

THE DISRUPTIVE BUSINESS ENVIRONMENT IN TOURISM: A SYSTEMATIC REVIEW OF EXTERNAL FORCES, STRATEGIC CAPABILITIES, AND ORGANISATIONAL RESILIENCE

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ABSTRACT

Purpose- The purpose of this study is to examine how tourism businesses respond and adapt to increasing disruptions caused by rapid digital transformation, environmental challenges, geopolitical uncertainty, and other external shocks.

Design/Methodology/Approach- This study employs a systematic literature review of research published between 2015 and 2025. A PRISMA-guided protocol was used to identify, screen, and select relevant peer-reviewed journal articles and conference papers from major academic databases. The selected studies were analysed using the TCCM framework (Theory, Context, Characteristics, Methodology) to examine organizational strategies that enable resilience and adaptation.

Findings- The analysis identified five key categories of external disruptive forces affecting tourism businesses: technological, regulatory, economic, and sociocultural. The review found that tourism firms with higher levels of digital maturity, organizational agility, and innovation capability were better positioned to reconfigure business models, foster collaborations, and implement adaptive strategies. The literature strongly emphasises disruptive theory and dynamic capability perspectives; gaps remain in theoretical integration, empirical research across diverse contexts, and the development of standardized measures for organizational resilience.

Practical Implications- The findings provide valuable insights for tourism managers, industry stakeholders, and policymakers seeking to strengthen organizational resilience in an increasingly volatile environment.

Originality/Value- This research contributes to the academic and practical understanding of tourism resilience by identifying key drivers of disruption, highlighting strategic organizational capabilities, and outlining future research directions for more integrated, context-sensitive studies in tourism management.

Keywords- Tourism disruption, organizational resilience, digital transformation, dynamic capabilities, PRISMA, TCCM, Tourism business environment, innovation capability, Organizational agility.

INTRODUCTION

Changes in international mobility, political stability, environmental sustainability, and digital transformation have made tourism one of the disruptions prone sectors in the global economy. The sector's sensitivity to external shocks, ranging from economic crises and terrorism to pandemics and

technological innovations made it highly vulnerable to volatility and uncertainty (Gössling, Scott, & Hall, 2021; Zenker & Kock, 2020). Over the past decade, events such as the global financial crisis, the rise of sharing economy platforms like Airbnb, the COVID-19 pandemic, and growing climate-related risks have dramatically reshaped the tourism landscape. These are no longer isolated anomalies; instead, they point to the emergence of a condition of disruption within which tourism enterprises must operate (Hall, Prayag, & Amore, 2017).

The accelerated pace of digitalisation, climate risks, and socio-political turbulence continues to test the capacity of tourism firms, especially small and medium-sized enterprises (SMEs), to withstand and respond to complex disruptions. Scholars have called for a shift from reactive crisis management to proactive strategic reconfiguration and resilience-building (Gössling et al., 2021; Brouder, 2020). However, academic literature has yet to deliver a coherent synthesis that links external shocks with internal adaptive mechanisms within a structured analytical framework. This systematic literature review (SLR) addresses a critical research gap by analysing and synthesising peer-reviewed scholarship on the disruptive business environment in tourism. It applies a multi-level lens to classify both (a) the external forces disrupting the tourism industry and (b) the internal strategic capabilities enabling firms to respond. The review also examines the types of responses reactive, adaptive, or transformative documented in the literature, providing a structured foundation for understanding organisational behaviour under disruption.

This review is guided by four key research questions: What kinds of external disruptions are affecting tourism businesses today, and how have researchers explained these changes? How do tourism businesses internally respond to disruption, especially through adaptability, innovation, and strategic thinking? What are the main theories and ideas used by scholars to study disruption and entrepreneurship in the tourism sector? Where are the knowledge gaps in existing research on how tourism firms deal with disruption, and what should future studies focus on? Accordingly, the study pursues the following objectives: To identify and categorise the major external forces that have disrupted the tourism industry; To identify and categorize the major internal capabilities that enable tourism firms to respond to or recover from disruptive changes; To understand how these firm-level responses have been conceptualized and studied in the literature to date.

This review systematically examines literature published between 2015 and 2025, using a PRISMA (See Appendix I)-compliant approach and guided by the TCCM (Theory, Context, Characteristics, Methodology) framework. The databases searched include EBSCOhost, Emerald Insight, Web of Science, and Google Scholar. After screening 123 initial records and applying inclusion/exclusion criteria, 19 full-text articles were selected for in-depth analysis. This evidence base was then thematically synthesized to construct a multi-level model of the disruptive business environment in tourism. By bridging the gap between disruption as a structural condition and firm-level strategic agency, this review lays the groundwork for a wider and more anticipatory approach to tourism management. In doing so, it provides an essential roadmap for future research and practical strategy development to foster agility, resilience, and innovation in an era of ongoing disruption.

SYSTEMATIC LITERATURE REVIEW APPROACH

This study adopts a systematic literature review (SLR) methodology to ensure a comprehensive, transparent, and replicable synthesis of existing research regarding disruption in the tourism sector. The SLR was guided by established protocols, comprising a structured search strategy, defined inclusion and exclusion criteria, systematic screening, and synthesis of findings using the TCCM (Theory-Context-Characteristics-Methodology) framework.

SEARCH PROCESS AND CRITERIA

The literature search targeted peer-reviewed journal articles and seminar papers published in English between 2015 and 2025. The following academic databases were utilised for the search: EBSCOhost, Web of Science, Emerald, and Google Scholar, chosen for their comprehensive coverage of tourism and management disciplines.

The following pre-defined search string was employed:

("disruptive business environment" OR "disruptive innovation" OR "business model disruption") AND ("tourism industry" OR "tourism sector" OR "hospitality and tourism") AND ("external environment" OR "external shocks" OR "macro-environmental forces") AND ("internal environment" OR "organisational resilience" OR "adaptive capabilities" OR "firm-level response")

INCLUSION AND EXCLUSION CRITERIA

Inclusion criteria:

Studies published between 2015 and 2025, Peer-reviewed journal articles and seminar papers, Research focused on the tourism sector (including hospitality and related sub-sectors), Studies addressing disruption, external shocks, and/or internal strategic capabilities, and Works published in English are included

Exclusion criteria:

Non-academic publications, Studies outside the specified date range, Industry or technical papers without empirical or theoretical contribution, and Papers focusing exclusively on sectors other than tourism are excluded

SCREENING PROCESS

The database search initially yielded a broad pool of studies. After removing duplicates, a two-stage screening process was conducted: firstly, Title and abstract screening: Papers were assessed for relevance to the research questions and objectives based on their titles and abstracts. Later, a full-text review: Remaining articles were evaluated in detail, applying the inclusion and exclusion criteria rigorously to ensure relevance and quality. This screening process resulted in a final sample of 19 studies for in-depth analysis.

USE OF THE TCCM FRAMEWORK IN ANALYSIS

To systematically extract and synthesize findings, the TCCM framework was employed. This approach offers a comprehensive lens for comparing and contrasting studies by four core dimensions:

- **Theory:** Each study was assessed for its theoretical grounding, with attention to frameworks such as disruptive innovation theory, resource-based view (RBV), dynamic capabilities, crisis management, configuration theory, and more.
- **Context:** The research context—such as geographic focus, tourism sub-sector (accommodation, intermediaries, attractions), and environmental features (developed vs. developing countries, urban vs. rural settings)—was documented and analysed.
- **Characteristics (Key Variables):** The review systematically captured constructs related to both external shocks (e.g., technological change, regulatory disruption, pandemics) and internal

capabilities (e.g., digital readiness, agility, absorptive capacity, innovation), as reported in the studies.

- **Methodology:** The methodological profile of each paper was recorded, including research design (quantitative, qualitative, or conceptual), data collection method, and analytic techniques.

DATA EXTRACTION, CODING, AND SYNTHESIS

Data were extracted systematically from each selected paper and coded according to the TCCM dimensions. Independent coding was conducted for reliability, followed by consensus meetings to resolve discrepancies. Extracted data were then synthesised narratively and, where appropriate, summarised in tabular form to highlight patterns in theoretical approaches, contexts, variables studied, and research methods.

SYNTHESIS OF RESEARCH ON THE DISRUPTIVE BUSINESS ENVIRONMENT IN TOURISM

Theory

Theoretical Frameworks Used in Studying Disruption and Innovation in Tourism

A thoughtful exploration of the disruptions shaping tourism cannot be accomplished without understanding the theoretical foundations that guide scholarly inquiry. A review of recent literature highlights several distinct but complementary frameworks, each providing valuable yet sometimes partial insights into how innovation and external shocks reshape tourism landscapes.

Table 1: TCCM – Theory Analysis of Disruptive Business Environment Literature in Tourism

Theory	Role in Studies (Primary / Supporting)	No. of Studies	% of Total Studies	
Disruptive Innovation Theory	Primary theoretical lens in most technology-focused papers	8	38.10 %	(Adeyinka-Ojo & Abdullah, 2019; Fedeli, 2017; Rai & Pinto, 2022; Sigala, 2018; Buhalis, Leung, & Lin, 2023; Guttentag, 2015; Florido-Benítez & Alcázar-Martínez, 2025; Karimi & Walter, 2016)
Resource-Based View (RBV)	Supporting lens explaining firm resources and capabilities	2	9.52 %	(Troise et al., 2022; Karimi & Walter, 2016)
Dynamic Capability Theory	Supporting framework for organizational adaptation	2	9.52 %	(Troise et al., 2022; Teece, Peteraf, & Leih, 2016)
Crisis and Disaster Management Theory	Primary lens for disruption caused by external shocks	2	9.52 %	(Ritchie, 2004; Aldao et al., 2021)
Service-Dominant Logic / Value Co-creation	Supporting framework explaining customer interaction in digital environments	2	9.52 %	(Sigala, 2018; Buhalis, Lin, & Leung, 2023)
Smart Tourism Ecosystem Theory	Supporting conceptual framework	2	9.52 %	(Rudwiarti et al., 2021; Valsamidis et al., 2022)
Business Model / Configuration Theory	Primary conceptual framework for tourism business model transformation	2	9.52%	(Linton & Öberg, 2020; Linton & Öberg, 2020)

Cultural / Well-being Tourism Concepts	Context-specific perspective	theoretical	1	4.76%	(Oe & Yamaoka, 2021)
			21	100 %	

Source: Author's own work

DISRUPTION THEORY

At the centre of most analyses is disruption theory, originally formulated by Christensen. This framework is widely employed to interpret how novel technologies or business models such as digital platforms (Airbnb, Booking.com), artificial intelligence, or the Metaverse initially target underserved or niche markets but then transform established value chains, upend incumbent businesses, and foster new patterns of competition (Buhalis et al., 2023; Guttentag, 2015). The strength of disruption theory lies in its explanatory power for market entry dynamics and the evolution of competitive advantages. However, the focus on technological or business model triggers sometimes narrows attention to “how disruption happens,” as it mainly examines the adaptive responses or stakeholder complexities within the tourism ecosystem.

DYNAMIC CAPABILITIES THEORY

Dynamic capabilities theory has gained growing traction as scholars shift focus toward the internal strategic processes that enable firms to sense, seize, and reconfigure assets in volatile environments. This perspective is especially valuable for understanding how tourism organizations develop agility, absorptive capacity, and innovation skills to adapt not just to one-time shocks, but to the ongoing churn of technological, economic, and regulatory change (Troise et al., 2022). Dynamic capabilities theory thus complements disruption theory by emphasizing organizational learning, flexibility, and evolution rather than disruption. Nonetheless, empirical work in this area often faces measurement challenges, with concepts like agility or absorptive capacity being operationalized inconsistently across studies.

INNOVATION DIFFUSION THEORY

Innovation diffusion theory, tracing back to Rogers, frequently underpins studies concerned with the spread and adoption of new technologies across the tourism sector (Valsamidis et al., 2022). It provides a robust lens for tracing how innovations such as contactless check-in or digital marketing gain critical mass or face barriers among different segments of tourism providers and consumers. While diffusion models usefully map adoption pathways, they can underplay the roles of power, regulation, and ecosystem interdependencies—factors that are highly salient in tourism, given its multi-actor, heavily regulated nature.

CRISIS MANAGEMENT FRAMEWORKS

Given the prevalence of exogenous events, pandemics, natural disasters, and terrorist attacks, crisis management frameworks are integral to tourism research. Drawing on complexity theory, resilience frameworks, and organisational crisis response models, these studies illuminate how preparedness, coordination, and adaptive recovery processes shape sectoral outcomes during acute disruption (Aldao et al., 2021). These frameworks excel at dissecting the nonlinear and multidimensional impacts of crises but can sometimes be more descriptive than predictive, highlighting best practices without always unearthing the underlying structural or cultural enablers of resilience.

OTHER RELEVANT THEORIES

Additional perspectives enrich the field's theoretical repertoire:

- **Resource-Based View (RBV):** Emphasizes how firm-specific assets and capabilities underpin sustainable responses to disruption, often informing studies on digital transformation readiness (Troise et al., 2022).
- **Configuration Theory:** Sheds light on how different business model archetypes and organizational fits enable or hinder adaptation in a dynamic environment (Linton & Öberg, 2020).

CONTEXT

The analysed research is set across a diversity of tourism contexts—global platform businesses (Airbnb, TripAdvisor), national clusters of innovative SMEs, heritage and visitor attractions, rural smart villages, and emerging digital intermediary markets. Much of the literature concentrates on developed markets—particularly urban settings in the US, Europe, and Asia—where digital disruption has been most pronounced and where data and case evidence are most readily available (Buhalis, Leung, & Lin, 2023; Valsamidis et al., 2022). Nevertheless, several papers focus attention on underexplored contexts such as rural Indonesia or regional Italian SMEs, offering insight into digital divides, resource limitations, and the intersection of technology adoption with local cultural and institutional factors (Rudwiarti et al., 2021; Troise et al., 2022). The COVID-19 pandemic features as a unifying context for many recent studies, providing a powerful illustration of multi-dimensional disruption and adaptive responses across geographies and sub-sectors (Aldao et al., 2021).

Table 2: TCCM – Context Analysis of Disruptive Business Environment Studies in Tourism

Context Dimension	Dominant Context in Literature	No. of Studies	%	
Global tourism industry perspective	Conceptual analyses of tourism disruption globally	8	40%	(Adeyinka-Ojo & Abdullah, 2019; Fedeli, 2017; Sigala, 2018; Buhalis, Leung, & Lin, 2023; Aldao et al., 2021; Valsamidis et al., 2022; Florido-Benítez & Alcázar-Martínez, 2025; Linton & Öberg, 2020)
Digital disruption in tourism and platform economy	Technology-driven tourism ecosystems and sharing platforms in developed market.	6	30%	(Adeyinka-Ojo & Abdullah, 2019; Sigala, 2018; Buhalis, Leung, & Lin, 2023; Valsamidis et al., 2022; Guttentag, 2015; Florido-Benítez & Alcázar-Martínez, 2025)
Crisis and disruptive events	Tourism disruptions caused by crises such as pandemics or disasters	2	10%	(Ritchie, 2004; Aldao et al., 2021)
SME and entrepreneurial tourism firms	Small and innovative firms navigating disruption	2	10%	(Troise et al., 2022; Rai & Pinto, 2022)
Rural and community tourism	Tourism villages and nature-based tourism contexts	2	10%	(Oe & Yamaoka, 2021; Rudwiarti et al., 2021)
		20	100%	

Source: Author’s own work

CHARACTERISTICS (KEY VARIABLES)

Empirical and conceptual studies consistently identify technological, regulatory, economic, ecological, and sociocultural forces as principal external shocks destabilizing tourism. Technological advances—chiefly digital platforms, immersive media, artificial intelligence, and smart infrastructure—emerge as both catalysts for transformation and sources of industry disruption. Digitising and ICT adoption are

treated as antecedents of a disruptive business model in tourism. Organisational agility and dynamic capability are taken as mediators of the disruptive business model. Regulatory shifts, including those prompted by platform economies or public health emergencies, add layers of uncertainty and sometimes intensify competitive pressures or financial vulnerability (Guttentag, 2015; Aldao et al., 2021). Economic instability, shifts in consumer preferences, and ecological threats such as climate change or natural disasters further challenge established tourism business models (Fedeli, 2017; Ritchie, 2004; Aldao et al., 2021).

Table 3: TCCM – Characteristics Analysis of Constructs Used in Disruptive Tourism Research

Construct Group	Typical Role	No. of Studies	%	
Digital technologies and ICT adoption	Antecedent	9	47.37%	(Adeyinka-Ojo & Abdullah, 2019; Fedeli, 2017; Rai & Pinto, 2022; Sigala, 2018; Buhalis, Leung, & Lin, 2023; Valsamidis et al., 2022; Florido-Benítez & Alcázar-Martínez, 2025; Linton & Öberg, 2020; Guttentag, 2015)
Organizational agility and dynamic capabilities	Mediator	3	15.79%	(Troise et al., 2022; Karimi & Walter, 2016; Teece, Peteraf, & Leih, 2016)
Customer engagement and co-creation	Outcome / mediator	3	15.79%	(Sigala, 2018; Buhalis, Lin, & Leung, 2023; Valsamidis et al., 2022)
Crisis resilience and recovery	Outcome	2	10.53%	(Ritchie, 2004; Aldao et al., 2021)
Business model innovation	Outcome	2	10.53%	(Linton & Öberg, 2020; Karimi & Walter, 2016)
		19	100.00%	

Source: Author's own work

The synthesis highlights that firms demonstrating greater capacity for digital investment, flexible resource deployment, and proactive innovation are more likely to pivot their business models (e.g., toward virtual service delivery, contactless operations, or experience diversification), to form strategic partnerships, shows better customer engagement and business model recovery. (Buhalis, Leung, & Lin, 2023; Valsamidis et al., 2022).

METHODOLOGY

The reviewed body of work features broad methodological diversity. Conceptual and systematic reviews are employed to build theoretical foundations and map emerging trends, particularly for new phenomena such as the Metaverse or AI-driven tourism (Buhalis, Leung, & Lin, 2023; Florido-Benítez & del Alcázar Martínez, 2025). Quantitative studies use cross-sectional surveys (often of SMEs or tourism entrepreneurs) and structural modelling to empirically examine relationships between digital capability, agility, and performance outcomes (Troise et al., 2022). Qualitative case studies and content analyses are deployed to explore business model evolution, smart village adaptation, and stakeholder perspectives, with data collection approaches including interviews, secondary data reviews, and documentary analysis (Fedeli, 2017; Rudwiarti et al., 2021). Despite this variety, there remains a need for more longitudinal, multi-site, and mixed-method research, especially in less-studied contexts and with standardised constructs for resilience and innovation.

Table 4: TCCM – Methodological Analysis of Studies on Disruptive Business Environment in Tourism

Methodological Aspect	Dominant Practice	No. of Studies	%	
Conceptual / theoretical papers	Literature synthesis and conceptual frameworks	11	57.89%	(Ritchie, 2004; Adeyinka-Ojo & Abdullah, 2019; Fedeli, 2017; Sigala, 2018; Buhalis, Leung, & Lin, 2023; Rudwiarti et al., 2021; Aldao et al., 2021; Valsamidis et al., 2022; Florido-Benítez & Alcázar-Martínez, 2025; Teece, Peteraf, & Leih, 2016; Linton & Öberg, 2020)
Quantitative survey studies	Cross-sectional survey with statistical analysis	3	15.79%	(Troise et al., 2022; Rai & Pinto, 2022; Karimi & Walter, 2016)
Qualitative case studies	Exploratory case-based research	2	10.53%	(Oe & Yamaoka, 2021; Rudwiarti et al., 2021)
Systematic literature reviews	Structured synthesis of prior studies	2	10.53%	(Adeyinka-Ojo & Abdullah, 2019; Florido-Benítez & Alcázar-Martínez, 2025)
Structural equation modeling studies	Advanced quantitative modelling	1	5.26%	(Troise et al., 2022)
		19	100.00%	

Source: Author's own work

DISRUPTIVE BUSINESS ENVIRONMENT: DEFINITION, CONCEPTS AND COMPONENTS.

Understanding the nature of disruption in tourism requires an integrative conceptualisation that captures both the external shocks that destabilise the industry and the internal responses that determine firm survival and adaptation. Prior scholarship from strategic management defines a disruptive business environment as a continuously evolving context shaped by non-linear changes, such as technological innovation, regulatory shifts, and market turbulence, that compel firms to recalibrate their strategic orientation and operational resilience (Teece, Peteraf, & Leih, 2016). While this definition provides a broad theoretical foundation, it lacks specificity when applied to sectors like tourism that are uniquely susceptible to external volatility.

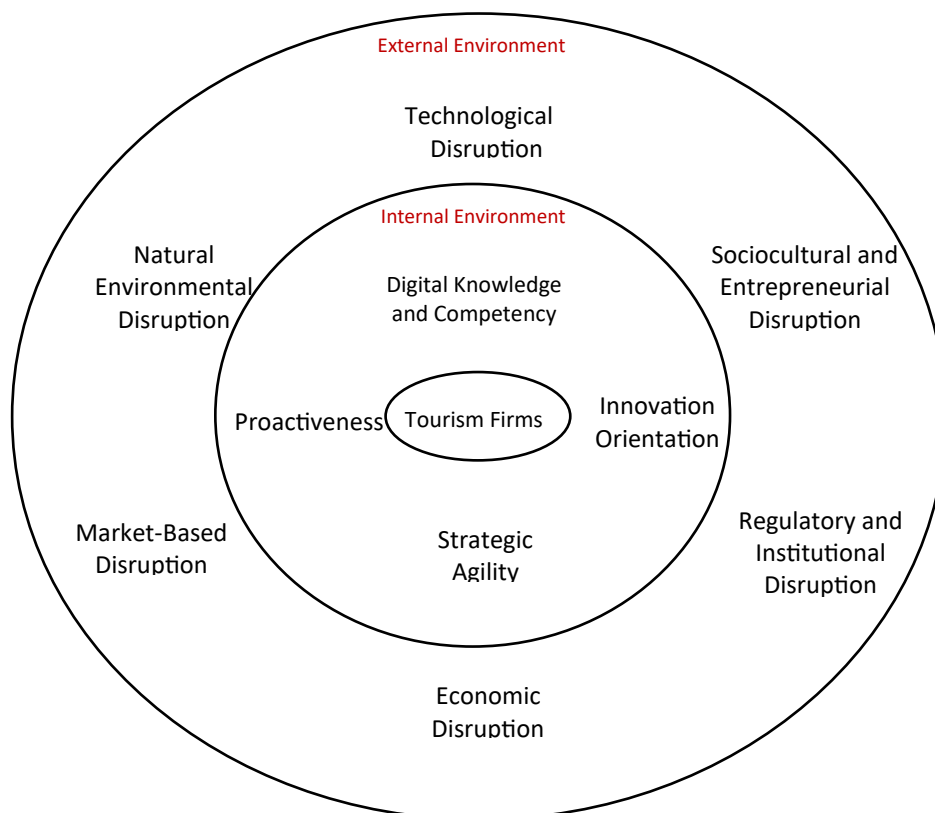
In tourism research, disruption is increasingly contextualised as a multi-dimensional ecosystem of uncertainty, particularly affecting SMEs, where external crises such as pandemics, digital platform competition, and climate risks intersect with internal capacity limitations (Gössling, Scott, & Hall, 2021; Prayag, 2020). A systems-oriented perspective further refines this view by emphasising the convergence of socio-economic, institutional, and technological forces that render traditional strategic assumptions obsolete (Ritchie & Jiang, 2019). However, across these strands of literature, a gap remains in operationalising this concept for empirical application. To bridge this gap, this paper adopts a refined operational definition: "A disruptive business environment in the tourism sector refers to an evolving organisational and market context shaped by external forces (e.g., technological, environmental, regulatory, economic, and socio-cultural shifts) and internal dynamics (e.g., leadership, innovation capacity, and digital readiness). This environment is characterised by unexpected or non-

linear changes that are evident through measurable shifts in firms' investment decisions, operational processes, digital adoption, and firms' agility."

COMPONENTS OF DISRUPTIVE BUSINESS ENVIRONMENT IN TOURISM

The Disruptive business environment in tourism consists of both external and internal factors, which lead to unexpected and nonlinear changes that influence the way in which the business of tourism happens in an area. These external factors and internal dynamics have made changes in the normal course of business so far. Below is a detailed picturisation and list of components of Disruptive business environment.

Figure1: Disruptive Business Environment in Tourism



Source: Author's own work

EXTERNAL DISRUPTIVE ENVIRONMENT IN TOURISM: A MULTIDIMENSIONAL PERSPECTIVE

Understanding the external disruptive environment is crucial for evaluating how tourism systems evolve and adapt in the face of persistent shocks. Drawing on the conceptual model, this section synthesises the influence of six distinct yet interrelated disruption domains: technological, environmental, market-based, economic, regulatory/institutional, and sociocultural/entrepreneurial disruptions.

TECHNOLOGICAL DISRUPTION

Technology is one of the most transformative forces in the tourism sector. Drawing on Christensen's (1997) Disruptive Innovation Theory, new entrants leveraging emerging technologies such as virtual

reality, mobile platforms, and peer-to-peer platforms (e.g., Airbnb) are reshaping traditional modes of tourism service delivery. These disruptions alter the competitive landscape by lowering entry barriers and enabling real-time, customized experiences. The Technology-Organisation-Environment (TOE) Framework (Tornatzky & Fleischer, 1990) further explains how technological readiness and environmental pressures facilitate or hinder innovation within tourism enterprises, making it a foundational theory in the study of external technological shifts. Scholars such as Buhari's et al. (2023) emphasise the metaverse as a systemic technological disruption that is altering tourism marketing and engagement. Antonio, N., & Rita, P. (2021) further explore how COVID-accelerated digital transformation has catalysed structural changes across hospitality and tourism systems. Tourism firms are compelled to integrate smart technologies, reconfigure distribution channels, and create digitally immersive experiences. Digitalization has disrupted legacy operators while enabling agile firms to scale rapidly. Empirical studies demonstrate that tech-ready firms outperform others during crises by leveraging digital platforms to retain customers and drive service innovation (Gretzel et al., 2015; Ivars-Baidal et al., 2021).

NATURAL ENVIRONMENTAL DISRUPTION

Climate change, biodiversity loss, and natural disasters pose existential threats to tourism destinations and infrastructure. Gössling and Hall (2021) highlight the urgency of addressing climate-induced shocks that degrade destination viability. Ritchie (2004) integrates natural disasters into broader crisis frameworks for tourism. Environmental shocks affect seasonality, destination branding, insurance costs, and physical infrastructure. Environmental sustainability has also transitioned from a peripheral concern to a central determinant of competitive advantage. With tourism's direct links to climate vulnerability, sustainable tourism principles (Butler, 1999) are increasingly embedded in policy and practice. Gössling, Scott, and Hall (2015) argue that climate change not only impacts destination attractiveness but also enforces long-term transformation in travel patterns, business planning, and resource management. These dynamics are often enforced through institutional pressure, aligning with Institutional Theory (DiMaggio & Powell, 1983). Regions dependent on coastal or alpine tourism are particularly vulnerable. Studies have shown that disaster-prone destinations experience significant drops in international arrivals and long-term reputational damage (Becken & Hughey, 2013), while those with pre-crisis environmental planning recover faster.

MARKET-BASED DISRUPTION

Shifts in consumer behaviour, driven by changing preferences, platform-based services, and inter-sectoral competition, are rapidly redefining tourism markets. primarily driven by rapidly evolving consumer preferences. The rise of experience-centric consumption, shaped by digital connectivity and social influence, underscores a profound shift from product to experiential value creation (Neuhofer, Buhalis, & Ladkin, 2015). The Stimulus-Organism-Response (S-O-R) Model (Mehrabian & Russell, 1974) offers theoretical justification here, illustrating how stimuli such as social media engagement, fear of missing out (FOMO), and online reviews affect emotional and cognitive responses that ultimately influence purchase behaviour. The rise of the sharing economy and digital intermediation is well-documented (Cheng, 2016; Guttentag, 2015). New entrants such as Airbnb have disrupted traditional accommodation providers through price flexibility and scale. Traditional firms face commoditization pressures, reduced margins, and disintermediation. Meanwhile, agile micro-entrepreneurs exploit niche markets and peer-to-peer platforms. Studies show firms that adapt through co-creation and dynamic pricing outperform static competitors. Market disruption has also increased the volatility of tourist flows and demand patterns.

ECONOMIC DISRUPTION

Global economic downturns, inflation, currency fluctuations, and unemployment levels directly affect travel affordability and consumer confidence. The 2008 global financial crisis and the COVID-19 recession have both been studied for their impacts on tourism economics (Gössling et al., 2021). Reduced spending power and discretionary income affect booking patterns, average length of stay, and package type preferences. Low-cost segments thrive while luxury and long-haul suffer. Empirical data from multiple crises show that SMEs with low overheads and flexible cost structures are more likely to survive (Weigel & Hadorn, 2021). Firms dependent on international arrivals are disproportionately affected.

REGULATORY AND INSTITUTIONAL DISRUPTION

Shifts in visa policy, taxation, platform regulation, and public health mandates significantly affect tourism mobility and operations, particularly concerning digital and informal tourism platforms. As new business models outpace existing legal structures, inconsistencies in taxation, zoning, and licensing frameworks create uncertainty. Guttentag (2015) highlights Airbnb's disruptive effects on urban regulatory regimes, further validated through institutional similarity, where firms conform to legal and normative expectations not merely for efficiency but for legitimacy. The regulation of the sharing economy and platform labour (e.g., Uber, Airbnb) has been debated in tourism governance studies (Davidson & Infranca, 2016). COVID-19-related travel restrictions further exposed policy limitations. Firms must constantly adapt to a patchwork of local and global regulations. Institutional uncertainty raises operational risks, compliance costs, and market entry barriers. Studies (Adeyinka-Ojo, 2019) show that destinations with coordinated governance and proactive regulatory frameworks recovered faster post-crisis than those with fragmented or reactive systems.

SOCIOCULTURAL AND ENTREPRENEURIAL DISRUPTION

Changing cultural values, demographic shifts, and entrepreneurial disruptions (e.g., creative tourism, inclusive tourism) reshape tourism demand and service models. On the sociocultural front, the increasing demand for authenticity, localization, and meaningful travel has disrupted mass tourism models. Postmodern Tourism Theory (Urry, 1990; Wang, 1999) elucidates how tourist motivations have shifted toward personal identity formation and immersion. Richards (2011) supports this by documenting the rise of cultural and creative tourism that values co-creation, engagement, and differentiation from mainstream offerings. There is growing attention to post-pandemic shifts in tourist priorities—favouring localism, health safety, and ethical consumption (Gretzel et al., 2020). Simultaneously, new entrepreneurial forms such as pop-up tourism, community-owned experiences, and wellness retreats are gaining ground. Firms need to reorient products towards well-being, customisation, and community integration. Businesses that fail to evolve risk losing relevance in value-sensitive markets.

Evidence from the wellness and silver tourism segments shows that entrepreneurial flexibility and cultural resonance strongly influence destination attractiveness (Rudwiarti, 2021; Adeyinka-Ojo, 2019; Antony et al., 2025). The disruptive business environment in tourism is fundamentally shaped by multiple external forces that operate across temporal and spatial scales. While technological and market-based disruptions dominate the discourse, institutional and sociocultural shocks are equally potent in destabilizing and reshaping the tourism landscape. Understanding these forces, both individually and collectively, is essential for formulating resilient strategies and adaptive governance mechanisms in tourism ecosystems.

INTERNAL ENVIRONMENT IN A DISRUPTIVE BUSINESS ENVIRONMENT

The Role of Entrepreneurial Orientation

While external disruptions in tourism, ranging from pandemics to platform economies, impose sudden and often uncontrollable pressures, it is the **internal strategic orientation** of tourism enterprises that determines whether disruption becomes a crisis or an opportunity. The internal environment comprises firm-level capabilities, culture, and learning systems that shape how organisations **interpret, respond to, and leverage external shocks**. This section discusses how dimensions of **entrepreneurial orientation (EO)**—particularly **digital knowledge, proactiveness, innovation, and agility**—mediate a firm's capacity to thrive in disruptive tourism landscapes.

Digital Knowledge and Competency

In the age of digital transformation, digital literacy is no longer an operational advantage but a survival necessity. For tourism firms, digital knowledge includes proficiency in using CRM systems, social media platforms, AI-based analytics, VR/AR-based marketing, and contactless service technologies. Anwar et al.(2024) emphasise that firms with embedded digital competencies were significantly better positioned to pivot during COVID-19, utilizing platforms for marketing, service delivery, and stakeholder coordination. Similarly, Buhalis et al. (2023) observe that immersive technologies are not only disruptive but also open new experiential revenue streams for digitally literate firms. Digital knowledge enhances absorptive capacity, enabling firms to scan, interpret, and exploit technological changes for innovation (Cohen & Levinthal, 1990). It also underpins strategic agility, allowing rapid reconfiguration of value propositions and touchpoints.

Proactiveness

Proactiveness reflects a firm's forward-looking posture, characterised by anticipation of future demands and readiness to pioneer new solutions before competitors (Fadda, 2018). In turbulent environments, proactive tourism firms tend to identify weak signals, respond to latent market trends, and pre-empt regulatory shifts (Gannon et al., 2021). For example, early adoption of health-focused tourism models post-COVID-19 positioned firms ahead in regaining consumer trust. Proactive behaviour enhances first-mover advantage, helps pre-empt obsolescence, and is often positively associated with firm performance under discontinuous change (Lumpkin & Dess, 1996). It is also linked to better strategic alignment with changing customer values, especially among wellness, eco-conscious, and tech-savvy segments.

Innovation Orientation

Innovation enables firms to convert uncertainty into opportunity. In the context of disruptive tourism, innovation includes business model transformation, product differentiation, service personalisation, and process redesign. Innovation has been widely recognised as a dynamic capability in tourism entrepreneurship (Ramezani and Camarinha-Matos,2020). Studies show that innovation-oriented firms were more likely to shift towards hybrid business models (e.g., physical-virtual tours), develop subscription-based pricing, or integrate community-based value co-creation (Adeyinka-Ojo, 2019). Firms with a strong innovation orientation report higher customer engagement, resilience to price competition, and market adaptability. In disruptive contexts, innovation reduces reliance on traditional intermediaries and enables direct value capture.

Strategic Agility

Agility is the firm's ability to rapidly sense, respond to, and recover from shocks without compromising long-term competitiveness. It encompasses both operational flexibility and strategic fluidity. Amankwah-Amoah et al. (2021) define agility as the capability to reconfigure processes, partnerships, and market approaches swiftly in response to disruption. In tourism, this includes shifting to new source markets, digital channels, or alternative revenue models during downturns. Empirical studies highlight that agile tourism firms were able to pivot to domestic tourism, launch micro-tourism offers, or offer flexible refund policies during COVID-19 (Gössling & Hall, 2021). Agility is particularly crucial in responding to VUCA environments where market signals are volatile and ambiguous (VUCA: Volatile, Uncertain, Complex, and Ambiguous).

THE INTERRELATIONSHIP BETWEEN ENTREPRENEURIAL ORIENTATION DIMENSIONS

The four internal constructs digital knowledge, proactiveness, innovation, and agility—are not discrete capabilities. They are mutually reinforcing and form the backbone of internal environment. For example, digital knowledge enhances agility by enabling real-time analytics and feedback loops, while innovation is often triggered by proactive scanning and digital experimentation. Together, these capabilities shape a firm's dynamic capabilities system, enabling tourism enterprises to not only survive but thrive amid disruption (Teece, 2007). The degree to which these are institutionalised in a firm's culture, strategy, and operations determines the firm's long-term competitive advantage under uncertainty. The internal environment, especially aspects of entrepreneurial orientation, significantly influences how tourism businesses respond to external disruptions. Developing strategic capabilities like digital expertise, innovation, proactiveness, and agility equips firms to better withstand volatility, drive new ideas, and anticipate future trends. Amid ongoing disruptions, these internal attributes are just as crucial as the external challenges they address.

In today's fast-changing tourism industry, businesses face many external influences—such as new technologies, shifting markets, changing regulations, and evolving social trends—that can shake up how they operate. To handle these changes well, it's important for firms to understand what's happening around them and build strong skills within the organization. Key qualities such as tech-savviness, creativity, forward-thinking, and flexibility help tourism businesses navigate disruptions and make the most of new opportunities. Strengthening these internal strengths allows them not only to reduce risks but also to adapt quickly, introduce fresh ideas, and grow sustainably in a competitive tourism landscape.

INTEGRATION OF EXTERNAL SHOCKS, INTERNAL CAPABILITIES, AND BUSINESS MODEL ADAPTATIONS

This systematic analysis of literature using the TCCM framework reveals a complex, dynamic interplay among external shocks, internal strategic capabilities, and business model adaptations within the tourism sector. External shocks—spanning technological, regulatory, economic, ecological, and sociocultural categories—exert multifaceted pressures on tourism organizations, often combining to amplify their disruptive impact. For example, technological advancements such as digital platforms and AI not only disrupt operational models but also precipitate regulatory responses and reshape consumer expectations, thereby increasing economic and environmental challenges within destinations (Buhalis et al., 2023; Aldao et al., 2021 Fang et al., 2024).

In response, tourism firms are compelled to develop and leverage robust internal capabilities. Digital readiness and technological adoption have proven fundamental for survival and adaptation,

particularly during crises such as the COVID-19 pandemic. Organizational agility and proactiveness further enable firms to quickly interpret environmental cues and pivot strategies as needed, while innovation capacity underpins the creation and implementation of adaptive solutions such as virtual tourism experiences, diversified services, and technology-enabled customer engagement (Florido-Benítez & del Alcázar Martínez, 2025; Troise et al., 2022).

These internal strengths directly inform the evolution of business models. Empirical evidence shows that entrepreneurs who combine digital upskilling, organisational flexibility, and innovation can successfully redesign their business models by pivoting to virtual or contactless delivery, diversifying their product lines, building partnerships, and centring operations on shifting customer needs. Such adaptive approaches not only buffer the impact of immediate shocks but also lay the groundwork for long-term resilience and competitiveness (Buhalis et al., 2023; Valsamidis et al., 2022).

SWOT CLASSIFICATION: TOURISM ENTERPRISE IN A DISRUPTIVE BUSINESS ENVIRONMENT

The tourism industry is among the most disruption-sensitive sectors of the global economy. From the 2004 Indian Ocean tsunami to the 2020 COVID-19 pandemic, external shocks have demonstrated the sector's susceptibility to crisis. According to Sigala (2020), the pandemic served as both a disruptor and a revelation, exposing the sector's structural vulnerabilities—particularly the overreliance on physical mobility and centralized platforms. In this context, SWOT analysis becomes a vital tool not only for recovery planning but also for proactive resilience building. Tourism firms' strengths, such as customer intimacy, experiential depth, and cultural capital, must be balanced against common weaknesses like low digital maturity and fragmented crisis preparedness. Opportunities have emerged in the form of wellness tourism, digital nomadism, and immersive technology integration (Buhalis et al., 2023, Shin & Kang, 2024), while threats include platform dependency, policy volatility, and shifting traveler expectations.

Rudwiarti et al. (2021) emphasize the importance of contextual SWOT framing in rural tourism, where digital adoption intersects with traditional knowledge systems to generate adaptive innovations. Public policy, as highlighted by Adeyinka-Ojo (2019), plays a crucial enabling role in ensuring that tourism SMEs—often the most vulnerable can translate SWOT-based strategic insights into tangible recovery and renewal pathways. Thus, the tourism sector's exposure to complex disruptions amplifies the relevance of SWOT not as a static assessment, but as a living, strategic tool for resilience and innovation. In the fast-evolving tourism industry, businesses are navigating a mix of promising opportunities and tough challenges. Internally, many firms have embraced digital technologies, which helps them stay relevant and competitive (Sigala, 2022; Buhalis et al., 2023).

The ability to act quickly and adapt—often referred to as entrepreneurial agility—is another key advantage (Amshoff et al., 2015). Strong ties with local communities also give them a sense of identity and trust, which adds to their long-term value (Rudwiarti et al., 2021). Furthermore, digital reputation systems like reviews and ratings play a crucial role in building traveler confidence (Guttentag, 2015). There are notable weaknesses that need attention. Many firms lack adequate preparedness for crises such as pandemics or environmental disasters (Ritchie, 2004). Technological gaps remain a barrier for smaller or rural businesses (Adeyinka-Ojo, 2019), and inconsistent or fragmented marketing strategies make it difficult to maintain a clear brand voice (Tan & Sharma, 2022). Over-reliance on external booking platforms also leaves businesses exposed to sudden algorithm or policy changes.

Table 5: SWOT Classification of Disruptive Business Environment in Tourism

Strengths (S)	Weaknesses (W)
Digital Adaptability (Sigala, 2022; Buhalis et al., 2023) Entrepreneurial Agility (Amshoff et al., 2015) Community Embeddedness (Rudwiarti et al., 2021) Strong Online Reputation Systems (Guttentag, 2015)	Limited Crisis Preparedness (Ritchie, 2004) Technology Gaps (Adeyinka-Ojo, 2019) Fragmented Marketing Strategies (Tan & Sharma, 2022) Dependence on External Platforms
Opportunities (O)	Threats (T)
Tech-Driven Innovation (Gretzel et al., 2022) Policy-Driven Recovery Funds (Sigala, 2020) Rise in Wellness and Eco-Tourism New Market Segments (e.g., Silver Tourism)	Frequent External Shocks (Brouder, 2020) Platform Disruption Changing Consumer Expectations Regulatory Uncertainty

Source: Authors own work

On the brighter side, tourism firms can explore emerging trends such as wellness and eco-tourism, which are gaining popularity among health- and nature-conscious travellers. Markets like silver tourism, targeting senior tourists, offer untapped potential (Rahimian et al., 2021). In addition, government recovery funds present a valuable support mechanism post-crisis (Sigala, 2020), while technology continues to drive innovation across the sector (Gretzel et al., 2022). At the same time, firms must brace for external shocks, ranging from market fluctuations to climate events (Brouder, 2020). Changing consumer expectations and regulatory uncertainties add further complexity. For tourism businesses to thrive, strengthening internal capacities while staying agile and proactive in responding to external changes will be essential. It's not just about survival; it's about evolving with purpose.

DISCUSSION

The Importance of Understanding the Disruptive Business Environment in Tourism Management and Marketing

In today's rapidly shifting global landscape, the tourism sector stands at the intersection of multiple, simultaneous disruptions—technological, environmental, socio-political, and epidemiological. Understanding the dynamics of a disruptive business environment is no longer optional for tourism management and marketing; it has become a strategic imperative. Positioning hospitality within a Disruptive Business Environment reframes the sector from crisis-reactive to transformation-oriented. Rather than asking how hospitality recovers from isolated shocks, the DBE lens directs attention to how firms continuously reconfigure capabilities in response to layered disruption. As evidenced during the COVID-19 pandemic, tourism firms lacking agility and innovation struggled to survive, while those embedded with digital competencies and adaptive capacity demonstrated resilience and even growth (Sigala, 2020).

Crisis Environment and Disruptive Business Environment

The distinction between a crisis environment and a disruptive business environment (DBE) lies primarily in their conceptual scope and temporal nature. A crisis environment refers to a specific disruptive event—such as a pandemic, terrorist attack, or natural disaster—that temporarily interrupts normal business operations but is generally expected to be followed by recovery and stabilization (Ritchie & Jiang, 2019). Accordingly, crisis management research largely concentrates on stages of preparedness, response, and recovery. In contrast, the concept of DBE views disruption as an ongoing structural condition rather than a single event. It emphasizes persistent and multidimensional changes that continuously reshape the business landscape. For instance, although the COVID-19 pandemic

initially appeared as a crisis, it also exposed deeper systemic weaknesses within the tourism sector, including heavy reliance on digital platforms, fragile global supply chains, and institutional rigidities that extend beyond the immediate crisis period (Gössling et al., 2021). Several distinctions help clarify this difference.

First, in terms of temporality, crisis environments are episodic and limited in duration, whereas DBE assumes that disruption is continuous. Second, regarding scope, crisis perspectives usually focus on isolated shocks, while DBE incorporates multiple concurrent transformations across technological, regulatory, ecological, economic, and sociocultural domains. Third, the strategic implications differ: crisis environments require recovery-oriented planning, whereas DBE requires firms to continuously reconfigure capabilities and redesign business models to remain competitive. Thus, crisis environments represent temporary disturbances within a system, whereas DBE reflects a systemic condition in which instability becomes an enduring feature of the competitive landscape.

VUCA AND DISRUPTIVE BUSINESS ENVIRONMENT

The concept of volatility, uncertainty, complexity, and ambiguity (VUCA) has been widely used to describe unstable and unpredictable environments at a broad macro level. In tourism and hospitality research, it has helped explain why organizations need to develop agility and innovation in response to rapidly changing conditions (Troise et al., 2022). However, VUCA primarily serves as a descriptive framework that highlights environmental turbulence without clearly identifying its underlying sources. In contrast, the concept of a disruptive business environment (DBE) offers a more structured and analytically useful perspective. First, DBE provides greater diagnostic clarity by categorizing disruption into specific domains such as technological, institutional, ecological, and economic forces, which makes the phenomenon easier to operationalize and measure empirically.

Second, DBE incorporates multiple theoretical foundations—including dynamic capabilities theory, the resource-based view, innovation diffusion theory, and institutional theory—to explain how firms respond strategically to environmental disruptions (Teece et al., 2016). Third, while VUCA primarily signals instability, DBE explains the mechanisms by which external disruptions influence internal capabilities and ultimately shape organizational outcomes. Therefore, VUCA helps contextualize environmental turbulence, whereas DBE provides a more comprehensive framework for analyzing and explaining how firms adapt and perform within such turbulent environments.

ENVIRONMENTAL TURBULENCE AND DISRUPTIVE BUSINESS ENVIRONMENT

Environmental turbulence generally refers to rapid and unpredictable changes in markets, technologies, and competitive conditions that reduce the ability of firms to forecast future developments (Dess & Beard, 1984). This concept is often measured through dimensions such as environmental dynamism, complexity, and hostility. However, the notion of a disruptive business environment (DBE) expands this perspective in important ways. While environmental turbulence mainly captures fluctuations occurring within an existing market system, DBE recognizes deeper structural shifts that can fundamentally reshape the system itself. For instance, the emergence of digital platforms in tourism has not only increased market dynamism but has also transformed traditional value chains, altered distribution mechanisms, and challenged existing regulatory frameworks (Guttentag, 2015).

In addition, environmental turbulence primarily focuses on external environmental conditions, offering limited insight into how firms internally reorganize in response to such changes. The DBE perspective, in contrast, explicitly incorporates internal strategic capabilities—such as digital maturity, entrepreneurial orientation, and innovation capacity—as key mechanisms through which organizations

respond to disruption. Consequently, environmental turbulence reflects variability in external environmental conditions, whereas DBE captures broader structural transformations that reshape competitive structures and require firms to adapt through strategic reconfiguration.

Moreover, in resource-constrained settings, such as rural or community-based tourism, understanding disruption is crucial for resilience-building (Rahimian et al., 2021). These environments often rely on informal networks, cultural capital, and social cohesion to navigate uncertainties. Studies from Indonesia's smart tourism villages demonstrate how integrating local knowledge with digital readiness creates pathways for inclusive innovation and sustainable growth (Rudwiarti et al., 2021). A comprehensive understanding of the disruptive business environment equips tourism managers and marketers with the foresight and flexibility necessary to thrive in uncertainty. It fosters strategic renewal, deepens customer engagement, and encourages systemic resilience across the value chain. As disruptions become the norm rather than the exception, embracing this paradigm becomes central to the future of tourism management and marketing.

DESPITE THESE ADVANCES, SEVERAL NOTABLE GAPS PERSIST IN THE LITERATURE AND OFFER RICH OPPORTUNITIES FOR FUTURE INQUIRY

- **Theoretical Integration and Pluralism:** Current studies predominantly employ disruption or dynamic capability theories, often in isolation. There is a clear need for integrative research that combines multiple frameworks—such as configuration, network, and creative destruction theories—to better explain complex, multi-actor adaptation processes (Linton & Öberg, 2020; Socorro Márquez & Reyes Ortiz, 2021).
- **Empirical Focus on Understudied Contexts:** Much of the empirical literature centres on digitalised, mature, or urban tourism markets. Rural destinations, developing economies, and informal tourism enterprises require greater attention, particularly regarding digital inclusion, capability development, and community-based adaptation (Rudwiarti et al., 2021).
- **Measurement Consistency:** Constructs like organisational agility, resilience, and digital readiness are operationalised variably, complicating cross-study synthesis. Standardised, context-sensitive measurement tools would enhance comparative research and practical application (Troise et al., 2022).
- **Stakeholder and Ecosystem Perspectives:** Most research privileges the firm or destination; broader networks, ecosystem relationships, and multi-level governance structures remain underexplored, as do the societal and cultural impacts of disruption, beyond immediate business outcomes (Buhalis, Leung, & Lin, 2023).
- **Longitudinal and Processual Studies:** There is a scarcity of longitudinal research exploring how capabilities and business models evolve before, during, and after disruption. Studies that track adaptation strategies over time would illuminate the processes driving resilience and transformation (Aldao et al., 2021).
- **Social Equity and Inclusion:** Issues of digital divides, job displacement, inclusion of marginalized groups, and ethical implications of technological adoption need much deeper investigation to advance both academic debate and policy development.

CONCLUSION

This study set out to examine the persistent and multifaceted disruptions shaping the contemporary tourism business environment, with a focus on understanding how external shocks intersect with

internal firm strategies and adaptation capacities. Drawing on a systematic review of recent literature and structured by the TCCM framework, the analysis identified a constellation of technological, regulatory, economic, ecological, and sociocultural disruptions that rarely act in isolation but instead produce complex, interdependent challenges for tourism organizations. The findings demonstrate that the ability to withstand and adapt to these shocks increasingly hinges on firms' digital maturity, organizational agility, and innovation capacity, which collectively underpin their resilience and capacity to transform business models in real time.

The research makes both theoretical and practical contributions by clarifying the interplay between systemic volatility and firm-level adaptation. It underscores the necessity of moving beyond reactive crisis management toward anticipatory, strategic reconfiguration, informed by integrated theoretical perspectives. For practitioners, the study highlights the value of investing in digital infrastructure, fostering organizational flexibility, and building collaborative networks as essential pathways to competitiveness in an environment defined by relentless change. Policymakers are encouraged to support these efforts through policies that promote digital inclusion, policy flexibility, and ecosystem-wide resilience—including among small and medium enterprises that often lack adaptive resources.

The review offers a broad and integrative perspective, but it is limited by the scope of its evidence base and the field's evolving nature, with certain geographical and sub sectoral contexts still underrepresented in current research. Future studies would benefit from more longitudinal investigation, standardized approaches to measuring key adaptive capabilities, and a deeper exploration of social inclusion and equity in the evolution of disruptive tourism landscapes.

In closing, this work affirms that disruption is not an occasional event but an ongoing reality in tourism, demanding continuous innovation and the cultivation of resilience at every level. By forging new connections between theory and practice, this study aims to lay the groundwork for a more robust, agile, and sustainable future for the global tourism sector.

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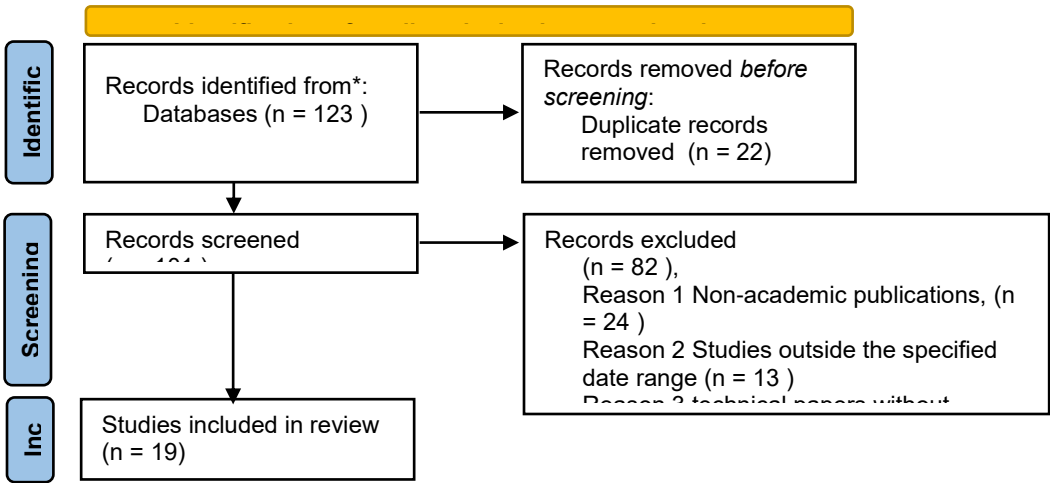
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APPENDIX 1

PRISMA 2020 flow diagram for new systematic reviews



Source: Page MJ, et al. BMJ 2021;372:n71. doi: 10.1136/bmj.n71.