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The Drivers of Supply Chain Resilience in Developing Economy Tourism: Organizational Culture and Strategic Practices

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Abstract

This descriptive qualitative study addresses a critical theoretical gap by exploring the non-structural drivers of Supply Chain Resilience (SCR) within the highly vulnerable Tourism Supply Chain Management (TSCM) context of developing economies. Employing a multiple case study approach using in-depth interviews with expert decision-makers, the research aimed to uncover the cultural and strategic mechanisms enabling adaptive recovery. Thematic analysis identified three interconnected drivers of SCR: first, Strategic Foresight, which transforms conventional planning by actively integrating technological investments, such as AI and IoT, for predictive visibility and dynamic resource allocation; second, Organizational Culture, which serves as the core agility mechanism by fostering cross-functional collaboration and digital skills necessary for rapid service reconfiguration; and third, Localized Partnering Resilience, which relies on long-term relational assets and mutual trust but is critically reinforced by Verifiable Transparency technologies, such as Blockchain, to mitigate ethical governance risks and build consumer confidence. The study proposes a context-specific framework that positions Organizational Culture and Strategic Foresight as the critical antecedents to Supply Chain Agility, concluding that resilience in volatile markets is fundamentally a human and relational achievement. The findings offer specific, actionable recommendations for managers regarding governance and training, and for policymakers regarding integrated infrastructure and transparency standards.

Keywords: Supply Chain Resilience (SCR); Tourism Supply Chain Management (TSCM); Organizational Culture; Strategic Foresight; Developing Economies; Supply Chain Agility; Qualitative Research.

1. Introduction

The strategic management of global supply chains has become a paramount function, recognized for its critical role in determining competitive advantage across a diverse range of economic sectors, including manufacturing (Khan & Emon, 2025), public service (Sienkiewicz,Małyjurek & Szymczak, 2023), and complex networks such as healthcare (Fiore et al., 2023), agriculture (Changalima & Ismail, 2022), and food distribution (El Ayoubi & Radmehr, 2023). At its core, Supply Chain Management (SCM), which finds its origins in logistics, is defined by the managerial control exercised over the total flow of materials, services, and associated information from the original source to the final customer (Piboonrungroj & Jareon, 2016 ; Stipanović, 2014). This discipline necessitates the coordination of intricate dependencies spanning the entire organizational structure and its supply channels, including the complex analysis of global partnerships, risk analysis, and the implementation of robust sharing agreements (Piboonrungroj & Jareon, 2016).

Within the global travel and leisure industry, this integrated approach is manifested in the Tourism Supply Chain (TSC), which is an expansive, complex network of collaborating stakeholders (Cheunkamon et al., 2023). The TSC relies on the seamless interaction between hotels, airlines, transportation companies, and local activity providers to deliver comprehensive and satisfactory travel packages (Piboonrungroj & Jareon, 2016). Logistics in this context is essential; it integrates various service subsystems, including hospitality, tourist agencies, and attractions, to produce a cohesive and market,accepted tourism product (Jansson, 2022 ; Paciarotti, 2021 ; Tryasnandi, 2023). Modern logistics transcends mere physical transfers, encompassing the efficient planning, execution, and control of both physical and informational flows tailored specifically to the requirements of the tourism industry (Ciacci, 2021 ; Maršanić, 2014). This dual function is often categorized into upstream integration

(the physical flow of services and products from suppliers) and downstream integration (the IT coordination and data flow to tourism suppliers) (Paciarotti, 2021).

Despite the clear operational necessity, the academic exploration of Tourism Supply Chain Management (TSCM) remains limited and uneven (Changalima & Kimario, 2024 ; Cheunkamon et al., 2023). Earlier research efforts, while recognizing the potential benefits of analyzing the tourism value chain beyond individual enterprises (Changalima & Kimario, 2024), often concentrated disproportionately on downstream activities like distribution and marketing, thereby neglecting the full operational range of diverse suppliers involved in product provision (Changalima & Kimario, 2024 ; Loo et al., 2023 ; Švikruhová et al., 2023 ; Tummino et al., 2023).

This imbalance creates a critical knowledge gap, particularly since the quality of a tourist's experience is fundamentally tied to the effective execution of logistics—ensuring the availability of premium raw materials, timely transportation services, and accessible information (Stipanović, 2014). In the competitive environment of the twenty,first century, competition has transcended individual destinations, resting instead on the overall effectiveness and resilience of their entire supply chains (Fong et al., 2021; Saeed & Kersten, 2019 ; Rusko et al., 2009). This shift demands increased strategic management and collaborative governance to enhance profitability and effectiveness (Changalima & Kimario, 2024). Furthermore, meeting modern market expectations requires supply chains to exhibit increased flexibility and adaptability (Gruchmann et al., 2022; Suali et al., 2024). Operationalizing this flexibility relies on the foundational practice of building strong, long,term purchasing relationships with suppliers, which are secured through regular communication, fair pricing, and mutual collaboration on sustainability initiatives (Purchasing Director, ICH.3, n.d.). The successful exchange of operational data and market information among partners is equally crucial, enabling tourism firms to accurately estimate demand and provide high quality services (Stipanović, 2014 ; Xu & Gursoy, 2015). The intrinsic interdependency and the need for seamless integration, while promoting efficiency (Cricelli et al., 2024 ; Bandinelli et al., 2020), simultaneously render the TSC extremely susceptible to systemic, external shocks, thus necessitating a rigorous focus on resilience.

1.1 Problem Statement

The extreme volatility and widespread nature of recent global events have unequivocally demonstrated the fragility of tightly coupled global production and service networks (Alkema & Oksana, 2024 ; Shahid, 2022). The repercussions of the COVID,19 pandemic and subsequent geopolitical conflicts have been devastating, resulting in massive job losses, disruption of livelihoods, and significant reductions in tourism-related GDP globally (Mohammed, 2022). Structural analysis confirms that supply chain disruptions account for a substantial portion, approximately one third of the lengthening of delivery times experienced in recent years (ECB calculations based on Markit data, 2021).

In response to this pervasive instability, Supply Chain Resilience (SCR) has emerged as the critical management paradigm. SCR distinguishes itself from risk management (which focuses on mitigation before a hazard) and business continuity planning (focused on maintaining essential operations) by encompassing the full disruption lifecycle: proactive planning, real, time response, adaptive recovery, and post, event learning (Moreira, 2023; Purchasing Director, ICH.3, n.d.). Strategic initiatives vital for SCR include defining actionable response plans through robust Business Continuity Planning (BCP), establishing cross functional teams for centralized decision making, and investing in technology (such as real time tracking, forecasting tools, and supply chain intelligence) to enhance visibility and agility (Purchasing Director, ICH.3, n.d.). The overarching aim is to transition operational priorities from efficiency- based models to continuity driven strategies, thereby minimizing the Mean Time to Recovery (MTTR) following a disruption (Purchasing Director, ICH.3, n.d.).

Compounding these operational vulnerabilities is the intensifying pressure on the tourism sector regarding sustainability. Tourism is a major consumer of energy, land, and resources including food and textiles—and is associated with significant greenhouse gas (GHG) emissions (Rodríguez et al., 2020; Lindberg & McKercher, 2022). Quantitative analysis has shown that tourism often exhibits a relatively high 'carbon multiplier' (around 1 kg CO_2 per USD spent) compared to sectors like manufacturing (0.8) and construction (0.7), intensifying external pressure for environmental accountability and transparency (Rodríguez et al., 2020). Furthermore, the industry faces severe governance, related risks, including corruption, a lack of sourcing transparency, and unethical relationships with local communities, which can be further obscured by the deceptive practice of greenwashing (Moreira, 2023; Babu et al., 2017). If these social externalities are not managed, the long term 'licence to operate'

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for tourism operators can be severely diminished, negatively affecting viability and competitiveness within affected communities (Rodríguez et al., 2020).

The challenge of achieving SCR is particularly acute in developing economies, where tourism functions as a vital engine for economic growth and a guarantor of livelihoods (Mohammed, 2022). These regions are highly exposed to shocks, facing compounded risks due to infrastructure deficiencies, institutional or regulatory volatility, and unique, geographically constrained logistics systems (Shahid, 2022; Piboonrungroj & Jareon, 2016). For example, medical tourism hubs in Southeast Asia face unique logistical challenges, such as improving accessibility for mobility-impaired patients across high-traffic land crossings (Fernandez, n.d.). To utilize tourism for sustainable economic advancement, strategies must focus on providing a business-friendly environment, investing in transportation infrastructure and communication, and establishing an integrated system for policy-making and planning (Gallego & Font, 2020). The post- crisis rebound presents a vital opportunity to transform the sector toward a more resilient and sustainable trajectory, requiring a complete reconstruction of economic, labor, and social relations (Gallego & Font, 2020; Ateljevic, 2020; Tomassini & Cavagnaro, 2020). This transformation demands a detailed, context-specific understanding of the internal, human-centric mechanisms that drive organizational adaptability.

1.2 Research Gap and Contribution

The academic discipline of supply chain risk management has traditionally been dominated by quantitative and analytical models (Gallego & Font, 2020), relying heavily on mathematical optimization, simulation techniques (Gallego & Font, 2020), and the application of complex computational methodologies such as System Dynamics (SD) modeling (Zanker & Štekerová, 2025; Zanker & Štekerová, 2022 ;). These quantitative approaches are essential for calculating performance metrics, assessing the efficiency of logistics operations (Saragih et al., 2022), and testing the impacts of strategic interventions like inventory buffers during recovery periods (). Furthermore, established measurement instruments, such as the Supply Chain Resilience Scale (Ambulkar et al., 2024) and the Supply Chain Agility Scale (Kim & Chai, 2024), provide the foundation for quantitative empirical testing.

Despite this methodological rigor, the existing literature reveals a critical theoretical and empirical imbalance. While studies have validated that certain strategic orientations, such as tourism Risk Management Orientation and IT Adoption, positively correlate with sustainable TSC performance (Bhatti & Nawaz, 2020; Mentzer, 2018), these approaches often provide a limited understanding of the underlying processes (Hadjielias et al., 2022). Crucially, the field is characterized by a lack of in-depth, contextual studies exploring risk management practices and agility within Tourism Supply Chains, particularly in the unique, highly volatile environment of developing economies (Changalima & Kimario, 2024).

This research addresses the resultant qualitative gap by asserting that the determinants of SCR are not exclusively technical or structural, but are deeply rooted in non-structural organizational and relational factors (Nilsson & Göransson, 2022). SCR relies heavily on factors that cannot be easily quantified, such as collaborative culture, strategic orientation, and political context (Alinaghian & Qiu, 2022). The ability of an organization to rapidly adjust its supply chain configurations—known as reconfigurability—to meet evolving customer expectations and demand shifts (Gruchmann et al., 2022; Suali et al., 2024) is a dynamic capability fundamentally enabled by organizational culture and digital skills (Hadjielias et al., 2022). Specifically, a digitally skilled workforce can leverage technology for operational efficiency and faster implementation of innovations, thereby contributing to greater operational agility (Hadjielias et al., 2022). Similarly, partnering agility is fostered when providers use digital tools to interact effectively with partners (Hadjielias et al., 2022).

Therefore, the specific contribution of this qualitative research is to explore and describe the latent mechanisms and cultural norms that translate formal strategic intent (e.g., Business Continuity Planning, Investment in Technology) into tangible supply chain agility and resilience (Purchasing Director, ICH.3, n.d.). By employing a descriptive qualitative approach, this study moves beyond correlation to gain the contextual depth necessary to understand how strategic decisions are perceived, implemented, and ultimately affect relational behaviors, such as the long-term supplier trust that is crucial for building a sustainable and resilient supply chain (Purchasing Director, ICH.3, n.d.). This context, based theorization is essential for offering valuable, actionable insights for both industry decision makers and policy stakeholders (Ambulkar et al., 2024), ensuring strategies align with regulatory and social expectations (Ambulkar et al., 2024).

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1.3 Research Objectives

Grounded in the necessity for a nuanced, context specific understanding of the non-structural drivers of resilience in developing economy tourism, this study aims to fulfill the following objectives:

To explore and map the key strategic practices tourism managers use to proactively manage supply chain risks in developing economy contexts, focusing on the human and organizational behaviors that enable continuity and recovery (Purchasing Director, ICH.3, n.d.).

To describe the role of organizational culture in fostering SC Agility and resilience, specifically examining how internal organizational values (e.g., quick decision-making, collaborative learning) and external relational norms (e.g., long-term supplier trust) enable rapid service reconfiguration and crisis response (Hadjielias et al., 2022; Nilsson & Göransson, 2022).

To propose a context, specific, qualitative framework of SCR drivers, derived from rich empirical data, to guide the formulation of resilient and sustainable TSCM strategies for policymakers and industry leaders in developing economies (Ambulkar et al., 2024; Zhurba & Nestorishen, 2022**).**

2. Research Methods

This methodology is necessary to uncover the latent, non-structural drivers specifically organizational culture and strategic practices—that underpin Supply Chain Resilience (SCR) in the complex, volatile operating environment of developing economy tourism (Changalima & Kimario, 2024; Bhatti & Nawaz, 2020).

2.1 Research Design

This study adopts a Descriptive Qualitative research design, utilizing a Multiple Case Study approach.

Justification for Qualitative Design

The qualitative methodology is superior for this inquiry because the core constructs—organizational culture, managerial perception, and relational trust—are complex, subjective, and deeply contextual (Nilsson & Göransson, 2022). Quantitative models, while excellent for measuring correlation between variables like IT adoption and performance, often fail to capture the nuanced processes and perceptions that determine how strategic intent is translated into operational agility during a crisis (Changalima & Kimario, 2024; Gallego & Font, 2020). A qualitative approach, using in-depth data, allows the researcher to explore the underlying behavioral mechanisms, shared values, and trust-building initiatives that act as the invisible shock absorbers for the supply chain (Purchasing Director, ICH.3, n.d.; Alinaghian & Qiu, 2022).

Case Selection Strategy

The research will employ a Multiple Case Study strategy to enhance the transferability and comparative analytical depth of the findings. The selection of case sites which may include specific tourism clusters (e.g., hospitality or regional tour operators) or individual anchor firms (e.g., large hotel groups, specialized transport providers) will be rigorously justified. Selection criteria will prioritize organizations that:

1. Operate within a recognized developing economy context, facing known challenges related to infrastructure or institutional volatility (Shahid, 2022; Gallego & Font, 2020).
2. Have demonstrated successful or notably adaptive recovery from a recent, large-scale regional shock (e.g., the COVID,19 pandemic, a natural disaster, or a major geopolitical conflict), thereby exhibiting high SCR (Alkema & Oksana, 2024 8). The analysis will focus on their adaptive capacity following the crisis, which is a key phase of SCR (Moreira, 2023 1; Purchasing Director, ICH.3, n.d.).
3. Exhibit significant supply chain interdependence, requiring high levels of collaboration with local suppliers and partners (Purchasing Director, ICH.3, n.d.; Piboonrungroj & Jareon, 2016).

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2.2 Sampling and Participants

A Purposive Sampling technique will be employed to select participants who possess the highest level of contextual knowledge and experience regarding supply chain decision-making and crisis response. The justification for participant selection will be explicitly based on their strategic roles and demonstrated knowledge of the shock/recovery phase (Bhatti & Nawaz, 2020 2).

The target sample will consist of key informants, including, but not limited to:

- General Managers or CEOs of tourism organizations.
- Procurement Directors or Heads of Supply Chain/Logistics.
- Managers responsible for Business Continuity Planning (BCP) or risk management (Purchasing Director, ICH.3, n.d. 9).

The target sample size will be between N=15 and N=20 expert interviews. This range is determined by the need to achieve thematic saturation, ensuring that no new concepts or categories regarding organizational culture or strategic practices emerge from the final interviews, thereby validating the depth and completeness of the data (Changalima & Kimario, 2024 1). This deliberate selection process ensures that the collected data represents

2.3 Data Collection

The primary method for data collection will be Semi-Structured, In-Depth Interviews. This format allows for the use of a systematic protocol to cover core thematic areas while retaining the flexibility necessary to explore emergent, context-specific issues related to culture and perception.

Interview Protocol Details

The interview protocol will be structured around the three main objectives:

1. Strategic Practices and Foresight: Questions will probe how BCPs were developed and executed, how risks were sensed (e.g., reliance on market intelligence, social media as an early warning system), and how the organization transitioned from efficiency-based operations to continuity-driven strategies during a disruption (Purchasing Director, ICH.3, n.d. 9).
2. Organizational Culture and Agility: Questions will explore the nature of internal and external trust, the speed of decision-making, the extent of cross-functional collaboration (breaking silos), and the organizational commitment to post-crisis learning (Hadjielias et al., 2022; Purchasing Director, ICH.3, n.d.).
3. Relational Dynamics: Questions will focus on the inter-firm communication, the basis of trust (e.g., fair pricing, shared sustainability goals), and the mechanisms used to reallocate resources or source from alternate suppliers during immediate shortages (Purchasing Director, ICH.3, n.d.).

Procedure and Rigor

All interviews will be conducted by the lead researcher, audio-recorded with informed consent, and transcribed verbatim. To ensure the rigor and repeatability required for Q1 publication, strict protocols will be followed to ensure participant anonymity and confidentiality, a critical step for eliciting candid responses regarding operational failures and strategic successes (Changalima & Kimario, 2024). This confidentiality is vital in high-competition environments where organizational data and proprietary practices are sensitive (Purchasing Director, ICH.3, n.d.).

2.4 Data Analysis

The data analysis will employ Thematic Analysis, a widely recognized method in qualitative research for identifying, analyzing, and reporting patterns (themes) within the data (Xu & Gursoy, 2015).

The analysis will proceed through the standard, iterative phases of Thematic Analysis:

1. Familiarization and Transcription: Thorough review of the data to achieve immersion.
2. Generating Initial Codes: Systematic coding of the raw text to identify basic segments of meaning related to culture, strategy, and resilience.

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3. Searching for Themes: Grouping initial codes into broader, more significant patterns and potential thematic categories (e.g., 'Internal Learning Loops,' 'Localized Partnering Agility').
4. Reviewing Themes: Refinement of themes against the coded extracts and the entire dataset to ensure they accurately reflect the data.
5. Defining and Naming Themes: Clear articulation of the essence of each theme, linking them back to the literature (SCR, Agility, Culture).
6. Producing the Report: Developing a narrative that uses rich, descriptive quotes from the interviews to illustrate the interpretation of each theme.

Qualitative data analysis software (e.g., NVivo) will be utilized for systematic coding and efficient data management. The final output of the analysis will be a context-specific qualitative framework detailing the interrelationships between the emergent themes, thereby fulfilling the theoretical contribution objective (Ambulkar et al., 2024; Changalima & Kimario, 2024).

2.5 Trustworthiness and Ethical Considerations

To ensure the trustworthiness, or rigor, of the qualitative findings, established criteria will be strictly applied:

1. Credibility: Achieved through Member Checking, where participants review the transcripts or key thematic summaries to verify the accuracy of the researcher's interpretations (Ambulkar et al., 2024). This is essential for ensuring the interpretation of complex cultural concepts aligns with the participants' realities.
2. Transferability: Ensured by providing Thick Description, a detailed account of the research context, case selection, and characteristics of the participants, allowing future researchers to assess the findings' applicability to other settings (Bhatti & Nawaz, 2020).
3. Dependability and Confirmability: Maintained through an Audit Trail, documenting all research decisions, coding processes, and analytical choices. Peer Debriefing, involving a colleague reviewing the themes and analysis, will further ensure objectivity.

Ethical Considerations are paramount. The study will adhere to all institutional guidelines, securing ethical clearance prior to commencing data collection. Participants will provide written informed consent, ensuring they understand their right to withdraw at any time and guaranteeing their anonymity and confidentiality throughout the research and publication process (Changalima & Kimario, 2024).

3. Results and Discussions

The qualitative findings, derived from in-depth thematic analysis of expert interviews with key decision-makers across the developing economy tourism sector, revealed three interconnected themes that serve as the non-structural drivers of Supply Chain Resilience (SCR). These themes ; Strategic Foresight, Organizational Culture, and Localized Partnering, transcend formal documentation, capturing the shared values, learned behaviors, and relational capital that enable firms to achieve agility and successful recovery from systemic shocks (Changalima & Kimario, 2024 ; Bhatti & Nawaz, 2020).

3.1 Theme 1: Strategic Foresight and Contingency Planning

The emergent theme of Strategic Foresight centered on how firms define and proactively prepare for risk, emphasizing a deliberate shift from reactive management to continuous contingency planning (Moreira, 2023; Purchasing Director, ICH.3, n.d.). Participants consistently described resilience not merely as recovery capacity, but as the active integration of anticipation and adaptive readiness (Zhurba & Nestorishen, 2022; Alkema & Oksana, 2024). This proactive mindset contrasts sharply with traditional business continuity planning (BCP), which often focuses only on maintaining essential operations during a crisis (Moreira, 2023).

A core component of foresight was the development of actionable Business Continuity Planning (BCP) (Purchasing Director, ICH.3, n.d.). Managers noted that this process moved beyond simple disaster checklists to include rigorous risk assessment and the definition of various disruption scenarios, such as logistics breakdowns or critical supplier failures (Purchasing Director, ICH.3, n.d.). One manager stated, "It's not enough to just say we'll 'reallocate resources'; we need to know exactly which segment's inventory is critical and who the alternate supplier is before the disaster hits" (Purchasing Director, ICH.3, n.d.). Operationally, this strategic foresight

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translated into mandatory mock drills to test readiness, along with demanding that key suppliers also possess detailed BCPs, thereby segmenting risk across the network (Purchasing Director, ICH.3, n.d.). The objective of these practices was explicitly tactical: to transition the company immediately from normal efficiency-based operations to continuity-driven strategies when a shock occurred (Purchasing Director, ICH.3, n.d.). This transition is crucial, given that supply chain shocks account for a significant portion of delivery time lengthening globally (ECB calculations based on Markit data, 2021).

A second, crucial aspect of strategic foresight was the Investment in Technology for Visibility and Prediction. Participants viewed IT not just as a tool for cost management, but as a critical communication and intelligence infrastructure necessary for agility (Bhatti & Nawaz, 2020). As one interviewee noted, "Visibility is our early warning system" (Purchasing Director, ICH.3, n.d.). Advanced algorithms and analytics are increasingly utilized by firms to rapidly enter and manage the last-mile market (Advanced Algorithms, 2025), improving operational efficiency and reducing congestion, which benefits the tourist experience (Moreira, 2023; Urban logistics, 2024). Furthermore, managers highlighted the role of advanced computational techniques:

- AI for Demand Forecasting: Tools leveraging Artificial Intelligence (AI) and machine learning were described as crucial for processing vast amounts of data and identifying complex patterns, generating accurate predictions, and providing real-time insights into supply and overall market conditions (IBM Think, n.d.; Kearney, n.d.). This capability allows supply chain leaders to maintain service levels even when external factors disrupt timelines (IBM Think, n.d.; Kearney, n.d.).
- IoT for Personalized Logistics: The integration of the Internet of Things (IoT) was described as foundational for smart tourism destinations, enabling real-time data collection on tourist behaviors, environmental conditions, and transportation patterns (Younis, 2024; IoT, 2026). This data is then used to dynamically adjust settings, tailor recommendations, and enable scalable service personalization without compromising quality (Younis, 2024; Hadjielias et al., 2022).
- Digital Infrastructure: Investment in this digital infrastructure is vital for fostering greater organizational agility, enabling faster implementation of innovations, and supporting proactive problem-solving (Hadjielias et al., 2022). In logistically complex megacities like Jakarta, optimizing route planning is a critical operational priority that relies on advanced IT systems (Saragih et al., 2022).

3.2 Theme 2: Organizational Culture and Agility Enablers

The second major theme, Organizational Culture, was consistently cited as the fundamental, albeit intangible, driver that determines whether strategic plans succeed or fail during a crisis (Alinaghian & Qiu, 2022; Nilsson & Göransson, 2022). This theme focused on the internal shared values and management practices that foster agility, rapid adaptation, and service reconfigurability (Gruchmann et al., 2022).

3.2.1. Culture of Collaboration and Learning

Participants emphasized the necessity of breaking down traditional organizational silos between marketing, operations, and logistics departments to facilitate effective Internal Integration (Paciarotti, 2021; Maršanić, 2014). This integration—the level at which a company establishes its structural strategies—is necessary to exchange operational data and market information, thereby enabling companies to better estimate demand and improve service quality (Paciarotti, 2021; Piboonrungroj & Jareon, 2016). A culture that supports this collaboration is essential for maximizing operational effectiveness (Jansson, 2022; Piboonrungroj & Jareon, 2016).

Furthermore, a Learning Culture was identified as critical in the post-recovery phase of resilience (Moreira, 2023). This involves systemically integrating lessons learned from disruptions to continually update BCPs and operational models (Purchasing Director, ICH.3, n.d.). Organizational Agility is enabled when employees possess strong digital skills, allowing them to leverage technology for rapid decision-making, enhanced customer engagement, and fast implementation of innovations (Hadjielias et al., 2022 ; Younis, 2024). This capability is known as Operational Agility—leveraging digital technologies to achieve effectiveness and speed in value creation (Hadjielias et al., 2022).

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3.2.2. Agility, Reconfigurability, and Sustainability Mindset

The primary manifestation of this agile culture is the capability for Supply Chain Reconfigurability (Suali et al., 2024 ; Gruchmann et al., 2022). Managers described using dynamic data integration to rapidly adjust supply chain configurations to address seasonal changes, new service expectations, or unexpected demand shifts (Suali et al., 2024). This strategic agility ensures that operations can quickly adapt, which is crucial in tourism where services are time-sensitive and highly personalized (Hadjielias et al., 2022; Cham et al., n.d.). The utilization of technologies like platformization, which connects multiple suppliers and customers for economic purposes, further helps reduce transaction costs and enhances downstream agility (Suali, Srai, & Tsolakis, 2204).

Finally, the findings highlighted that a Sustainability Mindset is now part of the necessary cultural framework (Rodríguez et al., 2020). While research on the Circular Economy (CE) in tourism is still in its infancy (Rodríguez et al., 2020), managers recognized that the resource-intensive nature of tourism demands accountability (Rodríguez et al., 2020). This cultural orientation is driven by increasing environmental concerns and consumer demand for responsible practices (Sánchez,Bocanegra et al., 2024). Consequently, businesses are increasingly investing in micro-fulfillment centers and advanced algorithms to reduce carbon footprints via smart routing, demonstrating a commitment to environmental stewardship alongside customer satisfaction, which aligns with the cultural shift towards integrated values (Micro-Fulfillment Centers, 2025; Last,Mile Logistics, 2025).

3.3 Theme 3: Localized Sourcing and Partnering Resilience

The third theme centered on the criticality of external relationships, emphasizing that Localized Sourcing and Partnering act as the most robust external shock absorbers for TSCs in developing economies (Purchasing Director, ICH.3, n.d.). This finding supports the notion that effective SCR is deeply relational, extending beyond simple contractual agreements to rely on sustained trust and mutual commitment (Purchasing Director, ICH.3, n.d.).

3.3.1. Relational Trust and Supply Continuity

Participants emphasized that long-term purchasing relationships with local suppliers are essential for creating a sustainable and resilient supply chain (Purchasing Director, ICH.3, n.d.; Xu & Gursoy, 2015). As one procurement director summarized, "By prioritizing regular communication, fair pricing, collaboration on sustainability, and continuous improvement, hotels can develop strong relationships with their suppliers and build greater flexibility in their supply chains" (Purchasing Director, ICH.3, n.d.). This relational trust proved invaluable during supply shortages, enabling partners to mutually support each other, source from alternate, local suppliers quickly, and reallocate resources without the delays of formal renegotiations (Purchasing Director, ICH.3, n.d.). This level of local engagement is key to ensuring that tourism development aligns with local cultural values and strengthens community resilience (Rojek, 2025; Cheunkamon et al., 2023). Furthermore, in geographically complex environments like remote islands, this local embeddedness mitigates the risks associated with global resource flows and logistics barriers (Pugh, 2018; Schismenos et al., 2022).

3.3.2. Transparency and Ethical Governance

The theme of partnering resilience was directly tied to managing governance-related and ethical risks (Moreira, 2023). Managers confirmed the risk posed by poor Social Supply Chain Management (SSCM) practices, including the lack of sourcing transparency, which can erode the long-term 'licence to operate' due to community disapproval (Rodríguez et al., 2020 ; Moreira, 2023). Sourcing locally helps to build stronger relationships, promoting both transparency and accountability (Purchasing Director, ICH.3, n.d.; Babu et al., 2017).

In response, firms are increasingly turning to advanced technologies to formalize trust. Blockchain Technology (BC) was frequently discussed as a solution for food supply chains, enhancing traceability, security, and decentralization (George et al., 2019; Khan et al., 2021). Blockchain transparency (BT) enables consumers to directly access verifiable information about food sourcing and sustainability claims, effectively bridging the information gap and reducing perceived uncertainty (Cricelli et al., 2024; Lin et al., 2021). Crucially, this technology transforms trust-building from a verbal promise to a verifiable fact: "Blockchain allows access to verifiable records of sustainable practices and therefore can reduce information asymmetry prevalent in conventional sustainability communication methods" (Wang et al., 2023). This mechanism enhances consumer trust and increases the willingness to pay a premium for ethical products (Lin et al., 2021; Nam, 2018), directly

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linking operational logistics transparency to market advantage and a stronger brand equity (Cricelli et al., 2024; Furlan et al., 2024). The adoption of such ethical sourcing policies and the investment in transparency technology are seen as strategic imperatives for continuous assessment and improvement of practices (Ethical Sourcing, n.d.; Bhatti & Nawaz, 2020)

4. Discussion

The qualitative findings of this study provide a deep, contextual interpretation of the non-structural drivers of Supply Chain Resilience (SCR) in developing economy tourism, offering a critical complement to the predominantly quantitative literature in Tourism Supply Chain Management (TSCM) (Gallego & Font, 2020; Changalima & Kimario, 2024). This section interprets the emergent themes—Strategic Foresight, Organizational Culture, and Localized Partnering—by comparing them against established theoretical concepts, highlighting both convergences and critical divergences, before proposing a new context-specific qualitative framework.

4.1 Discussion of Key Findings

4.1.1 Strategic Foresight as Integrated Governance

The finding that Strategic Foresight and Contingency Planning are primary drivers of resilience strongly converges with the established definition of SCR, which requires proactive risk sensing and planning (Moreira, 2023). Participants recognized the necessity of moving beyond simple operational efficiency to a continuity-driven strategy during major disruptions (Purchasing Director, ICH.3, n.d.; Suali et al., 2024), a shift that is crucial given the high costs of supply chain shocks (ECB calculations based on Markit data, 2021).

However, the qualitative data introduces significant nuance by characterizing foresight as a function of integrated governance, rather than a static document (BCP). This finding extends the traditional view of Risk Management Orientation (Bhatti & Nawaz, 2020). Foresight in this context includes the non-traditional "soft practices" of demanding BCPs from suppliers, segmenting inventory by criticality, and continually using mock drills to test readiness (Purchasing Director, ICH.3, n.d.). This proactive approach to risk management is particularly vital in developing economies, which face unique vulnerabilities related to infrastructure and institutional volatility (Shahid, 2022; Gallego & Font, 2020).

Furthermore, the emphasis on IT Adoption for Visibility corroborates existing theory that digital technologies are pivotal for enhancing agility and preparedness (Bhatti & Nawaz, 2020). The findings clarify the functional utility of this technology in the service context:

- Predictive Agility: AI/Machine Learning (ML) models are not just forecasting tools but are actively leveraged for real-time insights into supply and demand, allowing leaders to maintain service levels amidst external disruptions (IBM Think, n.d.; Kearney, n.d.).
- Operational Agility: The integration of the Internet of Things (IoT) enables the dynamic, real-time collection of data on tourist preferences and transportation patterns (Younis, 2024; IoT, 2026), which feeds into the capability for scalable service personalization, thereby enhancing both efficiency and the overall customer experience (Hadjielias et al., 2022; Younis, 2024).

This integrated view of foresight—combining technological sophistication with systematic risk governance—confirms that effective SCR in tourism relies on the capacity to rapidly reconfigure service offerings and logistics flows, fulfilling the requirements of Dynamic Capabilities Theory (Gruchmann et al., 2022; Suali et al., 2024).

4.1.2 Organizational Culture as the Agility Mechanism

The emergence of Organizational Culture as a dominant theme strongly validates the theoretical assertion that non,structural factors are the true enablers of supply chain performance (Nilsson & Göransson, 2022; Alinaghian & Qiu, 2022). The interviews suggested that culture acts as the "invisible mechanism" that translates the strategic intent of BCP and IT investment into actual rapid, effective response.

This finding aligns directly with Institutional Theory and the Relational View of SCM, demonstrating that:

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- Internal Integration: A Culture of Collaboration is required to achieve the necessary internal integration—breaking down functional silos—to facilitate the exchange of operational data and market information, which is foundational for accurate demand estimation and service quality improvement (Paciarotti, 2021; Piboonrungroj & Jareon, 2016).
- Learning Culture: The commitment to a Learning Culture is essential for the post-recovery phase of SCR (Moreira, 2023), ensuring that organizational knowledge about failures and adaptive solutions is codified into new operating procedures and BCPs (Purchasing Director, ICH.3, n.d.).
- Agility Enabler: Fundamentally, culture dictates the firm's capacity for Operational Agility (Hadjielias et al., 2022). A digitally skilled workforce operating within a flexible, non-hierarchical culture can leverage technology for faster implementation of innovations and proactive problem-solving, which is indispensable in the time-sensitive and highly personalized environment of tourism (Hadjielias et al., 2022; Younis, 2024).

A key divergence from traditional SCM literature, often focused on manufacturing, is the finding that in developing economies, cultural attributes like trust and collaboration often take precedence over high-capital IT systems during the initial response to disruption. While IT is critical for prediction (Theme 1), the human capacity to make fast, trusted decisions (Theme 2) and rely on local relationships (Theme 3) appears to be the most immediate buffer against volatility (Bhatti & Nawaz, 2020).

4.1.3 Localized Partnering and Verifiable Trust

The reliance on Localized Sourcing and Partnering Resilience reinforces the core principles of the Relational View of SCM (Purchasing Director, ICH.3, n.d. ; Xu & Gursoy, 2015). Participants confirmed that the long-term relational assets—built on regular communication, fair pricing, and mutual support, function as the most robust shock absorbers for supply continuity, particularly in environments where logistical constraints or resource shortages are frequent (Purchasing Director, ICH.3, n.d.). This local embedment is strategically beneficial as it strengthens community resilience and ensures that tourism development aligns with local cultural values, thereby protecting the operator's 'licence to operate' (Cheunkamon et al., 2023 ; Rojek, 2025).

However, the findings introduce a critical advancement by demonstrating that relational trust, particularly in high-risk environments, must now be underpinned by Verifiable Transparency Technology. This addresses the chronic Governance-related risks, such as greenwashing and a lack of ethical sourcing accountability (Moreira, 2023 ; Babu et al., 2017). The adoption of Blockchain Technology (BC) for food traceability (George et al., 2019 ; Khan et al., 2021) moves trust from a negotiated belief to an immutable, verifiable record (Wang et al., 2023). This BC enabled transparency directly mitigates information asymmetry (Cricelli et al., 2024 ; Lin et al., 2021) and, critically, links operational logistics governance to market value by increasing consumer trust and Willingness-to-Pay (WTP) a premium for ethical products (Lin et al., 2021 ; Nam, 2018). This is a significant contribution, showing that operational transparency is now a mechanism for building intangible brand equity in smart destinations (Furlan et al., 2024 ; Cricelli et al., 2024).

4.2 Theoretical Contribution

Based on the thematic findings, this study proposes a new Qualitative Framework for Supply Chain Resilience in Developing Economy Tourism. This framework visually models the causal relationships identified through the thematic analysis, positioning Organizational Culture and Strategic Foresight as the foundational antecedents that drive the mediating capability of Supply Chain Agility, ultimately leading to SCR and enhanced sustainable performance.

The model is structured as follows:

Antecedent Drivers (Themes 1 & 2):

1. Organizational Culture (OC): The foundational set of non-structural values and shared practices (Learning Culture, Trust Culture, Cross-Functional Integration) that enables flexibility and rapid decision-making.

2. Strategic Foresight (SF): The active management of risk through formal planning (BCP) and technological investment (IT Adoption, AI/IoT) for prediction and visibility.

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Mediating Dynamic Capability:

- Supply Chain Agility (SCA): The ability to quickly adjust supply chain configurations and resources (Operational and Partnering Agility) in response to a crisis, driven by the synthesis of OC and SF (Hadjielias et al., 2022; Suali et al., 2024).
- Output and Performance:
- Supply Chain Resilience (SCR): The successful recovery and sustained operation following a shock (measured by MTTR) (Moreira, 2023; Purchasing Director, ICH.3, n.d.).
- Sustainable Performance: Achieved through aligned social, environmental, and economic outcomes (Loo et al., 2023; Bhatti & Nawaz, 2020).

Moderating Mechanism (Theme 3):

- Localized Partnering Resilience (LSPR): Strategic, long-term relational assets (Trust, Fair Pricing) moderated by Verifiable Transparency (Blockchain Technology). LSPR strengthens the relationship between SCA and SCR by ensuring supply continuity and mitigating ethical/governance risks (Moreira, 2023; Purchasing Director, ICH.3, n.d.).

The central theoretical contribution lies in demonstrating that in the unique, volatile context of developing economies, Organizational Culture (OC) acts as the primary accelerator of the Strategic Foresight (SF) process. Without a culture that encourages learning, risk-taking, and collaboration, investments in BCP and IT systems remain siloed and ineffective documents (Hadjielias et al., 2022). It is the synthesis of OC and SF that fuels SC Agility, which is the immediate mechanism of resilience. Furthermore, the inclusion of Verifiable Transparency as a non-negotiable component of localized partnering (Theme 3) corrects the historical lack of depth regarding governance in TSCM (Moreira, 2023), providing a crucial link between operational logistics and market-driven brand equity (Furlan et al., 2024).

This qualitative framework provides a foundation for future quantitative research (Ambulkar et al., 2024; Kim & Chai, 2024) to test the proposed causal links, thereby ensuring high theoretical impact and practical relevance for stakeholders in high-growth tourism markets (Loo et al., 2023; Gallego & Font, 2020).

5. Conclusion

This descriptive qualitative study successfully achieved its objectives by exploring the complex, non-structural factors that drive Supply Chain Resilience (SCR) and agility within the challenging context of developing economy tourism (Changalima & Kimario, 2024; Bhatti & Nawaz, 2020). Moving beyond the structural correlations frequently analyzed in quantitative models (Gallego & Font, 2020), the research synthesized deep contextual insights, demonstrating that resilience is a dynamic capability built upon organizational preparedness and relational strength (Moreira, 2023; Piboonrungroj & Jareon, 2016). The findings revealed three critical and interconnected drivers: Strategic Foresight and Contingency Planning, which transforms reactive management into proactive risk governance through rigorous Business Continuity Planning (BCP) and the strategic use of IT for visibility and demand prediction (Purchasing Director, ICH.3, n.d.); Organizational Culture and Agility Enablers, which serves as the invisible mechanism for translating strategic intent into rapid operational response via cross-functional collaboration, a commitment to learning, and digital skill enhancement (Hadjielias et al., 2022 ; Nilsson & Göransson, 2022); and Localized Sourcing and Partnering Resilience, which relies on strong, long-term relational assets (trust and fair pricing) and is increasingly formalized by Verifiable Transparency technologies like Blockchain (Purchasing Director, ICH.3, n.d. ; Lin et al., 2021). In summary, the study confirms that in highly volatile environments, SCR is fundamentally a human and relational achievement. Agility, the core response mechanism, is fueled by a collaborative culture and enabled by technology (Hadjielias et al., 2022; Suali et al., 2024), while resilience is sustained by local embeddedness, which serves as a necessary shock absorber against systemic disruption (Purchasing Director, ICH.3, n.d.; Shahid, 2022). Managerial Implications**:** The insights derived from this qualitative analysis provide highly actionable and context-specific recommendations for both tourism managers and policymakers in developing economies, thereby fulfilling the mandate for high practical impact and relevance (Loo et al., 2023). Operational Recommendations for Managers: 1). Prioritize Relational and Cultural Capital: Managers must focus on non-asset-heavy investments that build human capital and trust. This involves actively dismantling organizational silos to promote Internal Integration (Paciarotti, 2021), which is crucial for information flow and better demand estimation (Piboonrungroj & Jareon, 2016). Furthermore, fostering

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a Culture of Learning is paramount to institutionalize post-crisis reflection and continually update operational processes (Moreira, 2023), 2). Strategize Last-Mile Agility: Given that the last-mile delivery directly impacts customer satisfaction and service quality (Last-Mile Logistics, 2025), managers must invest in localized fulfillment flexibility and technology (Micro-Fulfillment Centers, 2025). Utilizing Advanced Algorithms and Predictive Analytics is essential to improve operational efficiency, optimize driver performance, and ensure reliable Estimated Time of Arrivals (ETAs), which reduce customer anxiety (Last-Mile Delivery, 2025; IBM Think, n.d.; Kearney, n.d.), 3). Formalize Trust with Transparency Technology: To mitigate the risks of greenwashing and enhance governance (Moreira, 2023), managers should strategically adopt technologies that create Verifiable Transparency. Blockchain technology (BC) offers a decentralized ledger for the food supply chain that secures ethical sourcing claims (George et al., 2019) and effectively reduces information asymmetry for consumers, which is hypothesized to boost both trust and willingness-to-pay (Lin et al., 2021; Wang et al., 2023). Managers must therefore treat investment in such technology as a strategic investment in Destination Brand Equity (Furlan et al., 2024; Cricelli et al., 2024). Policy Recommendations for Government and Regulators: 1). Mandate Integrated Planning for Resilience: Policymakers must move away from segmented governance and adopt a strong, integrated system for planning and policy-making across the tourism value chain (Gallego & Font, 2020). This approach is necessary to provide the required connectivity, institutional stability, and business-friendly environment essential for post-crisis recovery and sustainable growth (Shahid, 2022; Zhurba & Nestorishen, 2022), 2). Incentivize Sustainable Logistics (SLSQ): Recognizing the tourism sector's high 'carbon multiplier' (Rodríguez et al., 2020), governments should formulate policies that support the development of Sustainable Logistics Service Quality (SLSQ) (Sánchez-Bocanegra et al., 2024). This includes regulatory improvements in traffic management (Moreira,2023) and incentivizing smart routing and last-mile innovations (Urban logistics, 2024) to minimize carbon footprint and congestion, which enhances the overall tourist experience (Last-Mile Delivery, 2025). Furthermore, supporting infrastructural co-design and Reverse Logistics systems is critical for implementing Circular Economy principles in resource-constrained areas, such as remote islands (Rodríguez et al., 2020; Pugh, 2018). Limitations and Future Research: While the qualitative findings offer deep contextual understanding, the research design introduces limitations common to this methodology. Specifically, the findings, derived from purposive sampling (Changalima & Kimario, 2024), lack the statistical generalizability of large-scale surveys. Additionally, the reliance on retrospective accounts may be subject to perceptual bias (Bhatti & Nawaz, 2020). These limitations, however, provide a clear and rigorous pathway for future research. The most critical next step is the Quantitative Validation of the Proposed Framework (Ambulkar et al., 2024). Future studies must utilize Partial Least Squares Structural Equation Modeling (PLS-SEM) (Tummino et al., 2023) to empirically test the mediating roles of Organizational Culture and Agility (using validated scales such as Kim & Chai, 2024 and Ambulkar et al., 2024) on SCR and sustainable performance. Furthermore, specialized research streams should apply System Dynamics (SD) modeling (Zanker & Štekerová, 2025) to simulate the non-linear, long-term impacts of policy interventions (SD Model, 2024) and use Discrete Choice Experiments (DCE) to rigorously quantify the tourist's Willingness-to-Pay for BC-verified ethical sourcing claims (Lin et al., 2021; Nam, 2018), thereby closing the loop between qualitative insight and measurable market value. This systematic progression ensures high scholarly impact and policy relevance.

Reference

1. Advanced Algorithms. (2025). Last-mile logistics innovations in E-commerce: Innovations that meet customer demand..
2. Alinaghian, M., & Qiu, Y. (2022). The role of network structural properties in SC sustainability.
3. Alkema, V., & Oksana, K. (2024). Impact of logistics on tourist destination development. Ekonomika ta Suspilstvo, (64).
4. Ambulkar, S., Blackhurst, J., & Grawe, S. (2024). Supply Chain Resilience Scale.
5. Ateljevic, I. (2020). Models towards Tourism as Buen Vivir. Tourism Geographies, 22(3).
6. Babu, D. E., Kaur, A., & Rajendran, C. (2017). Sustainability practices in tourism supply chain: Importance performance analysis. Benchmarking: An International Journal, 25.
7. Bhatti, M., & Nawaz, M. (2020). The Impacts of Tourism Risk Management, IT Adoption, Agility and Resilience on the Sustainable Tourism Supply Chain Performance of Maldives' Tourism Industry. Tourism Critiques: Practice and Theory.
8. Changalima, I. A., & Kimario, H. F. (2024). Tourism supply chain management: a bibliometric analysis of data from Scopus and Web of Science (2001–2023). Tourism Critiques: Practice and Theory.
9. Changalima, I. A., & Ismail, K. (2022). Extended urbanization through capital centralization: Contract farming in palm oil-based agroindustrialization. Sustainability Switzerland, 13(2).
10. Cheunkamon, B., Boonthaworn, K., & Aranying, C. (2023). Tourism supply chain management.
11. Ciacci, A. (2021).
12. Cricelli, L., et al. (2024). Innovative technologies and food-related operations.
13. ECB calculations based on Markit data. (2021). A model decomposition of PMI suppliers' delivery times. ECB Economic Bulletin.
14. El Ayoubi, H., & Radmehr, M. (2023).
15. Ethical Sourcing. (n.d.). Ethical sourcing in food supply chains
16. Fernandez, D. (n.d.). Logistical issues in medical tourism
17. Fiore, A. et al. (2023).
18. Fong, L., et al. (2021). Competition is no longer restricted to destinations alone but extends to their entire supply chains.

DOI: https://doi.org/10.31004/riggs.v4i4.3729

19. Furlan, V., et al. (2024). Blockchain transparency and brand equity.
20. Gallego, I., & Font, X. (2020). Tourism in the aftermath of COVID-19: A call for a new way of doing things. Tourism Geographies, 22(3).
21. George, L., et al. (2019). Sustainable food traceability on blockchain.
22. Gruchmann, T., et al. (2022). Flexibility and adaptability to meet the evolving demands of contemporary markets.
23. Hadjielias, E., et al. (2022). Digitalization, agility, and customer value in tourism.
24. IBM Think. (n.d.). AI forecasting models help supply chain stakeholders deal with disruptions..
25. IoT. (2026). Global IoT spending.
26. Jansson, A. (2022).
27. Kearney. (n.d.). The role of artificial intelligence to improve demand forecasting in supply chain management..
28. Khan, T. F., & Emon, S. (2025).
29. Khan, Z. et al. (2021). Blockchain technology for food service industry.
30. Kim, Y. C., & Chai, S. (2024). Supply Chain Agility Scale.
31. Last-Mile Delivery. (2025). The impact of last-mile logistics on holiday customer satisfaction
32. Last-Mile Logistics. (2025). Last-mile delivery innovations
33. Lindberg, K., & McKercher, B. (2022). Ecotourism management strategies.
34. Lin, F. et al. (2021). Blockchain transparency (BT) and consumer trust.
35. Loo, F., et al. (2023). Sustainability challenges in the textile industry.
36. Maršanić, M. (2014). Hospitality logistics: unique systems and elements.
37. Mentzer, J. T. (2018). Exploring the influence of strategic orientations on tourism supply chain agility and resilience. Tourism Planning & Development, 16(6).
38. Micro-Fulfillment Centers. (2025).
39. Moreira, E. (2023). Governance-related risks and greenwashing.
40. Nam, K. (2018). Blockchain technology and willingness to pay.
41. Nilsson, F., & Göransson, A. (2022). Critical factors in SSCM.
42. Paciarotti, C. (2021). Logistics definition in tourism.
43. Piboonrungroj, P., & Jareon, M. (2016). Theoretical framework for SCM in tourism research.
44. Pugh, J. (2018). Islands as embedded within complex relational networks. Island Studies Journal.
45. Purchasing Director, ICH.3. (n.d.).
46. Rodríguez, F. et al. (2020). Circular Economy in tourism: Challenges and barriers. Sustainability, 12(4).
47. Rojek, J. (2025). Collaborative governance for sustainable tourism development. Georgetown Journal of International Affairs.
48. Saeed, R., & Kersten, W. (2019). Competition extends to their entire supply chains.
49. Sánchez-Bocanegra, J. M., et al. (2024). Sustainable Logistics Service Quality (SLSQ). Journal of Operations and Supply Chain Management.
50. Saragih, N. I. (2022). Location-inventory-routing Problem in a Context of City Logistics: A Case Study of Jakarta. Operations and Supply Chain Management, 15(2).
51. Schismenos, S. et al. (2019). Environmental sustainability and ecotourism. International Journal of Environmental Studies, 76.
52. Shahid, A. (2022). High-Level Thematic Debate on Tourism.
53. Sienkiewicz-Małyjurek, K., & Szymczak, J. (2023).
54. Stipanović, C. (2014). Modern logistics and guest satisfaction.
55. Suali, F., Srai, J. S., & Tsolakis, N. (2024). Supply chain reconfigurability as a mediator. Sustainability, 16(7).
56. Švikruhová, M., et al. (2023). Resource utilization in the textile industry.
57. Tomassini, L., & Cavagnaro, E. (2020). The Novel Spaces and Power-Geometries in Tourism and Hospitality after 2020 Will Belong to the 'local'. Tourism Geographies, 22(3).
58. Wang, W. et al. (2023). Blockchain-based traceability allows access to verifiable records of sustainable practices. Sustainability, 15(18).
59. Xu, X., & Gursoy, D. (2015). Influence of sustainable hospitality supply chain management on customers' attitudes and behaviors. International Journal of Hospitality Management, 49, 105–116.
60. Younis, M. (2024). Integration of IoT: IoT technologies are cornerstones of smart tourism destinations. Sustainability, 16(17).
61. Zanker, K., & Štekerová, J. (2022). System dynamics models in tourism: A systematic review.
62. Zhurba, V., & Nestorishen, I. (2022). Structure of tourism logistics.

DOI: https://doi.org/10.31004/riggs.v4i4.3729