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DETERMINANTS OF TOURISM MOTIVATION AND THEIR IMPACT ON TOURISM EFFECTIVENESS: EVIDENCE FROM VIETNAM

Abstract

This study aims to identify the key factors influencing tourist motivation and its subsequent impact on tourism effectiveness within the Vietnamese digital tourism sector. Research data were collected through an online survey utilizing a structured instrument measured on a five-point Likert scale. Data collection was carried out from January 15, 2026, to March 30, 2026, yielding 300 valid responses used for empirical analysis. The data analysis followed a systematic process, including scale reliability testing via Cronbach's Alpha, exploratory factor analysis (EFA), confirmatory factor analysis (CFA), and structural equation modeling (SEM).

The structural model examines the impacts of tourism environment, tourism conditions, social media, guide quality, and travel attitudes on tourist motivation, as well as the path from tourism motivation to tourism effectiveness. The empirical results show that tourism environment, tourism conditions, guide quality, and travel attitudes all positively and significantly affect tourism motivation, with guide quality and travel attitudes as the strongest determinants. Notably, the study indicates that social media use does not significantly affect tourists' travel motivation. Furthermore, structural path analysis confirms that tourism motivation serves as a critical full mediator directly driving tourism effectiveness ($\beta = 0.413, p < 0.001$). These findings clarify the central role of psychological mechanisms in digital travel and offer actionable implications for destination management organizations (DMOs) and tour operators to design structured itineraries and maximize service quality to enhance the overall visitor experience.

Keywords

tourism motivation, guide quality, tourism effectiveness,
Vietnam, SEM

JEL Classification

L83, Z32, M31, C38

INTRODUCTION

Digital tourism has become important in the global entertainment system, especially with the rapid development of information and communication technology. It not only offers flexibility but also expands access to travel, while contributing to innovation in guide and travel methods at the destination, allowing tourists to access diverse travel content beyond the traditional method (Hariyanti et al., 2024). Particularly during the COVID-19 pandemic, digital tourism was not simply a temporary solution but is gradually being recognized as a long-term tourism management approach, emphasizing the active role of tourists and personalized travel experiences.

However, alongside these clear benefits, tourism also presents numerous challenges related to tourist participation, destination loyalty, and tourism effectiveness. Numerous studies have shown that the effectiveness of tourism depends not only on technological infrastructure or guide quality, but also significantly on the psychological, social, and tourism environment factors (Liu et al., 2024a; Yang, 2025). Among these, tourism motivation is considered a key factor, determining the

level of participation, commitment, and travel effectiveness. Tourism motivation promotes proactiveness, travel autonomy, and engagement in the travel process, thereby improving tourism effectiveness.

Tourism is increasingly asserting its role in entertainment, especially in rapidly developing digital technology and social media platforms. In this environment, factors such as the tourism environment, guide quality, tourism conditions, tourist attitudes, and social media use are key elements contributing to the formation of tourism motivation and influencing tourist tourism effectiveness. Tourism motivation is a central psychological foundation, promoting active participation, persistent effort, and the ability to maintain travel, thereby improving tourist tourism effectiveness (Xia et al., 2024; Zhao et al., 2025).

Although tourism is increasingly widespread, empirical evidence on the impact of travel factors on tourist motivation and tourism effectiveness in the context of entertainment in Vietnam remains incomplete and inconsistent. Furthermore, the role of social media in travel activities remains a subject of debate, as these platforms have the potential to support travel through enhanced interaction and information sharing, but can also cause distractions and reduce tourists' engagement with the tour (Li et al., 2017). Therefore, clarifying the relationship between these factors in the tourism environment is necessary to improve the quality of tourism management.

Previous studies have indicated that tourists with high levels of tourism motivation tend to achieve better satisfaction and tourism effectiveness, especially when receiving appropriate support from destination marketing organizations and tourism management institutions (Devesa et al., 2010). Simultaneously, Zheng and Khong-khai (2026) also affirmed that interaction, level of participation, and satisfaction significantly influence tourism outcomes, with tourism motivation acting as a mediating variable connecting influencing factors with tourism effectiveness. At the same time, tourism motivation is influenced by the participation of stakeholders in the economy (Sharma & Sharma, 2017).

Besides factors related to tourism environment, tourists' personal characteristics such as tourist attitudes, self-confidence levels, and technological proficiency have also been shown to significantly influence motivation and tourism effectiveness in the context of digital travel (Gretzel et al., 2015; Stankov et al., 2020). In the new tourism environment, investment in tourism infrastructure and destination services also contributes to competitiveness (Caber & Albayrak, 2018). Tourists with positive attitudes and confidence in their travel abilities tend to exhibit higher levels of participation, maintain better revisit intentions, and achieve higher performance. This shows that tourism motivation is not an independent factor, but is formed through a complex interaction between individual, social, and contextual travel factors.

In recent years, social factors, especially the role of social media, have increasingly attracted researchers' attention in the travel field. However, a major research gap persists in the Vietnamese context: prior studies have predominantly focused on the technical infrastructure, guide competencies, or manager support, while completely overlooking the psychological mechanisms of visitors, specifically the structural mediating role of tourism motivation. Furthermore, there is a critical lack of integrated frameworks that simultaneously synthesize individual (travel attitude), social (social media), environmental, and institutional (guide quality) factors to evaluate their holistic impact on tourists' behavioral outcomes.

1. LITERATURE REVIEW

The understanding of tourist motivation and its impact on tourism effectiveness has evolved significantly over the past decade. In digital tourism,

where tourists engage with travel content through online platforms, the determinants of motivation extend beyond traditional factors to include environmental, institutional, social, and personal dimensions.

Digital tourism is a form of travel that takes place on digital technology platforms and through internet connectivity, allowing tourists to access travel content flexibly in terms of time and space, without the limitations of traditional methods. In this environment, tourists play a central role, requiring a high degree of initiative, travel autonomy, and co-creation behaviors in the travel process (Prebensen et al., 2013; Campos et al., 2018).

Tourism effectiveness reflects the extent to which travel objectives are achieved through this form of travel, demonstrated through behavioral intentions, participation, satisfaction levels, a sense of destination attachment, and future destination loyalty. Recent studies show that the effectiveness of tourism is influenced both by technology and guide content and by the psychological, behavioral, and environmental factors (Shareef et al., 2023; Theerathitichaipa et al., 2025; Zhao et al., 2025).

Social media is an important travel support tool that facilitates information exchange, travel content sharing, and enhanced interaction among tourists. According to Aboalghanam et al. (2024) and Liu et al. (2024b), the use of social media in travel is positively correlated with tourists' self-confidence and initiative, thereby indirectly contributing to improved tourism effectiveness.

In the context of tourism, social media contributes to increased tourist engagement and interaction if properly utilized, while also supporting the rapid and effective sharing of destination insights, thereby promoting tourism motivation (Susanto et al., 2024; Oliverio et al., 2024; Wei et al., 2025). However, uncontrolled use of social media, especially for non-travel purposes, can cause distractions and impair tourists' engagement with the tour and travel effectiveness.

The tourism environment includes the physical and psychological factors surrounding the tourist, such as travel space, ambiance, facilities, and support from family or the travel community. In tourism, a favorable tourism environment helps tourists enhance their immersion, reduce psychological pressure, and improve

their well-being, thereby contributing to increased motivation.

Empirical studies in Vietnam show that a positive tourism environment has a significant impact on the level of participation and effectiveness of tourism. Conversely, unfavorable tourism conditions can reduce tourism motivation and the level of interaction among tourists (Ha et al., 2024).

The guide quality of tour guides and digital systems is one of the key factors affecting tourists' motivation and travel effectiveness. In a tourism environment, guide effectiveness depends not only on the guidance content but also on the level of interaction, responsive feedback, and the design of travel activities tailored to the specifics of tourism management. Xia et al. (2024) and Caber and Albayrak (2018) assert that active guide quality can promote tourism motivation and improve the overall tourist experience.

Furthermore, Torabi et al. (2022) and Liang et al. (2024) also indicate that a clear itinerary structure along with adequate technical preparation significantly influences tourists' perceptions, satisfaction levels, and tourism motivation in a digital tourism environment.

Tourism conditions refer to factors related to the technological infrastructure serving tourism, including travel equipment, internet connection quality, and software and platforms supporting tourism. These factors directly influence tourists' travel experience in the online environment. When technological conditions are adequately and stably ensured, tourists experience fewer system disruptions during the travel process, thereby maintaining higher levels of engagement and motivation (Torabi et al., 2022; Pai et al., 2020).

In addition, studies in Vietnam show that tourists' independent travel skills and level of confidence in using technology also contribute to increasing their intention to continue participating in tourism, thereby promoting tourism motivation and improving overall travel effectiveness.

Travel attitude reflects tourists' perceptions, feelings, and readiness for tourism. Tourists with a positive attitude tend to show greater

destination interest, be more proactive in their destination exploration, and adapt more easily to new guiding formats. According to Huang et al. (2017) and Neuhofer et al. (2015), a positive travel attitude is closely related to tourism motivation and travel effectiveness in a digital tourism environment.

Recent studies also show that a positive attitude enhances travel autonomy in tourism, supporting tourists to respond flexibly to difficulties and challenges, thereby improving tourism motivation throughout the travel process.

Tourism motivation is understood as the factor that drives individuals to participate in travel activities, maintain effort, and strive toward achieving set travel goals. Tourism motivation typically includes two main components: intrinsic motivation, stemming from interest and a desire to explore destinations; and extrinsic motivation, influenced by factors such as social media, social recognition, and external issues. In tourism, motivation plays a crucial role in determining the level of participation, engagement, and tourism effectiveness (Neuhofer et al., 2015; Pai et al., 2020).

In Vietnam, recent studies also emphasize the important role of tourism motivation in the online environment, where tourists must proactively manage their travel experiences and face challenges related to technology as well as limitations in direct interaction (Ngoc et al., 2024).

The link between tourism motivation and tourism effectiveness has been confirmed in many previous studies. Tourists with high levels of tourism motivation tend to participate more actively in travel, adapt well to the tourism environment, and achieve higher tourism effectiveness. Studies by Pai et al. (2020) and Xia et al. (2024) indicate that tourism motivation plays a crucial mediating role, connecting influencing factors with tourism effectiveness.

In addition, recent studies in Vietnam show that perceptions, attitudes toward tourism, and interaction factors significantly influence tourists' tourism motivation, thereby indirectly impacting tourism effectiveness (Ngoc et al., 2024).

Based on theoretical foundations and a review of previous studies, this study proposes a research model (Figure 1) to analyze the factors influencing tourism motivation and the role of tourism motivation in the tourism effectiveness of tourists. According to studies by Pai et al. (2020), Xia et al. (2024), and Zhao et al. (2025), tourism motivation plays a central role in determining the level of tourist participation and tourism effectiveness in the tourism environment, and is influenced by many different groups of factors, including personal factors, institutional factors, environmental factors, and social factors.

Specifically, the study aims at two main objectives:

- 1) to identify the key factors affecting tourism motivation in the tourism environment; and
- 2) to assess the impact of tourism motivation on tourism effectiveness.

The paper is expected to contribute to the refinement of the theoretical framework of tourism, while providing practical implications for managers and tourism management institutions in enhancing tourism motivation and improving tourism effectiveness in the current entertainment industry.

The study elaborates on the following hypotheses:

- H1: Social media usage has a positive influence on tourism motivation in a digital tourism environment.*
- H2: The tourism environment has a positive influence on tourism motivation within the digital platform.*
- H3: Guide quality has a positive impact on tourism motivation.*
- H4: Tourism conditions have a positive impact on tourism motivation.*
- H5: Travel attitude has a positive influence on tourism motivation.*
- H6: Tourism motivation has a positive impact on tourism effectiveness.*

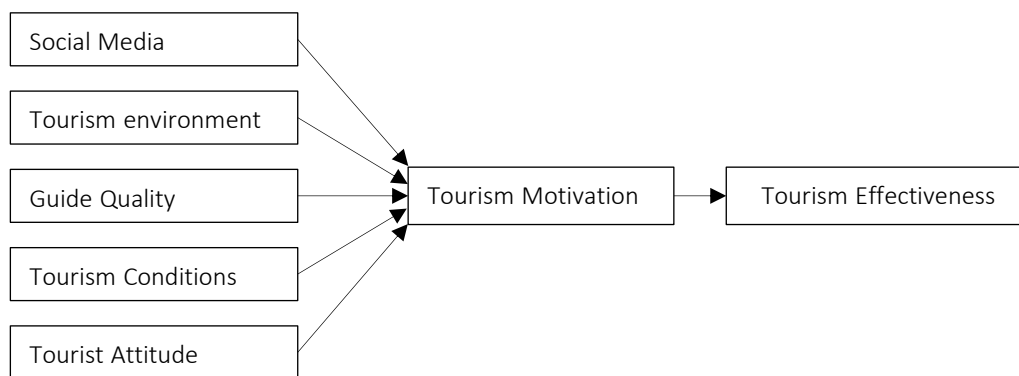


Figure 1. Proposed research model

2. METHOD

This study selects Vietnam as a primary research destination, stemming from the fact that post-COVID-19, the number of tourists visiting Vietnam has been steadily increasing. Notably, in 2026, Vietnam recorded a historic milestone for tourist arrivals during the first few months of the year, marking a 12% increase compared to the same period in the previous year. Vietnam is globally recognized for its diverse range of unique and famous tourist destinations, spanning luxury modern resorts such as Vinpearl, Cua Tung Beach, Da Nang, and the romantic Nha Trang, alongside heritage landscapes bearing the deep imprint of cultural exchange. Ancient houses, temples, and pagodas co-exist with traditional Vietnamese townhouses and historic French architectural quarters across its provinces. This vibrant ecosystem provides an ideal context to empirically explore diverse travel experiences, tourist attitudes, tourism motivation, and ultimate tourism effectiveness. To ensure empirical rigor while overcoming the logistical constraints of accessing a vast tourist population, a non-probability convenience sampling technique combined with a snowball sampling mechanism was deployed. The defined sampling frame targeted individuals who had actively traveled to various destinations within Vietnam and utilized digital platforms or social media for their itinerary planning. Data collection was systematically executed via a structured online questionnaire distributed through major social networking sites, tourism forums, and travel groups from January 15, 2026, to March 30, 2026. A total of 350 questionnaires were collected. After rigorous data screening to remove incomplete profiles, straight-lining responses, and outliers, 300 valid questionnaires were retained for empirical analy-

sis, yielding an effective response rate of 85.7%. According to Hair et al. (2019), a final sample size of $N = 300$ satisfies the minimum requirements for structural equation modeling (SEM), fulfilling the strict rule-of-thumb of maintaining an observation-to-variable ratio well above 10:1.

The measurement scales operationalized in this survey instrument were inherited and adapted from validated foundational studies in the fields of hospitality management and travel psychology. The comprehensive questionnaire comprised 28 observed variables designed to measure seven primary latent constructs: tourism environment (TE), guide quality (GQ), tourism conditions (TC), travel attitude (TA), social media (SM), tourism motivation (TrM), and tourism effectiveness (TEf). All latent items were evaluated utilizing a standard 5-point Likert scale, ranging from 1 (“Strongly Disagree”) to 5 (“Strongly Agree”) (Likert, 1932), which allowed respondents to precisely calibrate their level of psychological and behavioral agreement. Table A1, Appendix A, shows the measurement scale.

The collected data were processed and analyzed using SPSS, AMOS, and Excel software. First, the reliability of the scales was tested using Cronbach’s Alpha coefficient to assess the internal consistency of the observed variables (Nunnally & Bernstein, 1994). Next, Exploratory Factor Analysis (EFA) was conducted to determine the underlying structure of the scales and to select suitable observed variables (Hair et al., 2019). After establishing the scale structure, Confirmatory Factor Analysis (CFA) was used to assess the model’s fit, and to evaluate the convergent and discriminant validity of the scales. Finally, structural equation modeling (SEM) was applied to test the research hypoth-

eses and analyze the relationships between variables in the proposed research model (Kline, 2016).

Several ethical measures were taken to protect the rights of the respondents. First, all participants were provided with an informed consent statement at the beginning of the survey, which clearly explained that the study was for academic purposes only and that their responses would be anonymous and confidential. Participation was completely voluntary, and respondents could withdraw from the survey at any time without providing any reason. The questionnaire did not ask for any personally identifiable information. All data collected were stored on a password-protected computer, and only the authors had access to it.

The empirical datasets generated and analyzed during the current study are available from the corresponding author upon reasonable academic request.

3. RESULTS

3.1. Descriptive statistics

The research sample comprised 350 tourists; 300 surveys met the requirements and were used for analysis; the remaining 50 were excluded due to insufficient information. Regarding gender, female tourists accounted for 52.0% and male tourists for 48.0%, indicating a relatively balanced gender distribution in the sample (Table 1). In terms of age, the majority were between 25 and 55 years old. The highest proportion was 50-year-olds (18.3%), followed by 30-year-olds (16.7%) and 40-year-olds (14.7%). The age distribution was fairly even, reflecting the common characteristics of current tourists. This structure shows that the research sample ensures the representativeness and relevance of the research subjects.

Table 1. Descriptive statistics (N = 300)

Demographic characteristics	Category	Frequency (n)	Percentage (%)
Gender	Female	156	52.0%
	Male	144	48.0%
Age group	Under 25 years old	32	10.7%
	25-35 years old	86	28.7%
	36-45 years old	74	24.7%
	46-55 years old	82	27.3%
	Over 55 years old	26	8.6%
Total		300	100.0%

Table 2. Reliability analysis

STT	Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Social Media (SM) – Cronbach's Alpha = 0.966 (N = 4)					
1	SM1	8.86	13.392	0.917	0.955
2	SM2	8.89	13.115	0.912	0.956
3	SM3	8.8967	13.498	0.913	0.956
4	SM4	8.8633	13.443	0.919	0.954
Tourism Environment (TE) – Cronbach's Alpha = 0.965 (N = 4)					
5	TE1	9.1033	12.942	0.91	0.954
6	TE2	9.0667	13.059	0.908	0.954
7	TE3	9.0867	13.196	0.91	0.954
8	TE4	9.0333	12.761	0.919	0.951
Guide Quality (GQ) – Cronbach's Alpha = 0.965 (N = 4)					
9	GQ1	8.8167	13.281	0.915	0.953
10	GQ2	8.8367	13.395	0.913	0.954
11	GQ3	8.8633	13.189	0.918	0.953
12	GQ4	8.8333	13.417	0.906	0.956

Table 2 (cont.). Reliability analysis

STT	Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Tourism Conditions (TC) – Cronbach's Alpha = 0.964 (N = 4)					
13	TC1	8.92	12.321	0.904	0.954
14	TC2	8.9	12.284	0.917	0.95
15	TC3	8.89	12.098	0.914	0.951
16	TC4	8.93	12.326	0.905	0.954
Travel Attitude (TA) – Cronbach's Alpha = 0.953 (N = 4)					
17	TA1	9.2433	11.155	0.884	0.939
18	TA2	9.1867	11.209	0.89	0.937
19	TA3	9.31	11.151	0.879	0.941
20	TA4	9.22	11.202	0.891	0.937
Tourism Motivation (TrM) – Cronbach's Alpha = 0.946 (N = 4)					
21	TrM1	8.8467	10.505	0.869	0.929
22	TrM2	8.8267	10.418	0.873	0.928
23	TrM3	8.7967	10.49	0.873	0.928
24	TrM4	8.82	10.342	0.862	0.931
Tourism Effectiveness (TEf) – Cronbach's Alpha = 0.933 (N = 4)					
25	TEf1	8.9833	7.789	0.857	0.907
26	TEf2	8.91	7.975	0.823	0.918
27	TEf3	8.91	7.748	0.836	0.914
28	TEf4	8.9367	7.725	0.849	0.909

Table 3. KMO and Bartlett's test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.905
Bartlett's Test of Sphericity	Approx. Chi-Square	9,726.78
	Df	378
	Sig.	0

3.2. Reliability testing

Table 3 shows the Kaiser–Meyer–Olkin (KMO) test result as 0.809, indicating a high degree of fit for the study sample and confirming that the data met the criteria for factor analysis. In addition, the Bartlett's test of sphericity yielded a Chi-square value of 4481.879 with degrees of freedom (df) of 378 and a significance level of Sig. = 0.000, suggesting a statistically significant linear correlation between the observed variables. Therefore, the study data fully met the necessary conditions for conducting exploratory factor analysis.

Furthermore, the validity of the scales was assessed through confirmatory factor analysis (CFA), based on standardized loading coefficients and average variance extracted (AVE) methods. Table 4 shows that all observed variables had standardized loading coefficients greater than 0.5, while the AVE values of the constructs all reached or exceeded the threshold of 0.5, meeting the validity assessment criteria of the recommendations established by Hair et al. (2019). This indicates that the scales in the study are capable of effectively analyzing the latent concepts that need to be measured.

Table 4. CFA

Component	Estimate	S.E.	C.R.	CR	AVE
TE1 ← TE	1			0.87	0.63
TE3 ← TE	0.915	0.057	16.018***		
TE4 ← TE	1.001	0.058	17.169***		
TE2 ← TE	0.852	0.057	15.038***		
TC1 ← TC	1			0.88	0.65
TC4 ← TC	1.054	0.069	15.378***		
TC3 ← TC	1.054	0.066	16.023***		
TC2 ← TC	0.971	0.064	15.127***		

Table 4 (cont.). CFA

Component	Estimate	S.E.	C.R.	CR	AVE
TEf2 ←Tef	1			0.86	0.61
TEf1 ←Tef	0.91	0.059	15.323***		
TEf4 ←Tef	0.948	0.06	15.802***		
TEf3 ←Tef	0.921	0.065	14.28***		
SM2 ←SM	1			0.85	0.59
SM3 ←SM	0.865	0.059	14.608***		
SM1 ←SM	0.916	0.062	14.868***		
SM4 ←SM	0.86	0.06	14.418***		
GQ4 ←GQ	1			0.86	0.61
GQ3 ←GQ	1.031	0.071	14.462***		
GQ2 ←GQ	0.932	0.067	13.925***		
GQ1 ←GQ	0.872	0.064	13.552***		
TA2 ←TA	1			0.85	0.6
TA3 ←TA	1.01	0.071	14.25***		
TA1 ←TA	0.997	0.07	14.273***		
TA4 ←TA	0.91	0.067	13.648***		
TrM4 ←TrM	1			0.79	0.52
TrM3 ←TrM	1.192	0.105	11.318***		
TrM1 ←TrM	0.688	0.073	9.384***		
TrM2 ←TrM	0.693	0.101	6.86***		

Note: Tourism motivation (TrM); SM (Social Media); Tourism Environment (TE), Guide Quality (GQ), Tourism Conditions (TC), Tourism Attitude (TA), Tourism Effectiveness (TEf). ***: $p < 0.001$.

Table 5. Rotated component matrix^a

Component	1	2	3	4	5	6	7
TE1	.857						
TE4	.853						
TE3	.846						
TE2	.821						
TC3		.856					
TC1		.853					
TC4		.851					
TC2		.835					
TEf2			.829				
TEf1			.821				
TEf4			.819				
TEf3			.798				
SM2				.853			
SM1				.834			
SM3				.832			
SM4				.820			
GQ4					.841		
GQ3					.836		
GQ2					.823		
GQ1					.800		
TA2						.839	
TA3						.829	
TA1						.816	
TA4						.797	
TrM4							.809
TrM3							.801
TrM1							.750
TrM2							.468

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.^a

Note: a. Rotation converged in 5 iterations. Tourism motivation (TrM); SM (Social Media); Tourism Environment (TE), Guide Quality (GQ), Tourism Conditions (TC), Tourism Attitude (TA), Tourism Effectiveness (TEf).

3.3. Testing the structural model

Structural equation modeling (SEM) was performed using AMOS 20 software to test research hypotheses regarding the relationship between influencing factors and tourism motivation, as well as the impact of tourism motivation on tourism effectiveness. The SEM analysis results are presented in Figure 2, while parameter estimates and statistical significance levels of the relationships are summarized in Table 6.

The model fit indicators show that the research model fits well with the empirical data. Specifically, the Chi-square value = 394.706 with df = 334, resulting in Chi-square/df = 1.182, which is less than

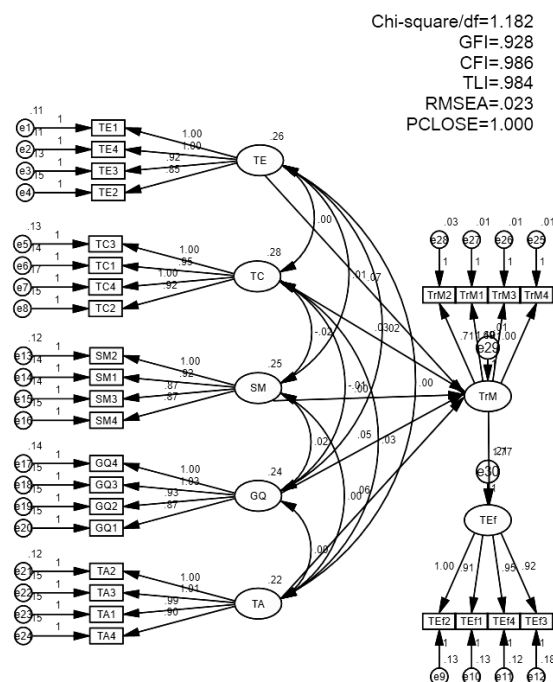
the recommended threshold of 3. In addition, the incremental fit indicators are all very good, with GFI = 0.928, CFI = 0.986, and TLI = 0.984, exceeding the acceptable threshold of 0.9 as suggested by Hu and Bentler (1999). Furthermore, the RMSEA index of 0.023, which is less than the threshold of 0.08, indicates a very low approximation error of the model. Simultaneously, the PCLOSE index of 1.000 shows that the model has a very high degree of fit to the overall data.

In summary, these indicators show that the research model has a very good fit, confirming that the proposed model structure is appropriate and that the research hypotheses have a basis for further testing and interpretation.

Table 6. Discriminant validity of constructs

Constructs	CR	AVE	MSV	TE	TC	SM	GQ	TA	TrM	TEf
TE	0.86	0.64	0.01	0.8						
TC	0.85	0.64	0.01	−0.02	0.8					
SM	0.84	0.61	0.01	0.06	−0.08	0.78				
GQ	0.83	0.6	0.01	0.1	−0.05	0.07	0.77			
TA	0.84	0.6	0.01	0.02	0.12	0.01	0.01	0.77		
TrM	0.79	0.52	0.02	0.28	0.12	0.01	0.22	0.23	0.72	
TEf	0.85	0.6	0.17						0.41	0.77

Note: Tourism motivation (TrM); SM (Social Media); Tourism Environment (TE), Guide Quality (GQ), Tourism Conditions (TC), Tourism Attitude (TA), Tourism Effectiveness (TEf).



Note: Tourism motivation (TrM); SM (Social Media); Tourism Environment (TE), Guide Quality (GQ), Tourism Conditions (TC), Tourism Attitude (TA), Tourism Effectiveness (TEf).

Figure 2. SEM results

The results of structural equation modeling (SEM) analysis show that tourism motivation has a very strong positive influence on tourists' tourism effectiveness, with a standardized effect coefficient of $\beta = 0.413$ and statistical significance level $p < 0.001$ (Table 7). This finding confirms the crucial role of tourism motivation in determining tourists' overall engagement in a digital tourism environment. The results are consistent with many previous studies, showing that highly motivated tourists tend to participate more actively in travel, immerse themselves more deeply, and achieve better travel satisfaction (Pai et al., 2020; Xia et al., 2024).

Considering the factors influencing tourism motivation, the analysis results show that the tourism environment has a positive and statistically significant impact on tourist motivation ($\beta = 0.066$; $p < 0.001$). This indicates that building a favorable tourism environment, including suitable travel spaces and psychological support, plays a crucial role in maintaining and enhancing tourism motivation. This result reinforces the previous findings of Ha et al. (2024), emphasizing that a positive tourism environment contributes to increased participation and interest in travel.

In addition, tourism conditions also have a positive influence on tourism motivation ($\beta = 0.028$; $p = 0.045$). Although the impact was not significant, this result shows that factors related to technological infrastructure, travel equipment, and internet connection quality still play a fundamental role in helping tourists maintain their travel interest. This finding is consistent with Torabi et al. (2022) and Pai et al. (2020), who suggest that favorable tourism conditions contribute to minimizing technical barriers and improving the tourism experience.

Conversely, the analysis did not find a statistically significant impact of social media on tourists' travel motivation ($\beta = 0.003$; $p = 0.811$). This indicates that the use of social media does not automatically lead to an increase in motivation to travel, especially when these platforms are not clearly geared toward travel purposes. This finding is consistent with several previous studies suggesting that social media can be disruptive and reduce tourist immersion if used excessively or not serving specific travel objectives (Wei et al., 2025).

Meanwhile, guide quality showed a strong and statistically significant positive impact on tourism motivation ($\beta = 0.054$; $p < 0.001$). This result indicates that guide quality designed to suit the specifics of tourism, emphasizing interaction and timely feedback, are capable of stimulating interest and maintaining tourist motivation. This finding further confirms the important role of guiding systems in promoting tourism motivation in the tourism environment (Xia et al., 2024; Caber & Albayrak, 2018).

Furthermore, travel attitude was identified as one of the factors that positively and significantly influenced tourists' tourism motivation ($\beta = 0.057$; $p < 0.001$). This result indicates that tourists with a positive travel attitude, openness to new experiences, and proactiveness in tourism tend to maintain higher levels of motivation. This finding is consistent with Neuhofer et al. (2015), who emphasize that travel attitude and self-confidence are important factors determining tourists' motivation and tourism effectiveness.

In summary, the research findings confirm that tourism motivation plays a crucial mediating role in the relationship between travel factors and tourists' tourism effectiveness. While factors such as tourism environment, guide quality,

Table 7. Hypothesis verification result

Path	Estimate	S.E.	C.R.	P	Results
TrM $\leftarrow$ TE	0.066	0.014	4.549	***	Accept
TrM $\leftarrow$ TC	0.028	0.014	2.008	0.045	Accept
TrM $\leftarrow$ SM	0.003	0.014	0.239	0.811	Not accept
TrM $\leftarrow$ GQ	0.054	0.015	3.557	***	Accept
TrM $\leftarrow$ TA	0.057	0.016	3.665	***	Accept
TEf $\leftarrow$ TrM	1.773	0.287	6.178	***	Accept

Note: *** Statistically significant at $p < 0.001$. Tourism motivation (TrM); SM (Social Media); Tourism Environment (TE), Guide Quality (GQ), Tourism Conditions (TC), Tourism Attitude (TA), Tourism Effectiveness (TEf).

tourism conditions, and tourist attitudes all positively influence tourism motivation, social media has not shown a clear role in promoting tourism motivation in this research context. Thus, to improve tourism effectiveness, tourism management institutions need to focus on improving the tourism environment, tourism conditions, innovating guide quality, and especially fostering active tourist attitudes in tourists, relegating the role of social media as merely a supporting factor.

3.4. Mediation analysis

To investigate the mediating mechanisms of tourism motivation (TrM) between the independent contextual/personal factors and the dependent variable, tourism effectiveness (Tef), a bootstrapping procedure with 2,000 replications was conducted. The results of the standardized direct, indirect, and total effects are summarized in Table 8.

According to Table 8, tourism motivation plays a mediating role in the relationships between several factors and tourism effectiveness. More specifically, the indirect effects of tourism environment, tourism conditions, guide quality, and travel attitude are all statistically significant ($p < 0.05$), with tourism environment and tourism attitude showing the strongest effects ($\beta = 0.117$ and $\beta = 0.095$, respectively). In contrast, social media was found to be insignificant ($p = 0.811$). Therefore, tourism motivation is a full mediator in most cases, except for social media, which does not seem to influence effectiveness through motivation.

4. DISCUSSION

The findings align with previous studies, indicating that tourism motivation is influenced by both travel-context factors and tourists’ personal characteristics (Xia et al., 2024). Among the factors considered,

guide quality and tourist attitudes showed a stronger impact than the others. This finding reinforces self-determination theory, which argues that tourism motivation increases when tourists feel autonomy, competence, and meaning in the travel process (Li & Shi, 2022; Li et al., 2024). When guide quality is designed to suit tourists and tourists maintain a positive travel attitude, these basic psychological needs tend to be met, thereby boosting tourism motivation.

Another noteworthy result is that social media did not show a statistically significant positive influence on tourism motivation. This finding suggests that the role of social media in travel is neither direct nor universal, but depends significantly on the purpose and manner of use. From the perspective of self-determination theory, tourism motivation is only formed when travel activities meet the needs for autonomy, competence, and social connection (Xia et al., 2024; Li & Shi, 2022; Li et al., 2024). However, most social media platforms are designed for personal communication, entertainment, and short-term content consumption, making it difficult to directly address these core psychological needs in the context of structured digital itineraries.

Furthermore, according to cognitive load theory, the use of social media can increase cognitive load unrelated to destination exploration, especially in multitasking and easily distracted situations (Huang et al., 2025; Li et al., 2025). Numerous empirical studies have shown that frequent social media use can impair concentration and negatively impact tourists’ overall experience (Sun et al., 2023). Therefore, because the research model controlled for key factors such as guide quality and tourist attitudes, the specific impact of social media on tourism motivation was insignificant.

Results from the structural model also showed that tourism motivation has a strong and positive

Table 8. Mediation analysis result using bootstrapping

Path	Direct Effect	Indirect Effect	Total Effect	P	Results
TE → TrM → Tef	0.000	0.117	0.117	0.002	Significant Mediation
TC → TrM → Tef	0.000	0.05	0.05	0.041	Significant Mediation
SM → TrM → Tef	0.000	0.001	0.001	0.811	No Mediation
GQ → TrM → Tef	0.000	0.092	0.092	***	Significant Mediation
TA → TrM → Tef	0.000	0.095	0.095	***	Significant Mediation

Note: *** Statistically significant at $p < 0.001$. Tourism motivation (TrM); SM (Social Media); Tourism Environment (TE), Guide Quality (GQ), Tourism Conditions (TC), Tourism Attitude (TA), Tourism Effectiveness (Tef).

influence on tourists' tourism effectiveness. This finding is consistent with contemporary tourism management theory, where tourism motivation is a crucial mediating mechanism for transforming inputs into tourism effectiveness (Xia et al., 2024; Li & Shi, 2022). This implies that factors such as the tourism environment, guide quality, or tourist attitudes are only truly effective when they contribute to boosting tourists' motivation. Conversely, factors that do not increase motivation, such as the use of social media without focus, are unlikely to have a positive impact on tourism effectiveness.

4.1. Theoretical implications

From a theoretical standpoint, this study clarifies that the influence of social media on tourism motivation is not direct or inherent, but depends significantly on the service implementation and the objectives of its use in travel activities. This result expands on previous findings that social media only plays a positive role in travel when intentionally integrated into structured activities, rather than being used freely and without direction (Sun et al., 2023).

Furthermore, the findings reinforce the foundation of self-determination theory by showing that guide quality and tourist attitudes directly addressing tourists' needs for autonomy, perceived competence, and level of engagement play a key role in shaping and maintaining tourism motivation in tourism environments (Li & Shi, 2022; Li et al., 2024). This implies that technological factors, including social media, primarily play a supporting role, while tourism motivation remains largely determined by operational and psychological factors of the tourist.

4.2. Practical implications and recommendations

Based on the research findings, the proposed recommendation follows a holistic approach involving coordination among three key stakeholders: destination management organizations (DMOs), tour operators, and tourists.

First, destinations and DMOs need to shift their focus from simply investing in technological infrastructure to building a comprehensive smart tourism ecosystem. This ecosystem should integrate smart travel management systems, interactive sup-

port tools, and digitalized travel services to create a seamless, tourist-centered travel experience that better meets the diverse travel needs of tourists (Chuang, 2023). The application of smart tourism models, flexibly combining real-time digital assistance with self-guided exploration modules, not only contributes to maintaining social interaction but also supports the development of tourists' autonomous travel capabilities and destination navigating skills. Furthermore, destination support policies need to be designed in a personalized manner, such as categorizing tourists based on their digital readiness and providing support tailored to each group. This approach helps bridge the gap in access to smart travel resources and improve the overall effectiveness of digital itinerary delivery (Gretzel et al., 2015; Chuang, 2023).

Second, for tour operators and tour guides, the professional role needs to shift from mere information providers to designers, organizers, and facilitators of immersive travel experiences. Social media should be integrated into clearly structured travel activities, such as guided destination discussions, virtual group interactions, or peer feedback on travel plans, rather than being used spontaneously. This deliberate integration helps social media better meet tourists' needs for active participation and perceived competence, thereby indirectly contributing to boosting tourism motivation (Sun et al., 2023; Li et al., 2024). Furthermore, the design of travel activities should focus on managing cognitive load by standardizing technological tools, limiting the simultaneous use of too many platforms, and providing timely feedback linked to specific travel objectives. This helps tourists maintain focus, reduce distractions, and enhance active travel engagement in a digitized tourism environment (Sun et al., 2023; Li & Shi, 2022).

Third, on the tourist side, developing independent travel planning skills, managing time at the destination, proactively monitoring the destination, and self-assessing travel progress are critical to maintaining motivation and improving tourism effectiveness in the context of digital tourism (Su et al., 2022; Wut et al., 2023). Furthermore, tourists need to be guided to use social media for meaningful purposes, such as participating in specialized tourism communities and exchanging destination insights, rather than using social media purely for passive entertainment, in order to optimize the benefits of technology for the travel process.

CONCLUSION

The primary objective of this study was to identify structural determinants of tourist motivation and to comprehensively assess their direct and indirect impacts on tourism effectiveness within the Vietnamese digital tourism context.

The empirical results derived from the structural equation modeling (SEM) analysis of 300 valid respondents provide several insights. First, tourist motivation strongly and directly drives tourism effectiveness, fully confirming its central mediating role within the operational framework. Second, guide quality and tourist attitudes emerged as the strongest positive determinants of inner motivation with comparable effect sizes, while the destination's tourism environment also contributed significantly, though more modestly. Third, physical tourism conditions exerted a small but statistically significant positive effect on motivation. Fourth and most notably, social media did not directly enhance tourist motivation, challenging the baseline assumption that modern digital tools inherently boost traveler engagement. These findings collectively demonstrate that psychological and operational service factors have surpassed baseline technological factors as the primary differentiators of destination motivation in mature digital tourism settings.

Although this study achieved significant results both theoretically and practically, it still possesses certain limitations, thus opening up clear directions for further research.

First, the sample size of the study is relatively limited ($N = 300$) and focuses heavily on a specific young tourist demographic. In the context of the ever-changing landscape of smart travel, driven by the rapid development of digital technology and the continuous emergence of new mobile travel applications, further studies should increase the sample size and expand the scope of surveys to more diverse tourism management contexts, including international travel, community-based ecotourism, and specialized travel programs in rural and mountainous areas. This expansion will significantly contribute to improving the generalizability and cross-contextual applicability of the research findings.

Second, the increasing diversity of digitalized tourism formats leads to significant variations in travel experiences and expectations among different consumer cohorts. For example, tourists with traditional in-person travel backgrounds often value face-to-face interaction and direct support from physical tour guides, while those participating in smart, self-guided, or virtual travel experiences rely more heavily on digital platforms, interactive resources, and autonomous travel capabilities. Future comparative research focusing on analyzing how different traveler segments acquire, evaluate, and utilize factors such as social media, interactive smart tools, and digital travel resources will provide deeper insights into the precise evolutionary role of tourism environments and technology.

Finally, current research models do not fully encompass all potential individual and situational factors that may influence digital tourism motivation and effectiveness. Basic demographic characteristics such as gender, age, prior travel experience, trip frequency, economic conditions, or geographical location may play a crucial moderating role in the structural relationships. Therefore, future studies should expand the current theoretical framework by incorporating additional moderating or mediating variables such as digital competence, independent travel self-regulation capacity, level of community support, or localized cultural factors, to further clarify the comprehensive psychological mechanisms affecting motivation and tourism effectiveness.

AUTHOR CONTRIBUTIONS

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APPENDIX A

Table A1. Measurement scales

No.	Constructs	Code	Observed Items	Source
1	Tourism Environment (TE)	TE1	The travel spaces during the digital tour were immersive and highly engaging.	Ha et al. (2024)
		TE2	The physical and psychological surroundings supported my digital travel experience.	Liu et al. (2024a)
		TE3	I received adequate encouragement and support from my family or the travel community.	Ha et al. (2024)
		TE4	The overall travel environment made me feel comfortable during the tour.	Liu et al. (2024a)
2	Tourism Conditions (TC)	TC1	My internet connection was stable throughout the digital tour.	Pai et al. (2020)
		TC2	The travel devices (smartphone, laptop, VR gear, etc.) I used performed reliably.	Pai et al. (2020)
		TC3	The digital tourism platforms and applications were user-friendly.	Torabi et al. (2022)
		TC4	Technical support from the travel agency was readily available when needed.	Torabi et al. (2022)
3	Social Media (SM)	SM1	I used social media platforms to share my digital travel experiences.	Aboalghanam et al. (2024)
		SM2	Social media helped me connect and interact with other tourists on the tour.	Li et al. (2024)
		SM3	I found useful destination information and travel tips on social media.	Aboalghanam et al. (2024)
		SM4	Social media enhanced my engagement with the tour content.	Li et al. (2024)
4	Guide Quality (GQ)	GQ1	The tour guide provided clear instructions and commentary.	Caber and Albayrak (2018)
		GQ2	The tour guide gave timely, helpful, and responsive feedback to my inquiries.	Xia et al. (2024)
		GQ3	The tour guide designed virtual travel activities that perfectly suited the digital format.	Xia et al. (2024)
		GQ4	The tour guide demonstrated professional knowledge and hospitality in response to my questions and service concerns.	Caber and Albayrak (2018)
5	Tourist Attitude (TA)	TA1	I hold a highly positive attitude toward digital and virtual tourism.	Neuhofer et al. (2015)
		TA2	I am fully confident in my ability to explore destinations through digital tours.	Huang et al. (2017)
		TA3	I thoroughly enjoy exploring new destinations through online travel platforms.	Huang et al. (2017)
		TA4	I believe digital tourism is an innovative and effective way to travel.	Neuhofer et al. (2015)
6	Tourism Motivation (TrM)	TrM1	I was strongly motivated to participate in and complete all tour activities.	Zhao et al. (2025)
		TrM2	I felt genuinely excited about participating in this digital tour.	Zhao et al. (2025)
		TrM3	I wanted to explore and discover as many geographic and cultural insights as possible from the tour.	Pai et al. (2020)
		TrM4	I was driven to achieve my personal travel and entertainment objectives.	Pai et al. (2020)
7	Tourism Effectiveness (TEf)	TEf1	I was completely satisfied with the overall digital tour experience.	Shareef et al. (2023)
		TEf2	I actively and deeply participated in all scheduled virtual tour activities.	Theerathitichaipa et al. (2025)
		TEf3	I gained valuable travel knowledge and destination insights from the tour.	Shareef et al. (2023)
		TEf4	I can successfully translate my virtual experiences into future physical destination loyalty.	Theerathitichaipa et al. (2025)