantly affects hotel choices, causing the integration of user-generated content to provide customers with unique and accepted views (Varkaris & Neuhofer, 2017; Buhalis et al., 2019). Factors such as country of birth, age, past foreign travel experience and risk views positively affect the chance of using social media during travel disasters, changing tourists' decision-making processes (Wang et al., 2012; Schroeder & Pennington-Gray, 2015). Additionally, Pop et al. (2022) stress the deep effect of customer trust in social media influencers (SMIs) over traditional sources, playing a key role in shaping various phases of trip choices. It can therefore be hypothesised that:

- H2: Tourists increasingly depend on travel companies that offer personalised recommendations through social media for planning and booking their trips.

### ***Mobile technology's impact on travel planning***

The effect of smartphones on internet travel is a focal point, as studied by Gretzel et al. (2015), stressing the importance of travel applications (apps) in improving the overall travel experience, from guidance to real-time ideas. While mobile technology has changed mobility, Dal Fiore et al. (2014) stress its possible costs, changing the appeal of travel by adding to increased road traffic. Millennials, known for their tech-savvy views, widely use smartphones for trip planning, with pro-environmental factors affecting planning, but with a smaller effect on travel results

(Jamal & Habib, 2020). Smartphone usage for trip planning is particularly common among young people 15 to 34 years old, with its effect affected by factors like neighbourhood features, mobility and land use (Jamal & Habib, 2019). Hospitality and tourism sites looking to attract regular visitors should value mobile services, as perceived usefulness strongly affects user views and plans, impacting mobile device growth in the tourism context (Kim et al., 2008; Fotis et al., 2012). Additionally, a survey utilising the technology acceptance model highlights the significant influence of perceived immersion, interest, enjoyment and usefulness on the intention to use virtual reality (VR) for travel planning, with future work aiming to address limitations through experimental studies and qualitative feedback (Živković et al., 2014; Disztinger et al., 2017). The adoption of digital payments by tourists is influenced by perceptions of service quality and interest in returning, with ease of use impacting satisfaction and repeat usage, underscoring the need for seamless integration into the digital ecosystem to enhance tourist visits (Neuhofer et al., 2012; Susanto et al., 2022). Therefore, we can set the hypothesis as:

- H3: People who are comfortable using technology are satisfied with the personalisation offered by travel technology platforms.

### **Proposed model**

Based on our literature review and hypothesis development, we present a conceptual framework that establishes connections between technology usage, social influences and travel experience environments (see Figure 1). The model evaluates the interconnections among three underlying factors simultaneously.

### **Methodology**

#### ***Sampling and data collection***

The sampling frame for this study focused on the Chattogram Division, a key region recognised for its prominent role in tourism in Bangladesh (Roy & Roy, 2015). To ensure a comprehensive representation, data was meticulously collected from 220 respondents using random sampling method. This region was chosen for its significant tourism activity, providing a relevant context for examining visitors' behaviours and preferences regarding digital technology. A carefully designed structured questionnaire was utilised to capture detailed insights into the respondents' attitudes and experiences. The data collection process aimed to reflect the diverse perspectives of the tourist

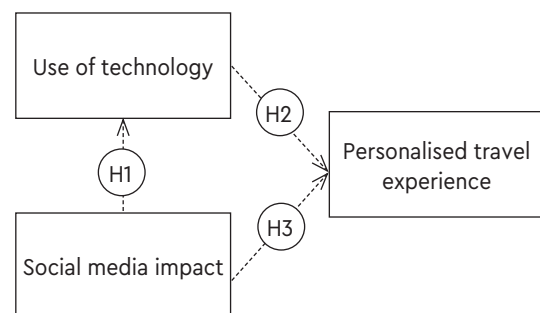


FIGURE 1: Proposed model (Source: Verina & Titko, 2019)

population in Chattogram, ensuring that the dataset was both robust and representative of the region's tourism dynamics. Both primary and secondary sources of data were used to conduct the research.

### Measures

The questionnaire encompassed closed-ended Likert scale items, extending from "strongly disagree" to "strongly agree" on a 5-point continuum (Brown, 2011). This methodological choice facilitates the quantification of respondents' sentiments towards digital technology in the domain of tourism. Before data collection, participants were provided with a comprehensive overview of the research objectives. Moreover, they were assured of anonymity and informed about their freedom to express their opinions without any constraints. The study included participants between 20 and 50 years old, both male and female, with at least higher secondary school certificate-level education and incomes between 10 000 Bangladeshi Takas (BDT) and 25 000 BDT. Those outside this age range, without high school education, or with incomes significantly above or below these thresholds were excluded.

### Data analysis

The research employed a descriptive and cross-sectional study design to acquire data from a diverse cohort of visitors in Bangladesh, capturing insights into their behaviours and preferences regarding digital technology in the tourism industry. This methodological approach facilitates the systematic accumulation of data at a specific point in time, thereby providing researchers with a comprehensive snapshot for effective analysis and interpretation (Stone et al., 2008; Setia, 2016). Subsequently, a meticulous descriptive statistical analysis was conducted to elucidate the demographic characteristics of the sample, alongside critical variables germane to digital technology and tourism. The analytical tools SmartPLS 4 and SPSS 27 were employed to investigate relationships among

variables and evaluate the research hypotheses using the bootstrapping method. These tools serve to unveil the intricate interplay between different constructs and validate proposed hypotheses. Through the judicious application of statistical methodologies, the research endeavour sought to elucidate the multifaceted dynamics underpinning the intersection of digital technology and tourism in the Bangladeshi context.

### Result and discussion

The structural model in Figure 2 shows the relationships among PTE (personalised travel experience), SMI (social media impact) and UT (use of technology). The path coefficients indicate that SMI has a strong direct effect on UT (0.609) and PTE (0.424), while UT has a moderate effect on PTE (0.314). Each construct is supported by multiple indicators, showing their contribution to the overall model.

Table 1 presents the correlation matrix among the constructs PTE (personalised travel experience), SMI (social media impact) and UT (use of technology). Correlation measures the strength and direction of the relationship between two variables, ranging from -1 (perfect negative) to +1 (perfect positive) (Meng et al., 1992). The diagonal values represent the square root of the average variance extracted (AVE) for each construct, which are all above 0.70, indicating good convergent validity. The off-diagonal values show the correlations between the constructs, with PTE and SMI having a high correlation of 0.804,

TABLE 1: Correlation among the constructs

Variable	Personalised travel experience	Social media impact
Personalised travel experience	0.804	
Social media impact	0.756	0.752
Use of technology		

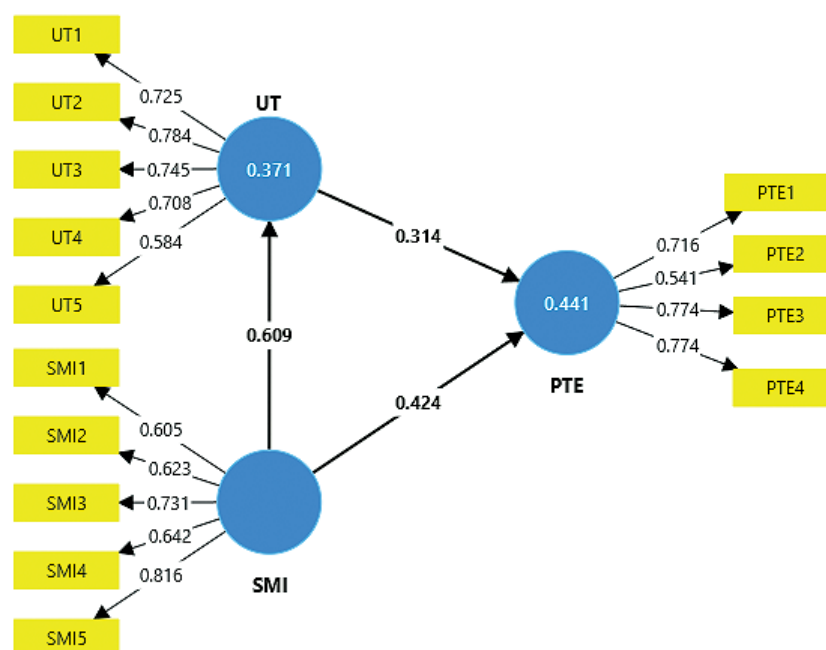


FIGURE 2: Structural model



suggesting a strong relationship between these two constructs. The correlation between PTE and UT is 0.756, and between SMI and UT, it is 0.752, both indicating moderate positive relationships.

The sample characteristics in Table 2 provide a clear demographic profile of the respondents in the study. The majority of participants are male (58.2%), with females making up 41.8%. Most respondents fall within the age group of 20–30 years (64.54%), suggesting that the study primarily targeted young adults, while smaller portions of the sample are in the 30–40 (14.54%), 40–50 (9.09%) and 50+ (4.55%) age brackets. In terms of marital status, 70% of the respondents are unmarried, further reinforcing the youthful nature of the sample. The educational background of the participants shows that 56.81%

are undergraduates, and 37.73% are graduates, with only a small percentage having completed either HSC or postgraduate studies (2.7% each). In terms of income, the largest group earns between 11 000 and 25 000 BDT (46.37%), followed by 40% earning less than 10 000 BDT per month, indicating that a majority of respondents have modest incomes. Overall, the study sample primarily consists of young, unmarried, moderately educated individuals with low to moderate income levels.

### Descriptive statistics

Descriptive statistics summarise and characterise a dataset's key aspects, such as measures of central tendency (mean, median, mode) and dispersion (range, variance, standard deviation). They give a clear picture of data distributions and variability, which aids comprehension and interpretation. These statistics are necessary for doing preliminary data analysis and presenting data effectively (George & Mallery, 2019). Table 3 presents the descriptive statistics for personalised travel experience (PTE), social media impact (SMI) and use of technology (UT), revealing consistent and favourable ratings across the constructs. The mean values for all items range from 3.655 to 4.173, with medians consistently at 4, indicating that respondents generally rated the items positively. Standard deviations range from 0.527 to 0.958, with SMI items showing more variability in responses compared to PTE and UT, which exhibit lower variation. The Cronbach's alpha values for all constructs (PTE = 0.701, SMI = 0.726, UT = 0.757) exceed the acceptable threshold of 0.7, indicating good internal consistency. Composite reliability (rho\_c) values for all constructs are also above 0.7, further supporting the reliability of the measures. Additionally, one widely used method for evaluating construct dependability is Cronbach's alpha (George & Mallery, 2019), where higher values indicate greater internal consistency (Nunnally, 1978; Clark & Watson, 1995). Psychometricians generally consider a Cronbach's alpha coefficient of 0.70 to be acceptable, further supporting the reliability of the constructs in this study (Xiang et al., 2015).

### Hypothesis testing

Figure 3 and Table 4 present the results of testing three hypotheses related to the use of travel technology and social media. All three hypotheses are supported by the data, as indicated by significant *t*-statistics (5.692, 13.478, and 3.641)

TABLE 2: Sample characteristics

Characteristics	<i>n</i>	%
Sex		
Male	128	58.2
Female	92	41.8
Age (in years)		
Under 20	16	7.3
20–30	142	64.54
30–40	32	14.54
40–50	20	9.09
50+	10	4.55
Marital status		
Married	66	30
Unmarried	154	70
Education level of the respondent		
High school certificate	6	2.7
Undergraduate	125	56.81
Graduate	83	37.73
Postgraduate	6	2.7
Monthly average income (in BDT)		
Less than 10 000	88	40
11 000–25 000	102	46.37
26 000–40 000	20	9.09
40 000+	10	4.55

TABLE 3: Descriptive statistics

Variable	Mean	Median	Standard deviation	Cronbach's alpha	Composite reliability (rho_c)
PTE1	3.955	4.000	0.638	0.701	0.798
PTE2	4.064	4.000	0.527		
PTE3	3.964	4.000	0.785		
PTE4	4.000	4.000	0.739		
SMI1	3.855	4.000	0.796	0.726	0.816
SMI2	3.655	4.000	0.958		
SMI3	3.936	4.000	0.742		
SMI4	3.818	4.000	0.822		
SMI5	3.909	4.000	0.910		
UT1	4.073	4.000	0.670	0.757	0.836
UT2	4.173	4.000	0.724		
UT3	3.727	4.000	0.797		
UT4	4.027	4.000	0.780		
UT5	3.718	4.000	0.811		

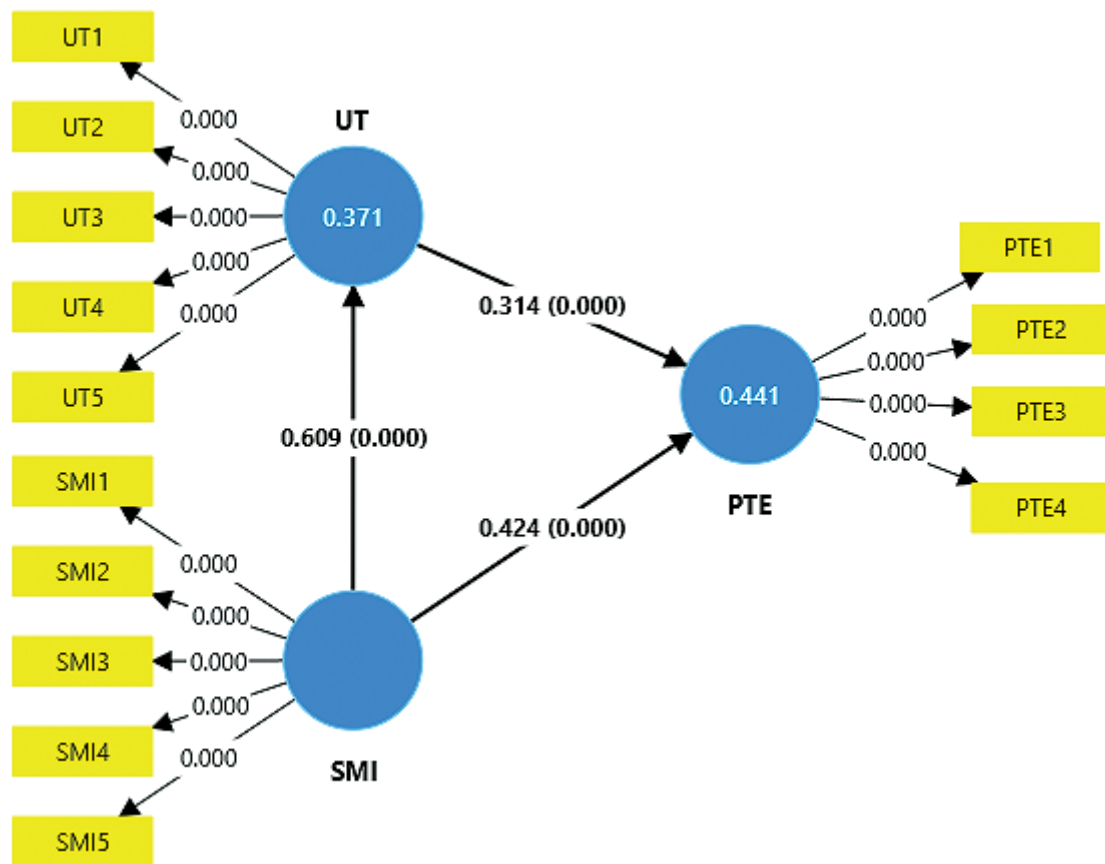


FIGURE 3: Model result

TABLE 4: Hypothesis result

Hypothesis	t-statistics	p-values	Result
H1: People who are open to using travel technology rely on social media to make travel decisions.	5.692	<0.001	Supported
H2: Tourists increasingly depend on travel companies that offer personalised recommendations through social media for planning and booking their trips.	13.478	<0.001	Supported
H3: People who are comfortable using technology are satisfied with the personalisation offered by travel technology platforms.	3.641	<0.001	Supported

and  $p$ -values of <0.001, showing strong statistical significance. The findings reveal that people who are open to using travel technology rely on social media for making travel decisions (H1), tourists increasingly depend on travel companies offering personalised recommendations via social media for planning and booking trips (H2), and those comfortable with technology are satisfied with the personalisation offered by travel platforms (H3). These results highlight the growing role of social media and personalised technology in travel planning and satisfaction.

The result of the study shows that technology acceptance and social media usage significantly enhance personalised travel experiences and decision-making among Bangladeshi tourists. Barykin et al. (2021) found that resilience, innovation and collaboration are the keys to overcoming challenges and ensuring sustainable growth by addressing the critical need for digital transformation in tourism. Chatzisavva (2018) stated that

technology has significantly transformed the tourism sector, particularly in hospitality, improving service quality, customer engagement and marketing through online systems and social media.

## Conclusion

The research shows that digital platforms and social media have a significant impact on the tastes and behaviours of tourists. A clear link between the adoption of technology, involvement with social media and satisfaction with personalised travel experiences is established through the use of sophisticated statistical analysis. Factors such as e-commerce, Big Data, artificial intelligence, policy/governance and technical design add to the difficulties faced by tourist locations and local dynamics (Abbasian Fereidouni & Kawa, 2019). The hypothesis results

show the changing landscape of travel, which is characterised by the proliferation of online tools that allow travellers to personalise their trip arrangements at their discretion. Developing countries' economies face great challenges due to the global digital transformation regime, which affects local rivals, digital investments and earnings (Cuomo et al., 2021). Millennials' trust in user-generated content on platforms like Instagram drives a constant demand for digital innovation in the travel industry (Nur'afifah & Prihantoro, 2021). The integration of technology into platforms and mobile applications allows active participation in social media. At the same time, feedback from people on social media drives technical progress, which leads to ongoing improvements in personalised travel experiences (Werenowska & Rzepka, 2020). In addition to this, it shines a light on the growing dependence of travellers on social media for decision-making, which is indicative of a larger trend toward adopting technology to enhance travel experiences.

### Limitations and future study

This study on the digital transformation of tourism and its effects on the travel and hospitality industries has several limits that necessitate attention for a complete understanding. Tourism, being a multifaceted industry, includes various sectors such as food, transportation, communications and multiple other service industries, each adding to its dynamics (Atilgan et al., 2003; Ahmed & Shuvo 2024). However, this study is limited to a single geographical area, with interviewees primarily showing similar demographic profiles. Moreover, the sample size of 220 people is limited, potentially inhibiting the study's ability to correctly portray the industry's latest practices and trends (Theofanidis & Fountouki, 2018).

Moving forward, future research efforts in Bangladesh's tourist sector demand a comprehensive exploration of the effects stemming from digital platforms, mobile technology usage patterns and personalised strategies. Such investigations are pivotal for informing industry practices and fostering innovations in line with current trends. Furthermore, there is a pressing need to look into ecological measures, legal frameworks and the promotion of fair access to digital resources. These endeavours are crucial for allowing responsible growth and fostering open development in the sector. While recognising the current limits, future research efforts must adopt a comprehensive method to understand the complex dynamics of Bangladesh's tourism environment. By solving the identified gaps and adopting a forward-looking viewpoint, experts and industry players can contribute greatly to the progress and survival of the tourist sector in Bangladesh.

### ORCiDs

Muhammad Istiaq Mohhammad Shuvo – 0009-0002-3674-643X

Muhammad Jamsedul Islam – 0000-0003-1803-8704

### References

Abbasian Fereidouni, M., & Kawa, A. (2019). Dark side of digital transformation in tourism. In *Intelligent Information and Database Systems: 11th Asian Conference, ACIIDS 2019, Yogyakarta, Indonesia, 8–11 April. Proceedings, Part II* (pp. 510–518). Springer International Publishing. [https://doi.org/10.1007/978-3-030-14802-7\\_44](https://doi.org/10.1007/978-3-030-14802-7_44)

Ahmed, T., & Shuvo, M. I. M. (2024) Halal tourism in Bangladesh: An exploratory study on its demand and opportunities. *Journal of Islamic Tourism* 4(1): 41–70.

Aldahdouh, T. Z., Nokelainen, P., & Korhonen, V. (2020). Technology and social media usage in higher education: The influence of individual innovativeness. *Sage Open*, 10(1). <https://doi.org/10.1177/2158244019899441>

Alghizzawi, M., Salloum, S. A., & Habes, M. (2018). The role of social media in tourism marketing in Jordan. *International Journal of Information Technology and Language Studies*, 2(3), 59–70.

Atilgan, E., Akinici, S., & Aksoy, S. (2003). Mapping service quality in the tourism industry. *Managing Service Quality: An International Journal*, 13(5), 412–422. <https://doi.org/10.1108/09604520310495877>

Balula, A., Moreira, G., Moreira, A., Kastenholz, E., Eusébio, C., & Breda, Z. (2019). Digital transformation in tourism education. *Tourism in Southern and Eastern Europe*, 5, 61–72. <https://doi.org/10.20867/tosee.05.45>

Barykin, S. E., de la Poza, E., Khalid, B., Kapustina, I. V., Kalinina, O. V., & Iqbal, K. M. J. (2021). Tourism industry: Digital transformation. In B. A. Khan, M. H. S. Kuofie & S Suman (eds), *Handbook of Research on Future Opportunities for Technology Management Education* (pp. 414–434). IGI Global. <https://doi.org/10.4018/978-1-7998-8327-2.ch025>

Brown, J. D. (2011). Likert items and scales of measurement. *Statistics*, 15(1), 10–14.

Buhalis, D. (2003). *eTourism: Information technology for strategic tourism management*. Pearson Education.

Buhalis, D., & Law, R. (2008). Progress in information technology and tourism management: 20 years on and 10 years after the internet – The state of eTourism research. *Tourism Management*, 29(4), 609–623. <https://doi.org/10.1016/j.tourman.2008.01.005>

Buhalis, D., & Sinarta, Y. (2019). Real-time co-creation and nowness service: lessons from tourism and hospitality. *Journal of Travel & Tourism Marketing*, 36(5), 563–582. <https://doi.org/10.1080/10548408.2019.1592059>

Buhalis, D., Harwood, T., Bogicevic, V., Viglia, G., Beldona, S., & Hofacker, C. (2019). Technological disruptions in services: lessons from tourism and hospitality. *Journal of Service Management*, 30(4), 484–506. <https://doi.org/10.1108/josm-12-2018-0398>

Buhalis, D., Kavoura, A., & Cooper, C. (2017). Social media and user-generated content for marketing tourism experiences. *Tourismos*, 12(3), x–xvi.

Cai, W., Richter, S., & McKenna, B. (2019). Progress on technology use in tourism. *Journal of Hospitality and Tourism Technology*, 10(4), 651–672. <https://doi.org/10.1108/jht-07-2018-0068>

Chatzisavva, P. (2018). Digital transformation in tourism sector [Unpublished Master's thesis]. International Hellenic University.

Clark, L. A., & Watson, D. (1995). Constructing validity: Basic issues in objective scale development. *Psychological Assessment*, 7(3), 309–319. <https://doi.org/10.1037//1040-3590.7.3.309>

Condorov, I. (2013). E-tourism: Concept and evolution. *Ecoforum Journal*, 2(1), 58–61.

Cox, C., Burgess, S., Sellitto, C., & Buultjens, J. (2009). The role of user-generated content in tourists' travel planning behavior. *Journal of Hospitality Marketing & Management*, 18(8), 743–764. <https://doi.org/10.1080/19368620903235753>

Cuomo, M. T., Tortora, D., Foroudi, P., Giordano, A., Festa, G., & Metallo, G. (2021). Digital transformation and tourist experience co-design: Big social data for planning cultural tourism. *Technological Forecasting and Social Change*, 162, 120345. <https://doi.org/10.1016/j.techfore.2020.120345>

Dal Fiore, F., Mokhtarian, P. L., Salomon, I., & Singer, M. E. (2014). "Nomads at last"? A set of perspectives on how mobile technology may affect travel. *Journal of Transport Geography*, 41, 97–106. <https://doi.org/10.1016/j.jtrangeo.2014.08.014>

Das, R. K., & Chakraborty, J. (2012). An evaluative study on tourism in Bangladesh. *Developing Country Studies*, 2(1), 17–27.



- Disztinger, P., Schlögl, S., & Groth, A. (2017). Technology acceptance of virtual reality for travel planning. In *Information and Communication Technologies in Tourism 2017: Proceedings of the International Conference in Rome, Italy, January 24–26, 2017* (pp. 255–268). Springer International Publishing. [https://doi.org/10.1007/978-3-319-51168-9\\_19](https://doi.org/10.1007/978-3-319-51168-9_19)
- Fotis, J., Buhalis, D., & Rossides, N. (2012). Social media use and impact during the holiday travel planning process. In M. Fuchs, F. Ricci, & L. Cantoni (eds), *Information and Communication Technologies in tourism 2012* (pp. 13–24). Springer. [https://doi.org/10.1007/978-3-7091-1142-0\\_2](https://doi.org/10.1007/978-3-7091-1142-0_2)
- George, D., & Mallery, P. (2019). *IBM SPSS Statistics 26 Step by Step*. Routledge. <https://doi.org/10.4324/9780429056765>
- Gretzel, U., Sigala, M., Xiang, Z., & Koo, C. (2015). Smart tourism: foundations and developments. *Electronic Markets*, 25, 179–188. <https://doi.org/10.1007/s12525-015-0196-8>
- Hassan, A. (Ed.). (2021). *Technology Application in the Tourism and Hospitality Industry of Bangladesh*. Springer. <https://doi.org/10.1007/978-981-16-2434-6>
- Ibrahim, M., & Islam, M. J. (2024). Hospitality 2.0: Applying the UTAUT model to understand guest perspectives on personalised technologies in hotels. *Research in Hospitality Management* 14(2): 171–185.
- Islam, Y., Sinha, R., & Hassan, A. (2022). Technology application in the tourism and hospitality industry: The contexts of India and Bangladesh. In A. Hassan (ed.), *Handbook of Technology Application in Tourism in Asia* (p. 763). Springer. [https://doi.org/10.1007/978-981-16-2210-6\\_36](https://doi.org/10.1007/978-981-16-2210-6_36)
- Jamal, S., & Habib, M. A. (2019). Investigation of the use of smartphone applications for trip planning and travel outcomes. *Transportation Planning and Technology*, 42(3), 227–243. <https://doi.org/10.1080/03081060.2019.1576381>
- Jamal, S., & Habib, M. A. (2020). Smartphone and daily travel: How the use of smartphone applications affect travel decisions. *Sustainable Cities and Society*, 53, 101939. <https://doi.org/10.1016/j.scs.2019.101939>
- Jørgensen, M. T. (2017). Reframing tourism distribution-activity theory and actor-network theory. *Tourism Management*, 62, 312–321. <https://doi.org/10.1016/j.tourman.2017.05.007>
- Kakon, K. (2022). Technological adaptation in tourism events, fairs, and festivals: Way to a revolutionary transformation in Bangladesh. In A. Hassan (ed.), *Technology Application in Tourism Fairs, Festivals and Events in Asia* (pp. 167–180). Springer Singapore. [https://doi.org/10.1007/978-981-16-8070-0\\_10](https://doi.org/10.1007/978-981-16-8070-0_10)
- Kalinić, Z., & Novaković, M. (2019). Online accommodation booking habits and attitudes of Serbian travelers. *Hotel and Tourism Management*, 7(2), 11–23. <https://doi.org/10.5937/menhotur1902011k>
- Kim, D. Y., Park, J., & Morrison, A. M. (2008). A model of traveller acceptance of mobile technology. *International Journal of Tourism Research*, 10(5), 393–407. <https://doi.org/10.1002/jtr.669>
- Kracht, J., & Wang, Y. (2010). Examining the tourism distribution channel: evolution and transformation. *International Journal of Contemporary Hospitality Management*, 22(5), 736–757. <https://doi.org/10.1108/0959611011053837>
- Lam, J. M., Ismail, H., & Lee, S. (2020). From desktop to destination: User-generated content platforms, co-created online experiences, destination image and satisfaction. *Journal of Destination Marketing & Management*, 18, 100490. <https://doi.org/10.1016/j.jdmm.2020.100490>
- Li, K., Kim, D. J., Lang, K. R., Kauffman, R. J., & Naldi, M. (2020). How should we understand the digital economy in Asia? Critical assessment and research agenda. *Electronic Commerce Research and Applications*, 44, 101004. <https://doi.org/10.1016/j.elerap.2020.101004>
- Marchiori, E., & Cantoni, L. (2015). The role of prior experience in the perception of a tourism destination in user-generated content. *Journal of Destination Marketing & Management*, 4(3), 194–201. <https://doi.org/10.1016/j.jdmm.2015.06.001>
- Meneses, R., Brito, C., Lopes, B., & Correia, R. (2023). Satisfaction and dissatisfaction in wine tourism: A user-generated content analysis. *Tourism and Hospitality Research*, 14673584231191989. <https://doi.org/10.1177/14673584231191989>
- Meng, X. L., Rosenthal, R., & Rubin, D. B. (1992). Comparing correlated correlation coefficients. *Psychological Bulletin*, 111(1), 172–175. <https://doi.org/10.1037/0033-2909.111.1.172>
- Narangajavana Kaosiri, Y., Callarisa Fiol, L. J., Moliner Tena, M. Á., Rodríguez Artola, R. M., & Sánchez García, J. (2019). User-generated content sources in social media: A new approach to explore tourist satisfaction. *Journal of Travel Research*, 58(2), 253–265. <https://doi.org/10.1177/0047287517746014>
- Neuhofer, B., Buhalis, D., & Ladkin, A. (2012). Conceptualising technology enhanced destination experiences. *Journal of Destination Marketing & Management*, 1(1–2), 36–46. <https://doi.org/10.1016/j.jdmm.2012.08.001>
- Neuhofer, B., Buhalis, D., & Ladkin, A. (2015a). Smart technologies for personalized experiences: a case study in the hospitality domain. *Electronic Markets*, 25, 243–254. <https://doi.org/10.1007/s12525-015-0182-1>
- Neuhofer, B., Buhalis, D., & Ladkin, A. (2015b). Technology as a catalyst of change: Enablers and barriers of the tourist experience and their consequences. In *Information and Communication Technologies in Tourism 2015: Proceedings of the International Conference in Lugano, Switzerland, 3–6 February* (pp. 789–802). Springer International.
- Nunez San Juan, R. (2017). Try before you buy: Using virtual reality for travel planning. Master's thesis. University of Stavanger, Norway.
- Nunnally, J. C. (1978). *Psychometric Theory*. (2nd edn). McGraw-Hill.
- Nur'arifah, O., & Prihantoro, E. (2021). The influence of social media on millennial generation about travel decision-making. *Jurnal The Messenger*, 13(3), 238–255. <https://doi.org/10.26623/themessenger.v13i3.2328>
- Pencarelli, T. (2020). The digital revolution in the travel and tourism industry. *Information Technology & Tourism*, 22(3), 455–476. <https://doi.org/10.1007/s40558-019-00160-3>
- Pesonen J. (2020) Management and Leadership for Digital Transformation in Tourism. In: Xiang Z., Fuchs M., Gretzel U., Höpken W. (eds) *Handbook of e-Tourism*. Springer.
- Pop, R. A., Săplăcan, Z., Dabija, D. C., & Alt, M. A. (2022). The impact of social media influencers on travel decisions: The role of trust in consumer decision journey. *Current Issues in Tourism*, 25(5), 823–843. <https://doi.org/10.1080/13683500.2021.1895729>
- Rahman, M.H.A., Saima, F.N. (2021). Technology Application in the Tourism Industry for Socio-Economic Development in Bangladesh. In: Hassan, A. (eds) *Technology Application in the Tourism and Hospitality Industry of Bangladesh*. Springer.
- Rahman, M.K., Hassan, A. (2021). Tourist Experience and Technology Application in Bangladesh. In: Hassan, A. (eds) *Technology Application in the Tourism and Hospitality Industry of Bangladesh*. Springer
- Roy, S. C., & Roy, M. (2015). Tourism in Bangladesh: Present status and future prospects. *International Journal of Management Science and Business Administration*, 1(8), 53–61. <https://doi.org/10.18775/ijmsba.1849-5664-5419.2014.18.1006>
- Sardar, S., Hossain, M. E., Kamruzzaman, M., & Ray, R. (2021). ICT applications in tourism and hospitality industry of Bangladesh: A research review. *IJRDO – Journal of Business Management*, 7(6), 64–74.
- Schroeder, A., & Pennington-Gray, L. (2015). The role of social media in international tourist's decision making. *Journal of Travel Research*, 54(5), 584–595. <https://doi.org/10.1177/0047287514528284>
- Sciarelli, F., Della Corte, V., & Del Gaudio, G. (2018). The evolution of tourism in the digital era: the case of a tourism destination. *Sinergie Italian Journal of Management*, 36(105), 179–199. <https://doi.org/10.7433/s105.2018.09>
- Setia, M. S. (2016). Methodology series module 3: Cross-sectional studies. *Indian Journal of Dermatology*, 61(3), 261–264. <https://doi.org/10.4103/0019-5154.182410>
- Sofronov, B. (2018). The development of the travel and tourism industry in the world. *Annals of Spiru Haret University. Economic Series*, 18(4), 123–137.
- Stone, H., Sidel, J., Oliver, S., Woolsey, A., & Singleton, R. C. (2008). Sensory evaluation by quantitative descriptive analysis. *Descriptive Sensory Analysis in Practice*, 28, 23–34.

- Susanto, E., Hendrayati, H., Rahtomo, R. W., & Prawira, M. F. A. (2022). Adoption of digital payments for travelers at tourism destinations. *African Journal of Hospitality, Tourism and Leisure*, 11(2), 741–753.
- Theofanidis, D., & Fountouki, A. (2018). Limitations and delimitations in the research process. *Perioperative Nursing*, 7(3), 155–163.
- Van Nuenen, T., & Scarles, C. (2021). Advancements in technology and digital media in tourism. *Tourist Studies*, 21(1), 119–132. <https://doi.org/10.1177/1468797621990410>
- Varkaris, E., & Neuhofer, B. (2017). The influence of social media on the consumers' hotel decision journey. *Journal of Hospitality and Tourism Technology*, 8(1), 101–118. <https://doi.org/10.1108/JHTT-09-2016-0058>
- Verina, N., & Titko, J. (2019). *Digital transformation: Conceptual framework*. Proceedings of the International Scientific Conference Contemporary Issues in Business, Management and Economics Engineering 2019, 9–10 May, Vilnius, Lithuania, Article ID: cibmee.2019.073. <https://doi.org/10.3846/cibmee.2019.073>
- Wah, K. K., Omar, A. Z., Alnoor, A., & Alshamkhani, M. T. (2022). Technology application in tourism in Asia: Comprehensive science mapping analysis. In Hassan, A. (ed) *Technology Application in Tourism in Asia: Innovations, Theories and Practices* (pp. 53–66). Springer Singapore.
- Wang, D., Park, S., & Fesenmaier, D. R. (2012). The role of smartphones in mediating the touristic experience. *Journal of Travel Research*, 51(4), 371–387. <https://doi.org/10.1177/0047287511426341>
- Wang, Y., & Fesenmaier, D. R. (2007). Collaborative destination marketing: A case study of Elkhart county, Indiana. *Tourism Management*, 28(3), 863–875. <https://doi.org/10.1016/j.tourman.2006.02.007>
- Werenowska, A., & Rzepka, M. (2020). The role of social media in Generation Y travel decision-making process (case study in Poland). *Information*, 11(8), 396. <https://doi.org/10.3390/info11080396>
- Werthner, H., & Ricci, F. (2004). E-commerce and tourism. *Communications of the ACM*, 47(12), 101–105. <https://doi.org/10.1145/1035134.1035141>
- Wirtz, B. W., & Göttel, V. (2016). Technology acceptance in social media: Review, synthesis and directions for future empirical research. *Journal of Electronic Commerce Research*, 17(2), 97.
- Xiang, Z., Du, Q., Ma, Y., & Fan, W. (2017). A comparative analysis of major online review platforms: Implications for social media analytics in hospitality and tourism. *Tourism Management*, 58, 51–65. <https://doi.org/10.1016/j.tourman.2016.10.001>
- Xiang, Z., Magnini, V. P., & Fesenmaier, D. R. (2015). Information technology and consumer behavior in travel and tourism: Insights from travel planning using the internet. *Journal of Retailing and Consumer Services*, 22, 244–249. <https://doi.org/10.1016/j.jretconser.2014.08.005>
- Zeng, B., & Gerritsen, R. (2014). What do we know about social media in tourism? A review. *Tourism Management Perspectives*, 10, 27–36. <https://doi.org/10.1016/j.tmp.2014.01.001>
- Živković, R., Gajić, J., & Brdar, I. (2014). *The Impact of Social Media on Tourism*. Proceedings of the 1st International Scientific Conference – Sinteza 2014, 758–761. <https://doi.org/10.15308/sinteza-2014-758-761>