Managing Tourism Uncertainties During the Era of COVID-19 Through Scenario Planning

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Abstract

This study used a scenario planning method to devise four possible scenarios for tourism recovery in Arizona, U.S.A., a state highly impacted by the COVID-19 pandemic. A scenario planning session was attended by 24 experts representing key stakeholder groups within the tourism industry and public health, epidemiology, tourism, public policy, and transportation experts where participants selected six critical drivers of tourism recovery to develop possible scenarios. The critical drivers were public health status, performance of the economy, destination availability, government policy, consumer confidence, and leadership communication, with public health status and performance of the economy agreed to be the most influential but most uncertain on tourism recovery. The four scenarios represented a worst-case, best-case, and two mid-level scenarios in which tourism recovery efforts would need to operate. The implications and responsibilities of each scenario for governmental bodies, destination managers, tourism businesses, and planners is discussed and recommendations are given.

Introduction

The world is experiencing unprecedented challenges from many natural and human-made disasters including global climate change, loss of biodiversity, conflicts and wars, and pandemics- all of which pose serious challenges to humanity (Gössling et al., 2021). The COVID-19 pandemic has proven how vulnerable socio-ecological systems are and how unprepared society was for dealing with such large disasters (Peeri et al., 2020). The pandemic has impacted every sector, including tourism, the largest industry in the world. The modern global tourism system, which includes both internal (demand and supply) and external factors, operates in a very complex environment (Lee et al., 2012) and has been shattered by the pandemic.

The impacts of the COVID-19 pandemic on global tourism in 2020 brought on the worst year for the industry in recorded history due to strict travel restrictions, ineffective virus containment actions, and low consumer confidence (UNWTO, 2020b). Although the rollout of a global vaccine campaign gives cause for optimism (UNWTO, 2020a), the virus diminished international tourism arrivals to 1990s levels, a 72% drop from 2019 that has resulted in 900 million fewer international travelers and a loss of $1.1 trillion in international tourism receipts (UNWTO, 2020b). Moreover, the impacts of the pandemic are unequally distributed within society in terms of health and economic outcomes (Jamal & Budke, 2020). Even before the onset of COVID-19, recent decades have clearly shown how a variety of disasters can and will continue to have a major impact on the tourism industry (Gössling et al., 2021; Hall et al., 2020). Further, the lack of historical data and complex feedback effects in social-ecological systems make it difficult to accurately foresee the future and make proactive decisions (Polasky et al., 2011).

There has been a large number of papers written about the impacts of certain disasters on the tourism industry but most of them either discuss disaster response and recovery (Hall et al., 2018; Mair et al., 2016; Ritchie, 2009) or provide authors' opinions about the future. Further, researchers have pointed out that the tourism industry lags behind other industries in both disaster preparedness and disaster planning (Scott & Gössling, 2015). Thus, this study provides an innovative approach for strategically mitigating the risks of pandemics through scenario planning and thus contributes

to tourism research by demonstrating the utility of innovative planning efforts among experts and key stakeholders from within the tourism industry.

Literature Review

The Impact of Disease Outbreaks on Tourism

With travel restrictions and lockdowns in place to help prevent the spread of COVID-19, global tourism has declined so significantly that no other event since World War II has caused such a severe disruption to the global economy (Gössling et al., 2021). The economic impact of pandemics is particularly felt in the tourism industry as it is reliant on the ability of humans to be mobile (Gössling et al., 2021; Yang et al., 2020). Interestingly, Hall et al. (2020) note how there is a surprising shortage of literature discussing the relationship between tourism and pandemics, an unfortunate occurrence considering that the threat posed by pandemics on society is nothing new (Jamal & Budke, 2020). In fact, despite advances in the field of medicine, the threat of pandemics has only been increasing since the second half of the 20th century as humans have become more mobile and can thus act as disease vectors when they travel (Hall, 2019; Hall et al., 2020; Kuo et al., 2008). Notably, issues of social justice can also arise in the wake of global disasters as their impacts are often disproportionately borne by the most vulnerable and poor populations across the world (Jamal & Budke, 2020).

The impacts of previous epidemics or pandemics on the tourism industry, public health, and the global economy pale in comparison to those caused by COVID-19 but provided the global tourism industry with crucial experience in dealing with viral disease outbreaks. In 2003, the onset of severe acute respiratory syndrome (SARS) resulted in heavy economic and health impacts, although these impacts were mostly contained within the Asian region, which saw a massive 70% decrease in travel at one point (McKercher & Chon, 2004). Similarly, the H1N1 flu pandemic also saw a decrease in international tourism, although most of this decline was attributed to the 2009 economic crisis (Lee et al., 2012). A few years later when Middle East respiratory syndrome (MERS) was first identified in Saudi Arabia just weeks before the 2012 Hajj pilgrimage, fortunately, no Hajj-related cases emerged (Al-Tawfiq et al., 2014). Lastly, while Ebola's fatality rate was high relative to other known virus contagions, efforts to contain the disease through isolating the sick and adjusting burial and funeral customs were largely successful (Adongo et al., 2016; Chowell & Nishiura, 2014).

Crisis and Disaster Management, Response, and Recovery

The gravity of impacts caused by certain disasters can span across state, provincial, and international boundaries, highlighting the need for stronger international collaboration and coordination within and outside the tourism industry to respond effectively to cross-border crises (McKercher & Chon, 2004). In response to the dire consequences of pandemics prior to the development of a vaccine, nonpharmaceutical interventions must be utilized and include stay at home orders, physical distancing, closure of schools/universities and non-essential businesses/workplaces, cancelling or postponing events and bans on gatherings of people over certain numbers (Gössling et al., 2021). As we remain in this current pandemic and contemplate the future of tourism, Higgins-Desbiolles (2020a) claims that we now have the unique opportunity of being able to reshape the entire sector to ensure that it grows back in a more inclusive, sustainable, and responsible manner.

The COVID-19 pandemic is an example of catastrophic failures on the part of local, national and global responses that deserves a serious reexamination of our current political-economic, health, transportation, and tourism systems, all of which contributed to the rapid spread of the virus. Prior to the COVID-19 outbreak, research showed that national governments, global institutions like the World Health Organization (WHO), and the media have been criticized for responding to pandemic disease outbreaks in a reactive manner rather than in a more proactive one (McKercher & Chon, 2004). For example, reactive government responses to the SARS outbreak fueled fears that the disease was spreading out of control, leading to a shutdown of tourism across Asia and causing major disruptions to the region's tourism industry (McKercher & Chon, 2004). Conversely, the response of many governments to the COVID-19 pandemic have been criticized for spreading misinformation and being too lax, particularly in the United States during the Trump administration where hundreds of thousands of U.S. citizens have died from the disease (Haffajee & Mello, 2020; Johns Hopkins University & Medicine, 2020). Within the U.S., the state of Arizona had 8,344 COVID cases per 100,000 people in mid- January of 2021, higher than any other state, and therefore serves as an appropriate market to examine for tourism recovery (Steinbach, 2021). Notwithstanding, strict regulations on the tourism industry are in place around the world to stem the curve of disease transmission, and these restrictions will likely be in place until COVID vaccines are more widely distributed across the globe (Setthachotsombut, & Sua-Iam, 2020).

Disaster Management and Preparation

The urgent need for crisis prevention and disaster management plans in the tourism industry is more prevalent than ever as our planet grapples with the impacts of the COVID-19 pandemic. Looking specifically at the threat of disease outbreaks, Peeri et al. (2020) claimed that society did not sufficiently learn from the relatively recent SARS and MERS outbreaks and was unprepared to deal with the challenges imposed by COVID-19. Moreover, scholars have expressed concerns regarding the industry's disproportionate focus on crisis and disaster response and recovery strategies over prevention and management plans (Hall et al., 2018; Mair et al., 2016; Ritchie, 2009). In their comparison study of different industries' future projections and preparedness strategies, Scott and Gössling (2015) found that the tourism industry's scenario planning efforts lag behind those of other industries, which represents a missed opportunity and call to action for tourism planners and researchers to engage more deeply with scenario planning.

As the 21st century has already seen a number of epidemics or pandemics (for example, SARS, 'Bird' flu, MERS, Ebola, Swine flu 'N1H1' and COVID-19) in its first 20 years (Gössling et al., 2021), having a disaster response plan will be necessary for tourism firms and destinations in the future. For tourism scholars and practitioners, the year 2020 was a year of reflection and contemplation about how tourism should operate in the future. For myriad scholars, the business-as-usual, volume growth model approach to tourism should not be reestablished at the expense of a new approach that demands greater sustainability, equity, and justice (Gössling et al., 2021; Higgins-Desbiolles, 2020b). The purpose of this study, therefore, is to develop scenarios that guide tourism recovery efforts in a state severely impacted by COVID-19.

Methodology

This study used a scenario planning method, a systematic tool for thinking creatively about possible complex and uncertain futures (Joseph, 2000). This technique helps present all complex

factors and trends together in a coherent, systematic, comprehensive, and plausible manner. Further, it considers the interactions among factors and trends to devise possible futures that include many uncertainties in the system rather than a focus on the accurate prediction of a single outcome (Peterson et al., 2003). A scenario is defined as "a set of hypothetical events set in the future [and are] constructed to clarify a possible chain of causal events as well as their decision points" (Kahn & Wiener, 1967, p. 6). Scenarios are alternative, dynamic narratives that capture key elements of our uncertainty about the future of the study of the system in question (Peterson et al., 2003). Used to help explain unforeseen trajectories, this tool has been used widely, in concert with other decision-making frameworks, within the military as well as in the context of private businesses and government agencies (Rowland et al., 2014). The process is not solely utilized to encourage understanding and planning for desirable scenarios but also to explicate and prepare for scenarios that could be detrimental.

The future is uncertain given the fact that there are often a multitude of factors at play. Furthermore, as one delves into the nuances of the sub factors that impact the major factors, predictions for the future become even more complex and challenging. From this vantage point, scenario planning can be a good tool for the following reasons: first, it stimulates strategic thinking and helps to overcome indecision by challenging the prevailing mindset and status quo; second, it adopts a systems thinking approach for future planning in a holistic manner; third, it takes into consideration the various interactions among several factors that shape the future; fourth, it takes macroscopic approach that allows for a detailed description of events and related outcomes; and last, it helps change the managerial worldview and organizational behavior of an agency in a way that allows the entity to better prepare for uncertainties by being more flexible and innovative (Amer et al., 2013).

There are two major approaches to scenario planning: a quantitative approach with modeling and a qualitative approach involving experts who help develop and explain the scenarios (Amer et al., 2013). This research used the latter approach as it is more appropriate for this type of exploratory study. Scenario planning can be done for any time frame but has greater usefulness if it is developed for the long term instead of the short term. Therefore, a virtual scenario planning session was conducted in June of 2020 to identify all possible COVID-19-related uncertainties and develop possible scenarios for the proceeding months and years to come. The session was attended by 24 expert participants. The scenario planning focus group participants represented various organizations, such as public land management agencies, the tourism industry, destination management organizations, and experts in various fields, including public health, transportation, travel and tourism, and epidemiology. During the scenario planning process, participants engaged in brainstorming to decipher the essential factors that will determine the recovery and future of tourism in Arizona over the next one to two years. Then through a guided process, we organized the factors into six critical drivers which were later used by the participants to create different scenarios. The responses were recorded, analyzed, and later shared with the participants for accuracy and transparency.

Results

The scenario planning session revealed six critical drivers of tourism recovery for Arizona: public health status, economic performance, destination availability, government policy, consumer confidence, and leadership communication (Table 1). According to participants, the two most influential drivers among these six are public health status and performance of the economy. Using

these two critical drivers, four possible scenarios were developed to describe what tourism might look like under such circumstances. The four scenarios included a best-case scenario where both performance of the economy and public health status were high, two mid-level scenarios where either performance of the economy is high and public health status is low or economic performance is low and public health status is high, and a worst-case scenario where both performance of the economy and public health status are low (Figure 1).

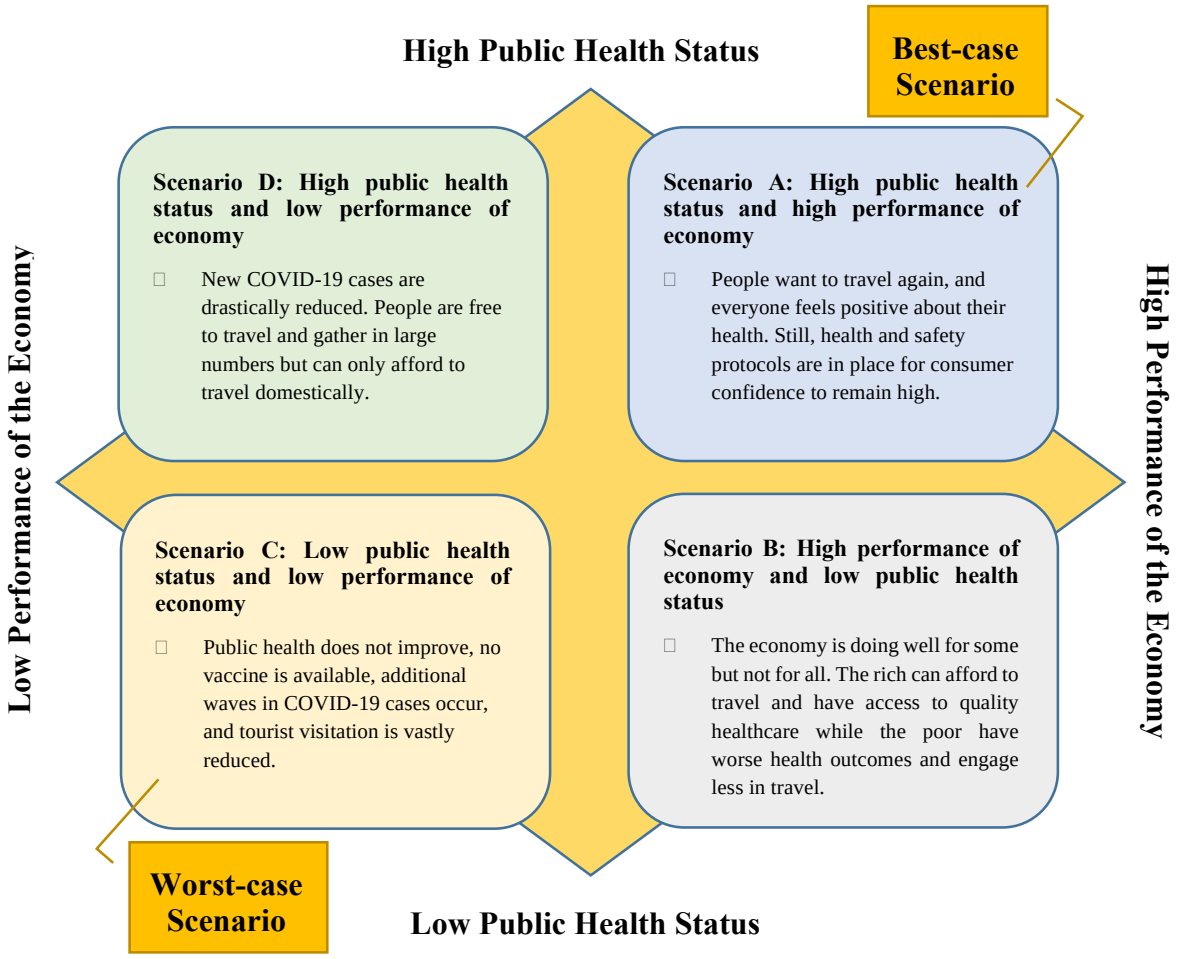
The best-case scenario (scenario A) for tourism recovery in Arizona was described as one where people generally feel positive about their health and want to travel again, and destinations are accepting travelers but have new health and safety protocols in place to encourage consumer confidence. In scenario B where economic performance is high but public health is low, participants described a tourism market wracked with social inequities where the wealthy have better health outcomes because of their access to quality healthcare and therefore have the means to travel, while the poor have much worse health outcomes and are much less engaged in travel due to their limited disposal incomes being focused on medical costs and household expenses. Participants further described how tourist destinations could reflect these social inequities should they focus recovery efforts on catering to wealthy tourists with high-end products in areas where outside visitors could have adverse health effects on local communities. In scenario C, the worst-case scenario, both the public health status and performance of the economy were low, resulting in a severe economic recession where hotels, restaurants, and other tourist-servicing businesses are forced to close, and the state's death toll surpass health experts' worst predictions. Lastly, scenario D envisioned an environment of high public health status but low economic performance, causing the state's destinations to focus their marketing efforts locally in order to capture the domestic travelers whose more expensive international travel plans need to be canceled and replaced with less expensive, closer trips in order to save money.

Table 1. Six Critical Drivers of Tourism Recovery

Critical Drivers	Related Factors Determining the Future of Tourism
Public Health Status	Development of an effective vaccine, decrease in cases, survival rate, local public health guidance, and worker and resident safety.
Performance of the Economy	Prices, airline survival, disposable income for travel, and small business resilience.
Destination Availability	Resident and traveler perceptions, consumer trust, and policies of private businesses.
Government Policy	Open borders, social distancing requirements, and number limits for gatherings.

Consumer Confidence	Fear, psychology, decrease in cases, shift in visitor experience, validation loop, and trust.
Leadership Communication	Accuracy of information, leadership messaging, interagency collaboration, and trustworthiness of messaging.

Figure 1. Four Possible Scenarios for the Future of Tourism in Arizona



Conclusion and Discussion

Each of the scenarios described by the participating experts present unique challenges and opportunities for destination managers, tourism planners, and federal, state, and local agencies to recover the tourism market in Arizona. Although a worst-case scenario would heavily rely on innovation and creativity for substantial tourism recovery, tourism has proven itself to be a resilient force and is highly unlikely to disappear or remain severely constrained for long-term projections (Gössling et al., 2021; Sigala, 2020). Furthermore, there are important implications for destinations and the industry as a whole in scenarios where the economy is performing well yet public health status is still poor. Many of Arizona's tourism destinations fit into this scenario as COVID-19 cases and death rates were tragically high throughout 2020 and early 2021, while the state's economy as a whole recovered at a relatively quicker rate (Department of Numbers, 2021; New York Times, 2021). In such circumstances, it is incumbent on destinations managers, individual businesses and attractions, and especially governmental bodies to enact policies that protect vulnerable workers and populations that are at high-risk from exposure to viral diseases.

This paper contributes to tourism research through its use of an innovative research method to assist with tourism recovery efforts during a global pandemic wrought with uncertainties. While scenario planning has been utilized more often in other disciplines, tourism researchers have been calling for its increased use (Scott & Gössling, 2015). The COVID-19 pandemic has clearly illustrated the vital importance of strategic planning and preparation to mitigate the impacts of disasters, and qualitative scenario planning using experts from key industries, fields, and organizations is shown here to be a useful approach for developing such strategies. Thus, future tourism research must continue to utilize innovative scenario planning methods to assist tourism businesses and destinations with developing strategic disaster prevention, response, and management plans.

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