



# Destination resilience and transformations in the tourism sector: new tendencies in destination development and management

Resiliência dos destinos e transformações no sector do turismo: novas tendências no desenvolvimento e gestão de destinos

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### **Abstract**

The world is increasingly changing, with climate change, pandemics, and wars becoming key factors. The recent pandemic devastated the tourism industry, leading to a sudden collapse of the global tourism economy. Historically disastrous situations are well known for their impact on innovations and technological advances. Therefore, in light of the idea that disasters can act as catalyst for innovation and transformation, the researchers attempted to conceptualise new strategies in destination development and management from a perspective of tourism destination resilience. The findings contribute to research and policy-making and culminate in identifying six dimensions, namely technology and digitalisation, business model innovation, partnerships and coordination, tourist behaviour, domestic tourism. and sustainability, that illuminate innovative and transformative tendencies in tourism resilience. The study's outcomes offer comprehensive knowledge for policymakers, business planners, and students describing the use of innovative ideas and resilience strategies to adapt to and counter sudden disasters and adopt transformational shifts in business.

Keywords: Destination Resilience, Destination Development and Management, Innovations, Tourism Transformations, Conceptual Research, Qualitative Study.

#### Resumo

O mundo está a mudar, com alterações climáticas, pandemias e guerras a tornarem-se fatores-chave. A recente pandemia devastou a indústria do turismo, levando a um colapso da economia mundial do turismo. Historicamente, as situações de catástrofe são bem conhecidas pelo seu impacto nas inovações e nos avanços tecnológicos. Por conseguinte, à luz da ideia de que as catástrofes podem atuar como catalisadores da inovação e da transformação, os investigadores tentaram concetualizar novas tendências no desenvolvimento e na gestão de destinos turísticos, numa perspetiva de resiliência. Os resultados contribuem para a investigação e a elaboração de políticas e culminaram na identificação de seis dimensões, nomeadamente a tecnologia e a digitalização, a inovação do modelo empresarial, as parcerias e a coordenação, o comportamento do turista, o turismo interno e a sustentabilidade, que realçam as recentes tendências inovadoras e transformadoras na resiliência do turismo. Os resultados do estudo oferecem um conhecimento abrangente aos decisores políticos, gestores e estudantes através da utilização de ideias inovadoras e estratégias de resiliência para se adaptarem e adotarem mudanças transformacionais.

Palavras-chave: Resiliência do destino, Desenvolvimento e gestão de destinos, Inovações, Transformações no Turismo, Investigação concetual, Estudo qualitativo.

# 1. Introduction

The swift spread of the coronavirus from a small corner of China to across the globe, primarily because of international travel (Khan, 2021), resulted in dire consequences for the tourism industry (Abou-Shouk et al., 2023; Erul et al., 2023). The period after the virus outbreak in the world could rightly be referred to as the "darkest time" for the global tourism sector in recent history. During the outbreak, international travel remained wholly suspended for a long time, implying a broader collapse of the global tourism economy (Abdelazimahmed et al., 2022; Ahmad, 2023). Pre-pandemic, i.e., in 2019, the United Nations World Tourism Organization (UNWTO) forecasted a 4% increase in international tourist arrivals worldwide. However, the pandemic outbreak prompted the UNWTO to revise its projections, leading to a staggering 30% decline in global arrivals by 2020. By this time, all nations throughout the globe had to enforce travel restrictions, with 27% of countries fully closing their borders to foreign visitors (Jiang et al., 2021). This resulted in a significant loss of approximately 300-450 billion USD for the global tourism sector (Casado-Aranda et al., 2021;

Among all the commercial sectors hit badly by the COVID outbreak, tourism became the "hardest hit" due to the complete halt of the transportation system (Abbas et al., 2021; Mohammed Said Al-Mughairi et al., 2021; Popovici & Popovici, 2021). The designation as the 'hardest-hit sector' had far-fledged consequences, and the United Nations estimates that the pandemic posed significant risks to about 100 million direct jobs and livelihoods (UN, 2020). Hence, the pandemic resulted in grave consequences for all tourism businesses, stakeholders and destinations that were ill-prepared for this inconceivable disaster (Al-Ababneh et al.,



2022; Unguren & Arslan, 2022; Lincényi & Bulanda, 2023). Regardless, while many tourism business operations succumbed to the pandemic, others slowly recovered post-pandemic, putting into use necessary changes in their operations with strategic innovations.

This study explores such innovations and the growing importance of resilience as a research topic (Yang et al., 2021). Ample research documents, innovative ideas, strategies, business models, and technologies create a strong correlation with various forms of resilience (Buliga et al., 2016; Carayannis et al., 2014; Hills et al., 2018; Subramanya et al., 2023; Valdez-Juárez et al., 2022). Interestingly, throughout history, disease outbreaks and pandemics have also been known for prompting economic and societal changes (Hall et al., 2020). Chan, Nozu, and Zhoy (2021) assert that post-disaster recovery triggers the creation of new products, enrichment of local knowledge, improvement of image, and formation of new collaborations.

The sheer scale of the COVID-19 crisis has indeed necessitated a global transformation of the tourism sector (Kuščer et al., 2022). The pandemic initiated the emergence of numerous innovative ideas within the tourism industry, enhancing resilience (Yang et al., 2021). More robust recovery prospects were anticipated through technological advancements, novel intra-destination collaborations, and innovative programs (Mirehie & Cho, 2021). Resilience management emerged as a crucial element in the tourism sector recovery process from the setbacks created by COVID-19 (Mirehie & Cho, 2021; Ruppenthal & Rückert-John, 2024). As a result, scholars have emphasised the need to investigate innovations and transformational shifts due to COVID-19 (Yang et al., 2021). It is even suggested that future research on COVID-19 and the tourism sector should adopt a holistic approach, examining interconnected aspects of the pandemic (Zenker & Kock, 2020).

Using an exploratory and conceptual research paradigm (Kirillova & Yang, 2022; Lawrence Neuman, 2014; Patten & New, 2017), this study focuses on the synthesis of innovative ideas, strategies, business models, and transformational shifts in tourism that have taken place in the tourism sector recently. The findings are conceptually categorised into six dimensions that have emerged as significant with regard to changes in tourism, viz. technology and digitalisation, business model innovation, partnerships and coordination, tourist behaviour, domestic tourism, and sustainability.

### 2. Literature review

# 2.1 Crisis and Innovations

"Failure is not an option" was an agenda during the rescue mission of Apollo 13 that led NASA engineers to construct a makeshift device scrubbing CO2 in whatever resources they had on the rocket in order to save the astronauts on their way back to Earth (Clark, 2020, p. 1). Clark believes that workforces have increased motivation during a crisis and require exemplary leadership to achieve a positive goal. According to a comment by John F. Kennedy, the Chinese word for "crisis" comprises two characters: one for danger and the other for opportunity (Am et al., 2020). Bhaskara et al. (2023) also concur that crises stimulate innovation and creativity in business. Clark (2020) suggests that problem-solving is at the heart of innovation; in the past, many revolutionary innovations resulted from a single-minded focus on solving a problem (Desjardins, 2018; Kay, 2020). Problem-solving during a crisis can be seen as a window of opportunity for growth and innovation in business firms. McKinsey report reveals the dominant view of the market that nearly 75% of organisations during the COVID-19 crisis believed in the newly created growth opportunities (Am et al., 2020). This blessing-in-disguise worldview during the crisis also aligns with the "creative destruction" theory of innovation in business/organisations/firms (Archibugi et al., 2013). Authors also see a crisis as an opportunity for 'accelerated' innovation and note the significant role of collaborations (Geurts et al., 2022). While crises play a positive role in innovation, some studies also provide evidence of negative impacts on innovations due to crisis (Chen et al., 2021), apparently due to the lesser availability of resources (financial, human, infrastructural, etc.) during a crisis. Nevertheless, leading organisations still push for innovation during crises to drive resilience and recovery (Archibugi et al., 2013), and other opportunistic business startups may enter the market after observing newly created opportunities (Archibugi et al., 2013). Hence, a massive crisis such as COVID-19 presents a golden opportunity to learn firm survival and resilience (Kyrdoda et al., 2023).

# 2.2 Innovation and Resilience

Innovation in terms of technology, business models, and strategies shows a strong correlation to various forms of resilience (Buliga et al., 2016; Carayannis et al., 2014; Hills et al., 2018; Nipa et al., 2022; Valdez-Juárez et al., 2022). In its broadest applicable sense, the term resilience can be defined as "the capability and ability of an element to return to a stable state after a disruption" (Bhamra et al., 2011, p. 5376). Resilience comprises both individual and organisational responses to crisis. Innovation, defined as "a new idea, method, or device" (Merriam-Webster, n.d.), can be seen, in terms of business model innovation, as an underlying factor for enhancing resilience during a crisis (Buliga et al., 2016; Carayannis et al., 2014). Various studies confirm a stronger relationship between innovation -in terms of business models or strategies- and the resilience of organisations/businesses/banks/etc. during the COVID-19 crisis (Barbhuiya & Chatterjee, 2023; Carraresi & Bröring, 2021; Münch & Hartmann, 2023; Nipa et al., 2022; Ramdani et al., 2022; Schaffer et al., 2021; Shahidullah et al., 2020; Xia et al., 2022). Apart from business model innovation or innovative



strategies, technological innovation can be seen as an important factor in sociocultural and economic resilience and recovery from a crisis (Hills et al., 2018; Schaffer et al., 2021; Zohuri et al., 2022).

### 2.3 Tourism Destination Resilience

Tourism resilience can be seen as a foundation to achieve the "holy grail" of sustainability (Espiner et al., 2017). This new concept adds to the existing scholarship on crisis and disaster management in tourism (Bethune et al., 2022). Tourism resilience helps policymakers and managers to mitigate the impact of the crisis and respond to the crisis, and it bolsters the capacity of all stakeholders to withstand the challenges imposed by various crises and to recover from them (Bethune et al., 2022; Yang et al., 2021). Resilience in tourism can be viewed from various perspectives, including social, cultural, political, economic, environmental, and institutional (Bhati et al., 2016). However, from an erstwhile view, most of the research on tourism resilience has been only associated with the economic perspective (Lew, 2014). In tourism, several authors have adopted a holistic approach to address resilience (Sharma et al., 2021; Vărzaru et al., 2021). Vărzaru, Bocean, and Cazacu (2021) suggest several measures ranging from finance, economy, and sanitation to labour that enhance the tourism sector's resilience. Sharma, Thomas, and Paul (2021) suggest a tourism resilience framework based on four factors: government support, technological innovations, consumer and employee confidence, and local belongingness. Apart from adopting a holistic approach to tourism resilience, other scholars and institutions have emphasised the role of factors such as government support, social capital, and collaborations in enhancing tourism resilience during crises. According to the World Travel and Tourism Council (WTTC) (2021), government support was crucial for enhancing resilience and expediting business recovery during the COVID-19 crisis. Regarding social capital, Guo et al. (2018) found that bonding, bridging, and linking social capital significantly enhances a community's perceived level of resilience. Chan, Nozu, and Zhou (2021) discovered effective role collaboration (among tourism stakeholders), to significantly strengthen the resilience of destinations against natural crises.

# 3. Methodology

The present study adopts an exploratory research approach (Lawrence Neuman, 2014; Patten & New, 2017) and focuses on the conceptualisation of its findings (Jaakkola, 2020; Xin et al., 2013). Frequently, the exploratory studies culminate in a conceptualisation of previously uncharted phenomena. Conceptual research occupies a pivotal position in science due to its contribution to advancing theory by comprehending broader phenomena and introducing novel paradigms for more specific empirical research (Jaakkola, 2020; Kirillova & Yang, 2022). A decline in conceptual research impedes the generation of new knowledge and the expansion of research domains (Yadav, 2010). However, despite the importance of conceptual research, it is largely ignored in the tourism field. This phenomenon is even termed the "curse" of conceptual research in tourism (Kirillova & Yang, 2022), potentially due to limited comprehension and prevailing misconceptions among scholars in the field. Nonetheless, due to the critical role of conceptual research in advancing theory, previous scholars have delineated the nature of conceptual research in tourism and business domains. For instance, Xin, Tribe, and Chambers (2013) offered twelve themes of conceptual research in tourism, whereas, in the context of business domains, Jaakkola (2020) defines four approaches to conceptual study, i.e., theory synthesis, theory adaptation, typology, and model. Consistent with these scholarly guidelines, the current paper strived to build a conceptualisation of tourism resilience and transformations in the tourism sector in recent times (Jaakkola, 2020; Xin et al., 2013).

Exploratory researchers commence by "observing a phenomenon or formulating well-defined research questions or themes for further investigation" (Patten & New, 2017, p. 22). Hence, the study aims to answer the following research questions.

**Q1:** What new ideas, innovations, and shifts have recently taken place in the tourism industry from the perspective of tourism resilience?

Q2: How has tourists' behaviour changed recently due to turbulent times?

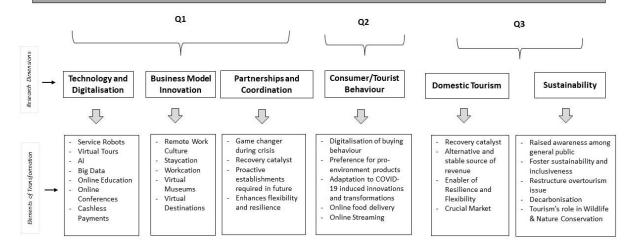
 ${\bf Q3:}$  What are paradigmatic transformations and shifts in the overall tourism sector?

# 4. Findings - New Tendencies and Transformations in the Tourism Sector

Recognising the role of crisis in innovating new ideas, technologies, business models, or behaviours and the importance of conceptual research in advancing the theory and knowledge in the field of tourism (or destination) resilience, the present study conceptualises the findings across six key dimensions (Figure 1): technology and digitalisation, business model innovation, partnerships and coordination, tourist behaviour, domestic tourism, and sustainability. The following subsections describe each dimension in detail.

Figure 1: New Tendencies and Transformations in the tourism sector.

# New Tendencies and Transformations in Tourism Sector



Source: Authors

# 4.1 Technology and Digitalisation

Technology and Digitalisation have played a crucial role in the resilience of various sectors during the recent crisis. In tourism, particularly, increased adoption of digital technologies, robots, and artificial intelligence can be observed (ADB & UNWTO, 2021; OECD, 2020; Tung & My, 2023; Zeng et al., 2020). Robotics and artificial intelligence (AI), which were once met with controversy due to concerns like job displacement and data privacy, experienced increased adoption during the pandemic, and this trend is expected to continue in the future (Zeng et al., 2020). Pre-pandemic technology and digitalisation trends such as telehealth, online banking, e-commerce, remote work, entertainment streaming, cashless payments and mobile payment, service robots, virtual tours, and drone delivery services witnessed heightened demand and acceptance during the COVID-19 crisis (ADB & UNWTO, 2021; Yang et al., 2021).

The recent turbulent times have forced the digitalisation of tourism education and influenced the work culture of the tourism industry (Lau, 2020; Tiwari et al., 2021; Ülkü, 2023; Yang et al., 2021). Tiwari, Seraphin, and Chowdhary (2021) discovered that tourism education professionals increasingly prioritise digital advancement and skills and have developed a positive outlook toward adopting digital technologies in tourism education. However, a study on South African tourism students reveals that the tourism students did not see online education in a positive light, indicating a lack of sufficient resources to participate in learning activities fully and, more importantly, a lack of access to support systems during online classes (Mokoena & Hattingh, 2023). Regarding the industry's work culture, technology and digitalisation were the only pillars that held teams together during the crisis. Lau (2020) and Litvinova-Kulikova et al. (2023) state that 'remote working' and 'live-streaming' conferences became standard practices during the pandemic. Oliveira et al. (2021), in their study of work culture in Portugal, found that the views of professionals on working from home were divided; while some wanted to return to an in-person work format, others were happy with increased financial gains, increased time for family, and productivity benefits in the workfrom-home (or remote work) culture.

# 4.2 Business Model Innovation

Technology and digitalisation also brought about a significant impact on the business models of the tourism sector (Toniatti et al., 2023). The continuum of crisis – innovation – resilience was prominent, with crisis stimulating new shifts, transformations and innovative ideas or business models, leading to enhanced resilience of tourism businesses and destinations during the COVID-19 crisis (Breier et al., 2021; Caballero-Morales, 2021; Camargo-Borges & Dijkmans, 2021; Ding & Li, 2021; Yang et al., 2021). Virtual tourism experiences and workcation models can be described as the two prominent shifts that emerged in the tourism industry due to the impact of the recent crisis, helping businesses sustain in periods of plummeting demand.

Digital tourism, or virtual tourism experiences like digital destinations, virtual museums, and virtual tours, became the primary trend, keeping the spirit of tourism and travel alive during the crisis (Folgado-Fernández et al., 2023). In terms of digital destinations, e.g., Faroe Island managed to re-invent itself in digital space, where the visitors were allowed to experience the virtual tours of the island without losing the comfort of their homes using joysticks (Camargo-Borges & Dijkmans, 2021). Similarly, research suggests a dominant perception of hotel managers that the pandemic led to a digital transformation of the hospitality sector, changing traditional business practices (Antonio & Rita, 2021; (Antonio & Rita, 2021; Nistal et al., 2022). In Rome, hotels were provided digitalised guest experiences, including



virtual property tours, mobile check-in and check-out, cashless payments, voice-controlled features, digital menus, and facial recognition entries, as well as other recreational activities (Mohammed Said Al-Mughairi et al., 2021). Apart from destinations and hotels, museums were another prominent area where significant effects of digitalisation of experiences can be observed. A report from the Organisation for Economic Co-operation and Development (OECD) finds that the museum sector suffered a drastic impact from the pandemic, forcing the transition into virtual tourism platforms and opening doors for remote visitors worldwide (OECD, 2020). However, this transition was not limited to the museum sector alone; the wildlife tourism sector also joined the trend. 'Wild Earth', a virtual tourism experience platform from Africa, gained popularity among tourists during COVID-19 for providing virtual safari experiences (European Union, 2021).

As a result of lockdowns and remote work culture, new business models and concepts like 'workcation' and 'staycation' emerged in the tourism industry as a resilient response to the crisis. Workcation targets customers who seek temporary relocation to a tourism destination for travel and remote work purposes (Popovici & Popovici, 2021; Skivko, 2021). The concept of 'remote working' gained immense popularity during COVID-19, with many tourism companies adopting it as a long-term or permanent business niche (Carracedo et al., 2021). From an accommodation provider's perspective, workcation opened up a new tourism market segment, where homestays and Airbnb started gaining increased popularity on account of affordable long-term stays.

### 4.3 Partnerships and Coordination

'Partnerships and coordination', as another dimension in the industrial perspective, played a crucial role in tourism resilience during the recent turbulent times in the tourism industry. While a lack of coordination was responsible for the rapid spread of global crises such as coronavirus (Arbulú et al., 2021), partnerships and coordination became essential for crisis management and recovery (OECD, 2020; WTTC, 2021).

Countries like Canada, France, and Ireland focused on coordination mechanisms and public-private dialogues to recover the tourism industry (OECD, 2020). 49 UNWTO member states in Africa collectively formulated a vision for swift recovery (UN, 2020). Pandey (2022) highlighted the role of partnerships in the hospitality industry during the COVID-19 crisis to promote strategic packages, enabling industry players to enter alternative markets and generate revenue to enhance resilience against the pandemic. Because of the crucial role of innovative partnerships and coordination during the crisis, partnerships were identified as an essential aspect of recovery in resilience (Baloch et al., 2022; Muangasame & Tan, 2023).

# 4.4 Tourist Behaviour

The recent crisis period had a significant impact on tourist behaviour in terms of travel motivation, travel planning, and travel decision-making (Devkota et al., 2022). Pristine and uncontaminated nature and environment received a higher level of appreciation from tourists, leading to a drastic transformation of individual tourist motivation towards nature in search of tranquillity, relaxation and quality time (Aldao et al., 2022; Garcez et al., 2021; Moya Calderón et al., 2022). Hygiene and disinfection of tourism facilities create motivational elements for selecting tourism products (Mirzaei et al., 2023). The desire for travel planning through online media has also increased (Garcez et al., 2021), making travel companies invest in their online and social media for maximum benefits (Aldao et al., 2022). During the crisis periods, tourists see extended travel periods as a risk to health (Mirzaei et al., 2023), hence encouraging the trend of shorter periods of travel (Mirzaei et al., 2023; Moya Calderón et al., 2022). The tourists also demand a condition of "flexibility" to alter booking information/dates/etc. to cope with the unprecedented travel restrictions.

Travel planning and decision-making of tourists also became detrimental to factors such as financial awareness and prices, safety and security, and advice from professional travel agents. As a result of economic recessions due to various crises, travellers/tourists are more aware of their finances (Garcez et al., 2021), there is a reluctance to pay for additional safety measures, and reasonable prices have become a catalyst in recovery (Aldao et al., 2022). However, travel decisions are immensely influenced by safety and security (Moya Calderón et al., 2022). Due to heightened concerns related to safety, security and financial conditions, tourists are likely to take the services of professional travel agents (Mirzaei et al., 2023), whereby travel agencies are gaining revitalised popularity for professional travel arrangements (Aldao et al., 2022). In addition, tourist behaviour towards augmented reality (AR) and digital tourism experiences is becoming more acceptable (Song et al., 2024). However, people also show concerns about how these technologies may affect their daily lives (Saman et al., 2023).

# 4.5 Domestic Tourism

Recently, domestic tourism has proven critical amid the crisis as an essential pillar of tourism resilience, revival and sustainability (Duong et al., 2023). For instance, domestic tourism accounted for approximately 33% of pre-COVID stays in Spain, including 50% of outbound tourists who were redirected to domestic destinations (Arbulú et al., 2021). In Oman, it was found that domestic tourism suffered fewer economic and social shocks than inbound tourism (Mohammed Said Al-Mughairi et al., 2021). In India, 'inbound clientele-based' hospitality businesses redirected their business strategies towards the domestic market to create an alternative source of revenue (Pandey, 2022). Domestic tourism came to play a crucial role in promoting tourism resilience and driving recovery during the COVID-19 crisis (UNWTO, 2021).



The newly realised importance of domestic tourism prompted governments to prioritise domestic travel and re-position their destinations (ADB & UNWTO, 2021; OECD, 2020). Macao and Singapore launched domestic tourism campaigns such as "Macao Ready Go" and "Singapore Rediscover" (ADB & UNWTO, 2021). In terms of demand (i.e., tourists), COVID-19-related restrictions and travel bans encouraged people to travel domestically (Skivko, 2021). However, this renewed focus on domestic travel from both the demand and supply end put remote domestic destinations under immense pressure of tourist footfalls. In India, a remote hill station, "Manali", saw extreme tourist footfall amid the COVID crisis, which led some media professionals to term this trend as "revenge tourism" (Ghosh, 2021). The renewed focus on domestic travel became instrumental in the creation of new travel concepts such as "staycation" and "workcation" (UNWTO, 2021), and domestic tourism became a strategic tool for recovery (Nyikana & Bama, 2023).

### 4.6 Sustainability

The tourism sector's recovery from the drastic impacts of the recent pandemic has been realised as an opportune moment to align the sector more towards sustainability goals. Global institutions are prevailing tourism's recovery towards greater sustainability and inclusiveness (ADB & UNWTO, 2021; OECD, 2020; WTTC, 2021). The World Travel and Tourism Council (WTTC) stressed the necessity of ensuring that the sector's recovery is sustainable and inclusive, with a strong focus on sustainability in all future planning and recovery efforts, aiming to benefit both people and the planet (WTTC, 2021). Likewise, the Organisation for Economic Co-operation and Development (OECD) advocated for policy intervention to cultivate sustainability and resilience in tourism, highlighting the importance of avoiding past management issues like over-tourism and emphasising priority initiatives such as fostering new business models, enhancing connectivity, and embracing digitalisation (OECD, 2020). The United Nations emphasises fostering sustainability and inclusive green growth by aligning tourism with the Paris Agreement and Sustainable Development Goals (UN, 2020). As a result of the recent pandemic, a more vital link between tourism and sustainable development was also discovered. Studies from Africa reveal that disruptions created by the COVID-19 crisis in the tourism industry affected tourism businesses and local communities and gravely impacted wildlife and nature conservation efforts (Chiawo et al., 2023; UN, 2020). Due to the revelation of such a symbiotic relationship between tourism and nature/wildlife conservation, global institutions continue to push the importance of sustainability through tourism resilience and recovery (ADB & UNWTO, 2021; OECD, 2020; UN, 2020; WTTC, 2021), and scientists believe that resilience is becoming the foundation of sustainability (Espiner et al., 2017).

# 5. Conclusion and Way Forward

The study concludes that the recent crisis came as a sudden disastrous blow across the globe, derailing tourism and hospitality. However, it somehow proved to be a blessing in disguise in bringing much-needed innovative transformations to the travel industry. Though businesses, stakeholders, and tourists suffered immensely over time, it was realised that this pandemic was a stark awakening for businesses to rethink and revamp their operations through innovations. Changes were necessitated further by the sudden change like tourist demand. The pandemic gave businesses a breather to think innovatively, modify their operation using digitisation and collaboration, and introduce creative offers to attract and cater to the changing demand. Travel behaviour of customers also underwent a welcome change in favour of opting for domestic tourism, safe travel and participating in sustainable tourism. The changes brought about by the pandemic paved the way for a 'new norm' that continues to evolve, paving a new direction for tourism and the hospitality industry. In the present age of uncertainty and vulnerability to ever-increasing unforeseen disasters, the future can be aimed at monitoring and documenting the effect of calamities on triggering changes in both the supply and demand of tourism.

# 5.1 Limitations and Future Research

This study's geographical and sectoral focus may constrain its broader applicability within the tourism industry. Challenges about data accessibility could have hindered a more in-depth analysis. Furthermore, the exclusive emphasis on the recent crisis (e.g., the COVID-19 pandemic) might limit the study's relevance to future crises or enduring industry trends. The reliance on exploratory and conceptual methodologies may also impose constraints concerning empirical validation and the extent of generalizability. Moreover, potential data collection, analysis, or interpretation biases could skew the study's outcomes and implications.

To address the above limitations and advance the field, future research endeavours could consider conducting longitudinal studies to monitor the enduring effects of COVID-19 on tourism alongside the sustainability of emergent innovations. Exploring the efficacy of resilience strategies across diverse regions and sectors within the tourism industry could offer valuable insights. Augmenting research methodologies with qualitative approaches could yield a deeper understanding of stakeholders' perceptions and experiences. Additionally, delving into the influence of governmental policies on promoting tourism resilience and post-pandemic recovery warrants investigation. Moreover, examining the sustained integration of technology within the tourism sector and its ramifications for resilience and sustainability presents an intriguing avenue for research. Collaborative efforts with industry stakeholders to evaluate the practical implications of identified dimensions of tourism resilience would enrich scholarly discourse.



Furthermore, assessing the tangible impacts of identified innovations and transformations on the overall resilience and sustainability of the tourism sector is essential.

By addressing these identified limitations and exploring the research in the above directions, scholars can contribute significantly to advancing the understanding of tourism resilience amidst crises.

#### Credit author statement

All authors have contributed equally. All authors have read and agreed to the published version of the manuscript.

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