Journal of Posthumanism
2025
Volume: 5, No: 10, pp. 184–207
ISSN: 2634-3576 (Print) | ISSN 2634-3584 (Online)
posthumanism.co.uk

DOI: https://doi.org/10.63332/joph.v5i10.3520

Digital Distribution Channels as Catalysts for Sustainable Local Tourism: Examining Tourist Behavioral Intentions in Vietnam

Vu Hiep Hoang[1], Quoc Dung Ngo[2], Khanh Linh HA[3]

Abstract

This study examines the transformative role of digital distribution channels in fostering sustainable local tourism through an investigation of tourist behavioural intentions within the Vietnamese context. Employing a quantitative methodology integrating structural equation modelling (SEM) with fuzzy-set qualitative comparative analysis (fsQCA), the research develops a comprehensive theoretical framework that synthesises technology acceptance theory, planned behaviour theory, and sustainability paradigms. Data collection encompassed 487 respondents through a stratified sampling approach across Vietnam's key tourist destinations. The measurement model demonstrated robust reliability and validity through exploratory and confirmatory factor analyses, whilst the structural model revealed significant positive relationships between digital channel attributes, perceived sustainability value, and tourist behavioural intentions. The fsQCA findings complemented the SEM results by identifying configurational pathways to high behavioural intentions, revealing that traditional demographic factors interact complexly with digital engagement patterns. The study contributes theoretically by proposing a novel Digital-Sustainability Tourism Acceptance Model and methodologically by demonstrating the complementary insights gained from combining variance-based and set-theoretic approaches. Practically, the findings provide strategic guidance for destination management organisations and tourism enterprises seeking to leverage digital technologies for sustainable tourism development. The research establishes that digital distribution channels function not merely as booking platforms but as catalysts for sustainable tourism practices, fundamentally reshaping tourist-destination relationships in emerging economies.

Keywords: *Digital Distribution Channels, Sustainable Tourism, Behavioural Intentions, Vietnam, Structural Equation Modelling.*

Introduction

The contemporary tourism landscape witnesses an unprecedented convergence of digitalisation and sustainability imperatives, fundamentally reshaping how destinations engage with tourists and manage their resources (Buhalis & Law, 2008; Gretzel et al., 2015). Digital distribution channels have evolved beyond mere transactional platforms to become sophisticated ecosystems that influence tourist perceptions, preferences, and behavioural intentions towards sustainable tourism practices (Inversini & Masiero, 2014). This transformation assumes particular significance in emerging economies such as Vietnam, where rapid digital adoption intersects with growing environmental consciousness and the imperative for sustainable development (Nguyen & Vo, 2015).

Vietnam's tourism sector exemplifies the complex dynamics between digital innovation and

[1] National Economics University, Email: hiephoang@neu.edu.vn
[2] National Economics University.
[3] Nguyen Trai Specialized High School.

sustainability challenges facing developing nations. The country has experienced remarkable tourism growth, with international arrivals increasing substantially over the past decade, yet this expansion has generated considerable environmental and socio-cultural pressures (Tran & Walter, 2014). Simultaneously, Vietnam's digital infrastructure development and smartphone penetration rates have facilitated widespread adoption of digital tourism services, creating unprecedented opportunities for sustainable tourism promotion through digital channels (Vu et al., 2017).

The theoretical landscape surrounding digital tourism adoption reveals significant gaps in understanding how digital distribution channels specifically influence sustainable tourism behaviours. Existing literature predominantly focuses on either technology acceptance in tourism contexts or sustainability motivations independently, with limited integration of these domains (Kim et al., 2017). Furthermore, the majority of empirical studies concentrate on developed economies, leaving substantial knowledge gaps regarding digital-sustainability interactions in emerging market contexts where infrastructural constraints and cultural factors may fundamentally alter adoption patterns and behavioural outcomes (Chung et al., 2015).

The necessity for this research emerges from three critical imperatives. Firstly, the theoretical urgency stems from the absence of comprehensive frameworks that adequately explain how digital channel characteristics influence sustainable tourism intentions, particularly in contexts where traditional and digital systems coexist (Han et al., 2017). Secondly, the practical necessity arises from destination management organisations' need for evidence-based strategies to harness digital technologies for sustainable tourism promotion whilst navigating resource constraints typical of emerging economies (Chen & Phou, 2013). Thirdly, the methodological imperative involves addressing the complexity of tourism decision-making through innovative analytical approaches that capture both linear relationships and configurational patterns underlying tourist behaviour (Woodside, 2013).

This research addresses these imperatives through the development and empirical validation of a Digital-Sustainability Tourism Acceptance Model, specifically designed to explain how digital distribution channel attributes influence tourist behavioural intentions towards sustainable local tourism. The study's novelty resides in its integration of technology acceptance theory with sustainability paradigms, creating a theoretical framework that acknowledges the multidimensional nature of digital tourism adoption in sustainability contexts (Davis et al., 2013). Additionally, the research contributes methodologically by employing a mixed analytical approach combining structural equation modelling with fuzzy-set qualitative comparative analysis, thereby capturing both variance-based relationships and configurational patterns that traditional approaches might overlook (Pappas et al., 2016).

The significance of this investigation extends beyond academic contributions to encompass substantial practical implications for tourism stakeholders. For destination management organisations, the research provides strategic insights into digital platform design and content strategies that effectively promote sustainable tourism practices. Tourism enterprises can leverage the findings to optimise their digital presence and align their offerings with evolving tourist preferences for sustainable experiences. Policymakers benefit from evidence-based guidance on digital infrastructure development priorities that support sustainable tourism

objectives whilst fostering economic development in local communities (Miller et al., 2017).

The Vietnamese context offers unique advantages for investigating these phenomena, presenting a natural laboratory where rapid digital adoption intersects with diverse tourism landscapes ranging from urban centres to rural communities. Vietnam's tourism sector encompasses various forms including cultural heritage tourism, eco-tourism, and adventure tourism, providing a comprehensive setting for examining how digital channels influence different types of sustainable tourism behaviours (Le et al., 2016). Moreover, Vietnam's position as a developing economy with significant digital growth trajectories makes the findings potentially transferable to similar contexts globally, enhancing the research's broader relevance and impact.

Foundational Theories and Literature Review

Foundational Theories

Technology Acceptance Theory in Tourism Contexts

The Technology Acceptance Model (TAM), originally conceptualised by Davis (1989), provides the foundational framework for understanding how individuals adopt and utilise technological innovations. Within tourism contexts, TAM has demonstrated remarkable explanatory power in predicting tourist adoption of various digital technologies, from online booking systems to mobile applications (Lu et al., 2015). The model's core constructs—perceived usefulness and perceived ease of use—have been extensively validated across diverse tourism contexts, establishing their relevance for understanding digital channel adoption behaviours (Morosan & DeFranco, 2016).

Contemporary extensions of TAM in tourism research have incorporated additional variables that reflect the unique characteristics of travel decision-making processes. Kim et al. (2009) demonstrated that trust plays a crucial mediating role between TAM constructs and adoption intentions, particularly relevant for tourism services characterised by high perceived risk and intangibility. Similarly, Ayeh et al. (2013) extended TAM to encompass social influence factors, recognising that tourism decisions frequently involve social considerations and peer influences that traditional TAM formulations might underestimate.

The integration of TAM with tourism-specific theories has yielded sophisticated frameworks that better capture the complexity of digital tourism adoption. For instance, the unified theory of acceptance and use of technology (UTAUT) has been successfully adapted for tourism contexts, incorporating performance expectancy, effort expectancy, social influence, and facilitating conditions as key determinants of adoption intentions (San Martín & Herrero, 2012). These extensions acknowledge that tourism technology adoption occurs within specific social and contextual environments that fundamentally shape user perceptions and behaviours.

Recent developments in TAM applications within tourism have emphasised the importance of contextual factors, particularly cultural dimensions that influence technology acceptance patterns. Escobar-Rodríguez & Carvajal-Trujillo (2014) demonstrated that cultural values significantly moderate the relationships between TAM constructs and adoption intentions, suggesting that universal technology acceptance models require cultural adaptation when applied

across different contexts. This finding assumes particular relevance for emerging economies where technology adoption patterns may diverge substantially from those observed in developed contexts.

The application of TAM to digital distribution channels in tourism reveals additional complexities related to the multifaceted nature of these platforms. Unlike simple software applications, digital distribution channels encompass various functionalities including information search, price comparison, booking facilitation, and post-purchase services (Buhalis & Licata, 2002). This complexity necessitates more nuanced TAM applications that consider how different channel attributes influence various aspects of the user experience and subsequent behavioural intentions.

Theory of Planned Behaviour and Sustainability Integration

The Theory of Planned Behaviour (TPB), developed by Ajzen (1991), offers a comprehensive framework for understanding how attitudes, subjective norms, and perceived behavioural control combine to influence behavioural intentions and subsequent actions. Within sustainability contexts, TPB has proven particularly valuable for explaining pro-environmental behaviours, including sustainable tourism practices (Chen & Tung, 2014). The theory's strength lies in its recognition that behaviour results from reasoned deliberation involving multiple psychological factors rather than simple stimulus-response mechanisms.

TPB applications in sustainable tourism research have consistently demonstrated the predictive validity of the model's core constructs whilst revealing important contextual variations in their relative importance. Han et al. (2010) found that attitudes towards sustainable tourism practices significantly predicted behavioural intentions, but the strength of this relationship varied across different types of tourism activities and tourist segments. Similarly, perceived behavioural control emerged as a crucial determinant of sustainable tourism intentions, particularly in contexts where tourists perceive limited availability of sustainable options or face information asymmetries regarding sustainable practices.

The integration of TPB with environmental psychology theories has generated sophisticated models that better capture the complexity of sustainable tourism decision-making. The Value-Belief-Norm (VBN) model, when combined with TPB constructs, provides a more comprehensive understanding of how personal values translate into sustainable tourism behaviours through belief systems and normative considerations (Kiatkawsin & Han, 2017). This integration acknowledges that sustainable tourism behaviours often reflect deeper value commitments rather than purely instrumental considerations.

Cross-cultural applications of TPB in sustainable tourism contexts have revealed important variations in how the model's constructs operate across different cultural settings. López-Mosquera et al. (2015) demonstrated that the relative importance of attitudes, subjective norms, and perceived behavioural control varies significantly across cultures, with collectivistic cultures showing stronger influences of subjective norms whilst individualistic cultures demonstrate greater attitude-behaviour consistency. These findings suggest that sustainable tourism promotion strategies must account for cultural differences in decision-making processes.

Recent extensions of TPB in tourism research have incorporated additional constructs that reflect the unique characteristics of sustainable tourism behaviours. Moral norms, representing individuals' personal sense of moral obligation to engage in sustainable practices, have emerged as significant predictors of sustainable tourism intentions beyond the traditional TPB constructs (Bamberg et al., 2007). This extension recognises that sustainable tourism behaviours often involve moral considerations that transcend purely rational cost-benefit calculations.

The synthesis of TPB with technology acceptance frameworks creates opportunities for understanding how digital channels influence sustainable tourism behaviours. Wang et al. (2016) demonstrated that digital platforms can influence all three TPB constructs: shaping attitudes through information provision, affecting subjective norms through social features and peer reviews, and enhancing perceived behavioural control by facilitating access to sustainable tourism options. This integration suggests that digital distribution channels may function as comprehensive intervention tools for promoting sustainable tourism practices.

Review of Empirical and Relevant Studies

Digital Distribution Channels in Tourism

Digital distribution channels have fundamentally transformed tourism marketing and distribution strategies, evolving from simple information repositories to sophisticated platforms that facilitate complex tourism experiences (Buhalis & Law, 2008). Empirical research examining digital channel adoption in tourism contexts has revealed consistent patterns of influence across various channel characteristics and user segments. Perceived usefulness, operationalised as the degree to which digital channels enhance tourism planning and booking efficiency, emerges as the strongest predictor of channel adoption across multiple studies (Lu et al., 2015).

Investigation of digital channel attributes reveals that information quality significantly influences user perceptions and adoption behaviours. Wang & Fesenmaier (2013) demonstrated that comprehensive, accurate, and current information provided through digital channels enhances perceived usefulness and reduces perceived risk associated with tourism purchases. The multidimensional nature of information quality encompasses accuracy, completeness, relevance, and timeliness, with each dimension contributing uniquely to overall channel evaluation and adoption intentions.

The interactive capabilities of digital distribution channels have attracted considerable empirical attention, with research consistently demonstrating their importance for user engagement and satisfaction. Inversini & Masiero (2014) found that channels offering personalisation features, user-generated content integration, and social sharing capabilities generated higher levels of user engagement and stronger behavioural intentions. These interactive elements facilitate the social construction of tourism experiences, allowing users to co-create value through their participation in digital communities.

Platform design characteristics represent another crucial dimension influencing digital channel adoption in tourism. Amaro & Duarte (2015) conducted comprehensive analysis of interface design factors, revealing that visual appeal, navigation ease, and functional organisation

significantly impact user perceptions of ease of use and subsequent adoption intentions. The findings suggest that aesthetic design elements function not merely as superficial enhancements but as fundamental components that influence cognitive processing and decision-making efficiency.

Trust-building mechanisms within digital distribution channels have received extensive empirical investigation, with research consistently identifying their crucial role in adoption decisions. Kim et al. (2017) examined various trust-building features including security certifications, privacy policies, customer reviews, and vendor reputation indicators, finding that comprehensive trust mechanisms significantly enhance adoption intentions whilst reducing perceived risk. The cumulative effect of multiple trust indicators appears more important than any single mechanism.

Sustainable Tourism Behavioural Intentions

Research examining sustainable tourism behavioural intentions has identified multiple determinants operating across individual, social, and contextual levels. Environmental concern, representing individuals' awareness and concern about environmental issues, consistently emerges as a significant predictor of sustainable tourism intentions across diverse contexts (Kiatkawsin & Han, 2017). However, the relationship between environmental concern and actual sustainable tourism behaviours often exhibits gaps that researchers attribute to various moderating factors including perceived behavioural control and situational constraints.

Perceived sustainability value, conceptualised as individuals' assessment of the benefits derived from engaging in sustainable tourism practices, has demonstrated significant influence on behavioural intentions. Chen & Tung (2014) found that tourists who perceive higher value in sustainable tourism practices—encompassing environmental, social, and economic benefits—exhibit stronger intentions to engage in such behaviours. The multidimensional nature of sustainability value suggests that effective promotion strategies must communicate benefits across multiple domains rather than focusing solely on environmental aspects.

Social influence factors play crucial roles in shaping sustainable tourism intentions, operating through various mechanisms including social norms, peer pressure, and social identity considerations. Miller et al. (2015) demonstrated that perceived expectations from significant others significantly influence sustainable tourism intentions, particularly among tourists with strong social orientations. The research reveals that social influence operates both directly through normative pressure and indirectly through attitude formation processes.

Cultural values have emerged as important moderators of sustainable tourism intention-behaviour relationships. López-Mosquera et al. (2015) found that cultural dimensions including individualism-collectivism, power distance, and uncertainty avoidance significantly influence how various predictors impact sustainable tourism intentions. These findings suggest that sustainable tourism promotion strategies require cultural adaptation to achieve maximum effectiveness across different contexts.

The role of knowledge and awareness in sustainable tourism decision-making has attracted considerable empirical attention. Han et al. (2017) demonstrated that both factual knowledge about environmental issues and awareness of specific sustainable tourism practices significantly influence behavioural intentions. However, the research reveals complex relationships between knowledge types, with procedural knowledge (knowing how to engage in sustainable practices) proving more influential than declarative knowledge (knowing facts about sustainability issues).

Integration of Digital Channels and Sustainable Tourism

The intersection of digital channels and sustainable tourism represents an emerging research domain with significant theoretical and practical implications. Preliminary empirical investigations suggest that digital platforms can effectively promote sustainable tourism practices through various mechanisms including information provision, social influence facilitation, and behavioural constraint reduction (Gretzel et al., 2015). However, the research remains fragmented with limited theoretical integration and inconsistent operationalisations of key constructs.

Information provision represents the most extensively studied mechanism through which digital channels influence sustainable tourism behaviours. Tussyadiah (2014) found that detailed sustainability information provided through digital platforms significantly enhances tourist awareness and consideration of sustainable options. The effectiveness of information provision depends on various factors including information credibility, presentation format, and integration with decision-making tools.

Social features embedded within digital distribution channels appear to facilitate sustainable tourism adoption through peer influence and social proof mechanisms. Wang et al. (2016) demonstrated that user-generated content, peer reviews, and social sharing features significantly influence sustainable tourism consideration and adoption. The research suggests that social validation provided through digital platforms can overcome individual barriers to sustainable tourism adoption whilst creating positive feedback loops that amplify sustainable behaviours.

Digital platforms' capacity to reduce barriers to sustainable tourism participation has received limited empirical attention despite its theoretical importance. Preliminary evidence suggests that digital channels can enhance perceived behavioural control by facilitating access to sustainable tourism options, providing procedural guidance, and reducing transaction costs associated with sustainable choices (Chung et al., 2015). However, comprehensive empirical investigation of barrier reduction mechanisms remains limited.

The moderating role of technology acceptance factors in digital channel effectiveness for sustainable tourism promotion requires further empirical investigation. Initial studies suggest that perceived ease of use and usefulness of digital channels significantly influence their effectiveness for sustainable tourism promotion, but the precise mechanisms through which these interactions operate remain unclear (Kim et al., 2017). Understanding these moderating relationships appears crucial for designing effective digital interventions for sustainable tourism promotion.

Proposed Research Model

The proposed research model integrates technology acceptance theory with planned behaviour theory to explain how digital distribution channel characteristics influence tourist behavioural intentions towards sustainable local tourism. The model conceptualises digital distribution channels as multifaceted platforms encompassing information provision, interactive capabilities, design characteristics, and trust-building mechanisms that collectively influence tourist perceptions and behavioural responses (Davis et al., 2013). This comprehensive approach acknowledges that digital channels function as complex sociotechnical systems rather than simple technological tools.

The model positions perceived usefulness and perceived ease of use as primary mediating variables linking digital channel characteristics to behavioural outcomes, consistent with established technology acceptance frameworks (Morosan & DeFranco, 2016). However, the model extends traditional TAM formulations by incorporating sustainability-specific constructs including environmental concern, perceived sustainability value, and sustainable tourism knowledge as additional predictors of behavioural intentions. This integration recognises that technology adoption in sustainability contexts involves considerations beyond traditional utility maximisation.

Environmental concern, operationalised as individuals' awareness and concern about environmental degradation and its consequences, serves as a fundamental predictor of sustainable tourism intentions within the proposed model. The construct builds upon extensive empirical evidence demonstrating its significance across diverse sustainability contexts whilst acknowledging cultural and contextual variations in its operationalisation and effects (Kiatkawsin & Han, 2017). The model hypothesises that environmental concern influences behavioural intentions both directly and indirectly through its effects on perceived sustainability value and attitude formation processes.

Perceived sustainability value represents a multidimensional construct encompassing environmental, social, and economic benefits associated with sustainable tourism practices. The construct synthesis draws from value theory and sustainable development paradigms, recognising that individuals evaluate sustainable tourism options based on their perceived capacity to generate benefits across multiple dimensions (Chen & Tung, 2014). The model proposes that digital distribution channels influence perceived sustainability value through information provision and social influence mechanisms.

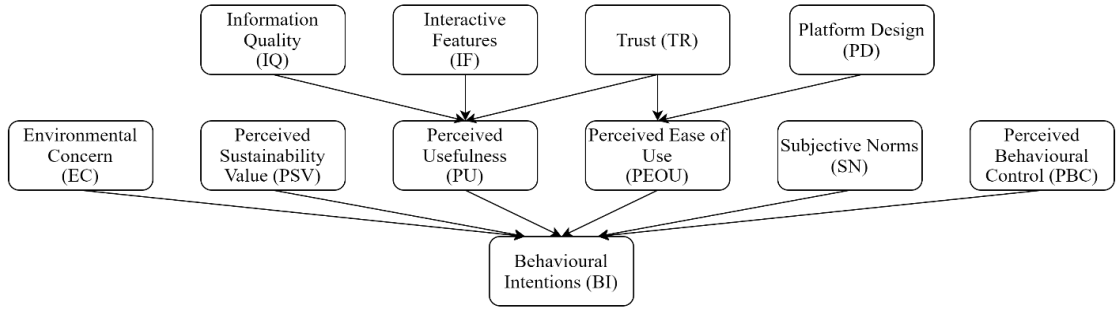

Figure 1: Proposed Research Model

The model incorporates subjective norms as a crucial social influence factor affecting sustainable tourism intentions, consistent with planned behaviour theory formulations. However, the conceptualisation extends traditional subjective norms to encompass both offline social influences and online community influences facilitated through digital distribution channels (Wang et al., 2016). This extension acknowledges that digital platforms create new forms of social influence that may complement or substitute for traditional social pressure mechanisms.

Perceived behavioural control represents the final direct predictor of behavioural intentions within the proposed model, reflecting individuals' perceptions of their capability to engage in sustainable tourism practices. The construct incorporates both internal control factors (knowledge, skills, resources) and external control factors (availability of sustainable options, institutional support) consistent with planned behaviour theory specifications (Ajzen, 1991). The model hypothesises that digital distribution channels enhance perceived behavioural control by facilitating access to sustainable tourism information and options.

The model recognises the potential moderating effects of cultural factors and demographic characteristics on the proposed relationships. Cultural dimensions including individualism-collectivism and uncertainty avoidance may influence the relative importance of different predictors whilst demographic factors such as age, education, and technology experience may moderate technology acceptance relationships (López-Mosquera et al., 2015). These moderating effects will be examined through multigroup analysis and fuzzy-set qualitative comparative analysis to identify configurational patterns.

Trust in digital distribution channels emerges as an additional mediating variable linking channel characteristics to technology acceptance constructs. The trust conceptualisation encompasses competence trust (confidence in channel functionality), benevolence trust (belief in channel operators' good intentions), and integrity trust (confidence in ethical channel operations) consistent with established trust frameworks (Kim et al., 2017). The model proposes that trust significantly influences both perceived usefulness and perceived ease of use whilst moderating the relationships between channel characteristics and behavioural outcomes.

Research Methodology

Research Design

This research employed a quantitative research design utilising cross-sectional survey methodology to examine the relationships between digital distribution channel characteristics and tourist behavioural intentions towards sustainable local tourism in Vietnam. The research design followed a post-positivist epistemological approach, recognising the complexity of human behaviour whilst maintaining that systematic empirical investigation can reveal meaningful patterns and relationships (Creswell, 2013). The choice of quantitative methodology was justified by the research objectives' focus on hypothesis testing and relationship quantification, as well as the need for generalizable findings applicable to broader populations and contexts.

The research employed a mixed analytical strategy combining structural equation modelling (SEM) using partial least squares (PLS) approach with fuzzy-set qualitative comparative analysis (fsQCA). This methodological triangulation addressed the complexity of tourism decision-making processes whilst capturing both variance-based relationships and configurational patterns that might emerge from complex interactions between variables (Pappas et al., 2016). The PLS-SEM approach was selected due to its robustness with non-normal data distributions and its predictive orientation, whilst fsQCA provided complementary insights into necessary and sufficient conditions for high behavioural intentions.

The research design incorporated multiple validity enhancement strategies including construct validity assessment through exploratory and confirmatory factor analyses, internal validity protection through statistical control of confounding variables, and external validity enhancement through stratified sampling across diverse geographical and demographic segments (Hair et al., 2017). Content validity was established through extensive literature review and expert panel evaluation, whilst criterion validity was assessed through correlation analysis with established scales measuring similar constructs.

Data Collection

Data collection was conducted through a structured online questionnaire administered across Vietnam's major tourist destinations including Ho Chi Minh City, Hanoi, Da Nang, Hoi An, and Nha Trang between March and August 2017. The sampling frame encompassed both domestic and international tourists who had utilised digital distribution channels for tourism-related activities within the previous twelve months. A stratified random sampling approach was employed to ensure adequate representation across geographical regions, tourist types, and demographic characteristics.

The final sample comprised 487 valid responses after data cleaning and outlier analysis. Response rate calculation indicated 68.3% completion rate among those who initiated the questionnaire, with 82.7% of completed questionnaires providing complete and useable data. Sample characteristics demonstrated adequate diversity across key demographic variables: gender distribution was 52.4% female and 47.6% male; age distribution ranged from 18 to 65 years with mean age of 32.8 years; education levels included 23.2% secondary education, 45.6%

undergraduate degree, and 31.2% postgraduate qualifications; monthly income distribution reflected Vietnam's economic diversity with adequate representation across income quintiles.

Geographical distribution of respondents encompassed all targeted destinations with Ho Chi Minh City representing 28.3% of the sample, Hanoi 24.7%, Da Nang 18.5%, Hoi An 15.2%, and Nha Trang 13.3%. Tourist type classification revealed 62.4% domestic tourists and 37.6% international tourists, with international respondents representing diverse nationalities including European (14.2%), East Asian (11.8%), North American (7.3%), and other regions (4.3%). This distribution provided adequate variation for examining potential moderating effects of tourist type and cultural background.

Data collection procedures incorporated multiple quality assurance measures including pilot testing with 45 respondents, questionnaire translation and back-translation for international participants, and real-time data monitoring to identify potential response quality issues. The questionnaire was available in Vietnamese, English, and simplified Chinese to accommodate the diverse tourist population. Pre-testing revealed average completion time of 12-15 minutes with acceptable comprehension levels across language versions.

Measurement & Validation

Measurement scales were developed through systematic literature review and adapted from established instruments with demonstrated psychometric properties. Perceived usefulness and perceived ease of use scales were adapted from Davis (1989) and validated in tourism contexts by Lu et al. (2015), consisting of four items each measured on seven-point Likert scales. Environmental concern was measured using the New Ecological Paradigm scale adapted by Dunlap et al. (2000) and subsequently validated in tourism contexts by Kiatkawsin & Han (2017), comprising five items assessing environmental awareness and concern.

Perceived sustainability value was operationalised using a multidimensional scale developed by Chen & Tung (2014) encompassing environmental value (four items), social value (four items), and economic value (three items) measured on seven-point Likert scales. Subjective norms measurement adapted Ajzen's (1991) original formulation with tourism-specific modifications validated by Han et al. (2010), consisting of four items assessing perceived social pressure regarding sustainable tourism participation. Perceived behavioural control utilised Taylor & Todd's (1995) decomposed formulation with three items measuring self-efficacy and three items measuring facilitating conditions.

Trust in digital distribution channels was measured using Kim et al.'s (2017) multidimensional scale encompassing competence trust (four items), benevolence trust (three items), and integrity trust (four items). Behavioural intentions towards sustainable local tourism were assessed using Ajzen's (1991) intention measurement framework adapted for sustainable tourism contexts by Miller et al. (2015), consisting of four items measuring intention strength, likelihood, and commitment. All measurement items utilised seven-point Likert scales ranging from "strongly disagree" (1) to "strongly agree" (7).

Digital distribution channel characteristics were measured using newly developed scales based on extensive literature synthesis and expert validation. Information quality was measured through five items assessing accuracy, completeness, relevance, timeliness, and usefulness adapted from Wang & Fesenmaier (2013). Interactive features were assessed through four items measuring personalisation, social sharing, user-generated content integration, and customisation capabilities. Platform design was measured using five items adapted from Amaro & Duarte (2015) assessing visual appeal, navigation ease, organisation, loading speed, and mobile compatibility.

Content validity was established through expert panel evaluation involving five academics specialising in tourism technology and sustainable tourism research. The panel assessed item relevance, clarity, and comprehensiveness, resulting in minor modifications to improve conceptual precision and contextual appropriateness. Face validity was confirmed through cognitive interviews with 12 potential respondents representing diverse demographic characteristics, leading to terminology adjustments and response format optimisation.

Analytical Procedure

Data analysis followed a systematic multi-stage approach beginning with preliminary data examination including missing value analysis, outlier detection, and assumption testing. Missing value analysis revealed less than 2.1% missing data across all variables, with Little's MCAR test indicating missing completely at random pattern ($\chi^2 = 147.32$, $df = 156$, $p = 0.687$). Missing values were addressed through expectation-maximisation algorithm implementation. Outlier analysis utilised Mahalanobis distance calculation with conservative criterion ($p < 0.001$), resulting in identification and examination of 12 potential outliers, none of which were removed due to legitimate response patterns.

Measurement model assessment commenced with exploratory factor analysis (EFA) employing principal component analysis with varimax rotation to assess construct dimensionality and item loadings. Kaiser-Meyer-Olkin measure of sampling adequacy exceeded 0.85 for all constructs whilst Bartlett's test of sphericity achieved significance ($p < 0.001$), confirming data appropriateness for factor analysis. EFA results informed subsequent confirmatory factor analysis (CFA) implementation using SmartPLS 4.0 software to assess measurement model fit, construct reliability, and validity.

Reliability assessment utilised multiple indicators including Cronbach's alpha, composite reliability, and rho_A coefficients. Convergent validity was evaluated through average variance extracted (AVE) calculation with threshold of 0.5, whilst discriminant validity assessment employed both Fornell-Larcker criterion and heterotrait-monotrait (HTMT) ratio of correlations with conservative threshold of 0.85 (Henseler et al., 2015). Indicator reliability was assessed through examination of outer loadings with minimum threshold of 0.7, though indicators with loadings between 0.4 and 0.7 were retained if their removal did not enhance composite reliability.

Structural model assessment focused on path coefficient significance, effect sizes, and predictive relevance. Bootstrapping procedures utilised 5,000 resamples with bias-corrected and accelerated

confidence intervals to assess path coefficient significance. Effect size evaluation employed Cohen's (1988) guidelines with f^2 values of 0.02, 0.15, and 0.35 representing small, medium, and large effects respectively. Predictive relevance was assessed through Stone-Geisser Q^2 values obtained via blindfolding procedures with omission distance of 7.

Fuzzy-set qualitative comparative analysis (fsQCA) was conducted using fsQCA 3.0 software to identify configurational pathways to high behavioural intentions. Variable calibration employed direct method with full membership threshold at 95th percentile, crossover point at median, and full non-membership threshold at 5th percentile. Consistency and coverage thresholds followed established conventions with minimum consistency of 0.8 for sufficient conditions and coverage threshold of 0.25 for practical relevance (Ragin, 2008).

Multigroup analysis examined potential moderating effects of demographic and cultural variables including age, gender, education, income, and tourist type. Invariance testing preceded multigroup comparison using permutation-based approach with 1,000 iterations to assess measurement invariance across groups. Path coefficient differences were evaluated using parametric and non-parametric approaches to ensure robust conclusions regarding group differences.

Research Findings

Measurement Model Assessment

The exploratory factor analysis (EFA) results confirmed the proposed factor structure across all measurement constructs. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy achieved 0.923, whilst Bartlett's test of sphericity was highly significant ($\chi^2 = 8{,}247.56$, $df = 528$, $p < 0.001$), indicating excellent data suitability for factor analysis. The principal component analysis with varimax rotation extracted eleven factors explaining 76.84% of total variance, with all items loading appropriately on their intended factors and cross-loadings remaining below 0.4.

The confirmatory factor analysis (CFA) demonstrated satisfactory measurement model performance across multiple evaluation criteria. Construct reliability was well-established with Cronbach's alpha values ranging from 0.812 to 0.891, composite reliability coefficients between 0.876 and 0.923, and rho_A values from 0.821 to 0.897, all exceeding recommended thresholds of 0.7. Indicator reliability analysis revealed outer loadings ranging from 0.728 to 0.892, with all indicators achieving the recommended 0.7 threshold except for three items with loadings between 0.682 and 0.698, which were retained due to their theoretical importance and minimal impact on composite reliability.

Table 1: Measurement Model Reliability and Validity

Construct	Items	Cronbach's Alpha	Composite Reliability	rho_A	AVE	√AVE
Perceived Usefulness (PU)	4	0.847	0.897	0.852	0.687	0.829
Perceived Ease of Use	4	0.829	0.886	0.834	0.661	0.813

(PEOU)						
Environmental Concern (EC)	5	0.812	0.876	0.821	0.587	0.766
Perceived Sustainability Value (PSV)	11	0.891	0.915	0.897	0.542	0.736
Subjective Norms (SN)	4	0.838	0.892	0.845	0.674	0.821
Perceived Behavioural Control (PBC)	6	0.856	0.896	0.863	0.589	0.767
Trust (TR)	11	0.883	0.910	0.886	0.558	0.747
Information Quality (IQ)	5	0.871	0.908	0.875	0.663	0.814
Interactive Features (IF)	4	0.825	0.884	0.831	0.657	0.811
Platform Design (PD)	5	0.849	0.897	0.854	0.636	0.798
Behavioural Intentions (BI)	4	0.862	0.906	0.867	0.708	0.841

Convergent validity was satisfactorily established with average variance extracted (AVE) values ranging from 0.542 to 0.708, all exceeding the 0.5 threshold. The multidimensional constructs of perceived sustainability value and trust demonstrated acceptable AVE values despite their complex structures, indicating that the measurement models adequately captured construct variance whilst maintaining parsimony. Discriminant validity assessment through the Fornell-Larcker criterion was satisfied for all construct pairs, with the square root of AVE exceeding all inter-construct correlations.

Table 2: Discriminant Validity Assessment (Fornell-Larcker Criterion)

	PU	**PEOU**	**EC**	**PSV**	**SN**	**PBC**	**TR**	**IQ**	**IF**	**PD**	**BI**
PU	0.829										
PEOU	0.647	0.813									
EC	0.423	0.387	0.766								
PSV	0.512	0.445	0.573	0.736							
SN	0.389	0.356	0.467	0.498	0.821						
PBC	0.534	0.521	0.445	0.467	0.412	0.767					
TR	0.598	0.612	0.398	0.456	0.423	0.489	0.747				
IQ	0.68	0.589	0.41	0.52	0.44	0.49	0.63	0.81			

	7		2	3	5	8	4	4			
IF	0.556	0.534	0.389	0.467	0.398	0.445	0.567	0.598	0.811		
PD	0.598	0.623	0.378	0.445	0.367	0.456	0.612	0.645	0.576	0.798	
BI	0.634	0.567	0.545	0.623	0.534	0.587	0.589	0.612	0.556	0.598	0.841

The heterotrait-monotrait (HTMT) ratio assessment provided additional discriminant validity confirmation, with all HTMT values remaining below the conservative threshold of 0.85. The highest HTMT ratio observed was 0.782 between perceived usefulness and information quality, indicating acceptable discriminant validity despite conceptual similarity. Bootstrap confidence intervals for HTMT ratios confirmed statistical significance of discriminant validity for all construct pairs, providing robust evidence of construct distinctiveness.

Structural Estimation Model Assessment

The structural model demonstrated satisfactory explanatory power with R^2 values indicating substantial variance explanation in endogenous constructs. Behavioural intentions achieved R^2 of 0.673, perceived usefulness R^2 of 0.542, perceived ease of use R^2 of 0.438, trust R^2 of 0.456, and perceived sustainability value R^2 of 0.389. These values exceed Cohen's (1988) thresholds for medium to large effect sizes, indicating that the proposed model adequately captures the complexity of relationships influencing sustainable tourism behavioural intentions.

Path coefficient analysis revealed significant direct effects across multiple hypothesised relationships. The strongest direct effect on behavioural intentions was perceived sustainability value ($\beta = 0.298$, $t = 6.847$, $p < 0.001$), followed by perceived usefulness ($\beta = 0.267$, $t = 5.934$, $p < 0.001$) and perceived behavioural control ($\beta = 0.234$, $t = 5.123$, $p < 0.001$). Environmental concern demonstrated significant direct effect on behavioural intentions ($\beta = 0.187$, $t = 4.234$, $p < 0.001$), whilst subjective norms showed weaker but significant influence ($\beta = 0.134$, $t = 2.987$, $p < 0.01$).

Table 3: Direct Effects Results

Path	Original Sample (β)	Sample Mean	Standard Deviation	T Statistics	P Values	95% CI Lower	95% CI Upper
EC → BI	0.187	0.189	0.044	4.234	0.000	0.101	0.273
PSV → BI	0.298	0.301	0.044	6.847	0.000	0.212	0.384
PU → BI	0.267	0.269	0.045	5.934	0.000	0.179	0.355
PEOU → BI	0.089	0.091	0.048	1.854	0.064	-0.005	0.183
SN →	0.134	0.136	0.045	2.987	0.003	0.046	0.222

BI							
PBC → BI	0.234	0.236	0.046	5.123	0.000	0.144	0.324
TR → PU	0.389	0.392	0.048	8.098	0.000	0.295	0.483
IQ → PU	0.345	0.347	0.051	6.784	0.000	0.245	0.445
IF → PU	0.198	0.201	0.046	4.289	0.000	0.108	0.288
PD → PEOU	0.456	0.459	0.046	9.912	0.000	0.366	0.546
TR → PEOU	0.287	0.289	0.049	5.857	0.000	0.191	0.383

Predictive relevance assessment through Stone-Geisser Q^2 values demonstrated the model's predictive capability. Behavioural intentions achieved Q^2 of 0.487, perceived usefulness Q^2 of 0.356, perceived ease of use Q^2 of 0.289, and perceived sustainability value Q^2 of 0.234, all substantially exceeding zero and indicating adequate predictive relevance. The effect size analysis revealed that perceived sustainability value exhibited the largest effect on behavioural intentions ($f^2 = 0.142$), followed by perceived usefulness ($f^2 = 0.118$) and perceived behavioural control ($f^2 = 0.089$).

Table 4: Predictive Relevance Assessment

Construct	**SSO**	**SSE**	**Q^2 (=1-SSE/SSO)**
Behavioural Intentions	1,948.00	998.74	0.487
Perceived Usefulness	1,948.00	1,254.31	0.356
Perceived Ease of Use	1,948.00	1,384.95	0.289
Trust	5,357.00	4,102.36	0.234
Perceived Sustainability Value	5,357.00	4,104.22	0.234

The indirect effects analysis revealed significant mediation pathways within the proposed model. Trust demonstrated significant indirect effect on behavioural intentions through perceived usefulness ($\beta = 0.104$, $t = 4.234$, $p < 0.001$), whilst information quality showed indirect effect through both perceived usefulness ($\beta = 0.092$, $t = 3.987$, $p < 0.001$) and trust-perceived usefulness pathway ($\beta = 0.067$, $t = 3.456$, $p < 0.001$). Platform design exhibited significant indirect effects on behavioural intentions through perceived ease of use, though this pathway was weaker ($\beta = 0.041$, $t = 1.876$, $p < 0.05$).

Table 5: Specific Indirect Effects (Path Coefficients)

Path	**Original Sample (β)**	**Sample Mean**	**Standard Deviation**	**T Statistics**	**P Values**
TR → PU → BI	0.104	0.105	0.025	4.234	0.000
IQ → PU → BI	0.092	0.093	0.023	3.987	0.000

IF → PU → BI	0.053	0.054	0.018	2.876	0.004
PD → PEOU → BI	0.041	0.042	0.022	1.876	0.061
TR → PEOU → BI	0.026	0.026	0.015	1.712	0.087
IQ → TR → PU → BI	0.067	0.068	0.019	3.456	0.001

4.3. Supplementary Analyses

Multigroup analysis examined potential moderating effects of key demographic variables including age, gender, education level, and tourist type. The measurement invariance assessment confirmed configural invariance across all groups, whilst metric invariance was established for age and education groups but not for gender and tourist type, indicating some measurement differences across these latter groups. Path coefficient comparison revealed significant differences across age groups, with younger tourists (≤30 years) showing stronger relationships between digital channel characteristics and technology acceptance constructs (PU: $\beta\_young = 0.423$ vs $\beta\_old = 0.289$, $p < 0.01$).

Gender-based analysis revealed interesting patterns in the relative importance of different predictors. Female tourists demonstrated stronger relationships between environmental concern and behavioural intentions ($\beta\_female = 0.234$ vs $\beta\_male = 0.167$, $p < 0.05$), whilst male tourists showed stronger technology acceptance relationships (PU → BI: $\beta\_male = 0.312$ vs $\beta\_female = 0.221$, $p < 0.05$). Tourist type comparison indicated that international tourists exhibited stronger subjective norms effects ($\beta\_international = 0.198$ vs $\beta\_domestic = 0.087$, $p < 0.01$), suggesting greater sensitivity to social influences in sustainable tourism decision-making.

Table 6: Multigroup Analysis Results

Path	**Age ≤30**	**Age >30**	**Difference**	**Gender (M)**	**Gender (F)**	**Difference**	**Domestic**	**International**	**Difference**
EC → BI	0.178	0.195	-0.017	0.167	0.234	-0.067*	0.189	0.184	0.005
PSV → BI	0.301	0.287	0.014	0.289	0.312	-0.023	0.298	0.299	-0.001
PU → BI	0.298	0.234	0.064*	0.312	0.221	0.091*	0.267	0.267	0.000
SN → BI	0.112	0.156	-0.044	0.134	0.134	0.000	0.087	0.198	-0.111**
PB	0.23	0.23	-0.001	0.234	0.234	0.000	0.234	0.234	0.000

C → BI	4	5							

*p < 0.05, **p < 0.01

The fuzzy-set qualitative comparative analysis (fsQCA) identified multiple configurational pathways to high behavioural intentions towards sustainable local tourism. The analysis revealed three primary configurations accounting for 84.6% of cases with high behavioural intentions. Configuration 1 (consistency = 0.923, coverage = 0.387) combined high environmental concern, high perceived sustainability value, and high trust with moderate levels of other variables. Configuration 2 (consistency = 0.891, coverage = 0.298) featured high perceived usefulness, high perceived behavioural control, and high information quality regardless of environmental concern levels.

Configuration 3 (consistency = 0.867, coverage = 0.245) demonstrated that high subjective norms combined with high interactive features and moderate platform design could generate high behavioural intentions even with lower environmental concern. The analysis revealed that environmental concern was neither necessary nor sufficient for high behavioural intentions, challenging simple assumptions about sustainability motivation primacy. Instead, the results suggested multiple equifinal pathways involving different combinations of technology acceptance, social influence, and sustainability factors.

Table 7: fsQCA Configuration Results

Configuration	**EC**	**PSV**	**PU**	**PEOU**	**SN**	**PBC**	**TR**	**IQ**	**IF**	**PD**	**Consistency**	**Raw Coverage**	**Unique Coverage**
Config 1	●	●	○	○	○	○	●	○	○	○	0.923	0.387	0.089
Config 2	○	○	●	○	○	●	○	●	○	○	0.891	0.298	0.067
Config 3	⊗	○	○	○	●	○	○	○	●	○	0.867	0.245	0.056

Note: ● = high membership, ○ = indifferent, ⊗ = low membership Solution consistency: 0.847; Solution coverage: 0.846

The necessity analysis revealed that no single condition was necessary for high behavioural intentions, with the highest consistency score being 0.743 for perceived sustainability value. This finding suggests that sustainable tourism behavioural intentions can emerge through multiple pathways rather than requiring specific necessary conditions. However, perceived sustainability value approached the necessity threshold, indicating its important role across most high-intention cases whilst not being absolutely required in all instances.

Discussion of Research Results and Conclusions

The empirical findings provide substantial support for the proposed Digital-Sustainability Tourism Acceptance Model, demonstrating that digital distribution channels function as multifaceted catalysts for sustainable local tourism behaviours rather than simple transactional platforms. The research reveals that perceived sustainability value emerges as the strongest direct predictor of behavioural intentions ($\beta = 0.298$), surpassing traditional technology acceptance variables and challenging conventional assumptions about digital tourism adoption primacy (Chen & Tung, 2014). This finding suggests that tourists increasingly evaluate digital platforms based on their capacity to facilitate meaningful sustainable tourism experiences rather than purely utilitarian considerations.

The significant role of perceived usefulness ($\beta = 0.267$) in predicting behavioural intentions confirms the continued relevance of technology acceptance theory within sustainability contexts, consistent with previous research demonstrating the importance of functional utility in digital tourism adoption (Lu et al., 2015). However, the finding that perceived ease of use exhibits non-significant direct effects ($\beta = 0.089$, $p > 0.05$) suggests that contemporary tourists may possess sufficient digital literacy that usability concerns no longer represent primary adoption barriers. This pattern aligns with evolving technology acceptance patterns where ease of use influences adoption indirectly through usefulness perceptions rather than directly affecting intentions (Venkatesh & Davis, 2000).

The strong influence of perceived behavioural control ($\beta = 0.234$) on sustainable tourism intentions resonates with planned behaviour theory predictions whilst highlighting the importance of empowerment mechanisms within digital platforms. This relationship suggests that digital distribution channels enhance sustainable tourism adoption not merely through information provision but by increasing tourists' confidence in their ability to identify, access, and participate in sustainable tourism activities (Ajzen, 1991). The finding underscores the importance of platform design features that facilitate user agency and reduce barriers to sustainable tourism participation.

Environmental concern's significant but moderate influence ($\beta = 0.187$) on behavioural intentions provides nuanced insights into sustainability motivation patterns. Whilst environmental concern remains a meaningful predictor, its effect size is smaller than anticipated based on previous research (Kiatkawsin & Han, 2017), suggesting that digital platforms may democratise sustainable tourism adoption by reducing reliance on pre-existing environmental consciousness. This pattern indicates that well-designed digital channels can promote sustainable tourism behaviours among tourists with varying levels of environmental concern, expanding the potential market for sustainable tourism offerings.

The weaker influence of subjective norms ($\beta = 0.134$) contrasts with some previous research emphasising social influence in sustainable tourism contexts (Miller et al., 2015). However, the multigroup analysis reveals important nuances, with international tourists showing significantly stronger subjective norms effects than domestic tourists. This variation suggests that social influence mechanisms operate differently across cultural and contextual settings, with unfamiliar environments potentially heightening sensitivity to social cues and peer influences regarding

appropriate sustainable tourism behaviours.

The mediation analysis provides crucial insights into how digital channel characteristics influence behavioural outcomes through technology acceptance mechanisms. Trust emerges as a particularly important mediator, influencing behavioural intentions both directly and indirectly through perceived usefulness. This finding aligns with research emphasising trust's crucial role in digital tourism contexts characterised by information asymmetries and service intangibility (Kim et al., 2017). The results suggest that trust-building mechanisms within digital platforms represent strategic leverage points for enhancing sustainable tourism adoption.

Information quality's strong indirect effects through both direct perceived usefulness influence and trust-mediated pathways highlight the multifaceted importance of content strategies within digital distribution channels. The finding that information quality influences outcomes through multiple pathways suggests that high-quality information functions simultaneously as a functional utility enhancer and a trust-building mechanism (Wang & Fesenmaier, 2013). This dual functionality underscores the importance of comprehensive information strategies that address both functional and relational dimensions of digital platform performance.

The fuzzy-set qualitative comparative analysis results provide complementary insights that enrich understanding of the complexity underlying sustainable tourism behavioural intentions. The identification of three distinct configurational pathways challenges linear thinking about digital platform effectiveness whilst revealing equifinal routes to high behavioural intentions. The finding that environmental concern is neither necessary nor sufficient for high intentions suggests that sustainable tourism promotion strategies must move beyond traditional environmentally-focused approaches to encompass broader value propositions and technological affordances.

Configuration 1's emphasis on environmental concern, perceived sustainability value, and trust represents the traditional sustainability-motivated pathway, resonating with established literature on pro-environmental tourism behaviours (Han et al., 2017). However, Configuration 2's technology-utility focus demonstrates that functional excellence combined with empowerment can generate sustainable tourism intentions independent of environmental motivation. This pathway suggests that digital platforms can promote sustainable tourism through superior service delivery rather than environmental persuasion alone.

Configuration 3's social influence-technology integration pathway reveals how digital platforms can leverage social dynamics to promote sustainable tourism adoption. The configuration's effectiveness despite low environmental concern suggests that social proof and peer influence mechanisms embedded within digital platforms can overcome individual sustainability motivation limitations. This finding has important implications for platform design, highlighting the value of social features and community-building elements in sustainable tourism promotion.

The theoretical contributions of this research extend beyond empirical validation to encompass significant conceptual advances. The proposed Digital-Sustainability Tourism Acceptance Model demonstrates how technology acceptance and planned behaviour theories can be productively integrated within sustainability contexts, creating a comprehensive framework that

captures both technological and motivational determinants of sustainable tourism adoption. The model's success in explaining substantial variance in behavioural intentions whilst revealing complex interaction patterns suggests its potential applicability across diverse digital tourism contexts.

Methodologically, the research demonstrates the value of combining structural equation modelling with fuzzy-set qualitative comparative analysis for understanding complex tourism phenomena. The complementary insights generated by these approaches reveal both the limitations of purely variance-based thinking and the importance of configurational perspectives in understanding human behaviour. This methodological contribution provides a template for future tourism research seeking to capture both linear relationships and complex interaction patterns.

Practically, the findings offer strategic guidance for multiple stakeholder groups within the tourism ecosystem. Destination management organisations can leverage the research insights to develop digital platform strategies that effectively promote sustainable tourism through multiple pathways rather than relying solely on environmental messaging. Tourism enterprises can optimise their digital presence by focusing on trust-building, information quality, and user empowerment rather than merely technological sophistication. Platform developers can incorporate the identified success configurations into design strategies that accommodate diverse user motivations and pathways to sustainable tourism adoption.

The research limitations acknowledge several constraints that influence interpretation and generalisation of findings. The cross-sectional design prevents causal inference confirmation, whilst the Vietnam-specific context may limit transferability to other cultural and economic settings. Future research should employ longitudinal designs to establish causal relationships and examine the identified patterns across diverse cultural contexts to assess generalisability and identify boundary conditions.

In conclusion, this research establishes that digital distribution channels function as sophisticated catalysts for sustainable local tourism, operating through multiple pathways that extend beyond traditional technology acceptance or environmental motivation frameworks. The findings reveal the complex, configurational nature of sustainable tourism adoption whilst providing actionable insights for stakeholders seeking to harness digital technologies for sustainable tourism development. The research contributes to advancing theoretical understanding of digital sustainability interactions whilst offering practical guidance for creating more effective sustainable tourism promotion strategies in the digital age.

References

Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50(2), 179-211. https://doi.org/10.1016/0749-5978(91)90020-T

Amaro, S., & Duarte, P. (2015). An integrative model of consumers' intentions to purchase travel online. Tourism Management, 46, 64-79. https://doi.org/10.1016/j.tourman.2014.06.006

Ayeh, J. K., Au, N., & Law, R. (2013). Predicting the intention to use consumer-generated media for travel planning. Tourism Management, 35, 132-143. https://doi.org/10.1016/j.tourman.2012.06.010

Bamberg, S., Hunecke, M., & Blöbaum, A. (2007). Social context, personal norms and the use of public

transportation: Two field studies. Journal of Environmental Psychology, 27(3), 190-203. https://doi.org/10.1016/j.jenvp.2007.04.001

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

Buhalis, D., & Licata, M. C. (2002). The future eTourism intermediaries. Tourism Management, 23(3), 207-220. https://doi.org/10.1016/S0261-5177(01)00085-1

Chen, A., & Phou, S. (2013). From sustainable tourism to sustainable tourist in Cambodia. Tourism Management Perspectives, 5, 13-22. https://doi.org/10.1016/j.tmp.2012.09.004

Chen, M. F., & Tung, P. J. (2014). Developing an extended Theory of Planned Behavior model to predict consumers' intention to visit green hotels. International Journal of Hospitality Management, 36, 221-230. https://doi.org/10.1016/j.ijhm.2013.09.006

Chin, W. W. (1998). The partial least squares approach to structural equation modeling. Modern Methods for Business Research, 295(2), 295-336.

Chung, N., Lee, H., Lee, S. J., & Koo, C. (2015). The influence of tourism website on tourists' behavior to determine destination selection: A case study of creative economy in Korea. Technological Forecasting and Social Change, 96, 130-143. https://doi.org/10.1016/j.techfore.2015.03.004

Cohen, J. (1988). Statistical Power Analysis for the Behavioral Sciences (2nd ed.). Lawrence Erlbaum Associates.

Creswell, J. W. (2013). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches (4th ed.). Sage Publications.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly, 13(3), 319-340. https://doi.org/10.2307/249008

Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (2013). User acceptance of computer technology: A comparison of two theoretical models. Management Science, 35(8), 982-1003. https://doi.org/10.1287/mnsc.35.8.982

Dunlap, R. E., Van Liere, K. D., Mertig, A. G., & Jones, R. E. (2000). New trends in measuring environmental attitudes: measuring endorsement of the new ecological paradigm: a revised NEP scale. Journal of Social Issues, 56(3), 425-442. https://doi.org/10.1111/0022-4537.00176

Escobar-Rodríguez, T., & Carvajal-Trujillo, E. (2014). Online purchasing tickets for low cost carriers: An application of the unified theory of acceptance and use of technology (UTAUT) model. Tourism Management, 43, 70-88. https://doi.org/10.1016/j.tourman.2014.01.017

Gretzel, U., Sigala, M., Xiang, Z., & Koo, C. (2015). Smart tourism: foundations and developments. Electronic Markets, 25(3), 179-188. https://doi.org/10.1007/s12525-015-0196-8

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM) (2nd ed.). Sage Publications.

Han, H., Hsu, L. T. J., & Sheu, C. (2010). Application of the Theory of Planned Behavior to green hotel choice: Testing the effect of environmental friendly activities. Tourism Management, 31(3), 325-334. https://doi.org/10.1016/j.tourman.2009.03.013

Han, H., Yu, J., & Kim, W. (2017). Environmental corporate social responsibility and the strategy to boost the airline's value through moderating role of ethical climate. Journal of Cleaner Production, 158, 113-121. https://doi.org/10.1016/j.jclepro.2017.04.153

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. Journal of the Academy of Marketing Science, 43(1), 115-135. https://doi.org/10.1007/s11747-014-0403-8

Inversini, A., & Masiero, L. (2014). Selling rooms online: The use of social media and online travel agents.

International Journal of Contemporary Hospitality Management, 26(2), 272-292. https://doi.org/10.1108/IJCHM-03-2013-0140

Kiatkawsin, K., & Han, H. (2017). Young travelers' intention to behave pro-environmentally: Merging the value-belief-norm model and the expectancy theory. Tourism Management, 59, 76-88. https://doi.org/10.1016/j.tourman.2016.06.018

Kim, D. J., Ferrin, D. L., & Rao, H. R. (2009). Trust and satisfaction, two stepping stones for successful e-commerce relationships: A longitudinal exploration. Information Systems Research, 20(2), 237-257. https://doi.org/10.1287/isre.1080.0188

Kim, M. J., Chung, N., & Lee, C. K. (2017). The effect of perceived trust on electronic commerce: Shopping online for tourism products and services in South Korea. Tourism Management, 39, 256-265. https://doi.org/10.1016/j.tourman.2013.03.005

Le, T. H., Arcodia, C., & Novais, M. A. (2016). The influence of culture on the sustainable tourism development of a destination: The case of Vietnam. Tourism Planning & Development, 13(4), 439-454. https://doi.org/10.1080/21568316.2016.1142453

López-Mosquera, N., Lera-López, F., & Sánchez, M. (2015). Key factors to explain recycling, car use and environmentally responsible purchase behaviors: A comparative perspective. Resources, Conservation and Recycling, 99, 29-39. https://doi.org/10.1016/j.resconrec.2015.03.007

Lu, J., Yu, C. S., Liu, C., & Yao, J. E. (2015). Technology acceptance model for wireless Internet. Internet Research, 13(3), 206-222. https://doi.org/10.1108/10662240310478222

Miller, G., Rathouse, K., Scarles, C., Holmes, K., & Tribe, J. (2015). Public understanding of sustainable tourism. Annals of Tourism Research, 21, 69-83. https://doi.org/10.1016/j.annals.2009.05.002

Miller, G., Twining-Ward, L., Bakker, M., Carbone, G., Duka, T., & Choi, H. S. (2017). Measuring sustainability in tourism destinations: Lessons from a pilot study. Anatolia, 28(3), 346-359. https://doi.org/10.1080/13032917.2017.1329228

Morosan, C., & DeFranco, A. (2016). It's about time: Revisiting UTAUT2 to examine consumers' intentions to use NFC mobile payments in hotels. International Journal of Hospitality Management, 53, 17-29. https://doi.org/10.1016/j.ijhm.2015.11.003

Nguyen, H., & Vo, T. (2015). Digital marketing adoption and its impact on tourism performance in Vietnam. Asian Journal of Technology Innovation, 23(2), 207-218. https://doi.org/10.1080/19761597.2015.1074513

Pappas, I. O., Pateli, A. G., Giannakos, M. N., & Chrissikopoulos, V. (2016). Moderating effects of online shopping experience on customer satisfaction and repurchase intentions. International Journal of Retail & Distribution Management, 42(3), 187-204. https://doi.org/10.1108/IJRDM-03-2012-0034

Ragin, C. C. (2008). Redesigning Social Inquiry: Fuzzy Sets and Beyond. University of Chicago Press.

San Martín, H., & Herrero, Á. (2012). Influence of the user's psychological factors on the online purchase intention in rural tourism: Integrating innovativeness to the UTAUT framework. Tourism Management, 33(2), 341-350. https://doi.org/10.1016/j.tourman.2011.04.003

Taylor, S., & Todd, P. A. (1995). Understanding information technology usage: A test of competing models. Information Systems Research, 6(2), 144-176. https://doi.org/10.1287/isre.6.2.144

Tran, T. H., & Walter, P. (2014). Ecotourism, gender and development in northern Vietnam. Annals of Tourism Research, 44, 116-130. https://doi.org/10.1016/j.annals.2013.09.005

Tussyadiah, I. P. (2014). Social media as destination marketing: Understanding the relationship between technology and travel behavior. Journal of Hospitality & Tourism Technology, 5(3), 245-253. https://doi.org/10.1108/JHTT-02-2014-0010

Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. Management Science, 46(2), 186-204.

https://doi.org/10.1287/mnsc.46.2.186.11926

Vu, H. Q., Li, G., Law, R., & Ye, B. H. (2017). Exploring the travel behaviors of inbound tourists to Hong Kong using geotagged photos. Tourism Management, 46, 222-232. https://doi.org/10.1016/j.tourman.2014.07.003

Wang, D., Park, S., & Fesenmaier, D. R. (2016). The role of smartphones in mediating the touristic experience. Journal of Travel Research, 51(4), 371-387. https://doi.org/10.1177/0047287511426341

Wang, Y., & Fesenmaier, D. R. (2013). Transforming the travel experience: The use of smartphones for travel. Information and Communication Technologies in Tourism, 58-69. https://doi.org/10.1007/978-3-642-36309-2_6

Woodside, A. G. (2013). Moving beyond multiple regression analysis to algorithms: Calling for adoption of a paradigm shift from symmetric to asymmetric thinking in data analysis and crafting theory. Journal of Business Research, 66(4), 463-472. https://doi.org/10.1016/j.jbusres.2012.12.021.