

# EMERGENCY MANAGEMENT AND ITS IMPLICATIONS FOR HOSPITALITY INDUSTRY DURING THE CORONAVIRUS DISEASE 2019 (COVID-19) OUTBREAK

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## Abstract

The objectives of this paper are to investigate how the hospitality industry dealt with the COVID-19 outbreak and make a significant contribution to learning and awareness about emergency management in the hospitality business. By using secondary data, this study aims at analyzing leadership's commitment to updating, developing, and implementing emergency management strategies. This research indicates that the hospitality and tourism business as an international industry must adapt to, recover from, and minimize a wide range of difficulties, including infectious diseases. Marketing methods are essential as an emergency management plan component to assist enterprises such as hotels, tourist sites, and vacation planners. Several emergencies are commonly represented on hotel chains, such as the COVID-19 pandemic, which has startled the hotel business recently. Academics develop emergency management frameworks based on a variety of metrics. Hotel retention is aided by recovery and learning, which undervalues negative impacts and reduces losses. Finally, the evaluation process plays a role in combating repeated emergencies and resuming normalcy, and novel ideas are addressed to assure a COVID-19-free stay at their establishments.

**Keywords:** COVID-19 pandemic, emergency management, hospitality industry, strategic approaches.

## I. Introduction

The world constantly faces uncertainty and challenges brought upon by technological development, changes in human activity, and the climate crisis. However, the COVID-19 (2019 coronavirus disease) pandemic has occurred as the most significant challenge at the onset of the current decade. The present outbreak has directed the world toward severe socio-economic emergencies and psychological distress. It has hardly hit the economy, but the service sector, especially the hospitality industry, is terribly affected. It enriches the essence of insecurity among the workers and their perception of being jobless, adversely involving their mental health (Khan et al., 2021). COVID-19 is a transmissible disease induced by the SARS-CoV-2 virus and proclaimed a global pandemic by the World Health Organization (Lipsitch et al., 2020). Since its detection, the

development of COVID-19 has been unbeatable and distressed all countries, impacting the global population and yielding millions of casualties. In addition, various actions were prompted because of the contagion, including compulsory quarantines, which have paralyzed a crucial element of economic and, in particular, tourist activity. For example, the World Tourism Organization of the United Nations (UNWTO, 2021) calculated a reduction of over 73% in the number of multinational tourists worldwide throughout 2020. The decline in tourism activity will have a tremendous impact on destinations where international tourism is noteworthy.

Since the COVID-19 outbreak, it has become challenging for health professionals to mitigate the virus (Razu et al., 2021) and the casualties. In the current status, an emergency will be used for various catastrophes and crises when the specific disparities are irrelevant. Both terms

are defined as Crisis: a premature internally provoked trouble that can seriously damage or destroy a firm and requires immediate action; Disaster: an externally generated emergency that is either natural or artificial in origin, which has the capability of damaging or demolishing an organization and instructing immediate action; and, Emergency: any sudden situation which can seriously injure or kill a company and needs immediate action (Zamoum & Gorpe, 2018). Emergency and catastrophe are the two basic categories of emergencies and are sometimes interchangeable (Ogie & Verstaavel, 2020). As COVID-19 and other emergencies consistently demonstrate, emergency managers remain too heavily concentrated on the first response aspect. Emergency managers must step away from the response-oriented attitude and adopt an emergency management approach as the key to avoiding catastrophe to manage emergencies indeed.

The COVID-19 outbreak is a manifestation that risks, often unexpected, may influence the nation or the international community as the case of COVID-19. Therefore, communities worldwide must recognize the importance and relevance of emergency management concerning an array of various menaces. Emergency management is about managing dangers to communities and the surroundings (Tulane University, 2021). It is the central business of the service sector, particularly in the hospitality industry, but every individual and organization has a part to play. The purpose is to alleviate the detrimental consequences of all-natural risks, including catastrophes. Emergency management constitutes all actions such as preparedness, mitigation, response, and recovery (Kelly, 2020). The effectiveness of the emergency management cycle is that all communities are in at least one phase of emergency management at any time. In the hospitality industry, this notion employs both individuals and hotel chains completely and communally to respond to the whole scope of emergency requirements amid the COVID-19 pandemic. A significant goal in emergency management is to guarantee that the clear communication of information and planning are not lacking for unexpected conditions (Pecujlija & Cosic, 2019). Albattat and Mat Som (2019) state that it is essential for a hospitality establishment to be well equipped for an emergency such as the COVID-19 pandemic

because the hospitality industry works year-round. Also, it is susceptible to the negative impact of a crisis since visitors and workers are a part of the product itself.

In management literature, authors could diversify the definition of emergency management regarding event response, management style, and stakeholders' willingness. Oostlander et al. (2020) described emergency management as decreasing community exposures to risks and preparing for and managing usual catastrophes. It is often conceptualized as a complex multi-objective optimization problem concerning how to solve an emergency with limited resources. Academic scholars cited that preventive measures like temperature measurement, disinfection, and hygiene heightened tourists' perception of secure tourism during the pandemic (Davras & Durgun, 2021). Numerous authors have claimed that protection and safety are necessities, especially since it has demonstrated that tourists manage to bypass destinations and accommodation structures with more heightened risks to their wellbeing (Matiza, 2020; Owiyo & Mulwa, 2018). Moreover, some occasion directly affecting tourists damages the destination's revenue (Zhuang et al., 2019). To ensure that tourism persists in developing and generating income, all stakeholders should pay awareness to customers' safeness. Thus, managers in general and tourist accommodation units in particular need to consider the emergency management plan required by constantly observing the conditions and norms they deliver (Anichiti et al., 2021). Likewise, it is the most significant element in dealing with natural catastrophes, economic emergencies, epidemics, and brand-new viruses.

Sheek-Hussein et al. (2021) claimed that natural tragedies had disclosed an inadequate response to this dreadful international catastrophe, including the psychological effect on society. The COVID-19 pandemic can occur in any territory (Sharifi & Khavarian-Garmsir, 2020). Rodriguez-Anton and Alonso-Almeida (2020) witnessed an increasing number of coronavirus infections that damage the hospitality and tourism industry. Health-related emergencies are not a particularly new sensation as the menace of pandemics has been at its height despite advancements in medicine. Scholars witnessed a sequence of pandemics such as

Severe Acute Respiratory Syndrome (SARS) in 2002-2003 (Jamal & Budke, 2020), Ebola Virus Disease Outbreak (EVD) in 2014-2016 (Anis, 2019; Novelli et al., 2018), Middle East Respiratory Syndrome (MERS) in 2015 (Joo et al., 2019), food-related epidemic diseases (Kim et al., 2020). Some of the significant pandemics, apart from influencing the tourism and hospitality sector's capacity to work usually, has additionally directed to hotel business disruptions (Rodrigues et al. 2021), tourism and hospitality schools, and universities closures (Pokhrel & Chhetri, 2021), reduced incomes for businesses in the tourism and hospitality industries as well as loss of tax revenue for governments among others (Soliku et al., 2021). A recent study by Karabulut et al. (2020) finds that pandemics negatively affect tourist arrivals in 129 countries from 1996–2018. Such occurrences can induce insecurity and future uncertainty (Chirumbolo et al., 2021). Moreover, they can influence the number of travelers.

The hospitality industry is one of the most vulnerable industries and can be influenced by the pandemic (Szentesi et al., 2021). Some hotel specialists investigate the impact of the COVID-19 pandemic on different sectors within the hospitality industry, such as restaurants (Zeb et al., 2021; Lippert et al., 2021), travel agents (Bouarar et al., 2020; Gautam, 2021), airlines (Xuan et al., 2021; Kang et al., 2021), and hotels (Garcia-Gomez et al., 2021; Basnyat & Sharma, 2021). It cannot control the outcomes of a pandemic but can mitigate them (Shang et al., 2021), and hotel investments can be preserved (Rodrigues et al., 2021). Diverse writers expressed that a study about COVID-19 impacts and recovery on hospitality is under construction with the most contributions, critical reflections (Gossling et al., 2020; Gursoy & Chi, 2020), and very preliminary empirical study (Hu et al., 2021). However, the present case demonstrates that the pandemic is not yet restrained. Therefore, the crisis is unforeseen, and research is paramount to rescue hospitality and its allied industries (Chang et al., 2020). This article strived to examine the existing literature about emergency management for an emergency involving the hotel industry and mitigate the consequences of such risks. It will shed light on planning for the successive unsafe occasions. This article identifies the intricacy and implication of emergency preparation and

response at the industry level, and the planning mandates a considerable knowledge of regional cases.

## 2. Literature review

### *Emergency Management Process*

The global impact of COVID-19 has mandated hoteliers worldwide to acclimate fast and identify the implication of an emergency management plan. Chartoff et al. (2021) ascribed that adequate planning delivers efficacious emergency management. Planning for emergencies is essential to control current occurrences like a pandemic. In addition, it is a strategy to evade global crises such as the COVID-19 pandemic and exemplifies the purpose to acknowledge the notification signal. Academic scholars asserted that hotels have been classified as high-risk to any disruptive events (Santos et al., 2020) and have tremendous impacts on all aspects of society (Battarcharya, 2020). Aldao et al. (2021) illustrated that the hotel industry could embrace a soundness standard as an emergency management instrument to disruptive discourse events influencing this specialization. Its required practice and adaption actions are required (Connolly et al., 2020).

While the study on hotels' strategic responses to the pandemic is expanding (Garrido-Moreno et al., 2021), the outcomes of these responses demand carefulness. Rodriguez-Anton and Alonso-Almeida (2020) displayed that hoteliers had arranged the expected objective of shielding the health of customers and their workers with prevention actions against COVID-19. Response approaches such as suggesting rooms for purposes other than tourism accommodation, redirection of hotel marketing and sales programmes, and promotional packages implemented by the sector during the pandemic. These drives strive to entice and reconstruct assurance in tourists (Brouder et al., 2020), one of today's preferences. The hotel sector has carried hygienic measurements. These movements seek to construct significance by delivering the social distance between employment and leisure (Sigala, 2020) and shifts in accommodations.

Resource allocation is a predictor of emergency planning and communication approach, with top

management recreating an integral function in enforcing an adequate procedure. In the present pandemic, Chen et al. (2020) document that China's hospitality industry oversaw the virus as part of its social accountability; hotel owners supplied free accommodation assistance for medical attendants who contributed to the COVID-19 medicine. The researchers demonstrated that several tourism industries fully reimburse tourists who revisit their travels due to the pandemic. Hotel managers enforced remote working, paid and unpaid leave and the lowering of permanent and temporary salaries in a few destinations (Haak-Saheem, 2020).

Several studies (Lai & Wong, 2020; Sager & Mavrot, 2020; Sanfelici, 2020) have analyzed the practices that benefited governments and hotel operations during the duration of emergency management. Governments and co-actors are performing on controlling the spread of COVID-19, with several techniques executed (Hao et al., 2020). Governments implemented fiscal stimulus packages to safeguard public health and deliver more income steadiness to citizens (DeWit et al., 2020). For instance, the Chinese government has arranged fiscal and financial policies, produced exceptional fund support, lessened tax and rent costs, and delivered services electronically (Chen et al., 2020). In Dubai, the government gave the international workforce authorization to remain until 2020 to those who lost their job positions due to the pandemic (Haak-Saheem, 2020). The Indonesian government toiled on the reallocation of fiscal policy, labour protection, rescheduling of loan repayment from SMEs, and tax incentives policy (DeWit et al., 2020). The Moroccan government ingrained in awareness drives sensitizing individuals about the dangerous impact of COVID-19 (De Freitas & Stedefeldt, 2020).

Planning for emergencies should assess several internal aspects such as communication, collaboration, and control. However, the most significant internal factor is the management's commitment to embrace and design an emergency management plan, which will be a powerful suggestion and a corrected message to disseminate before, during, and after the unanticipated occurrence that demands prompt measure (Haupt, 2020). Scholars and business specialists discussed that small enterprises do not have an emergency plan other than large

businesses, depending on the scope and monetary condition (Fischer et al., 2019; Zerrenner, 2021). Fischer et al. (2019) explained that emergency planning is less crucial for small alliances with limited resources. They believe that emergencies will not disassemble them or handle their firm without a plan. Some business specialists clarified that the hotel industry organizations that encountered misfortune before would be more likely to support in and develop their emergency plan because they suffer from the previous menaces and understand its consequence on the belongings and human lives (Kenny & Dutt, 2021).

Stakeholders and hotel managers should be conscious of the significance of modernizing an emergency plan, accurate information about their hotels, their services, and safeness and protection approaches embraced in the possibility of vulnerability like the COVID-19 pandemic. Academic scholars described measures implied in emergency planning: recognizing existing risks, developing an improved emergency plan, and, finally, assuring the community's preparedness for emergencies (Mojtahedi et al., 2021). The emergency plan should also include the use, maintenance, and advancements for the systems. The objective of contingency planning is straightforward. Practically, contingency planners function to organize their business, alliance, or association to nicely mitigate any disturbance to normal business activities. For illustration, if a natural occurrence (e.g., epidemic, pandemic, and endemic) disrupts typical business actions, having plans to respond and recover from such a circumstance will permit a speeded-up enterprise resumption. Hence, lessening the industry's time is unstable (Fisher et al., 2019).

Numerous studies have investigated how the hotel image quality, decision-making process, hotels' exit risk, and audacity influence the tourist destination preference as tourists explore for a secure location away from expected catastrophes (Alrawabdeh, 2021; Boto-Garcia et al., 2021; Karlsson & Strom, 2021; Liu et al., 2019; Schimanovich, 2021; Triatmanto et al., 2021; Vo et al., 2021; Wang et al., 2018; Zhang & Xie, 2021). But unfortunately, they embarked on specific lectures to discuss emergency management cases in the hospitality industry (Sao Joao, 2021). As such, this article will

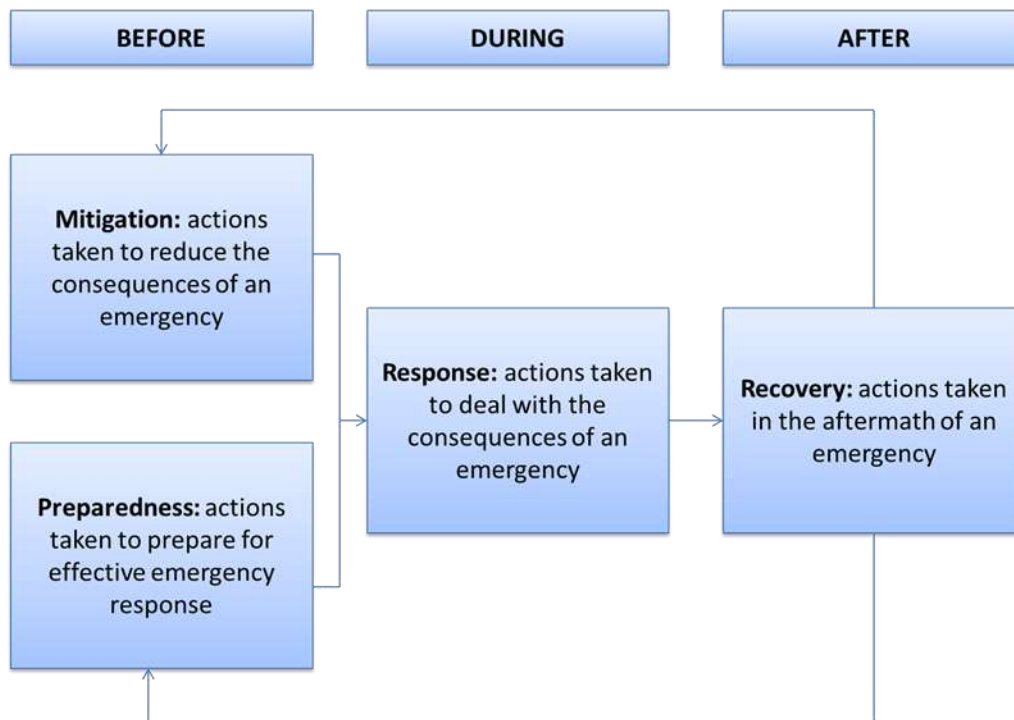
exemplify the ways in which the hospitality industry can be equipped for the subsequent contingencies and tasks to assuage the impact of such circumstances on the hotel establishments.

### *Hotel Safety and Health Measures*

The health emergency generated by the infectious COVID-19 disease has shattered the hospitality sector worldwide. The present concern has guided numerous nations to execute drastic authorities to halt the multiplication of the virus. Robina-Ramirez (2021) examine the welfare and health processes for the COVID-19 transition period in the hotel industry in Spain. Twelve thousand seven hundred forty hotels and 823 Spanish hotel managers participated in his study. The results divulged that social distancing in the hospitality and tourism industry, awareness of sanitation measures, and mass testing and equipment are pivotal in the hospitality and tourism industry, either for the private or public sector. For the five (5) star hotels, safety and health are significant in controlling damage for guests and workers. Hotel establishments positioned a doctor on call 24 hours to enhance safety and health, an electronic device card-locking system on guestroom doors, and solid information for hotel visitors through specific programs (Anichiti et al., 2021). Safety and health personnel are accountable for securing the hotel's security, guests, employees, and assets. Schimanovich (2021) demonstrated that safety is more appropriate than ever regarding the ongoing COVID-19 outbreak. Hotel guests require to have a secure feeling when travelling. Restrictions emerge from the apprehension of how lengthy the virus will be present in the future and if a vaccine will stop the disease. Also, it is undefined if the newly equipped safety standards will hover after the outbreak and to what degree the virus influenced the hotel industry. One way to stand out in the highly competitive hotel industry is through its attributes. Hotel choice and satisfaction attributes influence guests to choose one hotel

over another. The significance of those attributes is not persistent and may adjust due to various occurrences depending on their result (De Almeida & Pelissari, 2019). Makanyeza et al. (2021) remarked that the awareness of pointing out the suitable attributes a hotel establishment can suggest would lead to higher client commitment and more accessible hotel development judgments.

Academic scholars started to comprehend the safety and health investigation in the hospitality and tourism industry in the 20th century. The impact of the current disease has been profound that is still extending in countries like the United States, Brazil and India (Konarasinghe, 2020; Marques et al., 2020; Mohanty, 2020). Effects of the pandemic on tourism and hospitality worldwide are persisting in becoming severe, with the sector embracing higher unemployment rates. For instance, in India, the possible job loss in tourism and hospitality has been counted at 38 million, which is 70 per cent of the industry human resources (Radhakrishna, 2020). Li et al. (2020) use a data envelopment analysis (DEA) to examine the nonlinear relationship between tourism economic contact intensity and tourism industry efficiency by making a mixed effect model. It also determines the commitments of diverse groups in prevention and recovery. Other hotel specialists examine how communities can acquire in-depth compliance with COVID-19 safety standards in the hospitality industry. The results indicate that workers' serious compliance with safety strategies possesses a four-stage psychological approach, which could underpin management safety practices and organizational emergency techniques (Hu et al., 2021). Some hotel managers asserted that they were elated with the system efficiency (Mim & Ferdous, 2021). Furthermore, this progress has had an insignificant effect on tourism or hospitality at any level, particularly regarding the issues of sustainability (Moscardo, 2021).



**Figure 1:** *The Process of Emergency Management*

**Source:** *Modified from the Canadian Centre for Management Development (2003)*

This study offers a theoretical framework (Figure 1) revised from the Canadian Centre for Management Development (2003). It implies that an emergency management plan may index into four phases: (1) *mitigation phase*. These activities authorize the hospitality industry to decrease the loss of life and physical investments such as supplies and buildings. It will reduce the general result of the catastrophe on an establishment and society as a whole; (2) the *preparedness phase* contains the continuous process of activities such as staff training, emergency planning, assessment, exercising, and remedial actions. Preparedness phase creates that personal and team are inclined to be quickly and readily activated when emergency afflicts; (3) the *response phase* refers to how hoteliers respond to whatever issues the crisis brings. It contains changes in service delivery, supply chain interruptions, or daily staffing. Finally, (4) the *recovery phase* concentrates on recovering critical hotel industry's positions to balance daily services and improve the capability to resume serving their communities after the contagion. The recovery phase enables the hospitality industry to reoccur to an average service level immediately (Davahli et al., 2020;

Rodriguez-Anton & Alonso-Almeida, 2020; Ghaharian et al., 2021). They also remarked that the emergency management cycle must have efficient public awareness, infrastructure, and even human justice cases (Oostlander et al., 2020). This segment delivers a framework to support hotel managers enhance their comprehension of the primary phases of the emergency management process or program.

### 3. Research Methodology

This study investigates the available literature on hospitality emergency management and its preparation. It proposes a theoretical framework clarifying the affinity between emergency management planning and its preparation within the hospitality industry. In strengthening the discussion, the results of former studies have been used. As a theoretical article paper, the methodology will contain an assessment of secondary data from different resources such as published research papers, reports, theses, and conference proceeding papers to boost the overall effectiveness of the research and elucidate the existing ideas (Dawadi et al., 2021). The rationale why academic researchers use secondary research methods is because of their cost-effectiveness. Since not every hotel expert or organization can settle a sizeable

amount of money just for market research, they utilize secondary data sources and organize them for analysis. Hence, secondary research is so-called “desk research”, as the data may be available while staying behind a desk. Reviewing the hospitality industry’s previous occurrences will offer emergency management planning and emergency preparedness (Ismiyati & Lestari, 2020).

#### 4. Findings and Discussions

The tourism and hospitality industry has been the most destructively affected of notable economic sectors by the outbreak of the COVID-19 pandemic. It is impacted by these restrictions and will be the last to return to the new normal. Filimonau et al. (2020) asserted that hoteliers should be conscious of the levels of organizational resilience and the extent of CSR practices. Lai & Wong (2020) demonstrated that hotel sectors should set contingency planning for emergency management across situation periods. Likewise, Stergiou and Farmaki (2021) determine the aspects that may affect the hotel employees’ capability and readiness to document the work during the pandemic. Emergency management plan among scholars and professionals has been at its peak since a pandemic on 11 March 2020, allowing bars, restaurants, and hotel chains in numerous parts of the world in innovating their approaches and refocus their measures during the outbreak.

Hotel establishments have made significant changes in this area, implementing a wide range of health and safety standards. They use a contactless, quick check-in system, which has made the process faster, more manageable, and safer for hotel guests (Sarmah, 2020). A good example is the *City Suites Aparthotel in Manchester, United Kingdom*. Several boutique hotels have invested in technology to allow hotel guests to access their rooms through an electronic key. The check-in method becomes more secure and efficient by eliminating the need for interaction at the front desk (Car & Stifanich, 2020). It allows for more communication, collaboration, and information sharing flexibility. Many hotel visitors have been clamouring for such advancements for years. However, the sector has been relatively

hesitant to adapt without the threat of a global pandemic.

Due to the outbreak’s severity, it’s not unexpected that travellers and hoteliers prioritize safety and sanitation. In combating the infection, businesses follow tight cleaning practices (Soria, 2020). They have also put a COVID-specific cleaning solution across the premises and got a COVID confidence certificate to guarantee guests a sense of security. When it comes to reserving accommodations during the pandemic, adaptability has become more imperative (Salem et al., 2021). Customers want to know that hotels have protocols in place to reschedule, renegotiate, and obtain the necessary reimbursement if different and unexpected restrictions require them to postpone weekend vacations, overnight stays, and business meetings at the very last minute (Tate, 2020). Many online booking providers are already providing critical information on the state of their hotel advertisements. It contains information on local coronavirus restrictions, concierge services, airport transfers, increased cleaning processes, and up-to-date information on what will include in their vacation (Soria, 2020). Workers should also be encouraged to participate in the emergency response procedure as collaborators and disclose any accidents to the emergency management unit (Ghaderi et al., 2021). Most of these details have become crucial in terms of producing reservations.

Ghaharian et al. (2021) observed that limited research has concentrated on emergency management in the hotel business from managers’ perspectives. In addition, increasing safety awareness among professionals, managers, and customers (Widowati et al., 2021), improving documented emergency plans, and avoiding a lack of equipment and training are all critical demands for emergency management. The researchers highlighted the main significant components in the emergency preparedness plan and showed a lack of coordination and collaboration at the preparedness level. In their investigation on tourism and hospitality, Alvarez et al. (2022) established a paradigm that merges performance with organizational learning while preparing and addressing vulnerabilities. They argued that companies avoid accidents following their agendas and that a scarcity of funds and trust

among enterprises limits information exchange amongst often-competing hospitality groups. On the other hand, Appleby-Arnold et al. (2021) discovered a lack of preparedness and planning for future vulnerabilities.

As previously stated, practical emergency readiness and planning in the prodromal stage and emergency management plans play a pivotal part in emergency management (Liu et al., 2021). Emergency management models presented by hospitality and tourism specialists such as Breier et al. (2021), Gkoumas (2021), and Chanyasak et al. (2021) described the emergency stages: pre-crisis, during the crisis, and post-crisis utilizing many indicators. According to Yamori & Goltz (2021), the repercussions of catastrophes grew due to a lack of preparedness and planning for future vulnerabilities, resulting in more significant repercussions and a delayed retro-gradation to the tourism destination. According to hospitality and tourist professionals, emergency organizers should concentrate on the prodromal stage of readiness, planning, and prevention. Emergency management plans should indeed be adopted, tested, and evaluated in facilitating emergency prevention. It will enhance the effectiveness to recognize emergency indicators and reduce losses. During the emergency stage, however, the concentration is on assessment and information to enable prompt response and coordination to settle the emergency. Following the conclusion, the priority will be rehabilitation and understanding, which will aid the hotel industry in regaining and retaining clients (Rodriguez-Anton & Alonso-Almeida, 2020; Assaf & Scuderi, 2020; Wu et al., 2021).

To reduce losses, emergency professionals believe they should take measures to minimize the adverse effects of emergencies before they occur. Roda et al. (2020) stated that recognizing the warning signs for all occurrences is tough. While the crises progressed from prodromal to acute, the organization suffered damage. Losses will vary depending on the organization's level of readiness in this case. Additionally, Sobhaninia and Buckman (2022) demonstrated the four-stage emergency model, which explains how to prevent and prepare in the pre-event stage while organizing and saving public and private property in the emergency stage. After an emergency happens, work should proceed as planned to conquer and reestablish essential

services, with the long-term goal of procedures for identifying and long-term plans may position for an emergency.

Following an analysis of relevant literature, business experts design various strategies for dealing with risks and catastrophes, minimizing deleterious repercussions and averting losses in the hospitality industry. In their emergency department (ED) framework, Nadarajan et al. (2020) proposed four fundamental ideas for coping with emergencies: (1) situational awareness, surveillance, and perimeter defence, (2) ED personnel protection, (3) surge capacity management, and (4) ED recovery. They explained that to decrease the potential burden of such disease, hotel emergency departments should incorporate ED design and workflow principles. Such a framework is critical because the ED environment will be susceptible to infectious illness epidemics in the future.

Finally, in the resolution stage, evaluation is critical for hospitality organizations to recuperate from any issues and resume normal activities. Tourists' travel risk and management views may determine their psychological behaviour for travel to locations, and hospitality should resist adverse consequences, either good or unfavourable, minimize their severity, or acquire advantages as hotel clients (Neuburger & Egger, 2021; Agyeiwaah et al., 2021). Leading to the prevalence of the current pandemic, tourists may have a new perspective on travel risk and management challenges. Travellers will postpone planning trips if they believe they are unsafe (Kovacic et al., 2020).

According to Fioretti et al. (2020), catastrophes can be a beneficial or adverse pivotal moment for the destination. It has the potential to produce personalities that could lead and shepherd organizations through the vulnerabilities and return to normal business activities (Ivkov et al., 2019). Hospitality management should adjust or implement new methods based on their opportunity to understand emergencies. Furthermore, a feedback loop should enable proactive preparation and efficient emergency planning in the prospective (Mignan & Wang, 2020; Huggins et al., 2021). Toubes et al. (2021) state that continuous change from catastrophes may be influenced by the eagerness to understand unsafe environments. They claimed that organizations make few modifications to



their research because they believe these phenomena are hard to anticipate or predict.

The COVID-19 virus provided an opportunity to deploy emergency learning. Before and during the COVID-19 outbreak, Lee et al. (2020) employed theoretical learning concepts. They claim that by (re)developing a shared management framework, double-loop learning adhere for more emergency preparedness management. When double-loop learning is backed by single-loop learning that integrates existing developments and operating processes, learning effectiveness increases. Individuals who experience emergencies are better functional in a single-loop manner in an emergency. To combat the impact of the COVID-19 pandemic, hoteliers and company managers will alter their strategies, cooperate on efforts, strengthen communication systems, shift resources, and expand their advertising strategy (Nguyen et al., 2020; DiResta et al., 2020).

## 5. Conclusion

Although the increasing possibility of hospitality industries is being impacted by COVID-19 pandemic, there are still only a limited number of industries that have engaged in emergency planning and management are prepared to handle the impact of a catastrophe. Hospitality industries exist in a complex internal and external setting. Thus, while the industry needs to take the lead in its emergency management planning efforts, effective emergency management planning is a public-private effort in which the hospitality industry works internally with its employees at all operational levels and collaboratively with external entities such as government agencies, non-government emergency support agencies, transportation and financial service firms, and suppliers of materials and equipment. Indeed, communication with all stakeholders in the industry's operations is crucial before, during, and after a disease. It is hoped that the factors indicated in this article should be considered when working on the development of an emergency management plan to achieve a much more effective and comprehensive approach and risk mitigation efforts. Moreover, in order to improve, promote, and guarantee the success of the emergency management process, emergency

managers need to be coordinated and updated in a continuous way.

In conclusion, emergencies are uncertain and cannot be predicted in most cases, but they can be prevented using mitigation and emergency management techniques such as: optimize the reduction of long-term risk and strengthen operational capacities for responding to emergencies and disaster situations including actions to facilitate recovery. Emerging issues need urgent attention in order to save lives and properties, which can enhance sustainable development in the hospitality industry.

## References

- [1] Agyeiwaah, E., Adam, I., Dayour, F. & Baiden, F. B. (2021). Perceived impacts of COVID-19 on risk perceptions, emotions, and travel intentions: evidence from Macau higher educational institutions. *Tourism Recreation Research*, 46:2, 195-211. DOI: 10.1080/02508281.2021.1872263
- [2] Albattat, A. R. & Mat Som, A. P. (2019). *Disaster Planning and Preparedness in the Hotel Industry*. Emerald Publishing Limited. DOI: 10.1108/978-1-78769-937-320191002
- [3] Aldao, C., Blasco, D., Poch Espallargas, M. & Palou Rubio, S. (2021). Modelling the crisis management and impacts of 21st century disruptive events in tourism: The case of the COVID-19 pandemic. *Tourism Review*, 76(4), 929-941. DOI: 10.1108/TR-07-2020-0297
- [4] Alrawabdeh, W. (2021). Seasonal balancing of revenue and demand in hotel industry: the case of Dubai City. *Journal of Revenue and Pricing Management*. DOI: 10.1057/s41272-021-00290-6
- [5] Alvarez, S., Bahja, F. & Fyall, A. (2022). A framework to identify destination vulnerability to hazards. *Tourism Management*, 90, 104469. DOI: 10.1016/j.tourman.2021.104469.
- [6] Anichiti, A., Dragolea, L. L., Tacu Harsan, G. D., Haller, A. P. & Butnaru, G. I. (2021). Aspects Regarding Safety and Security in Hotels: Romanian Experience. *Information*, 12(44), 1-22. DOI: 10.3390/info12010044

- [7] Anis, O. (2019). Western african Ebola virus edidemic. *WikiJournal of Medicine*, 6(1), 1-34. DOI: 10.15347/wjm/001.
- [8] Appleby-Arnold, S., Brockdorff, N. & Callus, C. (2021). Developing a “culture of disaster preparedness”: The citizens’ view. *International Journal of Disaster Risk Reduction*, 56, 102133. DOI: 10.1016/j.ijdrr.2021.102133.
- [9] Assaf, A. & Scuderi, R. (2020). COVID-19 and the recovery of the tourism industry. *Tourism Economics*, 26(5), 731–733. DOI: 10.1177/1354816620933712
- [10] Basnyat, S. & Sharma, S. (2021). Effects of COVID-19 Crisis on Small and Medium-Sized Hotel Operators: Insights from Nepal. *Anatolia - An International Journal of Tourism and Hospitality Research*, 32:1, 106-120, DOI: 10.1080/13032917.2021.1879184
- [11] Bhattacharya, S. (2020). The Social Impact of the COVID-19 Pandemic. *ORF Issue Brief* No. 406. Observer Research Foundation
- [12] Boto-Garcia, D., Escalonilla, M., Zapico, E. & Baños, J. F. (2021). Scale heterogeneity in hotel guests’ satisfaction relative to room rates. *Applied Economic Analysis*, 29(87), 208-225. DOI: 10.1108/AEA-07-2020-0093
- [13] Bouarar, A.C., Mouloudj, K., & Mouloudj, S. (2020). The impact of coronavirus on tourism sector - an analytical study. *Journal of Economics and Management*, 20(1), 323-335.
- [14] Breier, M., Kallmuenzer, A., Clauss, T., Gast, J., Kraus, S. & Tiberius, V. (2021). The role of business model innovation in the hospitality industry during the COVID-19 crisis. *International Journal of Hospitality Management*, 92, 102723. DOI: 10.1016/j.ijhm.2020.102723.
- [15] Brouder P., Teoh S., Salazar N.B., Mostafanezhad M., Pung J.M., Lapointe D...Clausen H.B. (2020). Reflections and discussions: Tourism matters in the new normal post COVID-19. *Tourism Geographies*. DOI: 10.1080/14616688.2020.1770325
- [16] Car, T. & Stifanich, L. P. (2020). Mobile Technology: A Tool to Increase Hotel Sales and Revenue. *Journal of Economics, Business and Organization Research*. Appolloni et al. (eds). Proceedings of the Third EBOR Conference 2020 454-465.
- [17] Chang, C. L., McAleer, M. & Ramos, V. (2020). A Charter for Sustainable Tourism after COVID-19. *Sustainability*, 12(9), 3671. DOI:10.3390/su12093671
- [18] Chanyasak, T., Koseoglu, M. A., King, B. & Aladag, O. F. (2021). Business model adaptation as a strategic response to crises: navigating the COVID-19 pandemic. *International Journal of Tourism Cities*. DOI: 10.1108/IJTC-02-2021-0026
- [19] Chartoff, S. E., Kropp, A. M. & Roman, P. (2021). *Disaster Planning*. Treasure Island (FL): StatPearls Publishing
- [20] Chen, H., Huang, X. & Li, Z. (2020). A content analysis of Chinese news coverage on COVID-19 and tourism. *Current Issues in Tourism*, 1–8. DOI: 10.1080/13683500.2020.1763269
- [21] Chirumbolo, A.; Callea, A.; Urbini, F. The Effect of Job Insecurity and Life Uncertainty on Everyday Consumptions and Broader Life Projects during COVID-19 Pandemic. *International Journal of Environmental Research and Public Health*, 18, 5363. DOI: 10.3390/ijerph18105363
- [22] Connolly, C., Ali, S. H. & Keil, R. (2020). On the relationships between COVID-19 and extended urbanization. *Dialogues in Human Geography*, 10(2), 213-216. DOI: 10.1177/2043820620934209
- [23] Davahli, M. R., Karwowski, W., Sonmez, S. & Yorghos Apostolopoulos, Y. (2020). The Hospitality Industry in the Face of the COVID-19 Pandemic: Current Topics and Research Methods. *International Journal of Environmental Research and Public Health*, 17, 7366. DOI: 10.3390/ijerph17207366
- [24] Davras, O. & Durgun, S. (2021). Evaluation of Precautionary Measures taken for COVID-19 in the Hospitality Industry during Pandemic. *Journal of Quality Assurance in Hospitality and Tourism*. DOI: 10.1080/1528008X.2021.1932013
- [25] Dawadi, S., Shrestha, S., & Giri, R. A. (2021). Mixed-Methods Research: A Discussion on its Types, Challenges, and

- Criticisms. *Journal of Practical Studies in Education*, 2(2), 25-36. DOI: <https://doi.org/10.46809/jpse.v2i2.20>
- [26] De Almeida, G. S. & Pelissari, A. S. (2019). Customer Satisfaction based on the Attributes of Accommodation Services. *Brazilian Journal of Tourism Research*, 13(2). DOI: 10.7784/rbtur.v13i2.1516
- [27] De Freitas, R. S. G. & Stedefeldt, E. (2020). COVID-19 pandemic underlines the need to build resilience in commercial restaurants' food safety. *Food Research International* (Ottawa, Ont.) 136: 109472.
- [28] DeWit, A. Shaw, R. & Djalante, R. (2020). An integrated approach to sustainable development, national resilience, and COVID-19 responses: The case of Japan. *International Journal of Disaster Risk Reduction: IJDRR* 51: 101808.
- [29] DiResta, A. E., Williford, K. T., Cohen, D. A. & Genn, B. A. (2020). The Impact of COVID-19 on Your Advertising and Marketing Campaigns. *Holland & Knight Alert*. <https://www.hklaw.com/>
- [30] Filimonau, V., Derqui, B. & Matute, J. (2020). The COVID-19 pandemic and organizational commitment of senior hotel managers. *International Journal of Hospitality Management*, 91: 102659. DOI: 10.1016/j.ijhm.2020.102659
- [31] Fioretti, C., Palladino, B. E., Nocentini, A. & Menesini, E. (2020). Positive and Negative Experiences of Living in COVID-19 Pandemic: Analysis of Italian Adolescents' Narratives. *Frontiers in Psychology*, 11:599531. DOI: 10.3389/fpsyg.2020.599531
- [32] Fischer, R. J., Halibozek, E. P. & Walters, D. C. (2019). Contingency Planning Emergency Response and Safety. *Introduction to Security*, 249–268. DOI: 10.1016/B978-0-12-805310-2.00011-1
- [33] García-Gómez, C. D., Demir, E., Díez-Esteban, J. M. & Bilan, Y. (2021). The impact of COVID-19 outbreak on hotels' value compared to previous diseases: the role of ALFO strategy. *Heliyon*, 7(8), e07836. DOI: 10.1016/j.heliyon.2021.e07836
- [34] Garrido-Moreno, A, García-Morales, VJ, Martín-Rojas, R (2021) Going beyond the curve: Strategic measures to recover hotel activity in tim.es of COVID-19. *International Journal of Hospitality Management*, 96: 102928. DOI: 10.1016/j.ijhm.2021.102928.
- [35] Gautam, P. (2021). The Effects and Challenges of COVID-19 in the Hospitality and Tourism Sector in India. *Journal of Tourism & Hospitality Education*, 11, 43-63.
- [36] Ghaderi, Z., King, B. & Hall, C. M. (2021). Crisis preparedness of hospitality managers: evidence from Malaysia. *Journal of Hospitality and Tourism Insights*, Vol. ahead-of-print No. ahead-of-print. DOI: 10.1108/JHTI-10-2020-0199
- [37] Ghaharian, K., Abarbanel, B., Soligo, M. & Bernhard, B. (2021). Crisis management practices in the hospitality and gambling industry during COVID-19. *International Hospitality Review*, 35(2), 171-194. DOI 10.1108/IHR-08-2020-0037
- [38] Gkoumas, A. (2021). Developing an indicative model for preserving restaurant viability during the COVID-19 crisis. *Tourism and Hospitality Research*, 1-14. DOI: 10.1177/1467358421998057
- [39] Gossling, S., Scott, D. & Hall, C. M. (2021). Pandemics, tourism and global change: a rapid assessment of COVID-19. *Journal of Sustainable Tourism*, 29(1), 1-20. DOI: 10.1080/09669582.2020.1758708
- [40] Gursoy, D. & Chi, C. G. (2020). Effects of COVID-19 pandemic on hospitality industry: review of the current situations and a research agenda. *Journal of Hospitality Marketing & Management*, 29(5), 527-529. DOI: 10.1080/19368623.2020.1788231
- [41] Haak-Saheem, W. (2020). Talent management in Covid-19 crisis: How Dubai manages and sustains its global talent pool. *Asian Business & Management*, 19(3): 298–301.
- [42] Hao, F, Xiao, Q, Chon, K (2020) COVID-19 and China's hotel industry: Impacts, a disaster management framework, and post-pandemic agenda.

- International Journal of Hospitality Management*, 90: 102636.
- [43] Haupt, B. (2021). The Use of Crisis Communication Strategies in Emergency Management. *Journal of Homeland Security and Emergency Management*, 18(2), 125-150. DOI: 10.1515/jhsem-2020-0039
- [44] Hu, X., Yan, H., Casey, T. & Wu, C. H. (2021). Creating a safe haven during the crisis: How organizations can achieve deep compliance with COVID-19 safety measures in the hospitality industry. *International Journal of Hospitality Management*, 92: 102662. DOI: 10.1016/j.ijhm.2020.102662
- [45] Huggins, T. J., Yang, L. & Sornette, D. (2021). Introduction to the Special Issue on Cascading Disaster Modelling and Prevention. *International Journal of Environmental Research and Public Health*, 18, 4813. DOI: 10.3390/ijerph18094813
- [46] Ismiyati, A., Lestari, F. (2020). Analysis on emergency and disaster preparedness level of hospitality industry in Palu and Gorontalo cities. *International Journal of Safety and Security Engineering*, 10(5), 671-677. DOI: 10.18280/ijss.100512
- [47] Ivkov, M., Blesic, I., Janicevic, S., Kovacic, S., Miljkovic, D., Lukic, T. & Sakulski, D. (2019). Natural Disasters vs Hotel Industry Resilience: An Exploratory Study among Hotel Managers from Europe. *Open Geosciences*, 11(1), 378-390. DOI: 10.1515/geo-2019-0030
- [48] Jamal, T. & Budke, C. (2020). Tourism in a world with pandemics: local-global responsibility and action. *Journal of Tourism Futures*, 6(2), 181-188. DOI 10.1108/JTF-02-2020-0014
- [49] Joo, H., Maskery, B. A., Berro, A. D., Rotz, L. D., Lee, Y. K. and Brown, C. M. (2019). Economic impact of the 2015 MERS outbreak on the Republic of Korea's tourism-related industries. *Health Security*, 17(2), 100-108. DOI: 10.1089/hs.2018.0115.
- [50] Kang, S.-E., Park, C., Lee, C.-K., Lee, S. (2021). The Stress-Induced Impact of COVID-19 on Tourism and Hospitality Workers. *Sustainability*, 13, 1327. DOI: 10.3390/su13031327
- [51] Karabulut, G., Bilgin, M. H., Demir, E. & Doker, A. C. (2020). How pandemics affect tourism: International Evidence. *Annals of Tourism Research*, 84: 102991. DOI: 10.1016/j.annals.2020.102991
- [52] Karlsson, O. & Strom, M. (2021). Online reviews' influence on purchase decisions within the Hotel Industry (Master thesis). School of Business, Society and Engineering, Mälardalen University.
- [53] Kelly, M. (2020, April 14). 4 phases of disaster management explained (the easy way). <https://home.akitabox.com/blog/4-phases-of-disaster-management>
- [54] Kenny, J. & Dutt, C. (2021). The long-term impacts of hotel's strategic responses to COVID-19: The case of Dubai. *Tourism and Hospitality Research*, 1-15. DOI: 10.1177/14673584211034525
- [55] Kim, J., Kim, J., Leec, S. K. and Tang, L. (2020). Effects of epidemic disease outbreaks on financial performance of restaurants: Events study method approach. *Journal of Hospitality and Tourism Management*, 43, 32-41. DOI: 10.1016/j.jhtm.2020.01.015.
- [56] Khan, K. I., Niazi, A., Nasir, A., Hussain, M. & Khan, M. I. (2021). The Effect of COVID-19 on the Hospitality Industry: The Implication for Open Innovation. *Journal of Open Innovation: Technology, Market and Complexity*, 7(30), 1-17. DOI: 10.3390/joitmc7010030
- [57] Konarasinghe, K. M. U. B. (2020). Modeling COVID-19 epidemic of India and Brazil. *Journal of New Frontiers in Healthcare and Biological Sciences*, 1(1): 15-25.
- [58] Kovacic, S., Margarint, M. C., Ionce, R. & Miljkovic, D. (2020). What Are the Factors Affecting Tourist Behavior Based on the Perception of Risk? Romanian and Serbian Tourists' Perspective in the Aftermath of the Recent Floods and Wildfires in Greece. *Sustainability*, 12, 6310. DOI: 10.3390/su12166310
- [59] Lai, I. K.W. & 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*, 32(10): 3135–3156.
- [60] Lee, S., Yeo, J. & Na, C. (2020). Learning before and during the COVID-19 outbreak: a comparative analysis of crisis learning in South Korea and the US. *International Review of Public Administration*, 25(4), 243-260. DOI: 10.1080/12294659.2020.1852715
- [61] Li, Y., Li, R., Ruan, W. & Liu, C. H. (2020). Research of the Effect of Tourism Economic Contact on the Efficiency of the Tourism Industry. *Sustainability*, 12, 5652; doi:10.3390/su12145652
- [62] Lippert, J. F., Furnari, M. B. & Kriebel, C. W. (2021). The Impact of the COVID-19 Pandemic on Occupational Stress in Restaurant Work: A Qualitative Study. *International Journal of Environmental Research and Public Health*, 18, 10378. DOI: 10.3390/ijerph181910378
- [63] Lipsitch, M., Swerdlow, D. L. & Finelli, L. (2020). Defining the Epidemiology of Covid-19—Studies Needed. *New England Journal of Medicine*, 382, 1194–1196. DOI: 10.1056/NEJMp2002125
- [64] Liu, X., Mehraliyev, F., Liu, C. & Schuckert, M. (2020). The roles of social media in tourists' choices of travel components. *Tourist Studies*, 20(1), 27-48. DOI: 10.1177/1468797619873107
- [65] Liu, L. Y., Wu, W. N. & McEntire, D. A. (2021). Six Cs of pandemic emergency management: A case study of Taiwan's initial response to the COVID-19 pandemic. *International Journal of Disaster Risk Reduction*, 64, 102516. DOI: 10.1016/j.ijdrr.2021.102516
- [66] Makanyeza, C., Sivotwa, T. D. & Jaiyeoba, O. (2021). The effect of consumer rights awareness on attitude and purchase intention in the hotel industry: Moderating role of demographic characteristics. *Cogent Business & Management*, 8:1, 1898301. DOI: 10.1080/23311975.2021.1898301
- [67] Marques G., Agarwal D., de la Torre Díez I. (2020). Automated medical diagnosis of COVID-19 through EfficientNet convolutional neural network. *Application of Soft Computing*, 96: 106691. DOI: 10.1016/j.asoc.2020.106691
- [68] Matiza, T. (2020). Post-COVID-19 crisis travel behaviour: Towards mitigating the effects of perceived risk. *Journal of Tourism Futures*, Vol. ahead-of-print, No. ahead-of-print. DOI: 10.1108/JTF-04-2020-0063
- [69] Mignan, A. & Wang, Z. (2020). Exploring the Space of Possibilities in Cascading Disasters with Catastrophe Dynamics. *International Journal of Environmental Research and Public Health*, 17(19), 7317. DOI: 10.3390/ijerph17197317
- [70] Mim, S. J. & Ferdous, M. A. (2021). *Factors Influencing Customers Satisfaction in Hospitality Industry: Fine Dining Restaurants* (Master thesis). University of Gavle
- [71] Mohanty S.K. (2020). Contextualising geographical vulnerability to COVID-19 in India. *Lancet Global Health*, 8(9). DOI:10.1016/S2214-109X(20)30329-6
- [72] Mojtahedi, M., Sunindijo, R. Y., Lestari, F., Suparni. & Wijaya, O. (2021). Developing Hospital Emergency and Disaster Management Index Using TOPSIS Method. *Sustainability*, 13, 5213. DOI: 10.3390/su13095213
- [73] Moscardo, G. Using Systems Thinking to Improve Tourism and Hospitality Research Quality and Relevance: A Critical Review and Conceptual Analysis. *Tourism and Hospitality*, 2, 153-172. DOI:10.3390/tourhosp2010009
- [74] Nadarajan, G. D., Omar, E., Abella, B. S., Hoe, P. S., Shin, S. D., Ma, M. H. & Eng Hock, O. M. (2020). A conceptual framework for Emergency department design in a pandemic. *Scandinavian Journal of Trauma, Resuscitation and Emergency Medicine*, 28, 118. DOI: 10.1186/s13049-020-00809-7
- [75] Neuburger, L. & Egger, R. (2021). Travel risk perception and travel behaviour during the COVID-19 pandemic 2020: A case study of the DACH region. *Current Issues in Tourism*, 24:7, 1003-1016, DOI: 10.1080/13683500.2020.1803807
- [76] Nguyen, M. H., Gruber, J., Fuchs, J., Marler, W., Hunsaker, A. & Hargittai, E. (2020). Changes in Digital Communication During the COVID-19 Global Pandemic: Implications for

- Digital Inequality and Future Research. *Social Media + Society*, 1-6. DOI: 10.1177/2056305120948255
- [77] Novelli, M., Burgess, L. G., Jones, A. & Ritchie, B. W. (2018). No Ebola . . . still doomed'—The Ebola-induced tourism crisis. *Annals of Tourism Research*, 70, 76–87. DOI: 10.1016/j.annals.2018.03.006
- [78] Ogie, R. I. & Verstaavel, N. (2020). Disaster informatics: An overview. *Journal of Progress in Disaster Science*, 7, 100111. DOI: 10.1016/j.pdisas.2020.100111
- [79] Oostlander, S. A., Bournival, V. & O'Sullivan, T. L. (2020). The roles of emergency managers and emergency social services directors to support disaster risk reduction in Canada. *International Journal of Disaster Risk Reduction*, 51: 101925. DOI: 10.1016/j.ijdr.2020.101925
- [80] Owiyo, V. & Mulwa, J. M. (2018). Safety and Security in Tourism Destinations: Its Moderating role in the Destination Competitiveness Determinants and Destination Competitiveness Nexus in Western Kenya Circuit. *International Journal of Research in Management and Business Studies*, 5(3), 30-33.
- [81] Safety and Security in Tourism Destinations: Its moderating
- [82] role in the Destination Competitiveness Determinants and
- [83] Destination Competitiveness Nexus in Western Kenya Circuit
- [84] Safety and Security in Tourism Destinations: Its moderating
- [85] role in the Destination Competitiveness Determinants and
- [86] Destination Competitiveness Nexus in Western Kenya Circu
- [87] Pecujlija, M., & Cosic, D. (2019). *Crisis management: Introducing Companies' Organizational Reactivity and Flexibility*. Nova Science Publishers.
- [88] Pokhrel, S. & Chhetri, R. (2021). A Literature Review on Impact of COVID-19 Pandemic on Teaching and Learning. *Higher Education for the Future*, 8(1), 133-141. DOI: 10.1177/2347631120983481
- [89] Radhakrishna S. A. (2020). COVID-19 | Post-pandemic, India's Tourism Sector Stares at 70% Job Loss. <https://www.thehindu.com/news/national/kerala/coronavirus-tourism-sector-stares-at-70-job-loss/article31310234.ece>
- [90] Razu, S. R., Yasmin, T., Arif, T. B., Islam, M. S., Islam, S. M. S., Gesesew, H. A. & Ward, P. (2021). Challenges Faced by Healthcare Professionals During the COVID-19 Pandemic: A Qualitative Inquiry From Bangladesh. *Frontiers in Public Health*, 9, 647315. DOI: 10.3389/fpubh.2021.647315
- [91] Robina-Ramírez, R., Medina-Merodio, J.-A., Moreno-Luna, L., Jiménez-Naranjo, H.V. & Sánchez-Oro, M. (2021). Safety and Health Measures for COVID-19 Transition Period in the Hotel Industry in Spain. *International Journal of Environmental Research and Public Health*, 18, 718. DOI: 10.3390/ijerph18020718
- [92] Roda W.C., Varughese M.B., Han D. and Li M.Y., 2020. Why is it difficult to accurately predict the COVID-19 epidemic? *Infectious Disease Modelling*, 5, pp. 271–281. PMID:32289100
- [93] Rodrigues, M., Franco, M., Sousa, N. & Silva, R. (2021). COVID 19 and the Business Management Crisis: An Empirical Study in SMEs. *Sustainability*, 13, 5912. DOI: 10.3390/su13115912
- [94] Rodriguez-Anton, J. M. & Alonso-Almeida, M. (2020). COVID-19 Impacts and Recovery Strategies: The Case of the Hospitality Industry in Spain. *Sustainability*, 12, 8599. DOI: 10.3390/su12208599
- [95] Sager, F. & Mavrot, C. (2020). Switzerland's COVID-19 policy response: Consociational crisis management and neo-corporatist reopening. *European Policy Analysis*, 6(2): 293–304.
- [96] Salem, I. E., Elkhwesky, Z. & Ramkissoon, H. (2021). A content analysis for government's and hotels' response to COVID-19 pandemic in Egypt. *Tourism and Hospitality Research*, 1-18. DOI: 10.1177/14673584211002614
- [97] Sanfelici, M. (2020). The Italian response to the COVID-19 crisis: Lessons learned and future direction in

- social development. *The International Journal of Community and Social Development*, 2(2): 191–210.
- [98] Santos, A., Sousa, N., Kremers, H. & Bucho, J. L. (2020). Building resilient urban communities: the case study of setubal municipality, Portugal. *Geosciences*, 10(6), 1-13. DOI: 10.3390/geosciences10060243
- [99] Sao Joao, E.A.(2021).COVID-19 and Hospitality Operations: What happened and what's next?. *African Journal of Hospitality, Tourism and Leisure*, 10(1):318-332. DOI:10.46222/ajhtl.19770720-103
- [100] Sarmah, H. (2020). Contactless Check-In: The Key To A SAFER Stay For Your Guests. <https://www.hotelogix.com/blog/2020/06/22/contactless-check-in-the-key-to-a-safer-stay-for-your-guests/>
- [101] Schimanovich, A. (2021). *The shift in significance of hotel choice and satisfaction attributes during the Covid-19 pandemic in respect of changes made in the hotel industry* (Bachelor thesis). Modul University.
- [102] Shang, Y., Li, H. & Zhang, R. (2021). Effects of Pandemic Outbreak on Economies: Evidence From Business History Context. *Frontiers in Public Health*. DOI: 10.3389/fpubh.2021.632043
- [103] Sharifi, A. & Khavarian-Garmsir, A. R. (2020). The COVID-19 Pandemic: Impacts on cities and major lessons for urban planning, design, and management. *Science of the Total Environment*, 749, 142391. DOI: 10.1016/j.scitotenv.2020.142391
- [104] Sheek-Hussein, M., Abu-Zidan, F. M. & Stip, E. (2021). Disaster management of the psychological impact of the COVID-19 pandemic. *International Journal of Emergency Medicine*, 14, 19. DOI: 10.1186/s12245-021-00342-z
- [105] Sigala, M. (2020). Tourism and COVID-19: Impacts and implications for advancing and resetting industry and research. *Journal of Business Research*, 117: 312–321. DOI: 10.1016/j.jbusres.2020.06.015
- [106] Sobhaninia, S. & Buckman, S. T. (2022). Revisiting and adapting the Kates-Pijawka disaster recovery model: A reconfigured emphasis on anticipation, equity, and resilience. *International Journal of Disaster Risk Reduction*, 69, 102738. DOI: 10.1016/j.ijdr.2021.102738.
- [107] Soliku, O., Kyiire, B., Mahama, A. & Kubio, C. (2021). Tourism Amid COVID-19 Pandemic: Impacts and Implications for Building Resilience in the Eco-tourism sector in Ghana's Savannah region. *Heliyon*, 7(9). DOI: 10.1016/j.heliyon.2021.e07892
- [108] Soria, A. (2020). Strategies for The Hotel & Tourism Industry during the “New Normal” of Covid-19. <https://lesroches.edu/blog/strategies-hotel-tourism-industry-new-normal-covid-19/>
- [109] Stergiou, D. P. & Farmaki, A. (2021). Ability and willingness to work during COVID-19 pandemic perspectives of front-line hotel employees. *International Journal of Hospitality Management*, 93: 102770. DOI:10.1016/j.ijhm.2020.102770
- [110] Szentesi, S. G., Cuc, L. D., Feher, A. & Cuc, P. N. (2021). Does COVID-19 Affect Safety and Security Perception in the Hospitality Industry? A Romanian Case Study. *Sustainability*, 13(20), 11388. DOI: 10.3390/su132011388
- [111] Tate, C. (2020). Need to cancel or change travel plans? What to know about COVID-19 policies for airline, hotels, more. USA Today. <https://www.usatoday.com/story/travel/2020/11/24/covid-19-travel-info-hotel-flight-cancellation-policies/6398350002/>
- [112] Toubes, D. R., Araújo-Vila, N. & Fraiz-Brea, J. A. (2021). Organizational Learning Capacity and Sustainability Challenges in Times of Crisis: A Study on Tourism SMEs in Galicia (Spain). *Sustainability*, 13, 11764. DOI: 10.3390/su132111764
- [113] Triatmanto, B., Respati, H. & Wahyuni, N. (2021). Towards an understanding of corporate image in the hospitality industry East Java, Indonesia. *Heliyon*, 7(3), e06404. DOI: 10.1016/j.heliyon.2021.e06404
- [114] Tulane University (2021). *What is Disaster Management? Understanding Emergencies from Prevention to Mitigation*.

- <https://publichealth.tulane.edu/blog/what-is-disaster-management/>
- [115] Vo, N. T., Hung, V. V., Tuckova, Z., Pham, N. T. & Lien H. L. Nguyen. (2021). Guest Online Review: An Extraordinary Focus on Hotel Users' Satisfaction, Engagement, and Loyalty. *Journal of Quality Assurance in Hospitality & Tourism*. DOI: 10.1080/1528008X.2021.1920550
- [116] Wang, T. C., Tsai, C. L. & Tang, T. W. (2018). Exploring Advertising Effectiveness of Tourist Hotels' Marketing Images Containing Nature and Performing Arts: An Eye-Tracking Analysis. *Sustainability*, 10, 3038. DOI:10.3390/su10093038
- [117] Widowati, E., Istiono, W. & Adi Heru Husodo, A. H. (2021). The development of Disaster Preparedness and Safety School model: A Confirmatory Factor Analysis. *International Journal of Disaster Risk Reduction*, 53, 102004. DOI: 10.1016/j.ijdr.2020.102004.
- [118] Wu, L. F., Achyldurdyeva, J., Jou, W. P., Fong, W. T. & Jaw, B. S. (2021). Relief, Recovery, and Revitalization Measures for Tourism and Hospitality Industry During Covid-19 Pandemic: Case Study From Taiwan. *SAGE Open*, 11(3), 1-16. DOI: 10.1177/21582440211040805
- [119] Xuan, X., Khan, K., Su, C. W. & Khurshid, A. (2021). Will COVID-19 Threaten the Survival of the Airline Industry? *Sustainability*, 13, 11666. DOI: 10.3390/su132111666
- [120] Yamori, K. & Goltz, J. D. (2021). Disasters without Borders: The Coronavirus Pandemic, Global Climate Change and the Ascendancy of Gradual Onset Disasters. *International Journal of Environmental Research and Public Health*, 18(6): 3299. DOI: 10.3390/ijerph18063299
- [121] Zamoum, K. & Gorpe, T. S. (2018). Crisis Management: A Historical and Conceptual Approach for a Better Understanding of Today's Crises. *Intechopen*. DOI: 10.5772/intechopen.76198
- [122] Zeb, S., Hussain, S. S. & Javed, A. (2021). COVID-19 and a way forward for restaurants and street food vendors. *Cogent Business & Management*, 8:1. DOI: 10.1080/23311975.2021.1923359
- [123] Zerrenner, K. (2021). Why Emergency Preparedness Plans Are Crucial for Businesses Amidst the Pandemic. Triple Pundit. <https://www.triplepundit.com/story/2021/business-emergency-preparedness/727776>
- [124] Zhang, D. & Xie, J. (2021). Influence of Tourism Seasonality and Financial Ratios on Hotels' Exit Risk. *Journal of Hospitality and Tourism Research*, 20(10), 1-20. DOI: 10.1177/10963480211016038
- [125] Zhuang, X., Yao, Y. & Li, J. (2019). Sociocultural Impacts Tourism on Residents of World Cultural Heritages Sites in China. *Sustainability*, 11, 840. DOI: 10.3390/su11030840