

# Characteristics of crises resilient organizations in the hospitality and tourism industry

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## Abstract

**Purpose** – COVID-19, like many previous crises, proved once more that some hospitality and tourism organizations are more crises resilient than others. Despite increasing frequency and magnitude of crises, little is known about the features of crises resilient organizations and mitigation strategies they adopt. If the characteristics of such resiliency are identified, those strengths might be targeted. Hence, the purpose of this study is to identify characteristics of crises resilient organizations by analyzing the interface between different organizational characteristics, recovery strategies they adopted and impacts of COVID-19 on individual hospitality and tourism organizations.

**Design/methodology/approach** – A global sample of 202 respondents from 20 countries and four continents, representing different sectors of the hospitality and tourism industry, participated in the survey. Descriptive analysis and cluster analysis were used to rank the items and group hospitality and tourism organizations based on their crises resiliency.

**Findings** – Service quality, loyal customers, branding, high paid in capital, domestic market base, hygiene and safety image, information and communication technology adoption, product and market diversification and restructuring debts emerged as major characteristics and strategies of crises resilient organizations. Using cluster analysis, four different groups of organizations were identified. Based on the impacts of COVID-19 on these organizations, Cluster-1 emerged as significantly more crises resilient, whereas Cluster-4 organizations were significantly more vulnerable to crises. Their characteristics and mitigation strategies they adopted were discussed.

**Research limitations/implications** – The paper not only identified features of crises resilient organizations and successful mitigation strategies but also measured their impact on various performance indicators. Future studies might use characteristics, mitigation strategies and performance indicators identified in this study.

**Practical implications** – Based on the findings, tourism organizations would focus on strengthening characteristics and implementing strategies that make crises resilient organizations. Public bodies and destination management would also set their decision criteria based on these findings to create a more resilient tourism industry.

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**Originality/value** – This research not only identifies how hospitality and tourism organizations are affected by COVID-19 but also how these impacts change based on different organizational characteristics and strategies. Understanding which organizational characteristics affect the crises vulnerability of hospitality and tourism organizations might inform risk and crises management literature and structural design elements in tourism businesses, hence offer both theoretical and practical implications.

**Keywords** Crises management, Organizational resiliency, Recovery strategies, Crises performance

**Paper type** Research paper

## 1. Introduction

The perishable nature of hospitality and tourism services limits their ability to be stored for future consumption (Kampel, 2020). Furthermore, hospitality and tourism services are considered among luxury products and their consumption can be postponed. The fluctuating and seasonal nature of demand (Noel, 2022) also make these services more vulnerable against crises (Whitman *et al.*, 2014). However, some hospitality and tourism organizations might be more vulnerable/resilient to crises than others depending on their unique characteristics and recovery strategies they adopt. Despite their detrimental impacts on overall tourism economy, past economic crises, natural disasters, armed conflicts and epidemics confirm some organizations are more successful in adopting to those crises (Kosova and Enz, 2012), some even converted crises into opportunities.

Because hospitality and tourism services are based on human interaction, the impact of epidemics has more severe impacts on tourism than other crises. Particularly, the impacts of COVID-19 on the hospitality and tourism industry are unprecedented (Maliszewska *et al.*, 2020) since Second World War. Collaborating with its impact, COVID-19 has also attracted the attention of tourism academia. According to Wut *et al.* (2021), there are more than five hundred papers published in top 10 journals on crisis management and almost 80 of them examine COVID-19 case. However, these studies are focused on central responses of destinations (e.g. destination management organizations), usually concentrated on governance and crises management at regional level including other stakeholders, communities, local governments and so on. Yet, all of these stakeholders including tourism and hospitality industry may have different characteristics, priorities and objectives (Campiranon and Scott, 2014). Scant research looking into effective crises management strategies in hospitality and tourism are also conceptual in nature (i.e. Jiang *et al.*, 2019) or conducted during pre-COVID period (Okumus and Karamustafa, 2005). Majority of these conceptual papers in crises management offering theoretical implications are neglecting market needs and practical implementations. Limited studies (Do *et al.*, 2022) which based their discussion on empirical data are qualitative and concentrated on crises response strategies ignoring structural organizational characteristics that might affect efficiency of response strategies and hence resiliency of hospitality and tourism organizations. Hospitality and tourism (e.g., food, beverage and lodging) services' characteristics and the global crises long-term impacts are overlooked in the literature. Hence, there is also a need for a more holistic analysis of the hospitality industry to understand its characteristics and sectoral differences.

Relationship between organizational performance, organizational characteristics and crises mitigation strategies in the long run also remain unexplored. The pandemic started in 2019, and the impacts started to fade away during 2022, creating a more suitable environment to evaluate the efficiency of organizational characteristics and mitigation strategies. Few studies (i.e. Israeli and Reichel, 2003) looked into interface between crises management strategies and hotel performance by using immediate secondary data. Even

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though some studies explored generic responses, there is limited research analyzing the effectiveness of these crises management strategies, because their impacts were to be seen after a certain period of implementation.

Considering its coverage, impacts and duration, COVID-19 has been one of the most suitable cases to examine the interface between organizational characteristics, mitigation strategies and resiliency during such crises. Hence, this paper aims to identify the characteristics of crises resilient hospitality and tourism organizations and effective crises management strategies based on a mixed methods approach in a period when the impacts of COVID-19 started to decline. At the initial qualitative stage, 30 organizations were interviewed about characteristics that would make them crises resilient and mitigation strategies those might be considered successful. These qualitative data were then converted into a survey using also features and strategies mentioned in the literature. The survey was then implemented on 202 hospitality and tourism organizations representing different sectors located in 20 different destinations in four continents. Impacts of crises were also measured for each individual organization, to identify their crises resiliency. Understanding those features and strategies those make hospitality and tourism organizations more resilient is important to create a more resilient industry and provide valuable contributions to the crises management theory.

Therefore, this study is distinctive from previous studies from several perspectives. Different than previous studies focusing only one sector (e.g. lodging) and single destinations, the current study used data from various types of tourism organizations. Study also differentiates from its predecessors by presenting insights not only for crisis mitigation strategies and characteristics of tourism organizations but also relating these strategies with their crises resiliency. By conducting these links, study suggests rethinking existing approaches to risk and crises management in tourism and hospitality organizations according to their specific characteristics and potential mitigation strategies.

## **2. Crises and their impact on the hospitality and tourism industry**

Crises in tourism can be defined as any event which can threaten the normal operations, damage destination's image or affect visitor's intentions (Sommez *et al.*, 1994). Hence, a crisis can cause a downturn in the local tourism economy and interrupt business operations. Depending on size and effects internal factors (e.g. strikes, fires) leading to a crisis can be more controllable compared to external factors (e.g. earthquakes, epidemics). External tourism crises can derive from environmental, societal/political, health-related and economic events (COMCEC, 2017). The hospitality and tourism industry has specific vulnerabilities against crises because of its product characteristics and market structure which is fragmented and complex with many interdependencies among its stakeholders. Hospitality and tourism services provide a total experience for tourists that start even before arrival to destination and finally ends by returning home, involving various services and regulators (Cetin, 2020). A crisis emerged during any step of this consumption process may have impacts on overall tourism destinations and businesses.

Considering the global political and economic instability, frequent earthquakes, forest fires and other natural disasters, epidemics, terrorism, hospitality and tourism businesses are very likely to experience several crises during their life cycle (Kash and Darling, 1998). Acknowledging hospitality and tourism services' specific characteristics (e.g. perishability and heterogeneity), and possibility of facing such events, these organizations should assume they are always on the eve of a crisis (Santana, 2004). Research also suggest that crises have dramatically increased both in terms of frequency and magnitude. For example, natural disasters quadrupled in numbers between 1976 and 2019, a similar increase is also

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experienced in the number of terrorist attacks (WTTC, 2019). Consequently, the hospitality and tourism industry should learn how to be resilient, adopt and manage such sudden events. Yet, literature so far has failed to address how to create crises resilient organizations and to measure success of various crises management strategies adopted by these businesses. Most research focused on impacts of crises and mitigation strategies are concentrated on central management of crises, neglecting importance of organizational characteristics and individual crises mitigation strategies (Campiranon and Scott, 2014). Hence, there is also the need to broaden the theoretical framework on how hospitality and tourism organizations become crises resilient at organizational level, based on a recent global crisis.

Crisis literature in hospitality and tourism recognized risk and crises management as a continuous process (Henderson and Ng, 2004; Sawalha *et al.*, 2013) explain crises life cycle consisting of three main stages, namely, precrisis, crisis and postcrisis, whereas Ritchie (2004) classifies those stages as pre-event, prodromal, emergency, intermediate, recovery and resolution. Corresponding to this continuous resiliency, Paraskevas and Altinay (2013) propose organizations' crises management includes both proactive (risk of happening) and reactive (actual crises) components. Hence, regardless of the concepts used during each step, organizations need to attempt, first and foremost to understand and prevent (Santana, 2004) second to adapt and cope with circumstances and finally by doing these, to ensure organizational learning and gain resilience. Hall *et al.* (2023) argue, because of different types of crises threats, inability to predict them and resource constraints, investing on organizational resilience is a more effective approach rather than trying to manage risk and crises. They go on to state there is common approach to resiliency and the term is usually referring to the capacity to respond, adopt and mitigate change (Hall *et al.*, 2023). Organizational resiliency is also defined as the ability to adopt and maintain operations when faced with disturbance (Holling, 1973). Hence, identifying and assessing organizational strengths after a crisis and determining characteristics of a successful management response facilitate effective crises management and resiliency in the future (Kim *et al.*, 2005).

Despite the importance of crisis resilience and its impact on competitiveness (Hall *et al.*, 2023), the extant tourism crises management literature has focused on recovery phase and adoption strategies (Do *et al.*, 2022) and overlooked pre- and postcrises risk management phases and understanding how and why some organizations are more resilient than others. Thus, crisis resilience also refers structural characteristics, ability and preparedness to maintain organizational operations during crises rather than trying to return to normal operations after the disruption (Williams *et al.*, 2017). Crisis management literature so far also mainly concentrated on resilient actors (individual, organizations and community) who are reactive rather than proactive. There are different interpretations of resilience depending on one's conceptual and disciplinary viewpoint, making it a disputed boundary object. In the context of hospitality and tourism studies, the prevailing perspective centers around engineering resilience and is primarily concerned with organizational resilience leading to a lack of appreciation of the multiscaled nature of resilience (Hall *et al.*, 2023).

Therefore, organizational characteristics are acknowledged as fundamental for gaining crises resiliency. Even though hospitality and tourism organizations can increase their ability to handle crisis with reactive or proactive management plans designed based on similar prior crises, every crisis have unique characteristics. Hence, despite few studies outside hospitality and tourism literature mentioned some generic characteristics such as customer loyalty, flexibility, innovation and human resources (HRs) (Dahles and Susilowati, 2015; De Sausmarez, 2004; Everly, 2011; Orchison *et al.*, 2016) because of unique features of

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the industry, these characteristics do not provide transferable information on how to create and operationalize crises resilient hospitality and tourism organizations for crises to come. Particular focus is needed to explore characteristics of crises resilient organizations and risk and crises management strategies at organizational level in the hospitality and tourism industry.

### *2.1 Characteristics of crises resilient tourism organizations*

Every crisis has unique characteristics, processes and effects, and hospitality businesses also differentiate from each other based on their products, markets, size, location, finances, cost structures, life cycle, organizational systems, ownership and so on (Brown *et al.*, 2018; Ngin *et al.*, 2020). As regards to recovery Schoenberg *et al.* (2013), address cost efficiencies, asset retrenchment, focusing on core activities, building for the future, reinvigoration of leadership and cultural change as six main turnaround strategies. Understanding these structural features and classifying hospitality and tourism businesses based on crisis resiliency might provide practical insights for future crises. For instance, scarce research in crises management show that large tourism businesses are likely to be more bureaucratic and slow (Wang and Ritchie, 2010), yet most of these are supported by their parent companies (Usher, 2020), professional and have contingency plans to mitigate organizational disruption (Whitman *et al.*, 2014). Hence, larger organizations might also be better prepared and distribute risk and in a better position to prevent crises. Compared to large ones, small tourism organizations have low level of bureaucracy and limited risk and might be more flexible during a crisis (Alves *et al.*, 2020) but they also lack crises management compliance, and usually financial and human capital (e.g. training) to survive crises (Dahles and Susilowati, 2015).

Ritchie *et al.* (2011) discuss that accommodation type and size have significant impacts on crisis planning and preparedness in lodging. According to them, larger (chain hotels) and higher star grading hotels are more effective in crisis planning and preparedness compared to smaller independent hotels. This corroborates with Vij *et al.* (2021), who found 3- and 4-star hotels were less crises resilient than 5-star and deluxe hotels. They go on to list financial capabilities, brand support and customer base as other inherent characteristics for hotels which are less effected by crises. Other than size, Biggs *et al.* (2012) claim only 13% of formal organizations downsized or temporarily closed compared to 39% of informal organizations during the tsunami crisis. Hence, formal and larger organizational structures are discussed as more crises resilient (Biggs *et al.*, 2012).

Kosova and Enz (2012) have compared hospitality and tourism organizations based on their market segments. Despite luxury hotels are the first to feel the effects of crisis, they are claimed to have higher levels of customer loyalty and service quality and thus they were the first to recover from crisis. Branded hotels also rely on business travelers who are less flexible to avoid travel unless officially restricted. Market segments hence can also be seen as a significant antecedent of crises resiliency. Marketing and management strategies are discussed as facilitators of hospitality and tourism resilience by Estiri *et al.* (2022) as well. Different organizational target markets, their income and price elasticity are also among the dimensions mentioned for resilience against financial crises; however, this may not be necessarily true for other types of crises (Song *et al.*, 2011). Resilient markets and their characteristics during COVID-19 were frequently mentioned as domestic travelers, other short-haul travelers, nature-based tourists, smaller groups, families and younger travelers (Do *et al.*, 2022; UNWTO, 2022).

Organization's age was also mentioned as a characteristic of crisis resilience. Rousaki and Alcott (2006) state that the more unfamiliar the organization is with the specific crisis

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event, the more vulnerable it is and less readiness. [Hall et al. \(2023\)](#) also discuss previous crises experience might help develop resilience for future crises. One can claim that older organizations may become more resilient if they have experienced similar event before ([Liu-Lastres and Cahyanto, 2023](#)). In addition, younger organizations may be less resilient due to their limited capital reserves and smaller networks ([Whitman et al., 2014](#)). [Ritchie et al. \(2011\)](#) demonstrated that older organizations do not actually have a higher perceived level of crisis preparedness which can be interpreted as an obstacle for resiliency. Organizational culture may also be an important factor for being resilient to crisis ([Sawalha et al., 2013](#)).

Overall, although current literature discusses some characteristics of crises resilient organizations, these were usually based on specific regional crises and conceptual in nature, offering limited empirical support. Because previous scant research was conducted on specific destinations and sectors of tourism (i.e. lodging), there are also some disagreements (large vs small, old vs young) on features of the crises resiliency. Moreover, most of these studies are based on pre-COVID crises which had temporary, regional and limited impacts in global hospitality and tourism industry. Hence, there is first a need to identify a comprehensive list of features and strategies that make a crises resilient organization and then to empirically test and measure their importance, which would in turn create the much-needed transferable understanding on characteristics of crises resilient organizations. Hence, this paper does not only identify these characteristics but measure their effectiveness by matching these characteristics with impacts experienced by individual organizations and their performances during COVID-19.

### *2.2 COVID-19 mitigation strategies and resiliency of organizations*

Regarding its size and effects, COVID-19 is acknowledged as a global event triggering multiple health, economic, geopolitical and social crisis ([Romagosa, 2020](#)). By April 2020, 157 destinations have closed their borders to international flights, and this caused an unprecedented impact on entire hospitality and tourism industry ([UNWTO, 2020](#)). All hospitality and tourism organizations, large and small, that depend directly or indirectly on the industry (air transport, lodging, food and beverage, cruises, travel agencies, leisure and cultural activities) have experienced significant downturns ([Romagosa, 2020](#)), and the crises have posed an existential threat on the industry.

Between January and June 2020, international tourist arrivals for all regions decreased as much as 65% compared to same period in 2019. Estimated loss of hospitality businesses during early stage of crisis has reached up to 80% for accommodation and food services ([UNWTO, 2022](#)). Because of these unprecedented negative impacts, focusing on strengthening resilience is significant not only for individual organizations but also destinations ([Jiang and Wen, 2020](#)). Different recovery strategies are adopted by tourism organizations during the pandemic. These can be classified under financial (e.g. cost reduction), marketing (e.g. focusing on domestic markets), operational (e.g. adopting technology) and HR-related (e.g. cross training) activities ([Goktepe and Cetin, 2020](#)). [Campiranon and Scott \(2014\)](#) classify these organizational strategies under crises management, market segmentation and selection, recovery marketing and communication, collaboration and personnel management.

[Do et al. \(2022\)](#) adopts retrenchment, persevering, innovating and exit as the main categories of crises management strategies used by tour operators in Vietnam. They go on to discuss decreasing costs, assets, number of staff, concentrating on core activities, innovation, restructuring, de-investment, focusing on new products, markets among major mitigation strategies. [Israeli and Reichel \(2003\)](#) explored lodging organizations' responses to crises and identified 21 strategies under marketing, hotel maintenance, HRs and



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governmental assistance. For investigating responses to economic impacts of crisis also in lodging, [Waller and Abbasian \(2022\)](#) have discussed dimensions such as flexibility for targeting different segments (e.g. domestic, new business, leisure), communicating for safety and security and collaboration with internal and external stakeholders for strategy implementation. For food and beverage businesses' resilience, [Bhattacharya et al. \(2021\)](#) propose a Four-F action plan, and they highlight strategies related to stakeholder theory and relationships with suppliers. [Colmekcioglu et al. \(2022\)](#) have examined resilience research in hospitality and tourism conceptually. They have also stressed the importance of long-term strategies that are centered around HR management, marketing innovation and changing patterns in consumer behavior.

Even though some studies explored generic responses, there is limited research analyzing the effectiveness of these crises management strategies, because their impacts were to be seen after a certain period of implementation. The impacts of pandemic started to fade away during 2022 and created an environment to evaluate the efficiency of organizational characteristics and mitigation strategies. After the record year in 2019 in arrivals, the tourism volume significantly dropped by 72% in 2020 and 69% in 2021 compared to 2019. Tourism volume during the first seven months of 2022 reached 57% of prepandemic levels. Compared to the same period, international tourism arrivals almost tripled from 175 million in 2021 to 474 million in 2022 ([UNWTO, 2022](#)).

### 3. Methodology

The main objective of this study is to identify attributes of crises resilient organizations in hospitality and tourism industry. Because of its exploratory nature, a sequential mixed method (first qualitative then quantitative) was adopted. The first step in studying organizational crisis management resiliency from a multi-attribute approach requires identification of such attributes. This can be accomplished by assembling a list of organizational characteristics, managerial practices, mitigation strategies and key crisis performance indicators based on literature and/or by interviewing tourism experts. Because theoretical foundations on what makes a crises resilient tourism organization is scant, we adopted both.

Thirty hospitality and tourism industry representatives were first interviewed during March, 2022. The semistructured interviews included questions on the characteristics of crises resilient organizations, effective mitigation strategies and performance indicators of COVID-19 on their businesses. The informants were initially recruited from networks of the authors, and a snowball sample was also introduced. These interviews were conducted with tourism professionals operating in major tourism destinations in Turkey (11), Jordan (6), Malaysia (6), Spain (5) and the USA (2); in lodging (12), tour operation (7), catering (7), event management (4) sectors of hospitality and tourism industry. After 30 interviews, data started to repeat itself and authors agreed on data saturation that no new interview would result in additional novel keyword. The responses were electronically recorded, transcribed verbatim and content analyzed to create an item pool for organizational characteristics (18), crises management strategies (22) and impacts of COVID-19 on different key performance indicators (KPIs) (5). An open coding approach was adopted initially, and participants' responses ([Strauss, 1987](#)) were used to identify characteristics of crises resilient organizations, effective mitigation strategies and KPIs measuring the impact of COVID-19. An example of the coding process based on responses is displayed in [Table 1](#).

However, creating list of attributes and strategies does not provide managers with the information on what to prioritize and where to invest limited organizational resources. Hence, there was also a need to measure the importance of these attributes through a

questionnaire where managers would rate the effectiveness of those strategies and significance of organizational characteristics they suggested. Such a quantitative approach also made possible to group these organizations into different clusters based on their organizational resiliency and characteristics. Hence, findings at the qualitative stage informed the survey which was distributed online using different channels including professional associations and destination management organizations in 50+ countries to enhance its geographical representation. A total of 202 responses were collected from 20 countries in 4 continents during May–June 2022. Majority of respondents were from Malaysia (84), Turkey (76) and Jordan (24). The descriptive results about the profile of these organizations are presented in Section 4.

Besides the inductive approach (qualitative data), previous literature (deductive approach) was also used to identify the items to be used in the questionnaire. During the qualitative semistructured interviews, 30 industry professionals were asked about the features of crises resilient tourism organizations and alternative strategies adopted during the crises. They were also requested to list potential KPIs to be used to identify the impact of crises on hospitality and tourism organizations and distinguish crises resilient organizations during this qualitative stage. Besides being informed by interviews, the mitigation strategies were generated based on a comprehensive review of numerous papers addressing organizational crises mitigation in tourism (Do *et al.*, 2022; Ritchie, 2004; Guillet and Chu, 2021; Okumus and Karamustafa, 2005; Seyitoglu and Ivanov, 2021; Vij *et al.*, 2021), and industry reports (AIEST, 2021; UNWTO, 2022; WTTC, 2019; WTTC, 2022) were also content analyzed to enhance the validity of items to be used in the survey. A total of 18 organizational characteristics, 22 mitigation strategies and 5 KPIs were identified at the end of this process.

Hence, the paper informed its survey based on expert opinions and extant literature. By collecting its data after the outcomes of strategy implementation can be evaluated, the paper is also able to offer a more representative list of characteristics and strategies that make a crisis resilient organization. The quantitative data collection tool also explores organizational characteristics and crises management strategies' effectiveness by matching these with actual impacts on (KPIs) of each individual organization (percentage change in revenues, prices, customers and employees) more than a year after the crises first started to impact the industry and after the recovery already commenced. Respondents were requested to compare these KPIs between 2019 and 2020 periods. These processes and analysis are explained further below.

The survey was first pilot tested on 40 experts to control for its face and content validity and reliability of the items used. Despite measurements were satisfactory, some adjustments

Interview (extracted from the data)	Open coding
We are in continuous crises since 1980s, economic crises, terrorist attacks, earthquakes, political conflicts, epidemics, you name it. Any business operating more than 5 years is resilient under these conditions . . . First of all you need to have a certain amount of capital reserve, the paid-in capital structure should also be strong . . . The organization needs to be very flexible . . . The large hotels are usually more professional and financially strong but they also lack the adaption capability. Besides for COVID-19 size is not an advantage, no one wants to dine among 150 people anymore	Greater years in operation, higher paid-in capital, lower capacity
<b>Source:</b> Own elaboration	

**Table 1.**  
An example of coding for resiliency characteristics



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were still made based on the individual feedback, and the items were also adopted to address all hospitality and tourism organizations. For example, change in *average occupancy* which was frequently mentioned by lodging professionals as an indicator of crisis performance was merged with *number of customers served* as a KPI to address other tourism organizations. Like characteristics and mitigation strategies, all KPIs were identified based on the qualitative enquiry and supported by various research (Hall *et al.*, 2023) as indicators of resilience.

Research measuring performance in hospitality and tourism used *revenue* industry (Kosova and Enz, 2012; Widz *et al.*, 2022), *price* and *number of customers* as three key financial performance indicators. Other research used these financial indicators for both measuring performance of industry and at organization level (Cvelbar and Dwyer, 2013; Caveró-Rubio and Amorós-Martínez, 2020). During a crisis, decrease in revenues is the most visible impact on financial performance (Leta and Chan, 2021), which is strongly dependent on other dimensions such as the number of customers and prices. By comparing percentage changes of revenue growth (net operating income per employee and asset turnover) prior and during the financial crisis, Caveró-Rubio and Amorós-Martínez (2020) measured performance of organizations. In addition to revenue, due to reduced demand, reduction in *price* is also an outcome of crisis (Leta and Chan, 2021). Number of *customers*, referred also as occupancy rates or demand in some studies, is one of the key dimensions for measuring an organization's performance (Cvelbar and Dwyer, 2013). HR performance or *employee* numbers, another indicator (Cvelbar and Dwyer, 2013; Caveró-Rubio and Amorós-Martínez, 2020), also emerged as a significant indicator of performance particularly during the COVID-19 due to large numbers of employee layoffs (Lai and Wong, 2020). Widz *et al.* (2022) also suggest that it is worthwhile to extend performance analyses with HR-related indicators during COVID-19 pandemic.

The data collection tool was composed of three main sections. First section included characteristics of each organization (e.g. year of establishment, type, size). The second section was made up of crises response strategies and their importance [Likert type of not important at all (1) very important (5)]. Literature in crises management supports that there is a high correlation between mitigation strategies' importance and their usage (Israeli and Reichel, 2003). And the final section included KPIs aiming to measure the crises resiliency of organizations. KPIs were captured with a percentage change relative to pre-COVID performance. The managers choose on a rating of  $-100\%$  to  $+100\%$  to describe the impact of COVID-19 on these KPIs.

In addition to descriptive statistics, *cluster analysis* was used to explore the interface between crises resilient organizations, organizational characteristics and mitigation strategies. To measure crises resiliency level, percentage change in number of customers, revenues, prices and number of employees was used as KPIs based on the feedback received during the qualitative stage. Location, years in operation, branding, markets (geographic and motivational), size (number of employees), cost structure (fixed vs variable costs), service quality, customer loyalty, product diversification, market diversification, information and communication technology (ICT) adoption, capital structure, branding and ownership and so on were used as organizational characteristics. Based on the qualitative stage, a total of 21 mitigation strategies were also adopted into the analysis. These are displayed in Table 3.

The main objective of cluster analysis was to identify types of hospitality and tourism organizations and grouping them based on their crisis's resiliency. Organizations belonging to the same group (cluster) present a behavior as homogeneous as possible, and organizations belonging to different groups present behaviors that are as heterogeneous as possible. Before implementing the analysis, authors have proceeded to normalize (standardize) the variables. Because the high number of cases makes the use of the hierarchical cluster procedure inadvisable, it has been decided to apply the K-means cluster

analysis. From the normalized variables, the K-means method uses the concept of Euclidean distance to quantify the similarity/dissimilarity between subjects. In a system of  $p$  variables, the Euclidean distance between two subjects  $x$  and  $y$  are calculated as follows (Table 2):

$$d(x,y) = \sqrt{\sum_{i=1}^p (x_i - y_i)^2}$$

#### 4. Findings

This research explored the interface between crises resilience, organizational characteristics and mitigation strategies used by hospitality and tourism organizations for recovery after COVID-19 crisis. First, an index of mitigation strategies, features of crises resilient tourism organizations and KPIs were identified to measure effects of crises based both on content analysis of 30 interviews with tourism professionals and extant literature. A total of four KPIs (revenues, prices, # of customers, # of employees), 18 organizational characteristics and 21 mitigation strategies were used in the quantitative phase (see Table 3). The importance of mitigation strategies and organizational characteristics was reported based on descriptive analysis. Moreover, matching their performance on KPIs, their organizational characteristics and mitigation strategies, tourism organizations were grouped under four clusters. Hence, the study not only offers a list of structural characteristics and mitigation strategies used by tourism organizations and their importance but also categorized these organizations based on their KPIs, response strategies and organizational characteristics.

A total of 202 responses from 20 countries in four continents were involved in data collection. Of the responses, 43% were from Asia, 39% of the responses were from Europe, 17% from Africa and 3% from South America; 38% of the respondents were representing lodging organizations. Tour operation and transport services made almost half of the sample (49%), food and catering services (5%) and other tourism organizations (9%) made up the rest of the sample. Malaysia (84), Turkey (76) and Jordan (28) had the largest number responses. Of the respondents, 41% represented small and medium-sized enterprises which employ less than 50 employees, while 48% of respondents had 250+ coworkers in their organization. Minimum 5 years of experience in tourism and hospitality industry and holding an active executive position were set as a respondent criterion. Majority of informants were male (61%) with an average age of 49 and industry experience of average 22 years. Findings show that crisis has resulted in a major revenue decrease in responding organization caused by both reduced

Iteration history

Iteration	Iteration change in cluster centers			
	1	2	3	4
1	48,916	82,591	101,35	65,523
2	30,047	6,922	0	2,196
3	1,113	2,424	0	2,381
4	0	0	0	0

**Table 2.** Iterations for cluster analysis of this research

**Notes:** <sup>a</sup>Convergence achieved because there is no change in the cluster centers or a small change; the absolute maximum coordinate change for any center is 0.000; the current iteration is 4; the minimum distance between the initial centers is 218,254

**Source:** Own elaboration

	Total	Cluster 1 of 4	Cluster 2 of 4	Cluster 3 of 4	Cluster 4 of 4
<i>N</i>	200	31	91	13	65
<i>Type of organization</i>					
Accommodation and lodging services	38%	48%	41%	15%*	32%
Tour operation and transport services	49%	45%	42%	69%	55%
Food and catering services	5%	0%	8%	0%	5%
Others	9%	6%	10%	15%	8%
	Mean	Mean	Mean	Mean	Mean
Number of employees	155	32*	246*	468*	23*
Years in operation	17	16	18	18	16
<i>COVID-19 key performance indicators</i>					
a. Decline in revenues	69	25*	70	61	89*
b. Decline in # of customers	68	20*	69	64	90*
c. Decline in average prices	40	10*	43	18	56**
d. Decline in number of employees	48	35*	48	26*	59**
<i>Characteristics of crises resilient organizations</i>					
3.1. Capacity is lower	3.4	3.8	2.8	4.3*	3.9*
3.2. Fixed costs are higher than variable costs	3.2	3.7	2.4	3.6	3.8*
3.3. Variable costs are higher than fixed costs	3.4	4.0**	2.9	2.7	3.9
3.4. Paid-in capital is higher	3.6	3.6	3.5	4.5**	3.6
3.5. Organization's buildings are rental	2.8	3.4	2.1	3.6*	3.3*
3.6. Has the right location	3.5	3.6	3.2	4.4**	3.8
3.7. Cares about service quality	4.0	4.0	3.8	4.4	4.2
3.8. Owns a strong brand	3.8	3.9	3.8	4.7**	3.6
3.9. Part of a chain	3.2	3.0	3.2	4.7**	2.9
3.10. Has more loyal guests	3.7	3.6	3.7	4.4**	3.7
3.11. Competes based on price	3.6	3.8	3.3	3.8	3.8
3.12. Operates as a family business	2.7	3.2*	2.3	2.2	3.1*
3.13. Competes based on service quality rather than price	3.9	4.1	3.6	4.5**	4.1
3.14. Offers diversified services and products	3.8	4.2	3.6	4.7	3.9
3.15. Adopts information and communication technologies	3.9	4.2	3.7	4.3	4.0
3.16. Targets domestic markets	3.7	3.6	3.4	4.4	3.9
3.17. Targets business travelers	3.4	3.4	3.1	4.3*	3.5
3.18. Targets leisure tourists	3.4	3.9*	2.9	4.4*	3.6
<i>Effective recovery strategies</i>					
4.1. Increasing marketing activities	3.7	3.8	3.5	4.4*	3.7
4.2. Offering new products and services	3.9	4.2	3.7	4.8*	4.0
4.3. Decreasing prices	3.1	3.7*	2.6	2.6	3.5**
4.4. Decreasing costs	3.5	3.9	3.0	4.5*	3.9
4.5. Decreasing service quality	1.9	1.9	1.7	1.8	2.1
4.6. Decreasing capacity	2.9	3.0	2.5	3.7*	3.1
4.7. Enhancing service quality	4.1	4.2	4.0	4.0*	4.1
4.8. Market diversification/Targeting different markets	4.2	4.3	4.0	4.8*	4.3
4.9. Merging with other organizations	3.3	3.5	3.0	3.1	3.5
4.10. Relaxing cancellation policies	3.7	3.8	3.3	4.5*	4.1*
4.11. Investing in employee training	3.4	3.7	3.2	4.2*	3.4
4.12. Focusing on ICT and automation	3.6	3.6	3.3	4.5*	3.9
4.13. Postponing investments	3.4	3.1	3.1	3.4	3.8*
4.14. Corporate social responsibility activities	3.2	3.6	2.9	3.7	3.3

**Table 3.**  
Descriptive findings  
and cluster solutions  
(continued)

	Total	Cluster 1 of 4	Cluster 2 of 4	Cluster 3 of 4	Cluster 4 of 4
4.15. Applying for financial support	3.9	3.8	3.8	4.6**	4.1
4.16. Enhancing cleanliness and hygiene standards	4.3	4.4	4.1	4.9*	4.4
4.17. Enhancing travel insurance policies	3.7	3.9	3.4	4.8*	4.0
4.18. Restructuring debts	3.9	3.7	3.8	4.5**	4.1
4.19. Decreasing number of employees	3.2	3.5	2.9	3.6	3.5
4.20. Downsizing through liquidations	2.7	3.5**	2.1	3.2	3.2*
4.21. Creating safety image	4.1	4.2	4.0	4.6	4.2
4.22. Enhancing loyalty programs	3.8	3.9	3.5	4.6**	4.0

**Notes:** \* $p \leq 0.05$ ; \*\* $p \leq 0.01$ . There is significance when the difference between values is greater than the sum of the sampling errors associated with both values

**Source:** Own elaboration

**Table 3.**

demand and lockdown restrictions. Hospitality and tourism professional experienced an average of 69% decline in revenues, 68% loss in the number of customers, 48% decrease in the number of staff and 40% decline in rates compared to 2019. The findings on organizational characteristics and mitigation strategies are discussed in the following section based on overall sample ratings and ratings from cluster solutions.

#### 4.1 Organizational characteristics and mitigation strategies

A total of 18 organizational characteristics and 21 mitigation strategies were used to measure crises resilience of organizations based on five-point Likert scale. Based on the sample averages, service quality (4), using ICT (3.9), avoiding price competition (3.9), offering diversified products and services (3.8), owning a strong brand (3.8), local customer base (3.7), having loyal customers (3.7) and higher paid in capital (3.6) were rated as the most important structural characteristics of crises resilient organizations, whereas operating as a family business (2.7) and operating in rental facilities (2.8) received the lowest ratings from hospitality and tourism professionals.

Concerning mitigation strategies strengthening hygiene standards (4.3), diversification (4.2), improving quality (4.1), building a safety image (4.1), restructuring debts (3.9), introducing novel products and services (3.9), employing government financial support (3.9) and enhancing loyalty programs were listed as the most effective responses. Decreasing quality of service (1.9), downsizing through liquidations (2.7), decreasing capacity (2.9), decreasing prices (3.1) and decreasing the number of employees (3.2) received the lowest ratings from respondents based on sample averages.

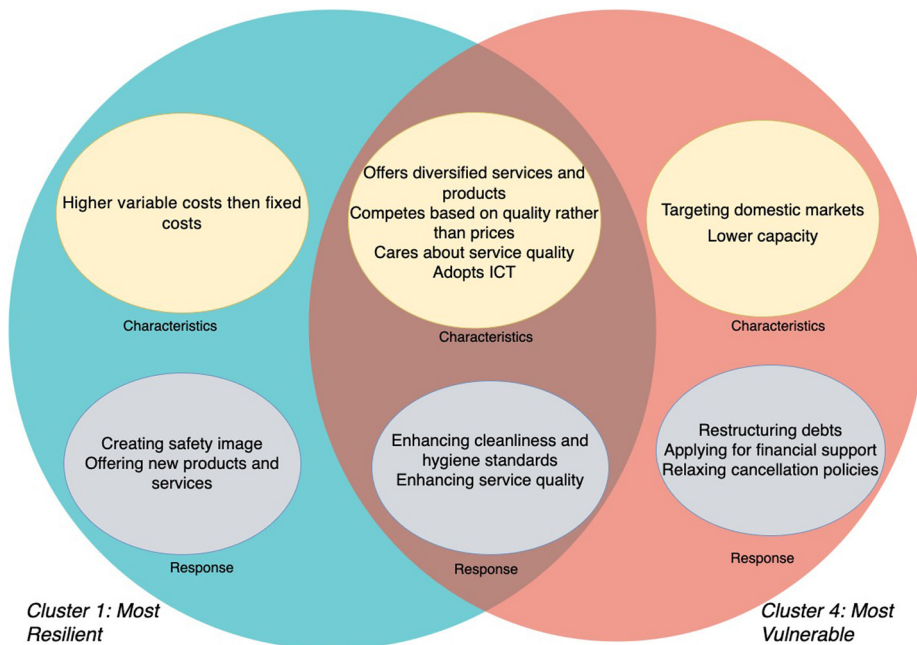
#### 4.2 Cluster solutions

Based on the analysis of organizational performance, four clusters were identified. Cluster-1 group of companies stayed significantly more resilient during COVID-19 based on the percentage change in their revenues, prices, customers and employees, whereas Cluster-4 experienced significantly more declines on all of the four dimensions. Cluster-2 and -3 were in between, recording different levels of negative KPIs between Cluster-1 and Cluster-4. However, the differences on performance experienced by these middle clusters were not significant (Cluster-2 and Cluster-3), except employment in Cluster-3. Hence, we focused on Cluster-1 as the most crises resilient group because all of its four KPIs were significantly lower than other clusters and Cluster-4 as the most vulnerable tourism organizations as its all four KPIs were

higher than other clusters. Hence, the findings are focused on these two extreme clusters. Chiapino *et al.* (2020) also suggest focusing on extreme values (extreme value theory [EVT]) to analyze patterns and structure in data. Similarly, EVT is extensively used in risk management research to identify data clusters that are associated with high or low values (Embrechts *et al.*, 1999), in our case the most resilient and the most vulnerable other clusters (please see Figure 1).

Cluster-1 was composed of 31 most resilient tourism organizations, and they had 32 employees on the average, which is also significantly less than the sample average of 155 employees. Of these organizations, 48% were lodging services, 45% were tour operating businesses and the remaining 7% is made up of other tourism organizations. None of the 10 food and catering service organizations made it into Cluster-1. These organizations experienced a 25% decline in revenues, 20% decline in prices, 10% decrease in the number of customers and 35% reduction in the number of employees. These KPIs are significantly lower than KPIs recorded by overall sample. Offering diversified portfolio of products and services (4.2), adopting ICT (4.2), competing based on service quality rather than prices (4.1), caring about service quality (4) and has higher variable costs than fixed costs (4) were labeled as the most significant features of resilient organizations by experts in this cluster. Having higher variable costs than fixed costs (4), targeting leisure tourists (3.9) and operating as family businesses (3.2) were unique characteristics of these organizations that differentiate them from other organizations.

Concerning their response strategies, resilient organizations those are grouped under Cluster-1 rated improving hygiene standards (4.4), market diversification (4.3), building safe image (4.2), improving service quality (4.2) and offering new products and services (4.2) as the most important mitigation strategies. The perception on importance of downsizing



**Figure 1.**  
Most resilient and vulnerable clusters

Source: Own elaboration

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through liquidations (3.5) and decreasing prices (3.7) were two of the strategies which also made this group significantly distinct from the other organizations.

Cluster-4, the most vulnerable group, had significant more declines in their revenues (90%), prices (89%), number of staff (59%) and number of customers (56%) compared to sample average of pre-COVID business performances. This group hosted 65 of the 202 organizations, has been in business for 16 years and employing 23 staff which is again significantly lower than the average. The respondents representing this group rated caring about service quality (4.2), competition based on service quality rather than price (4.1), adopting ICTs (4), having lower capacity (3.9), diversified portfolio of products and services (3.9) and clientele from domestic segment (3.9) as most important structural features of crises resilient organizations. Lower capacity (3.9), higher fixed costs than variable costs (3.8), paying rent for facilities (3.3) and operating as a family business (3.1) received significantly higher rates by professionals in this cluster than other organizations.

As to the mitigation strategies, enhancing cleanliness and hygiene standards (4.4), restructuring debts (4.1), applying for financial support (4.1), relaxing cancellation policies (4.1) and enhancing service quality (4.1) received the highest ratings. Crises response strategies that were significantly different than other clusters were as follows: relaxing cancellation policies (4.1), postponing investments (3.8), decreasing prices (3.5) and downsizing through liquidations (3.2).

Most of these strategies rated high and found significant in Cluster-4 were not considered a priority for resilient strategies in Cluster-1. However, these clusters also shared similarities such as downsizing through liquidations and decreasing prices. One may expect postponing investments and downsizing to have a negative impact on number of customers and revenues as they relate to capacity. Another shared characteristic was decreasing prices, which also relate to one of the other four KPIs (change in price). Yet, even it was one of the items that differentiated Cluster-4, decreasing prices did not have much of an impact on demand for organizations grouped under Cluster-4, they still lost 90% of their customers and 89% of their revenues.

However, Cluster-3 does not belong to the extremes of this study (EVT – the most/resilient tourism organizations), considering all of the four KPIs. These organizations recorded the lowest decline in number of employees. Keeping qualified staff has also proven significant for resilience particularly after recovery where organizations struggled finding suitable HRs. Cluster-3 also presents some statistically significant data related to features of resilient organizations to crises, such as owns a strong brand (4.7), is a part of a chain (4.7), high paid-in capital (4.5), competes based on quality rather than price (4.5), has the right location (4.4), has more loyal guests (4.4), targets leisure tourists (4.4), has low capacity (4.3), targets business travelers (4.3) and organization's buildings are rental (3.6).

## 5. Discussion and conclusions

Based on the findings; service quality, diversified products, brand image, catering local customers, having loyal customer base, using technology and financial power were rated among the most important structural organizational characteristics. These attributes are interrelated and stress the importance of long-term approach, structural organizational characteristics and management principles. Service quality for example is related to a positive brand image and customer loyalty (Alonso-Almeida and Bremser, 2013; Demirciftci and Kizilrimak, 2016) and is widely acknowledged as a key driver for enhancing operational performance of organizations, gaining competitive advantage (Ren *et al.*, 2018) and the key aspect for organizational survival, so resilience, in the global market (Cristea and Mocuta, 2018). Offering diversified products that would satisfy the needs of different market



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segments and their expectations is also mentioned as a competitive advantage in several research (Kirant Yozcu and Cetin, 2019; Ying *et al.*, 2020). Significance of loyal customer base for crises resiliency was also stressed in previous literature (Everly, 2011). Concerning mitigation strategies enhancing cleanliness, diversification of the market, enhancing service quality, building safety image and restructuring credits were listed as the most effective response strategies. These are also in line with previous research and policy reports (AIEST, 2021; Chan *et al.*, 2021; Ozdemir *et al.*, 2020; Cambra-Fierro *et al.*, 2022; Kim *et al.*, 2018). The complete list of these structural characteristics and mitigation strategies is displayed in Table 3.

Cluster analysis resulted four clusters in total. Cluster-1 and Cluster-4 have differentiated from Cluster-2 and -3. Cluster-1 was significantly more crises resilient, whereas Cluster-4 was significantly more vulnerable to crises than sample average in all of the four KPIs. Organizations in Cluster-1 as the most resilient organizations had significantly lower number of employees, mainly operating in lodging sector, having higher variable costs than fixed costs, targeting leisure tourists and operating as family businesses. These organizational characteristics were significantly different from other clusters. Concerning mitigation strategies, downsizing through liquidations and decreasing prices were two of the strategies which also made this group significantly distinct from the other clusters.

Cluster-4 on the other hand as the most vulnerable group rated lower capacity, higher fixed costs than variable costs, paying rent for facilities and operating as a family business significantly higher than other clusters. Relaxed cancellation policies, postponing investments, decreasing prices and downsizing through liquidations were mitigation strategies rated significantly greater in Cluster-4 than other groups. These findings do not mean that these clusters neglected all other characteristics and mitigation strategies but these are items received statistically different ratings in Cluster-1 and Cluster-4 than other clusters. Some items did not produce any significant differences across any of the four clusters. For example, service quality, price-based competition, product and service diversification, adopting ICT, mergers, corporate social responsibility activities and layoffs received similar ratings without any significant distinction among the clusters. Organizations' age was also not a statistically significant differentiating factor across clusters. This also explains the conflicting findings in the hospitality and tourism crises management literature about impact of organization's age on resiliency.

### *5.1 Theoretical implications*

Scarce research on organizational strategies so far are either qualitative in nature (i.e. Do *et al.*, 2022) or lack an inductive approach in identifying those alternative strategies, repeating previous crises management studies. Different than previous papers using secondary data and literature, this paper identified characteristic of crises management organizations and alternative strategies based on semistructured interviews with tourism professionals. Past research also focused on central mitigation strategies (i.e. destination level) or concentrated on a single sector (i.e. lodging) of hospitality and tourism industry (i.e. Okumus and Karamustafa, 2005). Previous studies are usually concentrated on one sector of hospitality and tourism industry, mainly lodging (Okumus and Karamustafa, 2005; Shi *et al.*, 2021) or tour operation (Do *et al.*, 2022), neglecting the holistic nature and interdependent structure of the industry (Yarcan and Cetin, 2021).

The fragmented perspective of each study apparent in crisis management literature, conflicting findings and different characteristics of individual case countries makes it difficult to identify the key findings and unsolved problems. This paper offers a more transferable results sampling 20 countries located in four continents. Most COVID-19

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research were also conducted during the crises where the impacts of crises were in progress. Focusing on postcrisis, aftermath its impacts, the paper was able to offer a more realistic assessment of characteristics of crises resilient organizations and effective mitigation strategies.

The paper also advances the knowledge on crises resilient organizations and effective crises strategies in hospitality and tourism research by exploring the impact of COVID-19 on individual organizations. Previous crises management investigations are reactive and case-based, they usually consider one particular crisis or a single sector at a time overlooking the precrisis planning and mid-crisis management and neglected stakeholders' holistic perspectives (Leta and Chan, 2021; Shi *et al.*, 2021; Waller and Abbasian, 2022; Bhattacharya *et al.*, 2021). As such, the generalizability of these studies is questionable. Another important contribution of the paper is that it not only identified features of crises resilient organizations and mitigation strategies but also measured their impact on various performance indicators. Different than its predecessors (Okumus and Karamustafa, 2005), the paper also investigates longer term impacts aftermath of the crises because the organizational characteristics and mitigation strategies are matched with real performances after the crises.

Moreover, the paper examines not only into effectiveness of mitigation strategies but also the organizational characteristics that make a resilient hospitality organization. This is also a novel approach in risk and crises management in tourism and hospitality literature. The paper also sheds light onto some disagreements in the hospitality and tourism crises management literature. For example, some papers (Alves *et al.*, 2020) suggest that small organizations are more crises resilient, while others (Whitman *et al.*, 2014) discuss larger organizations are more resilient to crises. This paper found both most resilient (average 32 employees) and most vulnerable (average 23 employees) organizations in tourism system have significantly lower number of employees (as an indicator of organizational size). Hence, the smallest small- and medium-size hospitality and enterprises (SMHTEs) were identified as most vulnerable. Mid-sized SMHTEs on the other hand were the most resilient organizations compared to the rest of the sample. Large organizations made up the second and the third clusters.

This is also another indication that resiliency depends on the interplay and synergy created by various characteristics and factors (e.g. ownership) coming together. Hall *et al.* (2023) also discuss organizational capabilities and type can affect resilience. Thus, various insights were also provided for current debates in hospitality and tourism crises management literature on different factors that need to be considered before conclusions. It should also be mentioned here that because of the significance of human interactions tourism and hospitality and challenges with finding, training and retaining qualified staff (Lai and Wong, 2020) decline in the number of staff might not reflect the true impact of crises on tourism and hospitality organizations.

### *5.2 Practical implications*

There is a lack of established mechanisms to guide hospitality and tourism organizations out of turbulent environments and enable effective long-term resilience. Most research focusing on central management of crises on regional and national levels neglected the needs of the industry. Majority of papers in crises management are also conceptual in nature offering theoretical implications ignoring market needs. Limited studies (Do *et al.*, 2022) which based their discussion on empirical data are qualitative and concentrated crises response strategies overlooking structural organizational characteristics that might affect efficiency of response strategies and hence resiliency of hospitality and tourism

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organizations. This paper not only identifies these characteristics and strategies but also measure their importance based on a questionnaire. Besides quantifying importance of different organizational characteristics and mitigation strategies, the paper also offers four clusters based on their level of crises resiliency.

Hence, it is expected an organization ranked high for an effective strategy will outperform another overlooking that particular strategy. For example, fixed and variable cost ratio seems to be one of the differentiating factors among the resilient and vulnerable clusters. Realizing resilient organizations have higher variable costs, hospitality and tourism organizations might focus on increasing their variable costs while minimizing their fixed costs. This also relates to rental buildings which received among the lowest ratings. Building rental fees as a fixed cost needs to be paid regardless of the business volume, hence producing detrimental pressure total fixed costs. Despite it was one of the significant items differentiating Cluster-1 and Cluster-4, *operating as a family business* received one of the least ratings from the respondents among other characteristics. Biggs *et al.* (2012) also discussed formal organizations being more crises resilient. Cluster-1 (32 employees) and cluster-4 (23 employees) also had the least number of employees, and family business emerged as one of the characteristics that differentiated these two clusters. However, Cluster-3 (246 employees) and Cluster-4 (468 employees) naturally rated family business the lowest characteristic among those define a resilient organization. These differences among sample ratings and significance of items in determining clusters also reflect the need for a holistic approach integrating organizational characteristics with effective strategies in examining resiliency rather than focusing merely on individual items. Hence, while it might be important for SMHEs, for large-scale organizations currently owned and managed by families might consider a more professional approach to replace their informal structure to be more crises resilient.

Service quality and loyal customers were also listed as important items. These two concepts have causal relationships in hospitality and tourism. When organizations continuously exceed customer expectations, they focus on quality service which in turn results in higher loyalty. Kosova and Enz (2012) also found service quality and loyalty are two major factors to affect resiliency in tourism. Branding was also listed an important dimension for crises resilient organizations (Gursoy and Altinay, 2021). Hence, hospitality and tourism organizations should consider joining suitable brands or investing in their own branding activities. Another feature of crises resilient organizations in hospitality emerged as the level of technology and ICT adoption. Besides offering various efficiencies (e.g. cost) and reliability (e.g. preventing human errors), these systems also help tourism organizations in social distancing measures (Seyitoglu and Ivanov, 2021).

Concerning mitigation strategies, relaxation in cancellation policies was one of the strategies differentiated vulnerable organizations in Cluster-4, which experienced a 90% decline in number of clients. Hence, more relaxed cancellation policies did not really make more positive impact on stimulating demand, because of travel restrictions, most travel trade and tour operation business already came to a halt (UNWTO, 2020). Lodging organizations were found to be more crises resilient than travel trade because they were still able to cater for their regional communities. Besides product diversification, market diversification mitigation strategy was also listed as important. Market diversification reduces the risk of being too dependent on one market. Some markets including domestic markets and leisure travelers were identified as more crises resilient (UNWTO, 2022). Do *et al.* (2022) also listed product and market diversification as effective recovery strategies for lodging organizations. However, targeting business travelers were among the lowest scored

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items considering most business meetings moved online and remote work already became the norm during the pandemic.

The classifications, characteristics and effective mitigation strategies suggested in this study might be used to create a crises resilience scale and offer areas for improvement for tourism organizations for their risk and crises management plans. The four item crises performance measure (i.e. change in revenues, prices, number of customers and employees) created based on the qualitative phase of the research might also be adopted by organizations as indicators of crises impacts, making comparisons among tourism and hospitality businesses possible.

### *5.3 Limitations and future research*

Despite the research used an international sample, every country might have specific challenges and external conditions. For example, geographical proximity to some crises resilient markets might affect an organizations' ideal targeting strategy. Hence, some adjustments might be needed when considering these findings on regional scale. Future research on tourism crisis management will benefit studies based on a larger sample looking into perspectives of stakeholders, adopting an integrative approach to research across multiple crisis stages, perspectives and levels of analysis. Research focuses on revealing causal relationships and actual behaviors of organizations in hospitality and tourism industry would also enhance tourism crises management theory and implementation. Research can also use official KPIs (e.g. return on investment) rather than self-reported KPIs used in this study. Moreover, this study is focused on most resilient and most vulnerable organizations that scored significantly higher and lower based on all of the four KPIs. It is also worth mentioning that although Cluster-3 did not show any significant differences among three KPIs, the decrease in the number of employees was significantly lower compared to other organizations. Cluster-3 also employed the largest number of staff, which might also indicate their size. Future studies might also explore different KPIs and segment organizations based on individual indicators rather than the holistic approach adopted in this study.

Finally, despite some papers used several indicators of resilience, these indicators might change based on personal, community and destination levels. For example, the study used 2020 (lowest annual arrivals) as the benchmark comparison to 2019 (precrises volume). There might be differences on how the temporal impacts of these KPIs are distributed across organizations. This paper also focuses on characteristics of organizational resilience; hence, the focus is short-term, recovery focused "engineering resilience" rather than long-term "ecological" or "socio-ecological resilience" (Hall *et al.*, 2023). In the absence of such holistic approach to resilience, this research identified organizational resilience measures based on qualitative inquiry and various literature. Future research might focus resilience measures from different perspectives.

## **References**

- AIEST, S. (2021), "The response of tourism businesses vis-à-vis the economic ramifications of SARS-CoV-2", available at: [www.aiest.org/news](http://www.aiest.org/news) (accessed 16 October 2022).
- Alonso-Almeida, M. and Bremser, K. (2013), "Strategic responses of the Spanish hospitality sector to the financial crisis", *International Journal of Hospitality Management*, Vol. 32, pp. 141-148.
- Alves, J.C., Lok, T.C., Luo, Y. and Hao, W. (2020), "Crisis management for small business during the Covid-19 outbreak: survival, resilience and renewal strategies of firms in Macau", *Research Square*, pp. 1-29.

- 
- Bhattacharya, A., Zutshi, A. and Bavik, A. (2021), "Building resilience for food service businesses in times of crisis: a Four-F action plan", *International Journal of Contemporary Hospitality Management*, Vol. 33 No. 10, pp. 3400-3441.
- Biggs, D., Hall, C.M. and Stoeckl, N. (2012), "The resilience of formal and informal tourism enterprises to disasters: reef tourism in Phuket, Thailand", *Journal of Sustainable Tourism*, Vol. 20 No. 5, pp. 645-665.
- Brown, N.A., Orchiston, C., Rovins, J.E., Feldmann-Jensen, S. and Johnston, D. (2018), "An integrative framework for investigating disaster resilience within the hotel sector", *Journal of Hospitality and Tourism Management*, Vol. 36, pp. 67-75.
- Cambra-Fierro, J., Gao, L., Melero-Polo, I. and Patrício, L. (2022), "Theories, constructs, and methodologies to study Covid-19 in the service industries", *The Service Industries Journal*, Vol. 42 Nos 7/8, pp. 551-582.
- Campiranon, K. and Scott, N. (2014), "Critical success factors for crisis recovery management: a case study of Phuket hotels", *Journal of Travel and Tourism Marketing*, Vol. 31 No. 3, pp. 313-326.
- Cavero-Rubio, J.A. and Amorós-Martínez, A. (2020), "Environmental certification and Spanish hotels' performance in the 2008 financial crisis", *Journal of Sustainable Tourism*, Vol. 28 No. 5, pp. 771-796.
- Cetin, G. (2020), "Experience vs quality: predicting satisfaction and loyalty in services", *The Service Industries Journal*, Vol. 40 Nos 15/16, pp. 1167-1182.
- Chan, J., Gao, Y.L. and McGinley, S. (2021), "Updates in service standards in hotels: how Covid-19 changed operations", *International Journal of Contemporary Hospitality Management*, Vol. 33 No. 5, pp. 1668-1687.
- Chiapino, M., Cléménçon, S. and Feuillard, V. (2020), "A multivariate extreme value theory approach to anomaly clustering and visualization", *Computational Statistics*, Vol. 35 No. 2, pp. 607-628.
- Colmekcioglu, N., Dineva, D. and Lu, X. (2022), "Building back better: the impact of the Covid-19 pandemic on the resilience of the hospitality and tourism industries", *International Journal of Contemporary Hospitality Management*, Vol. 34 No. 11, pp. 4103-4122.
- COMCEC (2017), "Risk and crisis management in tourism sector: recovery from crisis in the OIC member countries", available at: [www.sbb.gov.tr/wp-content/uploads/2021/02/Risk\\_and\\_Crisis\\_Management\\_in\\_Tourism\\_Sector.pdf](http://www.sbb.gov.tr/wp-content/uploads/2021/02/Risk_and_Crisis_Management_in_Tourism_Sector.pdf) (accessed 20 October 2022).
- Cristea, I. and Mocuta, D. (2018), "Customer relationship management", *Proceedings of the 31st International Business Information Management Association Conference, IBIMA 2018: Innovation Management and Education Excellence through Vision 2020*, Bulletin of Science and Practice, Milan, Italy, pp. 25-26.
- Cvelbar, L.K. and Dwyer, L. (2013), "An importance–performance analysis of sustainability factors for long-term strategy planning in Slovenian hotels", *Journal of Sustainable Tourism*, Vol. 21 No. 3, pp. 487-504.
- Dahles, H. and Susilowati, T.P. (2015), "Business resilience in times of growth and crisis", *Annals of Tourism Research*, Vol. 51, pp. 34-50.
- De Sausmarez, N. (2004), "Crisis management for the tourism sector: preliminary considerations in policy development", *Tourism and Hospitality Planning and Development*, Vol. 1 No. 2, pp. 157-172.
- Demirciftci, T. and Kizilrimak, I. (2016), "Strategic branding in hospitality: case of Accor Hotels", *Journal of Tourismology*, Vol. 2 No. 1, pp. 50-64.
- Do, B., Nguyen, N., D'Souza, C., Bui, H.D. and Nguyen, T.N.H. (2022), "Strategic responses to Covid-19: the case of tour operators in Vietnam", *Tourism and Hospitality Research*, Vol. 22 No. 1, pp. 5-17.
- Embrechts, P., Resnick, S.I. and Samorodnitsky, G. (1999), "Extreme value theory as a risk management tool", *North American Actuarial Journal*, Vol. 3 No. 2, pp. 30-41.

- 
- Estiri, M., Heidary Dahooie, J. and Skare, M. (2022), "Covid-19 crisis and resilience of tourism SME's: a focus on policy responses", *Economic Research – Ekonomska Istraživanja*, Vol. 35 No. 1, pp. 5556-5580.
- Everly, G.S. (2011), "Building a resilient organizational culture", *Harvard Business Review*, Vol. 10 No. 2, pp. 109-138.
- Goktepe, S. and Cetin, G. (2020), "Effects of the Covid-19 pandemic on the tourism industry", in Demirbas, D., Bozkurt, V. and Yorgun, S. (Eds), *The COVID-19 Pandemic and Its Economic, Social, and Political Impacts*, Istanbul University Press, Istanbul, pp. 59-70.
- Guillet, B.D. and Chu, A.M.C. (2021), "Managing hotel revenue amid the Covid-19 crisis", *International Journal of Contemporary Hospitality Management*, Vol. 33 No. 2, pp. 604-627.
- Gursoy, D. and Altinay, L. (2021), "The Silk Road and the service industries", *The Service Industries Journal*, Vol. 41 No. 7-8, pp. 441-445.
- Hall, C.M., Safonov, A. and Naderi Koupaei, S. (2023), "Resilience in hospitality and tourism: issues, synthesis and agenda", *International Journal of Contemporary Hospitality Management*, Vol. 35 No. 1, pp. 347-368.
- Henderson, J.C. and Ng, A. (2004), "Responding to crisis: severe acute respiratory syndrome (SARS) and hotels in Singapore", *International Journal of Tourism Research*, Vol. 6 No. 6, pp. 411-419.
- Holling, C.S. (1973), "Resilience and stability of ecological systems", *Annual Review of Ecology and Systematics*, Vol. 4 No. 1, pp. 1-23.
- Israeli, A.A. and Reichel, A. (2003), "Hospitality crisis management practices: the Israeli case", *International Journal of Hospitality Management*, Vol. 22 No. 4, pp. 353-372.
- Jiang, Y., Ritchie, B.W. and Verreynne, M.L. (2019), "Building tourism organizational resilience to crises and disasters: a dynamic capabilities view", *International Journal of Tourism Research*, Vol. 21 No. 6, pp. 882-900.
- Jiang, Y. and Wen, J. (2020), "Effects of Covid-19 on hotel marketing and management: a perspective article", *International Journal of Contemporary Hospitality Management*, Vol. 32 No. 8, pp. 2563-2573.
- Kampel, K. (2020), "Covid-19 and tourism: charting a sustainable, resilient recovery for small states", available at: <https://production-new-commonwealth-files.s3.eu-west-2.amazonaws.com/migrated/inline/THT%20163%20FINAL.pdf> (accessed 20 October 2022).
- Kash, T.J. and Darling, J.R. (1998), "Crisis management: prevention, diagnosis and intervention", *Leadership and Organization Development Journal*, Vol. 19 No. 4, pp. 179-186.
- Kim, S.S., Chun, H. and Lee, H. (2005), "The effects of SARS on the Korean hotel industry and measures to overcome the crisis: a case study of six Korean five-star hotels", *Asia Pacific Journal of Tourism Research*, Vol. 10 No. 4, pp. 369-377.
- Kim, J., Zheng, T. and Schrier, T. (2018), "Examining the relationship between the economic environment and restaurant merger and acquisition activities", *International Journal of Contemporary Hospitality Management*, Vol. 30 No. 2, pp. 1054-1071.
- Kirant Yozcu, O. and Cetin, G. (2019), "A strategic approach to managing risk and crisis at tourist destinations", *Tourist Destination Management*, Springer, Cham, pp. 273-287.
- Kosova, R. and Enz, C.A. (2012), "The terrorist attacks of 9/11 and the financial crisis of 2008: the impact of external shocks on US hotel performance", *Cornell Hospitality Quarterly*, Vol. 53 No. 4, pp. 308-325.
- Lai, I.K.W. and Wong, J.W.C. (2020), "Comparing crisis management practices in the hotel industry between initial and pandemic stages of Covid-19", *International Journal of Contemporary Hospitality Management*, Vol. 32 No. 10, pp. 3135-3156.
- Leta, S.D. and Chan, I.C.C. (2021), "Learn from the past and prepare for the future: a critical assessment of crisis management research in hospitality", *International Journal of Hospitality Management*, Vol. 95, pp. 1-11.



- 
- Liu-Lastres, B. and Cahyanto, I.P. (2023), "Are we always ready? Examining event professionals approaches to risk and crisis management and resilience", *Tourism Management Perspectives*, Vol. 46, pp. 1-11.
- Maliszewska, M., Mattoo, A. and Van Der Mensbrugge, D. (2020), "The potential impact of Covid-19 on GDP and trade: a preliminary assessment", *World Bank Policy Research Working Paper*, Vol. 9211.
- Ngin, C., Chhom, C. and Neef, A. (2020), "Climate change impacts and disaster resilience among micro businesses in the tourism and hospitality sector: the case of Kratie, Cambodia", *Environmental Research*, Vol. 186, pp. 1-9.
- Noel, M.D. (2022), "Competitive survival in a devastated industry: evidence from hotels during Covid-19", *Journal of Economics and Management Strategy*, Vol. 31 No. 1, pp. 3-24.
- Okumus, F. and Karamustafa, K. (2005), "Impact of an economic crisis evidence from Turkey", *Annals of Tourism Research*, Vol. 32 No. 4, pp. 942-961.
- Orchison, C., Prayag, G. and Brown, C. (2016), "Organizational resilience in the tourism sector", *Annals of Tourism Research*, Vol. 56, pp. 128-163.
- Ozdemir, O., Erkmen, E. and Kim, M. (2020), "Corporate social responsibility and idiosyncratic risk in the restaurant industry: does brand diversification matter?", *International Journal of Contemporary Hospitality Management*, Vol. 32 No. 9, pp. 2925-2946.
- Paraskevas, A. and Altinay, L. (2013), "Signal detection as the first line of defence in tourism crisis management", *Tourism Management*, Vol. 34, pp. 158-171.
- Ren, H., Huang, T. and Arifoglu, K. (2018), "Managing service systems with unknown quality and customer anecdotal reasoning", *Production and Operations Management*, Vol. 27 No. 6, pp. 1038-1051, doi: [10.1111/poms.12850](https://doi.org/10.1111/poms.12850).
- Ritchie, B.W. (2004), "Chaos, crises and disasters: a strategic approach to crisis management in the tourism industry", *Tourism Management*, Vol. 25 No. 6, pp. 669-683.
- Ritchie, B.W., Bentley, G., Koruth, T. and Wang, J. (2011), "Proactive crisis planning: lessons for the accommodation industry", *Scandinavian Journal of Hospitality and Tourism*, Vol. 11 No. 3, pp. 367-386.
- Romagosa, F. (2020), "The Covid-19 crisis: opportunities for sustainable and proximity tourism", *Tourism Geographies*, Vol. 22 No. 3, pp. 690-694.
- Rousaki, B. and Alcott, P. (2006), "Exploring the crisis readiness perceptions of hotel managers in the UK", *Tourism and Hospitality Research*, Vol. 7 No. 1, pp. 27-38.
- Santana, G. (2004), "Crisis management and tourism: beyond the rhetoric", *Journal of Travel and Tourism Marketing*, Vol. 15 No. 4, pp. 299-321.
- Sawalha, I.H.S., Jraisat, L.E. and Al-Qudah, K.A. (2013), "Crisis and disaster management in Jordanian hotels: practices and cultural considerations", *Disaster Prevention and Management: An International Journal*, Vol. 22 No. 3, pp. 210-228.
- Schoenberg, R., Collier, N. and Bowman, C. (2013), "Strategies for business turnaround and recovery: a review and synthesis", *European Business Review*, Vol. 25 No. 3, pp. 243-262.
- Seyitoglu, F. and Ivanov, S. (2021), "Service robots as a tool for physical distancing in tourism", *Current Issues in Tourism*, Vol. 24 No. 12, pp. 1631-1634.
- Shi, F., Shi, D., Weaver, D. and Samaniego Chavez, C.E. (2021), "Adapt to not just survive but thrive: resilience strategies of five-star hotels at difficult times", *International Journal of Contemporary Hospitality Management*, Vol. 33 No. 9, pp. 2886-2906.
- Song, H., Lin, S., Witt, S.F. and Zhang, X. (2011), "Impact of financial/economic crisis on demand for hotel rooms in Hong Kong", *Tourism Management*, Vol. 32 No. 1, pp. 172-186.
- Sonmez, S.F., Backman, S.J. and Allen, L.R. (1994), *Managing Tourism Crises: A Guidebook*, Clemson University, Clemson.

- 
- Strauss, A. (1987), *Qualitative Analysis for Social Scientists*, Cambridge University Press, Cambridge.
- UNWTO (2020), "Global guidelines to restart tourism", Madrid.
- UNWTO (2022), "International tourism back to 60% of pre-pandemic levels in January-July 2022", available at: [www.unwto.org/news/international-tourism-back-to-60-of-pre-pandemic-levels-in-january-july-2022](http://www.unwto.org/news/international-tourism-back-to-60-of-pre-pandemic-levels-in-january-july-2022) (accessed 22 October 2022).
- Usher, L.E., Yusuf, J.E. and Covi, M. (2020), "Assessing tourism business resilience in Virginia Beach", *International Journal of Tourism Cities*, Vol. 6 No. 2, pp. 397-414.
- Vij, M., Upadhya, A. and Abidi, N. (2021), "Sentiments and recovery of the hospitality sector from Covid-19 – a managerial perspective through phenomenology", *Tourism Recreation Research*, Vol. 46 No. 2, pp. 212-227.
- Waller, G. and Abbasian, S. (2022), "An assessment of crisis management techniques in hotels in London and Stockholm as response to Covid-19's economic impact", *International Journal of Contemporary Hospitality Management*, Vol. 34 No. 6, pp. 2886-2906.
- Wang, J. and Ritchie, B.W. (2010), "A theoretical model for strategic crisis planning: factors influencing crisis planning in the hotel industry", *International Journal of Tourism Policy*, Vol. 3 No. 4, pp. 297-317.
- Whitman, Z., Stevenson, J., Kachali, H., Seville, E., Vargo, J. and Wilson, T. (2014), "Organizational resilience following the Darfield earthquake of 2010", *Disasters*, Vol. 38 No. 1, pp. 148-177.
- Widz, M., Krukowska, R., Walas, B. and Kruczek, Z. (2022), "Course of values of key performance indicators in city hotels during the Covid-19 pandemic: Poland case study", *Sustainability*, Vol. 14 No. 19, pp. 1-16.
- Williams, T.A., Gruber, D.A., Sutcliffe, K.M., Shepherd, D.A. and Zhao, E.Y. (2017), "Organizational response to adversity: fusing crisis management and resilience research streams", *Academy of Management Annals*, Vol. 11 No. 2, pp. 733-769.
- WTTC (2019), "Crises readiness", available at: <https://wttc.org/Portals/0/Documents/Reports/2019/Crisis%20Preparedness%20Management%20Recovery-Crisis%20Readiness-Nov%202019.pdf?ver=2021-02-25-182725-567> (accessed 20 October 2022).
- WTTC (2022), "Lessons learned during Covid-19", available at: <https://wttc.org/Portals/0/Documents/Reports/2021/Lessons-Learnt-%20COVID-19.pdf?ver=2021-08-19-095731-037> (accessed 19 October 2022).
- Wut, T.M., Xu, J.B. and Wong, S.M. (2021), "Crisis management research (1985–2020) in the hospitality and tourism industry: a review and research agenda", *Tourism Management*, Vol. 85, pp. 2-29.
- Yarcan, Ş. and Cetin, G. (2021), *Tour Operating Business*, Istanbul University Press, Istanbul.
- Ying, S., Chan, J.H. and Qi, X. (2020), "Why are Chinese and North American guests satisfied or dissatisfied with hotels? An application of big data analysis", *International Journal of Contemporary Hospitality Management*, Vol. 32 No. 10, pp. 3249-3269.
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