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Assessing the Effectiveness of Digital Marketing in Enhancing Tourist Experiences and Satisfaction: A Study of Thailand's Tourism Services

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Abstract: Inbound digital marketing strategies play a vital role in the tourism industry, significantly influencing visitors' decision-making processes, enhancing tourist experiences, and ensuring post-consumption satisfaction. This study explores the effectiveness of digital marketing strategies in shaping tourists' perceptions of service quality and sustainability and their subsequent impact on overall satisfaction and behavioural intentions. This paper developed a conceptual framework and hypotheses through a comprehensive literature review to assess the causal relationships between digital marketing effectiveness, perceived destination service quality, perceived destination sustainability quality, tourist satisfaction, and behavioural intention. The empirical analysis was conducted using Partial Least Squares Structural Equation Modelling (PLS-SEM) on data collected from 195 international tourists in Thailand's coastal regions. The results reveal that while digital marketing effectiveness directly influences tourists' perceptions of service and sustainability quality, it indirectly influences tourist satisfaction and behavioural intentions through these perceptions. The findings highlight the critical role of aligning digital marketing strategies with service quality and sustainability initiatives. Moreover, the developed construct serves as a valuable tool for assessing and maintaining the destination image, helping tourism providers to improve their offerings and continuously foster long-term customer relationships.

Keywords: destination sustainability quality; destination service quality; sustainable tourism development; sustainable development goals; destination branding and marketing

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1. Introduction

Digital technologies have significantly transformed the tourism industry, causing major shifts in businesses, products, services, and experiences. This digital shift has not only redefined the roles of service providers and consumers but has also introduced new business models and competencies. Various digital platforms have expanded tourism offerings, enhanced the speed of transactions, and facilitated immediate feedback. As a result, these changes present both opportunities and challenges for small- and medium-sized enterprises (SMEs) in the tourism sector as they strive to fulfil consumer demands and tap into new markets (Dredge et al. 2018). Furthermore, digital transformation has altered business models, service offerings, and the nature of the tourism industry itself (Tajeddini et al. 2019). The core operations like reservations, point of sales, and extended back-office operations such as estimating demand, production, and process are some of the good examples of the earliest adoption of information technology (IT) in the travel, tourism, and hospitality industry (Ansel and Dyer 1999; Ravich 2004). Consequently, at the initial stage, digitalisation played a crucial role in central operations such as revenue management to maximise revenue, minimise cost, and manage and control demand (Ansel and Dyer 1999). The digitalisation for sales and marketing was adopted later by destination-related

services like restaurants and retail outlets. However, with technological advancements and changing consumer behaviours, inbound digital marketing strategies in tourism and hospitality have become crucial in influencing how visitors perceive and interact with destinations (Sánchez-Teba et al. 2020; Romero Montero et al. 2023).

As global destinations compete for attention, digital marketing provides significant opportunities for tourism firms and suppliers to foster and sell their offerings while also establishing long-lasting relationships with their customers. Inbound digital marketing strategies use various online tools and platforms like social media, Search Engine Optimisation (SEO), content marketing, and mobile applications (Maurer 2021). Destinations communicate their unique offerings to potential visitors, influencing their decisions at various stages of the trip. During the initial planning phase, tourists seek digital information for pre-purchase decisions (Sharafuddin et al. 2022). As tourists move to the purchase phase, ease of online booking, personalised promotions, and real-time information enhance their experience (Abdullah et al. 2017; Kucukusta et al. 2015; Almeida et al. 2019). Destinations use digital platforms to tell compelling stories, highlight unique attractions, and engage deeply with potential visitors. The immersive nature of digital content, like virtual tours and user-generated reviews, helps create an imagined destination experience, influencing tourists' expectations and perceptions (Sharafuddin et al. 2021, 2022). Thus, effective digital marketing captures the tourists' interest with engaging content, influencing their choices (Wang et al. 2014), particularly during their travel; subsequently, Neuhofer et al. (2015), emphasise the role of digital technologies in improving the purchase process and co-creation of consumer experiences.

A study by Noviana and Darma (2020) and Sánchez-Teba et al. (2020) have highlighted the importance of inbound digital marketing strategies that are vital for pre-purchase decision-making, the purchase process, perceived tourist experience, and maintaining sustainable customer relationships in the post-COVID-19 scenario. Pre-purchase decision-making is particularly crucial as it occurs well before the trip (Sharafuddin and Madhavan 2020a). Therefore, digital marketing's role is to provide prospective visitors with appropriate information, guiding them throughout their travel process and helping them successfully plan and complete their trips non-intrusively (Sánchez-Teba et al. 2020). The following sections of the article cover the study's rationale, a literature review, hypotheses and conceptual framework, research gap, methodology, results, discussion, and conclusion.

2. Rationale of the Study

Thailand is one of the leading tourist destinations in Asia for its coastal, marine, and maritime destinations (Sharafuddin 2015; Sharafuddin and Madhavan 2020b), with greater emphasis on building more sustainable, responsible, and digital tourism for attaining inclusive growth in the tourism sector (Tourism Authority of Thailand 2022). As a result, Thailand has witnessed significant success in its digital platform "ThailandCONNEX", with over 100,000 business operators in the first year (Ajanapanya 2023). It is evident from the above discussions that the tourism industry has seen significant transformations due to digital marketing, especially in shaping consumer pre-purchase attitudes, influencing travel intentions, and encouraging word-of-mouth recommendations (Ong and Ito 2019). Studies (Baber and Baber 2023) have established a causal relationship between digital marketing adoption and behavioural intention. However, with the growing emphasis on sustainable management of tourist destinations and the preservation of cultural identity, digital marketing plays an essential role in both educating and attracting prospective tourists (Sánchez et al. 2023). Therefore, there is a need for an integrated empirical approach to study the influence of digital marketing effectiveness on the tourism experience, emphasising its key role in pre-purchase decision-making, the purchasing process, perceived tourist experiences in terms of destination service quality and sustainability, overall post-consumption satisfaction, and behavioural intentions. Thus, the objectives of this research are three-fold: (1) to develop a robust conceptual framework through a literature review to explain the complex relationships between the effectiveness of digital marketing strategies, destinations' sustain-

ability quality, destinations' service quality, tourist satisfaction, and behavioural intention; (2) to measure the digital marketing effectiveness and its impact on tourist satisfaction and behavioural intentions in coastal tourist destinations in Thailand; and (3) to analyse the mediating role of destinations' sustainability quality and destinations' service quality in the causal relationship between digital marketing effectiveness and behavioural intentions. Hence, the following research questions are addressed in this study:

RQ1: *Do digital marketing effectiveness strategies impact tourist satisfaction and behavioural intentions?*

RQ2: *Does destination service quality mediate the causal relationship between digital marketing effectiveness and tourist satisfaction?*

RQ3: *Does destinations' sustainability quality mediate the causal relationship between digital marketing effectiveness and tourist satisfaction?*

RQ4: *Are there serial mediation effects between the causal relationship of digital marketing effectiveness and behavioural intentions (through destinations' service quality and tourist satisfaction)?*

RQ5: *Are there serial mediation effects between the causal relationship of digital marketing effectiveness and behavioural intentions (through destinations' sustainability quality and tourist satisfaction)?*

3. Literature Review

The literature review section synthesises key findings from existing research, shedding light on the multifaceted relationships between digital marketing effectiveness, tourist perceptions, satisfaction, and behavioural intentions.

3.1. Effectiveness of Digital Marketing Strategies

The effectiveness of digital marketing strategies (DME) in tourism and hospitality has been researched since 2000. This is evident from the study of Jung and Butler (2000), in which the authors examined the impact of the Internet on marketing effectiveness in the tourism and hospitality (T&H) industry. Initially, the use of information technology was centered on core operations of the T&H industry. However, digital marketing extends beyond the core operations, significantly shaping perceived tourist experiences. Digital marketing in the tourism industry involves the use of various digital tools for marketing, including digital payment infrastructure such as mobile banking and payment applications (Noviana and Darma 2020). The digital marketing strategies should consider the prime aspects such as "creating engaging content using blogs, images, videos, infographics, and podcasts", "monitoring customer online interactions in forums and networks to understand their likes, dislikes, opinions, complaints, and feedback", "building social networks or virtual communities to create personalised emotional bond between customers and brand", and "enhancing the online presence of tourism businesses to promote sustainable tourism development" (Romero Montero et al. 2023). In the post-pandemic era, developing countries effectively utilised technological advancements and conducted extensive digital marketing campaigns to promote tourism businesses and create sustainable tourist experiences (Ajanapanya 2023). Similarly, a study by Sánchez-Teba et al. (2020) highlighted the vital role of inbound digital marketing strategies in the post-COVID-19 era, particularly for pre-purchase decision-making, the purchase process, perceived tourist experiences, and long-term customer relationships. Noviana and Darma (2020) reiterated that social media marketing can influence the perceived attitudes of tourists towards destination image, which in turn influences behavioural intentions. Though the pre-purchase decisions occur well before the trip (Sharafuddin and Madhavan 2020a), digital marketing can alter or change tourists' plans flexibly and keep them updated throughout the trip with wider choices. This has been confirmed by Wang et al. (2014), in which the authors probed that tourists generally make plans but do so less before their trip, instead relying on online sources during their journey to book accommodations, select restaurants, or navigate direc-

tions. Furthermore, tourists are more likely to alter their plans if they are dissatisfied or encounter unforeseen circumstances, often resulting in more spontaneous and altruistic decisions that lead to unplanned trips or activities. Finally, tourists often document and share their experiences in real time using their smartphones, driven by instant online feedback. As a result, post-trip activities like sharing experiences now occur during the trip, with feedback from others influencing tourists' emotions and behaviours. Therefore, it is important to analyse the effectiveness of destinations' digital marketing from time to time. Based on the above discussions, the effectiveness of a destination's digital marketing can be assessed on the four key aspects, namely, relevance and engagement (RE), accessibility and usefulness (AU), ease of use (EU), and perceived value (PV). The first aspect, RE, includes sub-dimensions of customisation and personalisation, problem-solving, relevancy, flexibility, and engagement (Chung et al. 2020; Kushwaha 2020). The second aspect, AU, encompasses sub-dimensions such as direct reservation, speed, efficiency, information quality, and user-friendly accessibility (An et al. 2021; Armutcu et al. 2023; Jorge et al. 2018; Khasawneh et al. 2023; Kucukusta et al. 2015). The third aspect, EU, consists of ease, understandability, neatness and simplicity, clear instructions, and mobile friendliness (Deb et al. 2022; Kucukusta et al. 2015; Mitova et al. 2021; Mkwizu 2019). The fourth aspect, PV, comprises awareness, social value, trustworthiness and credibility, consistency, and value for money (Chung et al. 2020; Hwang et al. 2018; Kitsios et al. 2022; Lexhagen 2009; Mitova et al. 2021). Therefore, destination digital marketing strategies should incorporate these aspects and focus on providing continuous access to information throughout the trip. This approach will enable greater flexibility, enhance tourist satisfaction, and positively influence their behavioural intentions. Thus, digital marketing is a precursor to shaping visitors' expectations and perceptions. Additionally, scholars have examined its impact on the post-consumption phase, where tourists reflect on their experiences. The role of digital marketing in these post-trip reflections is well-recognised, with studies highlighting its influence on behavioural intentions (Jaya and Prianthara 2020).

3.2. Destination Service Quality (DSQ)

The theory and framework for island destination service quality were previously developed and tested (Sharafuddin et al. 2022). The study's findings indicate that island destination service quality positively affects tourist satisfaction and behavioural intention. Unlike other service quality models, this model adopts a 'tourist perception of the trip' approach, which is crucial for reflecting the overall visitor experience, including accommodation and maritime passenger transport services. The key dimensions for assessing destination service quality are divided into two main categories: accommodation and local transport. The accommodation category includes sub-dimensions such as check-in/check-out services, room cleanliness, staff attitude, and safety and security. The local transport category covers sub-dimensions like frequency, connectivity, comfort, staff attitude, and ride safety (Sharafuddin et al. 2022; Tosun et al. 2015).

3.3. Destinations' Sustainability Quality (DSuQ)

Studies on the sustainability of destinations have become crucial since the COVID-19 pandemic. Lima Santos et al. (2020) conducted a systematic review of sustainability perceptions, identifying three approaches: stakeholders' perception, residents' perception, and tourists' perception, with the latter being the most significant. The tourist's perception of sustainability was examined through the destination's economic, socio-cultural, and environmental sustainability (Nicholas and Thapa 2010) and their causal relationship with tourist satisfaction and behavioural intentions. Also, there is a need to extend the theory of destination service quality to destinations' sustainability quality by incorporating local souvenir shopping attributes, as souvenirs significantly impact visitor memories and their potential intention to revisit the destination (Sthapit et al. 2024). Key studies assessing perceived sustainability quality have focused on heritage sites (Nicholas and Thapa 2010), the hospitality industry (Modica et al. 2020; Ponnapureddy et al. 2017), and

national parks (Munanura et al. 2016). However, to the best of the author's knowledge, no integrated approach currently assesses the perceived sustainability quality of a destination from a tourist's trip perspective. Therefore, this research develops constructs for assessing perceived sustainability quality focusing on locally-made handcrafts and products, livelihoods of local vendors and artisans, size of food portions and waste reduction/leftovers, awareness programs to adjust water consumption, sufficient local guides with knowledge about the destination, sustainable local transports such as bikes, walking directions, and public transports, availability of reusable totes and bags, the adequate digital infrastructure that avoids printing papers and receipts, adequate sustainable seafood choices, sufficient litter boxes, and adequate warning sign boards about endangered marine species, plants, or animals (Sharafuddin et al. 2022; Sharafuddin and Madhavan 2020b; World Tourism Organization 2023).

3.4. Tourist Satisfaction

Satisfaction results from comparing expectations with actual experiences. According to Oliver (1980), a revised post-purchase attitude, influenced by initial expectations, determines satisfaction or dissatisfaction. Expectations act as benchmarks for consumers' judgments. When a product exceeds these expectations (positive disconfirmation), it leads to customer delight. Conversely, when a product falls short of these expectations (negative disconfirmation), it results in customer dissatisfaction. Zero disconfirmation occurs when perceived performance matches consumer expectations, leading to customer satisfaction (Oliver 1980, 2000). This study employed the variables related to 'expectations of fulfilment', 'overall travel experience', and 'comfort in destination' to measure tourist satisfaction (Sharafuddin et al. 2022).

3.5. Behavioural Intentions

Behavioural intention is given more emphasis in the service sector due to the complexity of service evaluation, which relies heavily on customers' attitudes and behaviours. Customer loyalty consists of both behaviour and attitudinal dimensions (Kandampully and Suhartanto 2000). The authors (Dick and Basu 1994) noted that while attitude influences behaviour, a person might favour one but choose another due to a stronger preference. A high relative attitude indicates a strong consumer association, leading to clearer distinctions and repeat intentions. In this study, three variables, "recommend others using online platforms," "share the experience online," and "intention to revisit the destination", were employed to measure the behavioural intentions of tourists (Han and Ryu 2009; Sharafuddin et al. 2022).

4. Hypotheses and Conceptual Framework

4.1. Causal Relationship between the Effectiveness of Digital Marketing Strategies, Destination Service Quality, Tourist Satisfaction, and Behavioural Intentions

The first dimension centres around perceived destination service quality. Digital platforms allow destinations to showcase their service quality, from accommodations to shopping experiences, using engaging visuals, social media influencers, user-generated reviews, and interactive content, which help form positive perceptions during the pre-purchase decision-making phase (Litvin et al. 2008). These perceptions are crucial in shaping overall tourist satisfaction and behavioural intentions. Parasuraman et al. (1988) stated that the gap between expectations and actual experiences forms the basis for satisfaction judgments and behavioural intentions. In digital marketing, where promises are made online, it is vital to ensure that delivered services meet these promises to achieve overall satisfaction. Several studies have empirically tested the DSQ and its impact on tourist satisfaction and behavioural intentions (Abdulla et al. 2019; Mohamad et al. 2019; Kazmi et al. 2020); thus, alignment of destination service quality perceptions with the actual encounters during the visit becomes pivotal. Also, DME plays a crucial role in tourists' revisit intentions (Tosun et al. 2015); as the tourists share their experiences in real-time during their trip itself, driven by instant online feedback (Wang et al. 2014). Therefore, this

study hypothesises that effective digital marketing contributes to positive perceptions of destination service quality and that these perceptions significantly impact overall tourist satisfaction and behavioural intentions.

H1: *Digital Marketing Effectiveness (DME) positively influences perceived Destination Service Quality (DSQ).*

H3: *Digital Marketing Effectiveness (DME) positively influences perceived Tourist Satisfaction (TS).*

H4: *Digital Marketing Effectiveness (DME) positively influences perceived behavioural intentions (BI).*

H5: *Perceived Destination Service Quality (DSQ) positively influences perceived Tourist Satisfaction (TS).*

H6: *Perceived Destination Service Quality (DSQ) positively influences perceived Behavioural Intention (BI).*

H10: *Perceived Destination Service Quality (DSQ) positively mediates the causal relationship between Digital Marketing Effectiveness (DME) and Tourist Satisfaction (TS).*

H12: *There is a serial meditation between the causal relationship of Digital Marketing Effectiveness (DME) and Behavioural Intention (BI), through Perceived Destination Service Quality (DSQ) and Tourist Satisfaction (TS).*

4.2. Causal Relationship between the Effectiveness of Digital Marketing Strategies, Destination Sustainability Quality, Tourist Satisfaction, and Behavioural Intentions

The framework's core is the effectiveness of inbound digital marketing strategies, which serve as an antecedent to various aspects of the tourist experience. This effectiveness can be assessed from the tourist's perspective through factors such as ease of access to content, consistency across platforms, value proposition, ease of booking, and availability of user-generated reviews and content (Kucukusta et al. 2015; Lai et al. 2013). As destinations increasingly adopt sustainable practices, digital platforms play a crucial role in communicating these initiatives to potential visitors. The second dimension of the framework focuses on the perceived sustainability quality of a destination. According to the World Tourism Organisation (World Tourism Organization 2023), travellers can significantly contribute to the United Nations Sustainable Development Goals (UNSDG | 2030 Agenda and the Sustainable Development Goals 2015) through actions like buying local products, avoiding food waste, staying in eco-friendly hotels, using public transport, and minimising their environmental footprint. Destinations must facilitate these sustainability features, as tourists' perceptions of sustainability during their trip positively impact their satisfaction. The importance of sustainability perceptions is heightened in the post-consumption phase, where tourists reflect on their experiences. Aligning the sustainability promises made through digital channels with the actual experiences encountered during the visit influences post-consumption satisfaction (Sharafuddin et al. 2022). The framework thus highlights the interplay between digital marketing, sustainability perceptions, overall tourist satisfaction, and behavioural intentions. Therefore, effective digital marketing strategies positively impact sustainability perceptions, and these perceptions play a crucial role in satisfaction and behavioural intentions. Thus, the following hypotheses are formulated:

H2: *Digital Marketing Effectiveness (DME) positively influences perceived Destination Sustainability Quality (DSuQ).*

H7: *Perceived Destination Sustainability Quality (DSuQ) positively influences perceived Tourist Satisfaction (TS).*

H8: *Perceived Destination Sustainability Quality (DSuQ) positively influences Behavioural Intention (BI).*

H11: *Perceived Destination Sustainability Quality (DSuQ) positively mediates the causal relationship between Digital Marketing Effectiveness (DME) and Tourist Satisfaction (TS).*

H13: *There is a serial meditation between the causal relationship of Digital Marketing Effectiveness (DME) and Behavioural Intention (BI) through Perceived Destination Sustainability Quality (DSuQ) and Tourist Satisfaction (TS).*

4.3. Tourist Satisfaction and Behavioural Intention

The final dimension of the framework investigates behavioural intention, acknowledging that tourist satisfaction is a key driver of future behaviours. Satisfied tourists are likelier to exhibit positive behavioural intentions, such as revisiting the destination or recommending it to others (Tosun et al. 2015; Sharafuddin et al. 2022). Thus, the study postulates that behavioural intention is a direct outcome of tourist satisfaction.

H9: *Perceived Tourist Satisfaction (TS) positively influences tourists' behavioural intention (BI).*

The conceptual framework (Figure 1) synthesises five dimensions, providing a holistic perspective on the causal relationships between the effectiveness of digital marketing strategies (DME), destination service quality (DSQ), destination sustainability quality (DSuQ), tourist satisfaction (TS), and behavioural intention (BI). By presenting these relationships, the framework offers a roadmap for empirical investigations and practical implications, guiding tourism stakeholders in optimising their digital marketing approaches for enhanced visitor experiences and customer relationships along with supporting SDGs (UNWTO 2024). It also sets the stage for future research endeavours to validate and refine these propositions in diverse tourism contexts.

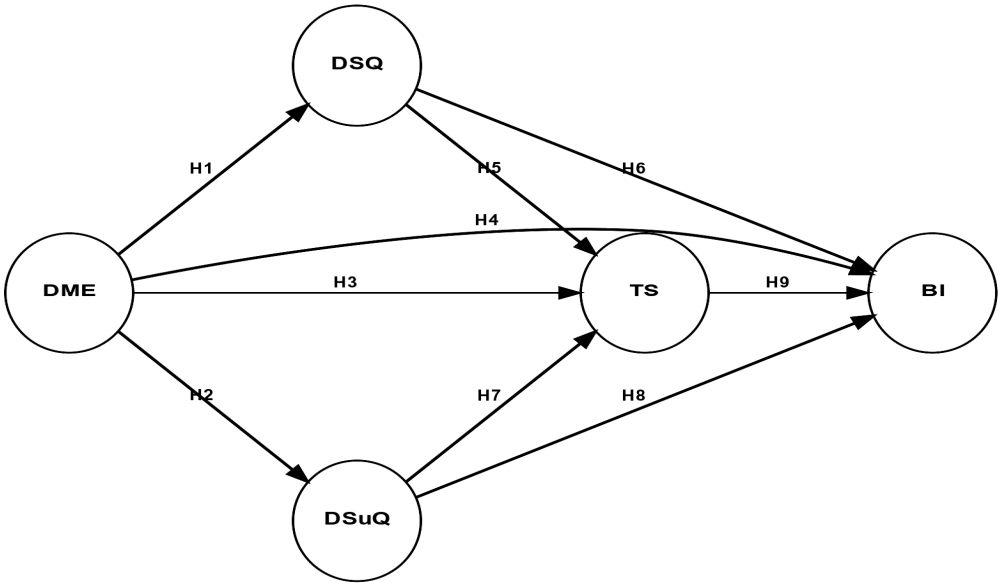

Figure 1. Conceptual framework. (Source: Author's own conceptual Framework).

5. Research Gap

A previous study by Sharafuddin et al. (2022) highlighted the importance of understanding the causal relationships between various aspects of destination service quality,

environmental quality perceptions, and overall satisfaction. However, there is a gap in the literature regarding assessing perceived sustainability quality by including souvenirs as a factor based on UN 'Tourism4SDG' recommendations and its causal relationship with tourist satisfaction. Therefore, this study extends the previous research in developing a destination's sustainability quality framework along with a digital marketing effectiveness framework for assessing tourist satisfaction and behavioural intentions.

6. Methodology

6.1. Research Design and Approach

The research adopts a quantitative approach and utilises Partial Least Squares Structural Equation Modelling (PLS-SEM) to explore the relationships among the constructs depicted in the conceptual framework. The target population comprises international tourists above the age of 20 who visited the Chonburi and Rayong provinces of Thailand. According to the Tourism Authority of Thailand's statistics, in 2023, 9,545,864 foreigners visited Chonburi and 727,468 visited Rayong ("TAT Intelligence Center 2024"). Thus, the total number of international visitors to Chonburi and Rayong provinces in 2023 was 10,273,332. However, the exact number of visitors above the age of 20 is difficult to predict. Therefore, this research considers the population size to be unknown.

A convenience sampling technique was employed to select respondents who have experienced blue tourism services (Sharafuddin and Madhavan 2020b) in Thailand. The selection criteria included international tourists who have visited Chonburi or Rayong provinces and consumed at least one blue tourism service, such as maritime passenger transport services like speed boats or ferry services. These two provinces were chosen as the geographic areas of study because they are the most popular destinations in Central Thailand due to their archipelago nature, proximity to Bangkok city, and International Airports. The minimum sample size was calculated using the inverse square root method, assuming a path coefficient ranging from 0.11 to 0.20. With 80% statistical power and a 5% significance level, the required sample size was determined to be 155 (Kock and Hadaya 2018; Hair et al. 2021, 2022). The survey form was distributed to 400 respondents, yielding 195 complete responses after excluding 10 incomplete forms. This resulted in a response rate of nearly 50 percent, exceeding the acceptable 30 percent threshold for online surveys (Sekaran and Bougie 2016; Madhavan et al. 2024). Consequently, 195 complete responses were included in the study to ensure robust and reliable results.

6.2. Questionnaire and Content Validity

The initial theoretical questionnaire (ITQ) consisted of five questions for digital marketing relevance and engagement (DMRE), six questions for digital marketing accessibility and usefulness (DMAU), five questions for digital marketing ease of use (DMEU), five questions for digital marketing's perceived value (DMPV), five questions for destination's service quality: accommodation (DSQA), five questions for destination's service quality: local transport (DSQT), eleven questions for DSQ, three questions for TS, and three questions for BI. The ITQ was distributed to four academic experts to check for content validity and reduce redundancy. After multiple discussions and careful consideration of the nature of the respondents, some questions were merged. Consequently, the final construct consisted of four questions for DMRE, three questions for DMAU, three questions for DMEU, four questions for DMPV, three questions for DSQA, five questions for DSQT, five questions for DSQ, three questions for TS, and three questions for BI. Thus, the final construct consisting of thirty-three variables was used in the study.

The constructs for DME and DSQ were conceptualised as higher-order models, and hence, the two-stage approach was adopted to test the hypotheses. Data were analysed using the R (version 4.3.3) Programming language (R Core Team 2024) and SeminR package (Ray et al. 2022), and the results are presented in the next section.

7. Results

The participants in this study included 195 individuals, with ages ranging from 18 to 65 years. Among the respondents, 15% were aged 18–25, 47% were aged 26–40, 26% were aged 41–50, and 12% were aged 51–60. The sample consisted of 110 females (56%) and 85 males (44%). Based on the educational qualifications of the respondents, 37% had completed post-graduation, 48% had completed an undergraduate degree, 14% held a diploma, and 1% had a high school education.

In terms of profession, 15% (n = 29) of the respondents were students, 13% (n = 26) were business owners, 66% (n = 129) were working professionals, and the remaining 6% (n = 11) identified as others.

Ethnically, 46% (n = 90) of the participants were Chinese, 21% (n = 41) were South Asians, 15% (n = 30) were Westerners, 12% (n = 23) were other Asians, and 6% (n = 11) were Russians.

In terms of travel companions, 46% (n = 90) of participants reported traveling with family, while 54% (n = 105) travelled with friends. Regarding travel group size, 32% travelled in groups of 1–2, 44% in groups of 3–5, and 24% in groups of more than 5.

7.1. Lower-Order Model

7.1.1. Lower-Order Reliability

The outer loadings of items on their respective constructs are presented in Table 1. For the Digital Marketing Relevance and Engagement (DMRE) construct, loadings range from 0.668 to 0.899, indicating a strong representation of DMRE by its items. Digital Marketing accessibility and usefulness (DMAU) items show even higher loadings, between 0.843 and 0.920. Digital Marketing Ease of use (DMEU) items have loadings from 0.897 to 0.932, and Digital Marketing Perceived value (DMPV) items range from 0.818 to 0.916, all indicating excellent representation.

Table 1. Indicator reliability.

	DMRE	DMAU	DMEU	DMPV	DSQA	DSQT	DSUQ	TS	BI
DMRE1	0.815								
DMRE2	0.899								
DMRE3	0.668								
DMRE4	0.838								
DMAU1		0.843							
DMAU2		0.915							
DMAU3		0.920							
DMEU1			0.897						
DMEU2			0.929						
DMEU3			0.932						
DMPV1				0.818					
DMPV2				0.916					
DMPV3				0.900					
DMPV4				0.863					
DSQA1					0.904				
DSQA2					0.920				
DSQA3					0.869				
DSQT1						0.778			
DSQT2						0.883			

Table 1. *Cont.*

	DMRE	DMAU	DMEU	DMPV	DSQA	DSQT	DSUQ	TS	BI
DSQT3						0.879			
DSQT4						0.811			
DSQT5						0.713			
DSUQ1							0.777		
DSUQ2							0.853		
DSUQ3							0.844		
DSUQ4							0.556		
DSUQ5							0.534		
TS1								0.913	
TS2								0.950	
TS3								0.867	
BI1									0.937
BI2									0.911
BI3									0.941

Destination Service Quality Accommodation (DSQA) and Destination Service Quality Transport (DSQT) constructs also show strong loadings, from 0.869 to 0.920 and 0.713 to 0.883, respectively. However, Destination's Sustainability Quality (DSUQ) has slightly lower loadings, particularly for DSUQ4 (0.556) and DSUQ5 (0.534). Tourist Satisfaction (TS) and Behavioural Intention (BI) constructs have high loadings ranging from 0.867 to 0.950 and 0.911 to 0.941, respectively.

Thus, the results of the outer loadings suggest that most indicators are strongly related to their constructs, demonstrating good convergent validity. Though some indicators, particularly in DSUQ, are lower, they are still acceptable.

7.1.2. Composite Reliability and Convergent Validity

Table 2 presents the composite reliability, average variance extracted (AVE), and internal consistency reliability (rhoA) for each construct in the model. All constructs exhibit high composite reliability (rhoC) and internal consistency reliability (rhoA), with values exceeding the recommended threshold of 0.7, indicating good reliability. The AVE values for all the constructs are also above the recommended threshold of 0.5, indicating adequate convergent validity. This suggests that all the constructs explain more than 50% of the variance in their indicators.

Table 2. Composite reliability and convergent validity.

	alpha	rhoC	AVE	rhoA
DMRE	0.833	0.883	0.656	0.898
DMAU	0.873	0.922	0.798	0.878
DMEU	0.909	0.943	0.846	0.910
DMPV	0.898	0.929	0.766	0.904
DSQA	0.880	0.926	0.806	0.886
DSQT	0.872	0.908	0.664	0.881
DSUQ	0.769	0.843	0.528	0.815
TS	0.897	0.936	0.830	0.907
BI	0.921	0.950	0.864	0.925

7.1.3. Discriminant Validity

Fornell–Larcker Criterion

Table 3 presents the Fornell–Larcker criterion (Fornell and Larcker 1981) values for assessing discriminant validity among the constructs. The square roots of the Average Variance Extracted (AVE) for DMRE (0.810), DMAU (0.893), DMEU (0.920), DMPV (0.875), DSQA (0.898), DSQT (0.815), DSUQ (0.726), TS (0.911), and BI (0.930) are on the diagonal. These values exceed the inter-construct correlations shown in the off-diagonal cells, demonstrating that each construct shares more variance with its own indicators than with those of other constructs. This confirms the discriminant validity of the constructs.

Table 3. Fornell–Larcker criterion.

	DMRE	DMAU	DMEU	DMPV	DSQA	DSQT	DSUQ	TS	BI
DMRE	0.810	NA	NA	NA	NA	NA	NA	NA	NA
DMAU	0.538	0.893	NA	NA	NA	NA	NA	NA	NA
DMEU	0.456	0.680	0.920	NA	NA	NA	NA	NA	NA
DMPV	0.406	0.590	0.605	0.875	NA	NA	NA	NA	NA
DSQA	0.314	0.409	0.484	0.583	0.898	NA	NA	NA	NA
DSQT	0.155	0.358	0.407	0.502	0.656	0.815	NA	NA	NA
DSUQ	0.166	0.316	0.356	0.374	0.491	0.594	0.726	NA	NA
TS	0.120	0.289	0.387	0.292	0.479	0.487	0.567	0.911	NA
BI	0.119	0.309	0.414	0.299	0.451	0.507	0.563	0.820	0.930

Cross Loadings

The cross-loadings table (Table 4) demonstrates discriminant validity by showing that each indicator loads highest on its respective construct compared to other constructs. For the DMRE construct, DMRE1 loads at 0.815, DMRE2 at 0.899, DMRE3 at 0.668, and DMRE4 at 0.838. For DMAU, DMAU1 loads at 0.843, DMAU2 at 0.915, and DMAU3 at 0.920. The DMEU construct has DMEU1 loading at 0.897, DMEU2 at 0.929, and DMEU3 at 0.932. DMPV indicators DMPV1, DMPV2, DMPV3, and DMPV4 load at 0.818, 0.916, 0.900, and 0.863, respectively. DSQA indicators load at 0.904, 0.920, and 0.869 for DSQA1, DSQA2, and DSQA3, respectively. For DSQT, the loadings are 0.778 for DSQT1, 0.883 for DSQT2, 0.879 for DSQT3, 0.811 for DSQT4, and 0.713 for DSQT5. DSUQ indicators load at 0.780 for DSUQ1, 0.855 for DSUQ2, 0.845 for DSUQ3, 0.551 for DSUQ4, and 0.529 for DSUQ5. TS indicators load at 0.912 for TS1, 0.950 for TS2, and 0.869 for TS3. BI indicators load at 0.937 for BI1, 0.911 for BI2, and 0.940 for BI3. The highest loadings of each indicator on their respective constructs confirm that each indicator is most strongly associated with its own construct, supporting discriminant validity. Thus, the results of the cross-loadings suggest that each construct is distinct and adequately represented by its indicators.

Table 4. Cross loadings.

	DMRE	DMAU	DMEU	DMPV	DSQA	DSQT	DSUQ	TS	BI
DMRE1	0.815	0.462	0.487	0.374	0.232	0.112	0.093	0.156	0.124
DMRE2	0.899	0.491	0.399	0.382	0.330	0.143	0.184	0.143	0.138
DMRE3	0.668	0.276	0.185	0.179	0.100	0.051	0.112	−0.035	0.002
DMRE4	0.838	0.451	0.330	0.310	0.263	0.158	0.135	0.041	0.062
DMAU1	0.493	0.843	0.612	0.525	0.388	0.306	0.267	0.227	0.213
DMAU2	0.503	0.915	0.627	0.511	0.348	0.304	0.260	0.271	0.289

Table 4. *Cont.*

	DMRE	DMAU	DMEU	DMPV	DSQA	DSQT	DSUQ	TS	BI
DMAU3	0.451	0.920	0.587	0.543	0.363	0.347	0.315	0.276	0.320
DMEU1	0.347	0.618	0.897	0.575	0.438	0.394	0.297	0.324	0.383
DMEU2	0.466	0.643	0.929	0.561	0.457	0.377	0.326	0.393	0.375
DMEU3	0.444	0.615	0.932	0.534	0.441	0.353	0.358	0.348	0.385
DMPV1	0.329	0.465	0.547	0.818	0.494	0.418	0.337	0.259	0.218
DMPV2	0.355	0.549	0.517	0.916	0.579	0.460	0.400	0.303	0.280
DMPV3	0.344	0.534	0.518	0.900	0.503	0.427	0.291	0.209	0.252
DMPV4	0.395	0.513	0.540	0.863	0.453	0.449	0.270	0.244	0.295
DSQA1	0.386	0.386	0.476	0.528	0.904	0.537	0.388	0.419	0.346
DSQA2	0.246	0.407	0.474	0.536	0.920	0.622	0.481	0.491	0.447
DSQA3	0.214	0.303	0.347	0.505	0.869	0.607	0.453	0.371	0.419
DSQT1	0.107	0.206	0.261	0.321	0.446	0.778	0.436	0.277	0.334
DSQT2	0.142	0.357	0.371	0.446	0.586	0.883	0.479	0.462	0.487
DSQT3	0.124	0.295	0.363	0.389	0.573	0.879	0.497	0.413	0.410
DSQT4	0.021	0.188	0.252	0.375	0.527	0.811	0.568	0.451	0.419
DSQT5	0.232	0.389	0.393	0.490	0.516	0.713	0.434	0.346	0.392
DSUQ1	0.096	0.190	0.283	0.263	0.391	0.481	0.777	0.406	0.390
DSUQ2	0.120	0.303	0.289	0.357	0.444	0.528	0.853	0.478	0.492
DSUQ3	0.084	0.217	0.274	0.254	0.396	0.524	0.844	0.541	0.542
DSUQ4	0.157	0.177	0.161	0.202	0.198	0.235	0.556	0.278	0.248
DSUQ5	0.201	0.264	0.278	0.283	0.306	0.303	0.534	0.287	0.287
TS1	0.170	0.289	0.362	0.322	0.502	0.471	0.528	0.913	0.760
TS2	0.094	0.243	0.356	0.278	0.477	0.459	0.538	0.950	0.813
TS3	0.060	0.262	0.339	0.189	0.313	0.395	0.482	0.867	0.657
BI1	0.081	0.323	0.390	0.296	0.435	0.507	0.539	0.807	0.937
BI2	0.151	0.298	0.421	0.264	0.397	0.452	0.485	0.700	0.911
BI3	0.105	0.239	0.348	0.272	0.424	0.454	0.542	0.774	0.941

HTMT Ratio

The Heterotrait–Monotrait (HTMT) ratio (Henseler et al. 2015) assesses discriminant validity by comparing the correlations between constructs. The HTMT ratios (Table 5) range from 0.124 (between DMRE and BI) to 0.766 (between DMEU and DMAU), all of which are below the threshold of 0.90, confirming discriminant validity. This indicates that the constructs are distinct from each other, providing evidence for discriminant validity. Therefore, the constructs in the model are well-differentiated, ensuring the validity of the measurement model. The constructs exhibit satisfactory discriminant validity, as all ratios are below the recommended threshold.

Table 5. HTMT ratio.

	DMRE	DMAU	DMEU	DMPV	DSQA	DSQT	DSUQ	TS	BI
DMRE	NA	NA	NA	NA	NA	NA	NA	NA	NA
DMAU	0.606	NA	NA	NA	NA	NA	NA	NA	NA

Table 5. *Cont.*

	DMRE	DMAU	DMEU	DMPV	DSQA	DSQT	DSUQ	TS	BI
DMEU	0.493	0.766	NA	NA	NA	NA	NA	NA	NA
DMPV	0.442	0.666	0.672	NA	NA	NA	NA	NA	NA
DSQA	0.332	0.466	0.539	0.653	NA	NA	NA	NA	NA
DSQT	0.170	0.404	0.453	0.562	0.744	NA	NA	NA	NA
DSUQ	0.222	0.389	0.427	0.450	0.584	0.700	NA	NA	NA
TS	0.135	0.327	0.428	0.320	0.529	0.540	0.664	NA	NA
BI	0.124	0.342	0.454	0.328	0.499	0.559	0.645	0.896	NA

7.1.4. Collinearity Analysis

Table 6 provides the variance inflation factor (VIF) values for indicators to assess multicollinearity. VIF values for DMRE indicators are DMRE1 (1.764), DMRE2 (2.139), DMRE3 (1.624), and DMRE4 (2.065). DMAU indicators show DMAU1 (1.830), DMAU2 (3.100), and DMAU3 (3.064). DMEU indicators include DMEU1 (2.519), DMEU2 (3.454), and DMEU3 (3.599). DMPV indicators are DMPV1 (1.935), DMPV2 (3.282), DMPV3 (3.273), and DMPV4 (2.535). DSQA indicators show DSQA1 (2.662), DSQA2 (2.783), and DSQA3 (2.113). DSQT indicators include DSQT1 (2.224), DSQT2 (2.879), DSQT3 (2.795), DSQT4 (1.948), and DSQT5 (1.556). DSUQ indicators are DSUQ1 (1.843), DSUQ2 (2.473), DSUQ3 (2.283), DSUQ4 (1.616), and DSUQ5 (1.574). TS indicators include TS1 (3.126), TS2 (4.202), and TS3 (2.348). BI indicators are BI1 (3.622), BI2 (2.982), and BI3 (3.915). This indicates no severe multicollinearity, as all VIF values are below the threshold of 5 (Sheather 2009).

Table 6. Collinearity analysis.

Construct	Indicator	VIF	Construct	Indicator	VIF
DMRE	DMRE1	1.764	DSQT	DSQT1	2.224
	DMRE2	2.139		DSQT2	2.879
	DMRE3	1.624		DSQT3	2.795
	DMRE4	2.065		DSQT4	1.948
DMAU	DMAU1	1.830		DSQT5	1.556
	DMAU2	3.100	DSUQ	DSUQ1	1.843
	DMAU3	3.064		DSUQ2	2.473
DMEU	DMEU1	2.519		DSUQ3	2.283
	DMEU2	3.454		DSUQ4	1.616
	DMEU3	3.599		DSUQ5	1.574
DMPV	DMPV1	1.935	TS	TS1	3.126
	DMPV2	3.282		TS2	4.202
	DMPV3	3.273		TS3	2.348
	DMPV4	2.535	BI	BI1	3.622
DSQA	DSQA1	2.662		BI2	2.982
	DSQA2	2.783		BI3	3.915
	DSQA3	2.113			

7.2. Higher-Order Model

7.2.1. Higher-Order Composite Reliability and Convergent Validity (AVE)

Table 7 presents the higher-order composite reliability and convergent validity (AVE) for the constructs in the model. All constructs demonstrate high composite reliability (rhoC) and internal consistency reliability (rhoA), with values exceeding the recommended threshold of 0.7, indicating good reliability. The AVE values for all constructs are above the recommended threshold of 0.5, indicating adequate convergent validity. Specifically, DME has an alpha of 0.828, rhoC of 0.883, AVE of 0.656, and rhoA of 0.873. DSQ shows an alpha of 0.792, rhoC of 0.906, AVE of 0.828, and rhoA of 0.793. DSUQ has an alpha of 0.769, rhoC of 0.843, AVE of 0.528, and rhoA of 0.813. TS demonstrates an alpha of 0.897, rhoC of 0.936, AVE of 0.830, and rhoA of 0.908. Lastly, BI shows an alpha of 0.921, rhoC of 0.950, AVE of 0.864, and rhoA of 0.926. These results suggest that the higher-order constructs are reliable and valid.

Table 7. Higher-order composite reliability and convergent validity.

	Alpha	rhoC	AVE	rhoA
DME	0.828	0.883	0.656	0.873
DSQ	0.792	0.906	0.828	0.793
DSUQ	0.769	0.843	0.528	0.813
TS	0.897	0.936	0.830	0.908
BI	0.921	0.950	0.864	0.926

7.2.2. Higher-Order Discriminant Validity

Fornell–Larcker Criterion

Table 8 presents the Fornell–Larcker criterion values to assess discriminant validity among higher-order constructs. The diagonal values represent the square roots of the AVE for each construct: DME (0.810), DSQ (0.910), DSUQ (0.726), TS (0.911), and BI (0.930). These values exceed the inter-construct correlations shown in the off-diagonal cells, demonstrating that each construct shares more variance with its own indicators than with those of other constructs. This confirms discriminant validity among the higher-order constructs.

Table 8. Fornell–Larcker criterion.

	DME	DSQ	DSUQ	TS	BI
DME	0.810	NA	NA	NA	NA
DSQ	0.573	0.910	NA	NA	NA
DSUQ	0.394	0.595	0.726	NA	NA
TS	0.360	0.531	0.567	0.911	NA
BI	0.378	0.526	0.563	0.820	0.930

HTMT Ratio

The results of the Heterotrait–Monotrait (HTMT) ratio (Table 9) show the discriminant validity among the higher-order constructs. All HTMT values are below the threshold of 0.90, indicating that each construct is distinct from the others. For instance, the HTMT value between DME and DSQ is 0.671, between DSQ and DSUQ is 0.744, and between TS and BI is 0.896. These values confirm that the constructs have adequate discriminant validity, demonstrating that each construct is unique and measures different aspects of the theoretical model.

Table 9. HTMT ratio.

	DME	DSQ	DSUQ	TS	BI
DME	NA	NA	NA	NA	NA
DSQ	0.671	NA	NA	NA	NA
DSUQ	0.477	0.744	NA	NA	NA
TS	0.388	0.625	0.664	NA	NA
BI	0.403	0.615	0.645	0.896	NA

7.2.3. Indicator Collinearity (VIF)

Table 10 provides the VIF (Variance Inflation Factor) values for the indicators within each construct. For the construct DME, the VIF values are as follows: DMRE (1.449), DMAU (2.275), DMEU (2.136), and DMPV (1.752). The DSQ construct shows VIF values for DSQA (1.755) and DSQT (1.755). For DSUQ, the VIF values are DSUQ1 (1.843), DSUQ2 (2.473), DSUQ3 (2.283), DSUQ4 (1.616), and DSUQ5 (1.574). The TS indicators have VIF value of TS1 (3.126), TS2 (4.202), and TS3 (2.348). Lastly, the BI construct's VIF values are BI1 (3.622), BI2 (2.982), and BI3 (3.915). All VIF values are below the threshold of 5, indicating no severe multicollinearity issues among the indicators.

Table 10. Higher-order collinearity.

Construct	Indicator	VIF	Construct	Indicator	VIF
DME	DMRE	1.449		DSUQ3	2.283
	DMAU	2.275		DSUQ4	1.616
	DMEU	2.136		DSUQ5	1.574
	DMPV	1.752	TS	TS1	3.126
DSQ	DSQA	1.755		TS2	4.202
	DSQT	1.755		TS3	2.348
DSUQ	DSUQ1	1.843	BI	BI1	3.622
	DSUQ2	2.473		BI2	2.982
				BI3	3.915

7.3. Bootstrapping Results

After assessing the reliability and validity of the structural model, a bootstrapping procedure with 1000 resamples was applied using the 'SeminR' package. The results (Table 11 and Figure 2) of the bootstrapped analysis are as follows:

Table 11. Bootstrapped results.

	Original Est.	Bootstrap Mean	Bootstrap SD	T Stat.	5% CI	95% CI
DME → DSQ (H1)	0.573	0.578	0.055	10.393	0.486	0.664
DME → DSUQ (H2)	0.394	0.406	0.078	5.028	0.274	0.532
DME → TS (H3)	0.053	0.049	0.089	0.589	−0.099	0.197
DME → BI (H4)	0.046	0.047	0.047	0.994	−0.026	0.126
DSQ → TS (H5)	0.271	0.275	0.099	2.729	0.115	0.444
DSQ → BI (H6)	0.059	0.057	0.066	0.897	−0.053	0.165
DSUQ → TS (H7)	0.385	0.388	0.1	3.846	0.212	0.546
DSUQ → BI (H8)	0.105	0.108	0.07	1.494	0.003	0.234
TS → BI (H9)	0.713	0.711	0.069	10.35	0.592	0.821
DME → DSQ → TS (H10)	0.155	0.161	0.065	2.379	0.045	0.306
DME → DSUQ → TS (H11)	0.152	0.157	0.051	2.988	0.066	0.261
DME → DSQ → TS → BI (H12)	0.111	0.114	0.045	2.458	0.035	0.206
DME → DSUQ → TS → BI (H13)	0.108	0.112	0.038	2.824	0.045	0.195

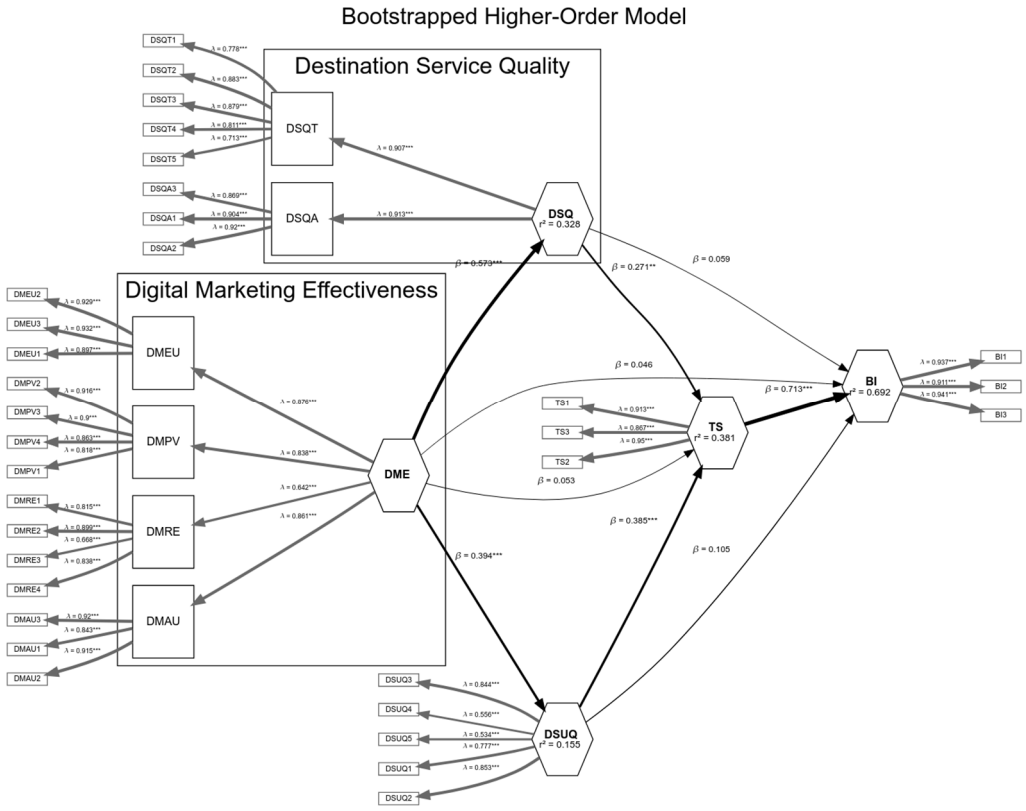

Figure 2. Bootstrapped higher-order structural model. (Statistically significant at ** 0.01, and *** 0.001) (Source: Author's Own Findings).

Direct Effects

H1: *DME → DSQ: The path coefficient is 0.573 with a T-statistic of 10.393 and a 95% CI of [0.486, 0.664], indicating a significant positive effect of digital marketing effectiveness on destination service quality.*

H2: *DME → DSUQ: The path coefficient is 0.394 with a T-statistic of 5.028 and a 95% CI of [0.274, 0.532], indicating a significant positive effect of digital marketing effectiveness on destination sustainability quality.*

H3: *DME → TS: The path coefficient is 0.053 with a T-statistic of 0.589 and a 95% CI of [−0.099, 0.197], indicating a non-significant effect of digital marketing effectiveness on tourist satisfaction. Hence, H3 is not supported.*

H4: *DME → BI: The path coefficient is 0.046 with a T-statistic of 0.994 and a 95% CI of [−0.026, 0.126], indicating a non-significant effect of digital marketing effectiveness on behavioural intention. Hence, H4 is not supported.*

H5: *DSQ → TS: The path coefficient is 0.271 with a T-statistic of 2.729 and a 95% CI of [0.115, 0.444], indicating a significant positive effect of destination service quality on tourist satisfaction.*

H6: *DSQ → BI: The path coefficient is 0.059 with a T-statistic of 0.897 and a 95% CI of [−0.053, 0.165], indicating a non-significant effect of destination service quality on behavioural intention. Hence, H6 is not supported.*

H7: *DSUQ → TS: The path coefficient is 0.385 with a T-statistic of 3.846 and a 95% CI of [0.212, 0.546], indicating a significant positive effect of destination sustainability quality on tourist satisfaction.*

H8: *DSUQ→BI: The path coefficient is 0.105 with a T-statistic of 1.494 and a 95% CI of [0.003, 0.234], indicating a non-significant effect of destination sustainability quality on behavioural intention.*

H9: *TS → BI: The path coefficient is 0.713 with a T-statistic of 10.350 and a 95% CI of [0.592, 0.821], indicating a significant positive effect of tourist satisfaction on behavioural intention.*

Indirect Effects

H10: *DME → DSQ → TS: The indirect effect is 0.155 with a T-statistic of 2.379 and a 95% CI of [0.045, 0.306], indicating a significant mediation effect of destination service quality between digital marketing effectiveness and tourist satisfaction.*

H11: *DME → DSUQ → TS: The indirect effect is 0.152 with a T-statistic of 2.988 and a 95% CI of [0.066, 0.261], indicating a significant mediation effect of destination sustainability quality between digital marketing effectiveness and tourist satisfaction.*

H12: *DME → DSQ → TS → BI: The indirect effect is 0.111 with a T-statistic of 2.458 and a 95% CI of [0.035, 0.206], indicating a significant mediation effect of destination service quality and tourist satisfaction between digital marketing effectiveness and behavioural intention.*

H13: *DME → DSUQ → TS → BI: The indirect effect is 0.108 with a T-statistic of 2.824 and a 95% CI of [0.045, 0.195], indicating a significant mediation effect of destination sustainability quality and tourist satisfaction between digital marketing effectiveness and behavioural intention.*

8. Discussion

The bootstrapped results reveal that digital marketing effectiveness (DME) positively impacts destination service quality (DSQ) and destination sustainability quality (DSUQ). However, DME does not directly influence tourist satisfaction (TS) or behavioural intention (BI). Instead, DSQ and DSUQ play significant mediating roles, directly affecting TS, which in turn has a strong influence on BI. These findings are consistent with previous studies (Sánchez-Teba et al. 2020) that suggest digital marketing's primary role is in shaping perceptions of service and sustainability quality, rather than directly influencing satisfaction or behavioural outcomes. This supports the notion that tourists are more likely to develop positive attitudes towards a destination based on their perceived quality of services and sustainable practices rather than just the marketing messages they receive.

The practical implications of these results are noteworthy, especially for tourism marketers and public administrators. The findings emphasise that to maximise the impact of digital marketing, destination managers must ensure their online content is closely aligned with the realities of their service and sustainability offerings. Investments in staff training, maintaining high service standards, and implementing sustainable practices are essential to meet tourist expectations and enhance overall satisfaction. This scale can serve as a valuable tool for continuously monitoring and refining marketing efforts to better align with quality and sustainability goals, allowing destinations to foster stronger relationships with their visitors and boost behavioural intentions, such as repeat visits and recommendations.

From the perspective of public administration, this study offers valuable insights into how digital marketing and service quality can be integrated into tourism development strategies. For example, policymakers could use these findings to guide decision-making in terms of resource allocation for improving service delivery and promoting sustainability practices at destinations. The scale developed here provides a framework for measuring the effectiveness of public-sector digital marketing campaigns and helps identify areas for improvement, particularly in enhancing service quality and sustainable tourism initiatives.

Despite the significant contributions of this study, certain limitations must be acknowledged. The cross-sectional design limits the ability to capture the evolving nature of tourist perceptions and behaviours over time. Additionally, the geographic specificity of the study

may limit the generalisability of the findings to other contexts. Furthermore, the diverse ethnic backgrounds of respondents restricted the testing of the scale across different nationalities. Future research should address these limitations by employing longitudinal designs to track changes over time and including diverse geographic contexts and ethnic groups to enhance the robustness of the findings. Comparative studies across multiple destinations would also help in understanding how regional and cultural differences influence the relationships between digital marketing, service quality, and tourist satisfaction.

The digital marketing effectiveness (DME) scale developed in this study can be widely applied by industry practitioners and public administrators alike. By testing the effectiveness of their destination marketing strategies and aligning digital campaigns with quality and sustainability goals, stakeholders can enhance their service offerings and better meet tourist expectations. Future research should consider expanding the scope of this study to include additional variables, such as cultural influences, and testing the scale in different regional contexts. This would provide a more comprehensive understanding of the complex dynamics between digital marketing, service quality, sustainability, and tourist behaviours, thereby improving the generalisability and practical relevance of the findings.

9. Conclusions

This study demonstrates a positive relationship between digital marketing effectiveness (DME), destination service quality (DSQ), and destination sustainability quality (DSUQ). While DME does not directly influence tourist satisfaction (TS) or behavioural intention (BI), it indirectly impacts these outcomes through DSQ and DSUQ, significantly influencing TS and, subsequently, BI.

The research confirms the crucial role of DME in improving tourist satisfaction and behavioural intention. By aligning effective digital marketing strategies with service quality and sustainability, tourism providers can significantly enhance tourist satisfaction and positively influence behavioural intentions. Thus, the findings highlight the importance of aligning digital marketing strategies with service quality and sustainability efforts to enhance tourist satisfaction and encourage favourable future intentions. Tourism providers should continuously refine their digital marketing content to reflect these values, ensuring they meet and exceed tourist expectations and foster long-term loyalty.

This research also recommends expanding the traditional 6A framework (Ritchie and Crouch 2003) of tourism destinations—"Attractions, Accessibility, Amenities, Available Packages, Activities, and Ancillary Services"—into a 7A framework by including "Awareness", with a focus on sustainability. This comprehensive 7A approach is vital for destination management because tourists perceive the entire destination and its services as a unified package (Sharafuddin et al. 2022).

Thus, this study provides a comprehensive framework for destination marketing by measuring and improving digital marketing effectiveness in tourism, highlighting the critical role of service quality and sustainability in achieving high levels of tourist satisfaction and positive behavioural intentions. Future research should build on these findings, exploring diverse contexts and longitudinal data to deepen the understanding.

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Institutional Review Board Statement: The Research Ethics Committee of Chiang Mai University has reviewed and issued the "Certificate of Exemption" (COE No. 009/67, CMUREC Code No. 67/053, Date: 19 March 2024) which was approved based on the international guidelines for human research

protection including the Declaration of Helsinki, International Conference on Harmonization in Good Clinical Practice (ICH-GCP), and The Belmont Report.

Informed Consent Statement: The study and its purpose were explained to all the respondents who participated in this study, and their consent was obtained. The anonymity and confidentiality of the data were always maintained.

Data Availability Statement: The data is not publicly available due to privacy and ethical restrictions.

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