RESILIENCE AND TRANSFORMATION IN THE CRUISE INDUSTRY:

NAVIGATING POST-PANDEMIC RECOVERY AND SUSTAINABLE FUTURES

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Michael Anthony Ryan M.S.M.

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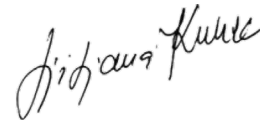SWISS SCHOOL OF BUSINESS AND MANAGEMENT GENEVA

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by

Michael Anthony Ryan M.S.M.

Supervised by
Dr. Jaka Vadnjal

APPROVED BY

dr. LJILJANA KUKEC, Ph.D.

Dissertation Chair

RECEIVED/APPROVED BY:

Admissions Director

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ABSTRACT

RESILIENCE AND TRANSFORMATION IN THE CRUISE INDUSTRY:

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This study takes a mixed methods approach to resilience in a time of crisis for the cruise industry. The industry dealt with unprecedented hardships presented by COVID-19. It looks at what strategic adjustments were made in light of the hardships.

There were disruptions and health concerns. This research shows how agility can be incorporated in times of such hardships. It implemented safety protocols and redefined passenger experiences. Significant operational changes brought about improvements in sustainability.

Furthermore, this research examines the crisis management strategies adopted by the cruise industry. It highlights plans incorporating health screening processes, rapid response mechanisms, and clear communication protocols. These measures addressed health concerns and laid a foundation for future crisis management frameworks.

An essential finding of this study indicates that sustainability has become a focus of the cruise industry. This focus is evident through initiatives such as adopting waste recycling systems, sourcing food options, and implementing eco-friendly practices. These efforts demonstrate an increasing commitment to stewardship within the industry.

The study also looks at how the cruise industry relates to the local communities it impacts. It highlights initiatives that focus on tourism and sustainability in a community-oriented approach.

Combining these findings shows how the cruise industry has adapted and persevered throughout the COVID-19 pandemic. It shows how the industry has redirected its focus toward safety, sustainability, and community engagement in the post-pandemic era. It is a truly transformative process.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

Chapter I:

INTRODUCTION

1.1 Introduction

This research paper delves into the impact of the COVID-19 on the global cruise industry exploring various aspects such as crisis management, social transformation and the industry's journey towards recovery and sustainability. Historically the cruise industry has been synonymous with leisure and luxury. However, the unprecedented global health crisis caused by COVID-19 has presented challenges and disruptions to this sector's operations. This study focuses on analyzing these challenges. How the industry has addressed them.

To achieve our research objectives this dissertation employs a mixed method approach that combines methods to understand how the industry has responded to the pandemic. The primary goals of this study are;

1. Investigate how operational strategies in the cruise industry have been altered due to COVID-19 in areas such as health protocols, safety measures, route adjustments and capacity modifications.

2. Understand how these strategic changes have been implemented their effectiveness and their long term implications for the cruise industry.

3. Evaluate how effectively crisis management techniques were employed by the cruise industry during COVID-19.

4. Examine communication strategies related to health responses utilized during this crisis and assess their efficacy.

The analysis conducted will provide insights into how these strategies have influenced the industry's framework, for responding to crises.

The cruise sector is currently, in the process of recovering from the impact of COVID-19. There is a growing emphasis on assessing its dedication to sustainability and environmental responsibility. This investigation aims to examine how the industry aligns its activities with these principles and concerns. Additionally it delves into the industry's strategies for bouncing from the pandemics effects and maintaining relationships with communities and destinations. By exploring these aspects this research sheds light on the industry's role in economies its responsibilities and how these dynamics have evolved during this time.

COVID-19 has had an impact on industries, including cruise lines. This study provides insights into the health related challenges faced by this sector offering an understanding of their consequences.

By utilizing crisis management models theories of transformation and frameworks for sustainability this dissertation establishes a foundation for analyzing how the cruise industry has responded to this crisis and examines its implications for operations. This research is crucial as it contributes to discussions about crisis management and sustainable practices within the tourism industry. It offers insights for stakeholders such as policymakers while also serving as a resource, for researchers.

The main focus of this dissertation is to investigate how the cruise industry has addressed the challenges posed by COVID-19.

This research delves into the repercussions of the pandemic, on aspects of the cruise industry, such as its strategies, crisis management methods, sustainability practices and community involvement. Through an analysis of these elements the study aims to enhance our comprehension of how vital economic sectors adapt and transform in times of crisis.

1.2 Research Objectives

The global cruise industry has faced challenges due to the COVID-19. These challenges have impacted its operations, crisis management endeavors, sustainability initiatives and interactions with communities. This investigation seeks to explore and understand the extent to which these impacts have influenced the industry. It aims to evaluate changes in strategies assess the effectiveness of crisis management techniques employed by the industry explore how sustainability practices are incorporated during recovery efforts and examine alterations in interactions with communities and destinations. The study addresses the necessity, for understanding these changes in order to develop strategies that will guide the cruise industry towards a future in a pandemic era.

Purpose of Research;

The cruise industry has faced challenges due to COVID-19. This research provides insights that can greatly benefit the industry. By examining changes, in strategies, crisis management techniques employed by operators within this sector and sustainability practices implemented by them during this time period caused by the pandemic.

The collected data serves important purposes;

1. Identifying Strategies; This research aims to pinpoint specific operational strategies and health protocols that have proven most successful in ensuring the safety of both passengers and crew members. Understanding these measures is crucial for shaping guidelines that prioritize safety.

2. Highlighting Areas for Improvement; The findings will shed light on any shortcomings in the industry's response such as communication, implementation of health measures or crisis management. Recognizing these gaps is essential for developing crisis management strategies.

3. Understanding Customer Perspectives; Examining how passengers perceive and respond to these changes is vital for shaping the future of the industry. The survey results can reveal trends in customer behavior and expectations which're crucial for tailoring marketing and operational strategies to regain and enhance customer confidence.

4. Assessing Sustainability Efforts; In a conscious world there is growing scrutiny of the cruise industry's commitment to sustainability. This research focuses on evaluating practices effectiveness and understanding public perception to determine additional measures necessary to align with sustainability goals.

The findings from this research can significantly contribute to policy making decisions and discussions with bodies. Ensuring that the cruise industry's practices align with health and safety standards plays a role, in influencing policy development and regulatory actions.

This research is crucial because it has the potential to improve the reputation of the industry. By examining and addressing how the industry has responded to the pandemic we can promote transparency and accountability which're key in rebuilding public trust.

In a world that is recovering from the pandemic it is important for the cruise industry to regain its status as a choice for travelers. The comprehensive data collected through this survey will guide recovery strategies aimed at establishing a market position.

Furthermore, this research examines how changes have affected economies and communities after the pandemic. It will provide insights into how people perceive the industry in these areas helping positive relationships with destination communities based on mutual benefits and sustainable tourism practices.

The significance of this study for the cruise industry lies in its aim to make it more resilient, adaptable and responsive to evolving customer expectations and global demands in a pandemic world.

The purpose of this research is to investigate aspects within the cruise industry that have been impacted by COVID-19. This includes analyzing changes, in strategies related to health measures, safety protocols, route adjustments and capacity modifications. Additionally we will evaluate crisis management techniques employed by the cruise industry during the pandemic focusing on health responses and communication strategies.

To evaluate how the cruise industry is incorporating sustainability and environmental responsibility in its recovery after the COVID-19 pandemic.

To investigate how the cruise industrys strategies for recovering from the pandemic are affecting its relationship, with communities and destinations.

1.3 Research Questions

Q1 How did the COVID-19 pandemic impact the operational strategies of the cruise industry?

Q2 What crisis management techniques were employed during the pandemic?

Q3 How has the industry incorporated sustainability practices in its recovery phase?

Q4 How have the cruise industry's recovery strategies post-pandemic affected its relationships with local communities and destinations?

CHAPTER II:

REVIEW OF LITERATURE

2.1 Introduction

The cruise industry has faced unprecedented challenges after the COVID-19 pandemic, leading to widespread disruptions and a reevaluation of operational strategies. As the industry strives to recover and build a sustainable future, exploring the concepts of resilience and transformation is essential. This literature review, titled "Resilience and Transformation in the Cruise Industry: Navigating Post-Pandemic Recovery and Sustainable Futures," examines key research areas within the cruise industry that contribute to its resilience and transformation.

The review will include operational strategies, post-pandemic recovery, sustainable practices, health and safety measures, digital technology and AI integration, and the impact on local communities and destinations. By critically examining existing research and identifying gaps, this review provides insights to guide the cruise industry toward a resilient and sustainable future.

Operational strategies have always been crucial in the cruise industry. Still, the pandemic has necessitated a reevaluation of ship size and capacity management, itinerary planning and route optimization, customer service and satisfaction, crew management and training, and food and beverage operations. This review will explore the existing research in these areas and identify strategies to enhance operational efficiency and adaptability to overcome challenges and meet evolving passenger expectations.

The post-pandemic recovery strategies are of utmost importance for the cruise industry. Restoring consumer confidence and addressing safety concerns, adapting operational strategies, crisis management and resilience, and market segmentation and targeting are crucial elements that must be carefully considered. By examining existing research and identifying gaps, this review aims to provide valuable insights into the strategies that can drive the industry's recovery and ensure long-term sustainability. Sustainable practices have gained prominence in the cruise industry, with a growing emphasis on minimizing environmental impacts, preserving cultural heritage, and supporting local communities. The review will explore the environmental impact and ecological footprint, alternative energy sources and emission reduction, waste management and recycling, corporate social responsibility, and sustainable tourism certification and standards.

Health and safety measures have become a paramount concern in the wake of the pandemic. This review will examine research on immediate responses to health crises, the evolution of health and safety protocols, the role of digital technology in health and safety management, health screening and monitoring of passengers and crew, sanitation and hygiene practices onboard, emergency preparedness and response strategies, mental health considerations, the impact of health and safety measures on customer satisfaction and experience, and regulatory oversight and compliance. By analyzing existing research and identifying gaps, this review aims to provide insights into best practices for ensuring the well-being of passengers and crew members.

Integrating digital technology and AI has transformed various aspects of the cruise industry. The review will explore digital transformation and operational efficiency, customer experience and personalization, digital platforms and online booking, data analytics and personalized marketing, AI-powered chatbots and virtual assistants, the Internet of Things and connectivity, cybersecurity, and data protection. By examining existing research and identifying gaps, this review recommends leveraging digital technologies to enhance operational efficiency, personalize customer experiences, and ensure data security.

Lastly, the cruise industry's impact on local communities and destinations is critical for its sustainable future. The review will explore research on sociocultural impacts and community perceptions, economic impacts and benefit sharing, cultural exchange and authentic experiences, responsible shore excursions, and tourism activities. By analyzing existing research and identifying gaps, this review provides recommendations for fostering positive relationships between the cruise industry and local communities, maximizing economic benefits, and preserving cultural heritage. In summary, this literature review on "Resilience and Transformation in the Cruise Industry: Navigating Post-Pandemic Recovery and Sustainable Futures" aims to contribute to the knowledge and understanding of critical areas within the cruise industry. By examining existing research and identifying gaps, this review provides valuable insights for guiding the industry toward a resilient and sustainable future. The findings will benefit cruise operators, policymakers, researchers, and other stakeholders involved in shaping the future of the cruise industry.

2.2 Operational Strategies in the Cruise Industry

Operational strategies, forming the bedrock of the cruise industry's prosperity and competitive advantage, significantly impact the tourism landscape. This industry stands apart with its intricate mix of logistical management, top-tier service delivery, and forward-thinking planning. All these components work together to deliver unique and memorable passenger experiences and position the industry competitively within the tourism market. Given this, effective operational management, which includes consideration of ship size, itinerary planning, and customer service, is vital in creating remarkable passenger experiences and constructing a resilient and responsive operational infrastructure.

This part of this literature review ventures into the vast research landscape surrounding operational strategies within the cruise industry. The aim is to extract critical themes, key findings, and transformative insights that shape our current understanding of operational complexities within this industry. This review will delve into the significant challenges, ranging from managing the growing size and sophistication of cruise ships to catering to an increasingly diverse and discerning customer base, each presenting unique demands and expectations.

In tandem, this review will examine promising opportunities for bolstering operational efficiency and customer satisfaction. This exploration will highlight areas where strategic improvements can significantly enhance the industry's operational performance. As this review navigates through these varied topics, the overarching goal

is to offer a detailed portrayal of the operational realities of the cruise industry, acknowledging its intricacies and dynamism.

The findings from this section of the literature review are intended to serve as a strong foundation for this specific study, setting the stage for further exploration and investigation. It promises to be an enlightening deep dive into the maze of operational strategies that power the cruise industry. It offers essential insights to inform this study's focus on resilience and transformation strategies in the post-pandemic era.

2.3 Ship Size and Capacity Management

In cruise line operations, the critical role of ship size and capacity management cannot be overstated. The ship's dimensions can significantly influence a cruise line's operational efficiency, profitability, and passenger satisfaction (Papathanassis, 2020; Ros Chaos et al., 2021). The dynamics dictating these strategic decisions within cruise lines are deeply rooted in passenger demand, destination port compatibility, and onboard amenities (Papathanassis, 2020).

Further emphasizing the impact of ship size, research by Ros Chaos et al. (2021) illuminates the necessity for cruise lines to identify the ideal ship size. They argued that this would balance capacity and profitability, enhancing operational efficiency. In the ever-competitive, passenger-centric cruise industry, this careful evaluation is essential.

Moreover, the selection of ship size should also be influenced by varying cruising areas as it impacts passenger demands and port compatibility. These factors complicate

the decision-making process, contributing to the complex relationship between ship size

and capacity management (Papathanassis, 2020; Ros Chaos et al., 2021).

Sturm and Fischer (2019) also underscored the importance of an extensive

evaluation when choosing the ship size. They suggested that factors such as geographical

restrictions, potential passenger demographics, onboard service requirements, and

environmental impacts should be considered in the decision-making process. Their

insights indicate that a comprehensive and nuanced analysis of these elements can

significantly contribute to the operational success of a cruise line.

Finally, research by Syriopoulos et al. (2022) contributed to the understanding of

the global cruise industry and its financial performance. This work not only tracks the

historical development and current disruptions in the industry due to the pandemic but

also sheds light on possible recovery and transformation paths in the post-pandemic era.

Their research emphasizes that strategic choices about ship size could significantly

impact the industry's strides toward sustainability and alignment with upcoming trends.

The current body of literature accentuates ship size and capacity management's

pivotal role in shaping a cruise line's operational strategy. These aspects necessitate

careful consideration in strategic planning and decision-making. Future research

endeavors aim to extend these existing insights and uncover new aspects in the ever-

evolving landscape of the cruise industry during the COVID-19 pandemic.

2.4 Itinerary Planning and Route Optimization

In the rapidly growing cruise tourism industry, the key to success lies in designing

itineraries that are both attractive to tourists and profitable for cruise shipping companies.

Alves and Santos (2022) developed a mixed-integer programming optimization model to find optimum cruise ship itineraries. This model calculates the cost and revenue of an itinerary separately, using a cost structure based on the cruise ship's size and itinerary duration and a revenue structure based on the month and the selected ports' attractiveness. Their results suggest that creating optimal cruise itineraries could increase profits, especially during the Summer season, and reveal opportunities for new cruise itineraries in underexplored regions like the Atlantic coast of the Iberian Peninsula and Morocco.

In another approach, Ji et al. (2021) proposed using wireless communication networks and genetic algorithms to optimize cruise travel routes' design and economic development. This innovative method showcases how advanced technology can facilitate more efficient and economical planning in the cruise industry.

Surveying the field, Meng et al. (2023) explored international cruise research advances and hotspots using big data gathered from the literature. This research indicates the growing importance of data-driven methodologies in cruise route planning and optimization, further underscoring the trend toward more technologically sophisticated strategies in the industry,

Similarly, Pillo et al. (2023) pursued a two-objective optimization of ship itineraries for a cruise company. Their research emphasizes the need for a balanced approach to cruise itinerary planning that considers multiple objectives to devise efficient and effective travel paths.

Collectively, these sources emphasize the critical role of strategic planning, advanced technology, and data analysis in the cruise industry's efforts to optimize itineraries. Such insights not only shed light on the evolving dynamics of the industry but also have the potential to enhance operational strategies greatly.

2.5 Customer Service and Satisfaction

Cruise industry customer service and satisfaction are fundamental to operational strategies, directly influencing brand loyalty and return business. In a market that's becoming more competitive, cruise lines prioritize understanding the elements that lead to significant passenger satisfaction (Castillo-Manzano et al., 2022).

Manolitzas et al. (2022) examined the connection between customer service, satisfaction, and loyalty, arguing that the customer experience is a vital component of cruise industry operational strategies. They discovered that a superior customer experience, comprising personalized services, attentive staff, and efficient problem resolution, dramatically contributes to customer satisfaction and loyalty. The importance of these findings is underscored by the economic value of investing in superior customer service for increased profitability.

Taking the conversation further, Demydyuk and Carlbäck (2022) discussed the role of food experiences on cruises, pointing out that the image of destination food and perceived food satisfaction significantly influence overall customer satisfaction. Therefore, cruise operators should consider general amenities and services and pay significant attention to their food service to improve passenger satisfaction. They

recommend focusing not just on the quality of the food but also on the presentation and cultural authenticity, as these elements contribute to overall customer satisfaction.

A qualitative review by Yoon and Cha (2020) highlights the need for sustainable practices on board, emphasizing passengers' growing concern about the environmental footprint of their consumption habits. Therefore, to enhance the overall customer experience, cruise operators should evaluate and potentially revamp their food service practices to be more sustainable.

The scholarly discourse on customer service and satisfaction underlines their vital role in operational strategies for cruise lines. This research provides insights into how cruise lines adjust their customer service strategies in response to the pandemic, address sustainability issues in their operations, and how these adaptations may influence future trends in the industry.

2.6 Crew Management and Training

In the cruise industry, the role of crew management and training in operational strategies is paramount. The efficiency of a cruise line and the satisfaction of its passengers largely depend on a well-trained and adeptly managed crew (Ajagunna et al., 2022).

Several studies have suggested the critical relationship between how crews are managed, their training, and passenger satisfaction. For instance, Ajagunna et al. (2022) found a direct correlation between the quality of crew training, their motivation levels, their empowerment in the workplace, and the standard of service delivered to the passengers. It emphasizes the strategic importance of crew management and training in

cruise operations.In addition, the crew's work engagement is another significant factor. Ariza-Montes et al. (2021) explored this aspect, suggesting that satisfied crew members who feel embedded in their job roles deliver more effective service to passengers, leading to less crew turnover.

Adding more insight, Faremi and Cunningham Heirs (2022) explored the concept of job embeddedness. They suggested that the level of support the crew receives and their integration into the workplace can substantially impact their job satisfaction and turnover rates. This emphasizes the need for cruise lines to create supportive work environments to retain their staff and ensure continuous, high-quality service delivery.

Taking the discourse a step further, Yoon and Cha (2020) investigated the impact of crew culture on staff retention. They argued that a positive crew culture could significantly reduce staff turnover, ensuring that passengers consistently receive service from experienced and skilled staff.

Summarizing, the significance of crew management and training as part of the cruise industry's operational strategies must be considered. These insights will guide us in exploring how the COVID-19 pandemic has affected crew management and training, the evolution of crew management in the post-pandemic recovery period, and how crew training and management practices might impact future trends and opportunities in the cruise industry.

2.7 Food and Beverage Operations

Food and beverage operations are integral to the cruise industry, significantly contributing to the guest experience and overall allure of cruise vacations (Pantelidis,

2022). Dobrotă and Dridea (2021) outlined that the COVID-19 pandemic has significantly transformed these operations, mainly catering and food supply services.

Research on the procurement process and the implications of disruptions in a multilayer cruise supply chain reveal the complexity of the system and the impact of unexpected events such as the COVID-19 pandemic (Qu et al., 2020). Cruises have had to adapt their procurement strategies to mitigate disruptions and ensure the continuity of operations.

In particular, the study by Dobrotă and Dridea (2021) underscores the significant changes in catering and food supply due to the pandemic. The temporary shutdown of the cruise industry and its slow recovery have resulted in substantial adjustments to onboard procedures to safeguard the health and safety of tourists.

Additionally, Pantelidis's (2022) work emphasizes the broader facets of food and beverage operations on cruise ships, shedding light on significant changes over recent years. This information, coupled with the findings by Rodrigue and Wang (2022), underscores the impact of disruptions on cruise shipping supply chains, specifically in the Caribbean.

These studies highlight the complexity and importance of food and beverage operations as part of the cruise industry's operational strategies. They also illustrate the industry's response to the COVID-19 crisis and the changes to food and beverage operations during recovery.

2.8 Post-Pandemic Recovery Strategies in the Cruise Industry

The COVID-19 pandemic has profoundly and unprecedentedly impacted the global economy, but perhaps no industry has felt this seismic shift more acutely than the cruise sector. For an industry that thrives on the intersection of global travel, large gatherings, and shared experiences, the global lockdowns, travel restrictions, and public health concerns associated with the pandemic have been nothing short of devastating. Cruise lines were forced to pause operations, revenues plummeted drastically, and perhaps most damagingly, consumer confidence in cruise travel was profoundly shaken.

As the world gradually moves towards a post-pandemic era, the cruise industry finds itself at a critical juncture, grappling with unique challenges as it seeks to recover, rebuild, and re-establish itself. This multifaceted recovery process encompasses everything from financial resiliency and safety protocols to rebuilding consumer trust and innovatively adapting to a new travel landscape. It necessitates robust, strategic, and far-sighted planning; thus, it is vital to understand the breadth and depth of these strategies.

This comprehensive literature review, therefore, aims to delve into the burgeoning body of research surrounding post-pandemic recovery strategies within the cruise industry. By synthesizing a diverse range of academic work, this review aims to shed light on the various strategies being deployed and discussed in the cruise sector's path to recovery.

The review highlights critical themes within these recovery strategies, including enhancing health and safety protocols, leveraging technology for contactless experiences, building financial resilience, improving communication with passengers, and reimagining

the cruise travel experience. It also explores emerging trends and forward-looking ideas informing recovery approaches, such as environmental sustainability considerations and adopting innovative digital platforms.

Moreover, the review considers the broader implications of these recovery strategies for the cruise industry, the wider tourism sector, and the global economy. This is particularly relevant given the interconnectedness of the cruise industry with various other sectors - from hospitality and entertainment to food and beverage and beyond. By exploring the existing body of research on post-pandemic recovery strategies within the cruise industry, this literature review seeks to contribute to the ongoing dialogue on how this key industry can navigate its way back to prosperity. This research hopes to provide a valuable resource for industry stakeholders, policymakers, researchers, and all those interested in understanding the intricate dynamics of the cruise industry's recovery in a post-pandemic world.

2.9 Restoring Consumer Confidence and Addressing Safety Concerns

The global cruise industry has faced significant challenges after the COVID-19 pandemic, mainly restoring consumer confidence and addressing safety concerns. Beirman (2022) comprehensively analyzed how government restrictions have targeted the Australian and global cruise sectors during the pandemic. This discrimination has led to a decline in the industry's reputation and undermined consumer confidence. This requires the cruise industry to engage more robustly with government stakeholders to alleviate their concerns, potentially leading to a lifting of restrictions and a concomitant increase in consumer confidence.

The study conducted by Chikodzi et al. (2022) highlighted potential recovery and reformation pathways for the global cruise ship industry. They recommend a greater focus on health and safety measures, transparency in communication, and adopting more sustainable practices. Incorporating these measures could address immediate safety concerns and improve consumer confidence by demonstrating the industry's commitment to passenger safety and sustainability.

Kabadayi et al. (2020) classified the pandemic's impact on the cruise industry as a service mega-disruption. They argued that to recover, service industries, including cruise lines, need to rebuild their service ecosystems in a way that addresses consumer concerns stemming from the pandemic. This includes demonstrating enhanced health and safety protocols, showcasing modifications to onboard experiences to minimize risks, and communicating effectively with potential customers about these changes.

The psychological impact of using cruise services post-pandemic is another critical study area. Yuen et al. (2021) have emphasized the importance of health management and proposed policy implications for the cruise industry to boost consumer confidence. They suggested that implementing strict health and safety protocols and adequately communicating them to potential customers can favorably alleviate concerns and influence their decision-making process.

Restoring consumer confidence and addressing safety concerns in the cruise industry necessitates a multi-pronged approach. This includes relaxing government restrictions, adopting robust health and safety measures, modifications to service delivery, sustainable practices, and transparent, effective customer communication.

2.10 Crisis Management and Resilience

Crew management and training on cruise ships is an essential component of operational success and customer satisfaction, and its importance is further amplified in times of crisis. Utilizing resilience and recovery principles, developing a robust strategy for crew management and training in the context of global disruptions such as the COVID-19 pandemic is possible.

In their comprehensive work, Ahmed et al. (2023) highlight the need for resilience and recovery in the tourism and hospitality industry, including cruise ships. Building resilience involves understanding and enhancing the ability of crews to withstand, recover, and grow in the face of stressors and changes. On the other hand, recovery implies returning to a state of normalcy after a crisis and may necessitate changes to the usual operation methods. In the context of a cruise ship, crew management, resilience, and recovery might involve implementing comprehensive training programs that equip crew members to handle a variety of crises and emergencies and to recover quickly once the crisis has passed.

Djalante et al. (2020) provide insights into building resilience against biological hazards and pandemics, which have specific implications for crew training on cruise ships. In light of the recent COVID-19 pandemic, it has become crucial to integrate biological hazard management into crew training programs. This includes using personal protective equipment, implementing hygiene protocols, and knowledge about disease transmission and prevention.

In addition, Jiang et al. (2021) suggest a processual and reflective approach to developing disaster resilience. This approach could be beneficial in crew management and training, as it would encourage crew members to learn from past experiences, reflect on their actions, and adapt their behavior accordingly in the face of future crises. Reflection can improve crisis management, ultimately contributing to a more robust, resilient crew.

Kaur and Noonwal (2023) discuss various crisis management strategies that can be applied to the tourism industry. These strategies, including effective communication, rapid response, and preemptive planning, can be valuable tools for crew management and training. Proper training in these areas will equip crew members with the skills to deal with crises efficiently and effectively.

The management and training of cruise ship crews in a crisis context must be a comprehensive process that equips individuals with the skills and knowledge to respond effectively to crises. This requires focusing on resilience and recovery, understanding specific threats such as biological hazards, and a reflective approach to learning from past crises. These principles will ensure cruise ship crews are well-prepared to handle future challenges and disruptions.

2.11 Market Segmentation and Targeting

The cruise industry, struck by the COVID-19 pandemic, faces several challenges in the post-pandemic world. Key among them is effectively segmenting the market and targeting potential cruise-goers in a landscape that the

pandemic has significantly altered. This will involve understanding consumers'
new needs and concerns due to the shifting global cruise market dynamics.

Before the pandemic, the cruise industry was one of the fastest-growing
and most economically efficient sectors in the global leisure and tourism industry,
with North America, Europe, and Asia as the main markets. However, the
pandemic has led to a severe contraction in the industry, with significant losses
reported across major cruise lines,

Despite these challenges, a study by Gebauer (2020) indicated that the
diversity of crew members in cruise ships serving a single-origin customer
segment could positively influence passenger experience, suggesting a potential
avenue for targeted marketing to specific customer segments. In addition, Bosnic
and Gasic (2019) identified key trends in the river cruise industry that could be
applied across the broader cruise industry, including diversifying the range of
destinations and the onboard offerings to cater to different passenger segments.

Georgsdottir and Oskarsson (2017) further highlighted the importance of
segmentation and targeting in the cruise industry, noting that successful strategies
require a deep understanding of the needs and preferences of passengers. This
would be especially crucial in the post-pandemic context, where potential
passengers will likely have new concerns regarding safety and health protocols.

Given the uncertainty around consumers' intention to cruise travel in the
post-pandemic world, market segmentation and targeting must be flexible and
responsive. A study by Namin et al. (2020) suggested that revenue performance in

the cruise industry could be improved through third-degree price discrimination, indicating that different customer segments might respond differently to pricing strategies. This could be an effective tool in a post-pandemic world where the affordability of cruise travel could be a significant concern for many consumers.

Finally, Peručić and Greblički (2022) highlighted vital factors driving demand for cruising and challenges facing the industry in the future, including the need to navigate the shift towards more sustainable practices. This suggests that targeting environmentally conscious customer segments could be a viable strategy for the post-pandemic cruise industry.

Therefore, market segmentation and targeting in the post-pandemic cruise industry involves an integrated approach that considers the changing global market dynamics, the evolving needs and concerns of potential passengers, and the strategic use of pricing and marketing tools to effectively engage with different customer segments.

2.12 Sustainable Practices in the Cruise Industry

In recent years, sustainability has taken center stage across many industries worldwide. The cruise industry is no exception. The industry's inherent characteristics – moving thousands of people across the oceans, utilizing vast resources, and generating significant waste – create serious sustainability challenges. Therefore, there has been a pressing need for the cruise industry to embrace sustainability in its operational and strategic paradigms.

Sustainability in the cruise industry pertains to environmental concerns and social and economic implications, all of which are integral to achieving true sustainability. This is in line with the triple-bottom-line approach of sustainability that includes social equity, economic viability, and environmental responsibility. These dimensions require significant attention if the cruise industry is to align itself with global sustainability goals and achieve long-term resilience.

Given the industry's international scope, the impacts of the cruise industry are far-reaching, influencing both the marine and terrestrial environments and local communities in cruise destinations. Managing such impacts is a critical aspect of sustainability in this industry. Simultaneously, the industry is bound by various international, regional, and national regulations that dictate certain sustainable practices, adding another layer of complexity to the issue.

Therefore, the concept of sustainability in the cruise industry is multifaceted and warrants comprehensive examination. This literature review delves into the existing research on sustainable practices within the cruise industry, highlighting key areas of interest, emerging challenges, potential opportunities, and innovative strategies for integrating sustainability into cruise operations.

This review aims to offer a thorough understanding of the current state of research in this area, identify knowledge gaps, and propose future research directions. It covers various topics, such as environmental impact and ecological footprint, alternative energy sources and emission reduction, waste management

25

and recycling, sustainable destination management, and more. The goal is to encourage informed, sustainable decision-making within the cruise industry, with implications for policy, management, and research.

2.13 Environmental Impact and Ecological Footprint

The environmental impact and ecological footprint of the cruise industry have become significant concerns in the context of sustainable development. Understanding these impacts is crucial for assessing the industry's historical evolution, its response to crises, and its progress toward sustainability.

Honey and Bray (2019) provide insights into the environmental "footprint" of the cruise industry, highlighting the various environmental problems associated with cruise tourism, such as air pollution, sewage, waste management, and their environmental impact. This research contributes to our understanding of the industry's environmental practices and their implications for sustainability.

Paiano et al. (2020) focus on managing sustainable practices in cruise tourism, explicitly assessing the carbon footprint and waste associated with water and beverage packaging. Their study evaluates changes over time and identifies strategies for minimizing carbon emissions and waste in this sector. This research sheds light on the industry's efforts to address its environmental impact and promote sustainability.

Ruiz-Guerra et al. (2019) examine the prediction of air quality impact in cities receiving cruise tourism, using the case of the Port of Barcelona. Their

research highlights the importance of understanding the impact of cruise tourism on air quality and the need for effective management strategies to mitigate any adverse effects. This study provides insights into the environmental implications of cruise tourism in specific destinations.

Trivyza et al. (2019) investigate the impact of carbon pricing on the optimal configuration of cruise ship energy systems. Their research explores the potential influence of carbon pricing policies on the cruise industry's energy systems and sustainability. This study contributes to our understanding of the industry's energy-related practices and the role of carbon pricing in shaping sustainable energy configurations.

These studies offer valuable insights into the cruise industry's environmental impact and sustainability practices. They comprehensively understand the industry's historical evolution, environmental challenges, and efforts to mitigate its ecological footprint. By examining these research findings, we can gain valuable knowledge on the industry's progress in sustainability and identify improvement areas.

2.14 Alternative Energy Sources and Emission Reduction

Alternative energy sources and emission reduction strategies are crucial in promoting sustainability within the cruise industry. These approaches are essential for aligning with global sustainability goals and ensuring the long-term resilience and development of the industry.

27

A case study by Ghenai et al. (2019) focused on a hybrid solar PV/PEM fuel cell/diesel generator power system for a cruise ship in Stockholm, Sweden. The study aimed to integrate renewable energy systems into small and large ships for greener and more sustainable marine transport. The research investigated the performance of different power system architectures, including energy conversion systems' efficiency and capacity factors. The study found that the proposed renewable energy system achieved an excellent penetration of renewable energy and reduced greenhouse gas and particulate emissions compared to a baseline system that used diesel engines. Integrating solar PV and PEM fuel cell technologies proved economically viable, environmentally cleaner, and reduced dependency on fossil fuels.

Another study by Gutierrez-Romero et al. (2019) explored the implementation of onshore power supply from renewable energy sources to meet the requirements of ships at berth. The research examined the feasibility of using renewable energy to power ships while docked. The study highlighted the potential of onshore power supply to reduce emissions and promote sustainability in the cruise industry.

Regarding fuel system sustainability, Iannaccone et al. (2020) conducted a comparative analysis of liquefied natural gas (LNG) and diesel technologies in cruise ship fuel systems. The study examined the environmental impact and sustainability aspects of these fuel options. The research findings contribute to

understanding the implications and potential benefits of adopting LNG technology in the cruise industry.

Lindstad and Rialland (2020) discuss the role of LNG in fulfilling regulations and reducing greenhouse gas (GHG) emissions in the cruise industry. The study emphasizes the importance of LNG as an alternative fuel option for cruise ships to comply with emission standards. It addresses the balance between regulatory requirements and the industry's need to reduce GHG emissions.

Furthermore, Rivarolo et al. (2020) analyze the potential of clean energy production using PEM fuel cells on tourist ships. The study focuses on a time-dependent analysis of fuel cell operation and its contribution to clean energy generation. The findings offer insights into using PEM fuel cells as a clean energy solution in the cruise industry.

Collectively, these research studies contribute to understanding alternative energy sources and emission reduction strategies in the cruise industry. They provide valuable insights into the potential of hybrid power systems, onshore power supply, LNG technology, and fuel cell applications. By examining these findings, the industry can learn about implementing sustainable practices, reducing emissions, and potential areas for further innovation and improvement.

2.15 Waste Management and Recycling

Effective waste management and recycling practices are vital for achieving sustainability in the cruise industry. These practices ensure the preservation of

marine and terrestrial ecosystems, align with global sustainability goals, and contribute to the well-being of local communities.

Di Vaio et al. (2022a) analyzed best practices in digital technologies for sustainable waste management onboard ships, focusing on the cruise industry. The study examined the implementation of digital technologies and their impact on waste management practices. The research highlighted the importance of technological advancements in improving waste management efficiency and promoting sustainability in the cruise industry.

Killmer (2022) conducted a case study on the sustainability practices of Disney Cruise Line, exploring their waste management strategies. The research delved into Disney Cruise Line's efforts to minimize waste generation and implement recycling initiatives. The study showcased the importance of sustainability practices within specific cruise lines, contributing to our understanding of waste management in the industry.

Sanches et al. (2020) reviewed the management of cruise ship-generated solid waste. The study examined various aspects of waste management, including waste types, handling techniques, and regulations. The research emphasized the importance of proper waste management systems and highlighted the need for effective waste-handling practices in the cruise industry.

Toneatti et al. (2022) explored waste-to-energy practices onboard cruise ships as a new paradigm for sustainable cruising. The study focused on using waste as an energy source through innovative technologies. The research

highlighted the potential of waste-to-energy solutions in reducing waste volume and contributing to sustainable practices in the cruise industry.

Synthesizing these studies' findings can provide a comprehensive understanding of waste management and recycling practices in the cruise industry. These studies provide insights into the role of digital technologies, case studies on specific cruise lines, management of cruise ship-generated waste, and waste-to-energy solutions. Such knowledge is crucial for examining the current state of waste management in the industry and identifying opportunities for further improvement and sustainability.

2.16 Sustainable Destination Management

Sustainable destination management is a crucial component of the tourism industry, considering tourism activities' potential environmental and socio-economic impacts. With an increasing emphasis on sustainable practices, tourism needs help aligning its operations with sustainable principles and practices, particularly the cruise industry.

Delgado (2017) offers a comprehensive review of the cruise industry, examining its opportunities, innovations, and challenges from a management perspective. The cruise industry has been increasing, and destination management strategies must consider this sector's specific characteristics and needs. Opportunities in the cruise industry lie in emerging destinations and innovative customer experiences, but they also pose significant challenges. Sustainable destination management in this context involves carefully selecting and managing

31

cruise destinations, adopting innovative practices to reduce environmental impacts, and ensuring benefits for local economies and communities.

Johnson (2002) provides a critical reality check for the cruise tourism industry regarding environmental sustainability. Despite a growing discourse around environmentally sustainable cruise tourism, the practices and impacts of the industry suggest a significant gap between rhetoric and reality. According to Johnson, sustainable destination management in cruise tourism must confront this reality and make meaningful changes toward more environmentally friendly operations.

Li et al. (2023) focus on the role of cruise enterprises in advancing sustainable development. They raise the question of whether these large enterprises are also giants of social responsibility for sustainable development. The implication is that destination management must involve the destinations and large corporations that drive much of the tourism activity. These corporations need to be held accountable for their impacts and need to contribute to sustainable practices and initiatives.

Lastly, Mihalic and Kuščer (2022) tackle the issue of over-tourism, examining the factors that affect residents' irritation and quality of life. They suggest that sustainable destination management must address the issue of over-tourism, which can lead to the degradation of destinations and adverse impacts on local communities. This involves careful planning and management, including

limitations on tourist numbers and measures to distribute tourists more evenly across destinations.

These perspectives suggest that sustainable destination management is a complex and challenging task. It requires a holistic approach that considers tourism's environmental, social, and economic dimensions and seeks to balance the interests of various stakeholders, including tourists, local communities, and tourism businesses. This includes the cruise industry, which has specific challenges and opportunities in sustainable destination management.

2.17 Corporate Social Responsibility

The evolving landscape of corporate social responsibility (CSR) in the cruise industry encompasses an increasing focus on many dimensions, such as environmental sustainability, social welfare, and positive customer experiences. A growing body of research provides valuable insights into the role and influence of CSR in shaping customer behavior, corporate social performance (CSP), and the overall industry approach to sustainability.

A study by Ahn and Lu (2022) explored the relative role of CSR activity and service experience on cruise customers' behavior, demonstrating that both components are crucial for the industry.

Meanwhile, Di Vaio et al. (2022b) shed light on the role of non-financial reporting in fostering CSP within the cruise industry, aligning with the Boluk et al. (2019) related United Nations Agenda 2030 Sustainable Development Goals. Their analysis of a major cruise company showed an evident sustainability and

community orientation, with initiatives mainly focusing on environmental and social issues to meet the 17 SDGs. They observed that reputation and positive image were significant drivers of CSP, reinforcing the importance of CSR in maintaining industry standards and competitiveness.

According to the authors, non-financial reporting can serve as a "booster" for CSP, contributing to meeting the SDGs. They also suggested that improving the quality of non-financial reporting can enhance disclosure, leading to realizing SDGs and CSP processes, outcomes, and ways. This research provides a broad and unique perspective on the role of non-financial reporting in promoting CSP in the cruise industry.

CSR plays a significant role in the cruise industry, impacting customer behavior, boosting CSP, and shaping sustainability practices. Non-financial reporting can enhance CSR practices and meet global sustainability goals, reinforcing the industry's commitment to sustainable and socially responsible operations. Further research and an in-depth review of the mentioned studies could offer more specific insights into these areas.

2.18 Sustainable Tourism Certification and Standards

Sustainable tourism certifications and standards for fostering environmentally, socially, and culturally responsible tourism have gained significant recognition in recent years. However, the applicability and effectiveness of these certifications and standards can be influenced by various factors.

One notable case in this context is the Mediterranean Standard for Sustainable Tourism (MESST). Initiated by the European Union to create sustainable certification schemes for tourism destinations and local enterprises in Southeast Europe, this standard experienced substantial obstacles, eventually leading to its failure. An ex-post facto analysis of the MESST case, based on the opinions of local tourism professionals in Rhodes Island, Greece, brought several critical issues to light (Zorpas et al., 2008).

One crucial problem was the incomplete accreditation process and the inability of tourism businesses to comply with technical and operational requirements. This non-compliance was primarily attributed to the local cultural, political, and socio-economic idiosyncrasies that greatly influenced the perceptions of the local tourism industry regarding sustainable tourism.

Another significant issue was the need for more local governance and a pervasive distrust towards local authorities and tourism institutions. This further eroded the potential utility and adoption of the MESST standard.

Moreover, the study questioned the capacity of sustainability indicators to accurately map destinations' constant transformations and challenges in a way that would benefit tourism professionals, enhance the well-being of host communities, and deliver quality services for visitors.

The cited research demonstrates that sustainable tourism certifications and standards, while having potential benefits, face significant obstacles in implementation. These challenges are primarily rooted in the complex social, economic, and cultural dynamics of the local contexts in which they are applied. Therefore, to maximize their

effectiveness, such certifications and standards must be tailored to the local
circumstances and backed by solid and trusted local governance structures.

2.19 Role of Health and Safety Measures in the Cruise Industry

Health and safety measures are paramount in the cruise industry, ensuring the well-being of passengers and crew members alike. In light of the recent global health crisis, these measures have taken on renewed urgency and significance. This literature review section critically examines the existing body of research on health and safety measures in the cruise industry. It explores topics such as the industry's immediate response to health crises, the evolution of safety protocols over time, the role of digital technology in health and safety management, and the impact of such measures on customer satisfaction and experience.

Furthermore, this review delves into areas such as sanitation and hygiene practices onboard, health screening and monitoring of passengers and crew, emergency preparedness and response strategies, and the crucial role of regulatory oversight and compliance. Mental health considerations, a critical but often overlooked aspect, are also discussed, recognizing their importance in providing a holistic approach to health and safety.

By examining these areas, this research aims to illuminate the state of health and safety measures in the cruise industry, assess their effectiveness, and identify areas of improvement. This review seeks to identify gaps in the current research landscape that could guide future studies, contributing to our broader understanding of the industry's

response to health crises, its recovery process, and the strategic changes implemented in its pursuit of safety, resilience, and sustainability.

2.20 Immediate Response to Health Crises: The Case of COVID-19

In health crises such as the COVID-19 pandemic, the cruise industry's immediate response is crucial in understanding crisis management strategies and industry adaptability under extreme conditions. Florentina and Gabriela (2022) investigated the impact of the COVID-19 pandemic on global cruise tourism, with a particular focus on resilience and recovery.

Li et al. (2022) study on the cruise industry's health crisis management post-COVID-19 offers essential insights. They examined health crisis management and marketing theories to address public health concerns and improve the use of cruise services. Their study proposed a theoretical model combining social exchange theory, customers' perceived value theory, and trust theory. The findings from their survey data highlighted that quality management, health management, social and communication strategies, and financial strategies contribute to customers' perceived value of cruise service. This perceived value, directly and indirectly, influences customers' intention to use cruise services through trust in the cruise company's pandemic management capability.

A unique perspective is provided by Tachikawa et al. (2022), who studied the mental health needs associated with COVID-19 on the Diamond Princess cruise ship. Their findings underline the importance of addressing psychological and emotional needs

during a health crisis, adding another layer of complexity to crisis management strategies in the cruise industry.

Although these studies provide valuable insights, there remains a gap in understanding the long-term implications of the cruise industry's immediate response to the COVID-19 pandemic. Future research that examines how the initial response to the crisis influenced the industry's post-pandemic recovery, customer confidence, and reputation could offer a further understanding of crisis management strategies in the industry.

2.21 Evolution of Health and Safety Protocols in the Cruise Industry

Understanding the evolution of health and safety protocols in the cruise industry is crucial in evaluating the sector's adaptability and resilience, especially in light of significant challenges such as the COVID-19 pandemic.

Florentina and Gabriela (2022) shed light on the cruise industry's resilience and recovery strategies amidst the COVID-19 pandemic, focusing on global cruise tourism. Their research indicates the industry's capacity to bounce back from such significant shocks. This illustrates the industry's agility and adaptability in adverse circumstances. This work provides vital insights into the industry's evolution and response to the pandemic, constituting a critical basis for understanding its historical development and reaction to significant health crises.

Risk perception, particularly in health and safety, plays a significant role in the decision-making process of both potential and current cruisers. Rossato and Nocella (2022) address the communication strategies related to risk and safety on cruise ships

during the COVID-19 pandemic. Their research underscores the importance of effective

communication in managing risk perceptions and attitudes toward cruising. This study

contributes significantly to understanding how risk perception is shaped and its role in

influencing travel decisions.

The study by Vlasceanu and Tigu (2021) explores the enhancements made to

health and safety protocols within the cruise industry. They examine these changes

against the backdrop of the pandemic, outlining their impacts on the sector. Their

research suggests that these improved protocols have strengthened the industry's

resilience and helped it navigate the complexities of operating amidst a global health

crisis.

Despite this extensive research, there remains a gap in understanding how

passengers have received and perceived these evolving health and safety protocols.

Additional research exploring the impact of these changes on the cruise experience,

customer satisfaction, and consumer decision-making process would enrich our

understanding of the cruise industry's post-pandemic transformation and its capacity to

meet new market demands.

2.22 Role of Digital Technology in Health and Safety Management

The surge of digital technology in managing health and safety has played a pivotal

role across different industries, including the cruise industry. This sector has witnessed a

drastic upturn in leveraging digital technology for managing complex challenges and

enhancing efficiency, particularly in the post-pandemic period (Dwivedi et al., 2022).

Advanced digital tools have been extensively utilized to manage safety in Industry 4.0 (Liu et al., 2020). Similar trends have been observed in the cruise industry, where technological solutions have aided in implementing stringent health and safety measures. These include mobile apps for contact tracing, digital health passports, and remote health monitoring (Vlasceanu & Tigu, 2021). Such digital solutions offer promising prospects for the industry to recover from the blow inflicted by the pandemic. However, a research gap remains in exploring these technologies' long-term implications and impacts on health and safety management.

Furthermore, incorporating the Internet of Things (IoT) in health and safety management has offered innovative solutions for real-time information provision and alert systems on cruise ships (Liu et al., 2020). Such advancements have facilitated maintaining onboard safety and hygiene standards, which is significant in the industry's growth and innovation potential.

Another remarkable trend in the industry is the use of AI-powered virtual assistants and chatbots. These tools have efficiently offered real-time health information and emergency response management (Patel et al., 2022). Still, additional research is required to study passengers' and crew members' perceptions and experiences with these technologies. Ethical and privacy considerations also need to be addressed to shape the future direction of digital technology in the cruise industry.

Lastly, digital technology has significantly transformed passengers' experiences during the COVID-19 pandemic. As Shiwakoti et al. (2022) noted, airlines' adoption of digital technology has shaped passengers' perceptions and satisfaction levels during the

pandemic. The cruise industry has adopted a similar approach, enhancing health and safety protocols to ensure passengers' satisfaction and perception (Vlasceanu & Tigu, 2021).

The role of digital technology in managing health and safety has shown considerable promise, particularly in the cruise industry. While several innovative solutions have emerged, there is a need for further research to fully understand the long-term impacts and future directions of these technological advancements.

2.23 Health Screening and Monitoring of Passengers and Crew

The importance of health screenings and continual monitoring of passengers and crew is pivotal to establishing a secure and healthy environment on cruise ships, a concern accentuated by recent public health emergencies. Boviatsis (2022) emphasizes the necessity of these health procedures within the maritime industry, particularly in the context of the COVID-19 pandemic. Boviatsis's research underscores the effectiveness of pre-boarding health questionnaires, temperature screenings, and on-site testing to detect and mitigate the spread of infectious diseases aboard ships. This aligns with this study's exploration of the immediate and lasting impacts of the COVID-19 pandemic on the cruise industry and the efficacy of the health and safety protocols implemented during the recovery phase.

Codreanu et al. (2021) thoroughly examine health monitoring systems on cruise ships, such as onboard health clinics and isolation wards. Their research accentuates the crucial role of these facilities in managing health crises onboard ships. The knowledge

gained from this research improves our understanding of the strategies utilized by cruise operators in managing health crises.

Furthermore, the study by Hu and Li (2022) offers insight into the mental health monitoring of the crew members. This research illuminates the potential stressors on the crew, such as long work hours and isolation, thereby contributing to a comprehensive understanding of health considerations in the cruise industry.

Lastly, the recommendations by Wang et al. (2023) on health and safety measures on luxury cruise ships emphasize the need for further research on the long-term effects of intensive health screening and monitoring protocols on the passengers and crew. Investigations focusing on the psychological and behavioral impacts of these measures, their long-term effectiveness, and the perceptions of passengers and crew would further enrich our understanding of the lasting impacts of the COVID-19 pandemic on the cruise industry and how the industry transforms post-pandemic.

These studies underline the importance of health screenings and continual monitoring in maintaining a secure and healthy environment on cruise ships, especially in light of recent health crises. The knowledge gained from these research studies aids our understanding of the strategies employed by cruise operators in managing health crises and the broader health considerations in the cruise industry. It also emphasizes the need for further research on the long-term effects of health and safety measures in the context of the COVID-19 pandemic.

2.24 Sanitation and Hygiene Practices Onboard

Robust sanitation and hygiene protocols are crucial to safeguard the health of cruise ship passengers and crew members. Brewster et al. (2020) provide essential context for the cruise industry's practices and experiences during the COVID-19 pandemic. While they don't explicitly discuss sanitation and hygiene practices, their research indirectly supports the importance of these practices in mitigating the impacts of health crises and maintaining business continuity.

The Vessel Sanitation Program (VSP), the U.S. Centers for Disease Control and Prevention initiative, is an integral part of these protocols. The CDC outlines the VSP as a means to prevent and control gastrointestinal illnesses on cruise ships. Its implementation within the cruise industry can significantly contribute to disease outbreak prevention and control, and it plays a crucial role in crisis management strategies and post-pandemic recovery in the cruise industry.

Moreover, the focus on personal hygiene for passengers and crew members is vital, as emphasized by Leggat and Franklin (2021). They discuss personal hygiene in the context of overall passenger health on cruise ships, aligning with the more extensive investigation into the long-lasting effects of the COVID-19 pandemic and the behavioral changes it has induced.

There remains a need for additional research on passengers' compliance with onboard hygiene practices and their perceptions of sanitation measures. Likewise, the long-term sustainability of enhanced hygiene practices and their implications for the crew's workload and well-being requires further investigation. These inquiries would

augment our understanding of the immediate and enduring impacts of the COVID-19 pandemic on the cruise industry and its post-pandemic transformation.

2.25 Mental Health Considerations for Crew and Passengers

Mental health considerations for crew and passengers form an essential component of health and safety measures within the cruise industry, relevant to the research goals. A study by Arjona-Fuentes et al. (2022) highlighted the heightened stress levels and poor mental health among cruise ship workers due to the global industry crisis, primarily due to the COVID-19 pandemic.

Tachikawa et al. (2022) shed light on the psychological impacts experienced by passengers onboard the Diamond Princess cruise ship during the COVID-19 outbreak, providing insights into the significant increase in anxiety and stress levels. This research underlines the immediate repercussions of the pandemic on passengers and points towards the critical necessity for onboard psychological support systems. The literature on occupational safety and health in the cruise industry indicates the imperative of maintaining a healthy work environment for service crews onboard passenger ships (Österman et al., 2020). This aligns with examining the recovery process of the cruise industry, as it offers strategies to enhance the passenger experience during health crises.

A review by Lloret et al. (2021) emphasized the environmental and human health impacts of cruise tourism, pointing out the need for further research on the long-term mental health support for crew and passengers in light of the ongoing impact of the

pandemic. This is particularly relevant given the potential recurrence of similar crises, underlining the necessity for future studies in this area.

2.26 Regulatory Oversight and Compliance in Health and Safety Management

The importance of regulatory oversight and compliance in health and safety management in the cruise industry has been highlighted in recent research, mainly due to the changes spurred by the COVID-19 pandemic (Purcell et al., 2021). In a comprehensive review of the state of tourism franchises, Aburumman (2020) has discussed how global governance has been instrumental in navigating these new challenges in the industry, such as the TUI group's case.

Purcell et al. (2021) emphasized the pressing need for sustainable tourism strategies amidst the pandemic. They focused on how the COVID-19 pandemic has emphasized the need for more effective health crisis management within the cruise industry. This analysis aligns with the role of policies and regulations in shaping this sector's future, particularly after a significant global health crisis. Zanganeh and Burrell (2023) argued that businesses such as wineries, vineyards, breweries, cruise ships, and resorts need a Chief Public Health Officer. This proposition signifies an understanding of the increased importance of health management and quality control in the operations of cruise ships, especially in the post-pandemic context. Their observations contribute to understanding crisis management strategies and implementing health and safety measures during the industry's recovery process.

The growing concern over the environmental impact of cruise tourism, as explored by Demyen (2023), speaks to the need for policy options to mitigate adverse

45

environmental consequences. This issue of regulatory compliance and oversight is also crucial in understanding the immediate and lasting impacts of the pandemic on the cruise industry.

However, a gap exists in research exploring how the increase in health and safety regulations has affected cruise ship operations in a post-pandemic world. Further exploration of the cruise industry's compliance with new regulations, challenges, and measures taken to ensure adherence would significantly enhance our understanding of the industry's post-pandemic transformation and regulations' evolving role.

2.27 Digital technology and AI in the cruise industry

The advent of digital technology and artificial intelligence (AI) has revolutionized numerous industries, and the cruise industry is no exception. Digital transformation has rapidly become a priority for cruise lines seeking to enhance operational efficiency, improve customer experience, and adapt to changing market dynamics. This section of the literature review delves into the role of digital technology and AI in the cruise industry, exploring their impact on various aspects of operations, customer engagement, and strategic decision-making.

Digital technology encompasses a range of tools and solutions, including the Internet of Things (IoT), big data analytics, automation, and virtual reality (VR), which can potentially transform the cruise industry's operational landscape. Conversely, AI enables intelligent automation, predictive analytics, and personalized passenger interactions through chatbots and virtual assistants.

Examining the existing research aims to shed light on the current state of digital transformation in the cruise industry and its impact on operational efficiency, customer experience, and strategic decision-making. Furthermore, this review will identify gaps in the research landscape, highlighting areas where further investigation is needed to understand the full potential and challenges of digital technology and AI implementation in the cruise industry.

The insights gained from this review will contribute to understanding the cruise industry's evolution in the digital era, its post-pandemic recovery process, and exploring emerging trends and opportunities. Additionally, it will provide valuable guidance for cruise lines, policymakers, and industry stakeholders seeking to leverage digital technology and AI to navigate the changing landscape and ensure sustained growth, operational excellence, and enhanced customer satisfaction.

2.28 Digital Transformation and Operational Efficiency

The transformative power of digital technologies on the operational efficiency of the cruise industry is profound. Buhalis et al. (2022b) reported that 'smart technology' applications such as the Internet of Things (IoT), big data analytics, and automation have radically transformed operational processes in cruise tourism. Such innovations streamline procedures, optimize resource allocation, and bolster decision-making processes.

Arrichiello and Gualeni (2020) explored the pivotal role of systems engineering and digital twins in future cruise ship design, production, and operations. Data-sharing concepts are also increasingly relevant in this context, contributing to operational

improvements in the cruise ship industry. Bumann and Persson (2019) investigated the feasibility of such concepts, potentially leading to more significant reductions in operational costs, increased productivity, and enhanced service quality.

Further highlighting the importance of digital transformation, Pinna et al. (2022) analyzed the impact of digital supply chains on operational efficiency in the cruise sector. They demonstrated that successful digitalization could help cruise lines become more agile and responsive to fluctuating market conditions, a sentiment echoed in the other studies.

Despite these advances, there is a shortage of research examining digital transformation's long-term impacts on the cruise industry's operational efficiency. Understanding these long-term effects is crucial to shaping future strategic planning and innovation within the sector, especially in light of the COVID-19 pandemic and the industry's subsequent recovery. This understanding can also support sustainability efforts within the cruise industry.

2.29 Customer Experience and Personalization

In cruising, emerging technologies like digital tools and artificial intelligence (AI) have become instrumental in delivering passengers a bespoke and highly personalized experience (Buhalis et al., 2022b). These digital enhancements significantly enhance the customer experience, which is a primary focus of the research objectives. Comprehensively exploring the influence of these digital tools on service quality and overall customer satisfaction, Buhalis et al. (2022b) accentuated the potential of technologies such as mobile applications, virtual reality, and AI chatbots. They

highlighted the capability of these tools to provide customized services, improve communication in real-time, and overall enhance the passenger experience on cruises. This research gives valuable insights into the role of these novel technologies in refining customer experiences in the cruising industry.

Simoni et al. (2022) investigate using mobile applications to boost passenger experience onboard cruise ships. Their findings showed how these applications allow passengers to access personalized information, make reservations, and engage in interactive experiences during their cruise. The research underscores the ability of digital technology and AI to create tailored experiences, addressing diverse market segments. Vafeidou's (2019) study delved into the role of personalization in the cruise industry and how digital technology can facilitate this. The research explored the potential of AI recommendation systems, data analytics, and machine learning to understand passenger preferences and provide personalized recommendations and services. This research furthers our understanding of the potential of personalization in the cruising industry, spearheaded by digital technology and AI.

However, Weinstein et al. (2022) suggested that further research is needed to explore the long-term impacts and sustainability of personalized experiences in the cruise industry. Additionally, examining passenger perceptions, expectations, and concerns about using digital technology and AI to personalize their cruising experiences would deepen our understanding of the industry's transformation in the post-pandemic period. The interplay between digital technology, AI, and customer experience is essential to shaping the future direction of the cruise industry, especially considering evolving

passenger expectations and preferences. Consequently, future research in this area will offer valuable insights for cruise lines aiming to leverage digital technology and AI to craft unforgettable and personalized experiences for their passengers.

2.30 Digital Platforms and Online Booking

Digital platforms and online booking systems are essential instruments transforming how passengers interact with cruise lines. This section will examine the significance of digital platforms and online booking procedures in the cruise industry. The innovative applications of intelligent technology in the cruise tourism sector have been documented by Buhalis et al. (2022a). The research underscores the significance of user-friendly websites, mobile applications, and flawless online booking procedures. The potential of digital platforms to attract and engage customers, enhance accessibility, and increase bookings is also highlighted. Such insights contribute to the research objectives by broadening our understanding of digital platforms and online booking systems in the transformation and recovery of the cruise industry.

Buhalis et al. (2022b) study also illuminate the impact of digital platforms and online booking systems on industry practices and adherence to policies and regulations. Understanding the role of these platforms in shaping industry practices and navigating regulatory requirements bolsters the objective of investigating the role of policies and regulations in the cruise industry.

While the previous study provides valuable insights into the potential of digital platforms and online booking, a research gap still needs to be found in comprehending the specific impacts of these platforms on operational efficiency, customer satisfaction,

and the industry's recovery process. Faremi and Cunningham Heirs (2022) emphasize the importance of training and crew re-certifying for cruise tourism. These practices will be crucial in shaping the future digital interaction between customers and service providers, underlining the need for further research. Furthermore, operational efficiency can be better understood by looking into revenue efficiency and its drivers in the cruise industry, as studied by Nguyen et al. (2022).

2.31 Data Analytics and Personalized Marketing

Data analytics has been integral to the progression of the cruise industry, in particular, personalized marketing. According to Brejla and Gilbert (2014), web content analysis offers invaluable insights into the sector, aiding the understanding of cruise tourism services. Data analytics lets cruise lines pinpoint specific consumer segments for targeted marketing initiatives, shaping the industry's historical growth.

Data analytics and its potential also influence the industry's recovery from disruptive events. Weaver (2021) discusses the crisis of analysis in big data and tourism, highlighting that understanding this tool is crucial in the industry's transformation and recovery endeavors, particularly post-pandemic. By employing data analytics for personalized marketing, cruise companies can pivot their marketing strategies to meet shifting consumer behavior and needs.

As Cao et al. (2022) noted, data analytics and AI can boost operational efficiency and improve the customer experience, reinforcing the significance of these technologies in the sector. Cruise lines can utilize data-driven insights to make strategic decisions,

enhance customer targeting, and customize marketing initiatives, contributing positively to operational efficiency and the customer experience.

Park et al. (2016) indicate the potential of Twitter data in cruise tourism marketing and research. They highlight the gap in understanding specific challenges and ethical considerations around data usage and customer privacy. More studies are required to comprehend these factors and develop best practices for responsible and effective data analytics implementation in the industry.

Examining the use of data analytics in personalized marketing within the cruise industry enables an understanding of its historical development, the recovery process, and the impact on operational efficiency and customer experience. This supports the research objectives by comprehensively understanding how data analytics influences the cruise industry's transformation, recovery, and strategic decision-making processes.

2.32 AI-powered Chatbots and Virtual Assistants

Artificial Intelligence (AI) and AI-powered chatbots and virtual assistants have become an integral part of the cruise industry, enhancing the customer experience while boosting efficiency. Thanks to their ability to utilize natural language processing (NLP), Chatbots can handle customer inquiries and offer personalized travel experiences, becoming an industry norm. This significance of AI-powered systems in the cruise industry is also documented in the extensive bibliometric analysis by Agarwal et al. (2022).

Chatbots and virtual assistants serve multiple roles on cruise ships; for instance, they provide personalized recommendations for onboard activities and efficiently manage

foot traffic to optimize the use of onboard services. AI improves overall customer service, which is imperative for the cruise line business. This aligns with the findings of Ponce (2022), who studied the impact of chatbots on brand affection in the hotel industry, a closely related sector to cruises.

In addition to valuable services, chatbots and AI are employed in the cruise industry to enhance user experience and marketing. Augmented Reality (AR) and Virtual Reality (VR) applications, such as interactive maps displaying the ship's cruise route and current position or immersive VR tours of cultural and natural sites, are made possible with AI.

The influence of chatbot humor on customer evaluations of services, as discussed in the study by Shin et al. (2023), could have implications in the context of cruise ship entertainment and customer interaction.

While these technologies are beneficial, finding a balance between AI and human interaction is crucial. According to Varghese et al. (2022), this balance is essential as human interaction and experience continue to be highly valued despite the significant influence of AI in human lives.

AI continues to push the boundaries of what is possible on cruise ships, providing the tools necessary for operators to streamline their operations, improve customer experiences, and offer unique and innovative services. While it is still an emerging field, it is clear that AI, chatbots, and virtual assistants will continue to play an increasingly important role in the future of the cruise industry.

2.33 Internet of Things (IoT) and connectivity

The Internet of Things (IoT) has revolutionized various industries, and the cruise sector is no exception. Aided by specific research, this review delves into the transformative influence of IoT within the cruise industry and its potential to enhance safety, efficiency, and customer experience.

In their study, Aslam et al. (2020) focus on the integration of IoT across ship architectures and how it aids in the management of onboard systems, tracking passenger movements, and optimizing energy consumption. Their findings underscore the instrumental role of IoT in crisis management strategies, particularly during the pandemic, aligning to comprehend the implications of such crises on the cruise industry and their responses to these challenges.

Moreover, Nolich et al. (2019) present a novel framework for optimizing comfort in IoT-equipped Smart Environments on cruise ships. Their research highlights the use of data analytics and AI, bolstered by IoT, to enhance operational efficiency by enabling real-time monitoring and management of onboard systems. It adds to our understanding of how digital transformation, driven by IoT, shapes strategic decisions in the cruise industry.

Su et al. (2021) investigate applying electric propulsion in ships powered by IoT systems. Their findings reveal an innovative blend of IoT and ship propulsion systems, which can contribute significantly to cruise operations' energy efficiency and sustainability.

While these studies provide insightful perspectives into the IoT's application in the cruise industry, a research gap persists regarding the specific challenges, limitations, and cybersecurity considerations in the implementation of IoT. Future research would benefit from exploring these aspects and developing best practices to leverage IoT effectively while ensuring data privacy and security.

The integration of IoT in the cruise industry has demonstrated its potential in crisis management, safety, security, and operational efficiency. By leveraging these insights, we can better understand the role of IoT in the cruise industry's response to the pandemic, digital transformation, and strategic decision-making processes.

2.34 Cybersecurity and Data Protection

Considering the growing digitalization of the cruise industry, it is imperative to ensure robust cybersecurity and data protection measures. Studies highlight the importance of cybersecurity from the perspective of cruise ship industry employees, suggesting a critical need for comprehensive measures to safeguard passenger information. Their study underscores the significance of regulatory adherence and the crucial role of staff education in maintaining customer trust.

Meanwhile, Tuomala (2021) provides a broader overview of the maritime cybersecurity landscape, emphasizing that mitigating risks before they materialize into attacks is crucial. Tuomala's work also studies the need for proactive steps such as regular security assessments, the implementation of encryption, and intrusion detection systems.

These scholarly insights align with findings from industry reports. In recent years, cruise lines have been frequently targeted by ransomware and other IT breaches, necessitating greater attention to maritime cybersecurity. This has highlighted the need for robust cybersecurity measures, like cyber hygiene and simulations of attacks, to understand and manage possible vulnerabilities.

Furthermore, a rise in cyberattacks against the cruise industry underlines the importance of proactive measures to protect valuable customer and financial data. This has led to a call for a more proactive approach in the industry, including stronger regulations, comprehensive cybersecurity frameworks, and continuous staff training. Consequently, collaboration among cruise lines, IT professionals, and cybersecurity experts is imperative (Kuhn et al., 2023).

Given the constant evolution of digital threats, it is clear that further research is needed to understand specific technological advancements and emerging cybersecurity threats within the cruise industry. As the industry embraces digitalization, it is imperative to continually update cybersecurity frameworks and protocols to address the evolving threat landscape.

2.35 Impact on Local Communities and Destinations

The cruise industry's impact on local communities and destinations has gained significant attention recently. As the popularity of cruise travel continues to grow, it is crucial to examine this industry's positive and negative consequences on the communities and destinations it visits. This section focuses on understanding the multifaceted impact

of the cruise industry on local communities and destinations, encompassing social, cultural, economic, and environmental dimensions.

The presence of cruise ships can bring economic benefits to destinations, such as increased tourism revenue and job opportunities. However, it is equally important to consider the potential adverse effects, such as overcrowding, cultural commodification, environmental degradation, and strained local resources. Balancing the interests of the cruise industry, local communities, and destination management is vital to ensure sustainable and responsible cruise tourism.

Through this section, this review attempts to explore and analyze the various impacts of the cruise industry on local communities and destinations. By examining the social, cultural, economic, and environmental aspects, we can understand the opportunities, challenges, and potential solutions for managing the cruise industry's impact on local communities and destinations.

2.36 Sociocultural Impacts and Community Perceptions

Exploring the sociocultural impacts of the cruise industry on local communities and their perceptions of cruise tourism is integral to assessing the overall sustainability and responsibility of the industry. This section delves into the cultural impacts and community perceptions, drawing from three relevant research pieces aligning with the research objective.

Baker et al. (2019) conducted an in-depth study investigating residents' sentiments towards tourism development in St. Kitts and Nevis, a popular Caribbean destination. They highlighted the necessity of engaging with local communities, valuing their cultural

heritage, and working towards a fair distribution of tourism benefits. This study intends to understand the influence of the cruise industry on local communities and their cultural dynamics.

Buzova et al. (2019) compare the environmental impacts between cruises and land-based holiday packages, emphasizing the importance of sustainable practices in lessening adverse effects on local communities and destinations. Comprehending the environmental implications and encouraging sustainable practices are crucial for mitigating sociocultural impacts and preserving the authenticity and integrity of local communities.

The research conducted by Wastawa and Suwadnyana (2021) sheds light on the role of cruise ship workers in the sociocultural dynamics of the Indigenous Community in Pitra Village. Their research contributes to understanding the impact of cruise tourism workers on local communities, aligning with the research objective of uncovering strategies to manage the cruise industry's impact on local communities and destinations. While these studies offer valuable insights into the sociocultural impacts and community perceptions of cruise tourism, there remains a gap in understanding the specific mechanisms through which cultural impacts occur and the community dynamics surrounding cruise tourism. Further research is needed to probe these aspects more deeply, enabling the development of culturally sensitive and sustainable strategies that minimize negative impacts and enhance the positive contribution of the cruise industry to local communities and destinations.

We gain insights into the industry's overall sustainability and responsibility by inspecting the cruise industry's cultural impacts and community perceptions. Further

research is required to delve deeper into specific mechanisms and community

perspectives to develop strategies that promote cultural preservation, community

engagement, and the equitable distribution of tourism benefits.

2.37 Economic Impacts and Benefit Sharing

The economic repercussions of the cruise industry on local destinations and the

equitable dispersion of benefits to local communities remain significant considerations.

Cerveny et al. (2020) have highlighted the subject of sustainable cruise tourism in marine

world heritage sites and its economic effects on these localities. Their investigation is

crucial to understanding the cruise industry's economic effects on destinations and the

importance of benefit sharing.

On a related note, Snyman and Bricker (2019) delve into the benefit-sharing

derived from protected area tourism, focusing on the economically empowering benefits

for the local communities in those areas.

Moreover, Wang et al. (2019) discuss an economic impact platform to navigate

the value-added cruise chain with environmental considerations, providing a broader

perspective on the economic impact and the role of environmental considerations in the

cruise industry. This work aids in understanding the cruise industry's economic impacts

on destinations, providing an additional layer of complexity with environmental

considerations.

While these studies provide important insights into the cruise industry's economic

impacts and benefit sharing, there is a research gap in understanding the specific

mechanisms and challenges associated with equitable benefit sharing. Further research is

needed to delve deeper into these areas, which will aid in formulating comprehensive frameworks and strategies to ensure fair economic benefit distribution and enhance local communities' economic empowerment in cruise destinations.

2.38 Cultural Exchange and Authentic Experiences

Cruise ships have become an increasingly popular form of vacationing in recent years, offering tourists the opportunity to visit various destinations while enjoying onboard amenities. A vital component of cruise tourism is cultural exchange and providing authentic experiences, which can significantly enhance tourists' overall satisfaction and lead to more sustainable tourism practices.

One way in which cultural exchange can occur is through spaces for encounters between tourists and locals (Baumann, 2021). Different cultures can interact in these places, promoting understanding and appreciation for other ways of life. Onboard cruise ships can manifest these spaces through various activities such as cultural performances, cooking classes featuring local cuisine, or talks and presentations about the destination's history and traditions. This helps tourists gain a deeper understanding and appreciation for their visiting cultures.

However, the cruise industry's impacts are cultural, environmental, and economic. Howusu and Teyssedou (2020) emphasize that the triple impact of the cruise industry - economic, social, and environmental - must be considered when evaluating its sustainability. While cruise tourism can bring significant economic benefits to the destinations, these benefits can sometimes be outweighed by the environmental impacts,

such as pollution and damage to ecosystems. Therefore, a balance must be struck to ensure the cruise industry's long-term sustainability.

Authentic experiences are another vital aspect of cruise tourism. According to Symes (2021), mobile communities on board cruise ships are a unique cultural phenomenon that provides a rich ground for authentic experiences. The mixture of passengers from different backgrounds, crew members from various countries, and the close-knit living conditions all contribute to a melting pot of cultural exchanges. These exchanges lead to a more profound understanding of others' ways of life, thus enriching the overall travel experience. In addition, these interactions can create lasting relationships and connections beyond the cruise's duration.

Cultural exchange and authentic experiences are essential components of cruise tourism that contribute to its appeal and sustainability. Cruise ships can offer a unique and enriching form of tourism by providing spaces for cultural interaction, promoting understanding of different cultures, considering the industry's triple impact, and fostering authentic experiences.

2.39 Responsible Shore Excursions and Tourism Activities

Responsible shore excursions and tourism activities refer to cruise tourism sectors' strategies to ensure sustainable practices while optimizing the tourist experience. These efforts are crucial to maintaining the viability of destinations and mitigating negative impacts, especially concerning city overcrowding and the strain on local resources.

A study by Buzova et al. (2019) shows cruise tourists' evaluation of shore excursions is crucial in understanding their behavior and preferences. The cruise industry, a rapidly developing and profitable sector, has experienced significant downturns due to crises such as the COVID-19 pandemic. This calls for improving the decision-making process in quality management and cruisers' satisfaction to remain competitive and maintain a profitable market share. Key to this strategy is the use of reliable data and decision support tools. As the study suggests, online user-generated content, such as satisfaction ratings and comments on cruise critic websites, are invaluable resources for assessing aspects of the cruise experience that customers value.

Navarro-Ruiz et al. (2020) highlight the significant role of shore excursions in cruise tourism, particularly regarding the distribution of cruise passenger flows. Their research indicates that most shore excursions are concentrated in port cities, leading to a concentration of visitor flows that can cause overcrowding. They argue that the redistribution within cities is not always balanced but also note that excursions offered by local tourism operators have helped expand the cruise tourist hinterland over a more comprehensive regional area, somewhat alleviating the concentration. These findings emphasize the need for policymakers to develop and promote practical measures to prevent overcrowding, a crucial aspect of responsible tourism.

Shore excursions are not only a vital component of the cruise experience but are also a reflection of the perceived attractiveness of a cruise itinerary. Sun et al. (2021) observe that the characteristics of global cruise shore excursions exhibit a core-periphery structure. They also identified a relationship between shore excursions and relevant local

62

resources such as natural and cultural resources, tourist products, facilities, experiences, and activities. Destinations can use this research methodology to identify critical local resources needed for shore excursion products to meet cruise line demand and satisfy passengers, further promoting responsible tourism activities.

2.40 Conclusion

This literature review has explored various aspects of the cruise industry, highlighting key research areas that contribute to its resilience and transformation. This review has provided valuable insights and identified gaps in existing research by examining operational strategies, post-pandemic recovery, sustainable practices, health and safety measures, digital technology and AI integration, and the impact on local communities and destinations.

The findings of this literature review shed light on the importance of operational strategies such as ship size and capacity management, itinerary planning and route optimization, customer service and satisfaction, crew management and training, and food and beverage operations. These strategies are crucial for enhancing operational efficiency, meeting passenger expectations, and adapting to the industry's evolving landscape.

In post-pandemic recovery, critical focus areas have emerged to restore consumer confidence, address safety concerns, adapt operational strategies, crisis management and resilience, and market segmentation and targeting. The insights from this review guide many cruise industry stakeholders to navigate the challenges posed by the pandemic.

Sustainable practices have gained prominence in the cruise industry, necessitating the consideration of the environmental impact and ecological footprint, alternative energy sources and emission reduction, waste management and recycling, corporate social responsibility, and sustainable tourism certification and standards. The review has highlighted the importance of implementing sustainable practices to minimize the industry's environmental impact, preserve cultural heritage, and contribute positively to the well-being of local communities and destinations.

Health and safety measures have taken center stage in the wake of the pandemic, necessitating immediate responses, the evolution of protocols, the role of digital technology, health screening and monitoring, sanitation and hygiene practices, emergency preparedness and response strategies, mental health considerations, the impact on customer satisfaction, and regulatory oversight and compliance. The insights from this review contribute to developing effective health and safety management strategies that prioritize the well-being of passengers and crew members.

Digital technology and AI integration have transformed various aspects of the cruise industry, including digital transformation and operational efficiency, customer experience and personalization, digital platforms and online booking, data analytics and personalized marketing, AI-powered chatbots, and virtual assistants, internet of things and connectivity, and cybersecurity and data protection. The review has provided insights into the potential of these technologies to enhance operational efficiency, improve customer experiences, and ensure data security while also identifying areas where further research is needed.

Lastly, the impact on local communities and destinations has been a significant focus of this review. Examining sociocultural impacts, economic impacts and benefit sharing, cultural exchange and authentic experiences, and responsible shore excursions and tourism activities have emphasized fostering positive relationships, maximizing economic benefits, and preserving cultural heritage.

In conclusion, this literature review on "Resilience and Transformation in the Cruise Industry: Navigating Post-Pandemic Recovery and Sustainable Futures" has provided a comprehensive overview of the critical research areas within the cruise industry. By identifying gaps in existing research and providing valuable insights, this review guides cruise industry stakeholders, policymakers, and researchers to develop effective strategies and practices that ensure the industry's resilience, sustainable growth, and positive impact on local communities and destinations. This researcher hopes this review's findings will contribute to the continuous improvement and development of the cruise industry, leading to a more resilient, sustainable, and prosperous future.

CHAPTER III:

METHODOLOGY

3.1 Overview of the Research Problem

This research explores how the cruise industry has adapted and shown resilience

in response to the challenges posed by COVID-19. Specifically, it investigates the

changes made in strategies crisis management approaches and the implementation of

practices within an industry dramatically affected by the pandemic.

3.2 Operationalization of Theoretical Constructs

This research aims to examine how the cruise industry has transformed and

demonstrated resilience amid COVID-19. It delves into analyzing alterations in

strategies, crisis management techniques, and sustainability practices adopted within a

sector that this health crisis has significantly impacted.

By combining the Finks Crisis Management Model (Fink, 1986) Maslows

Hierarchy of Needs and theories related to sustainability we have developed a framework

to examine how the cruise industry has responded to the challenges posed by COVID-19.

These theories complement each other effectively in addressing aspects of these issues.

The Finks Crisis Management Model, introduced by Steven Fink in 1986 is

widely recognized as a framework, in the field of crisis management. This model outlines

the stages that crises typically go through and provides insights for understanding them.

The model is structured around stages of a crisis each requiring strategies and

responses. These stages encompass crisis preparedness, crisis management during the

event. Dealing with its aftermath. Finks emphasis on comprehending the life cycle of a crisis enables organizations to effectively anticipate navigate through times and learn from these experiences. This comprehensive approach has established Finks Crisis Management Model as a concept both in literature and practical applications, within crisis management.

In addition, to its framework this model has successfully been applied in real world scenarios, including crisis management and natural disasters. Finks work emphasizes the importance of being prepared, communicating and making decisions when dealing with crises.

Furthermore when examining resilience and transformation within the cruise industry it becomes valuable to incorporate Maslows Hierarchy of Needs. It is crucial to understand how individuals in this industry navigate situations. Exploring "Navigating Post Recovery and Sustainable Futures" is worthwhile for reasons. One significant reason is the change in consumer behavior towards cruise services after COVID-19. By using Maslows hierarchy, which categorizes needs ranging from safety to aspects like self esteem and self actualization we can gain insights into how health concerns, trust and safety impact consumer decision making, during this pandemic era (Yuen et al., 2021).

Another important consideration is the development of tourism products that contribute to the recovery and transformation of the cruise industry. By aligning with Maslows theory we can identify what consumers value and need such as security and well being. This understanding can inform management practices (Ali et al., 2022).

By incorporating Maslows Hierarchy of Needs into our research we can address the shifting expectations and demands, within the cruise industry from a perspective. This approach allows us to develop strategies for recovering from impacts and ensuring growth. Given the growing emphasis on responsibility in the cruise industry it is crucial to integrate sustainability theories into our analysis. This will assist us in assessing how the industrys response aligns with its objectives and understanding the long term effects of COVID-19 strategies on practices. By incorporating sustainability models into our study we place importance on grounds. The cruise industry has shown an increasing interest, in implementing ship design and operational practices (Könnölä et al., 2020). Through utilizing these models we can gain insights into integrating approaches that conform to trends and future directions within the industry. Cruise ships have impacts related to pollution and resource consumption (Ramoa et al., 2020). Sustainability models offer us a framework, for analyzing and mitigating these impacts enabling us to develop strategies that can minimize the footprint of cruise operations.

Moreover it is of importance, for management models in the cruise industry to be in sync with sustainability objectives set forth by initiatives, like the UN 2030 agenda.

Figure 3.1 Fink's Crisis Model

[Source](#)

68

Figure 3.2 Maslow's Hierarchy of Needs
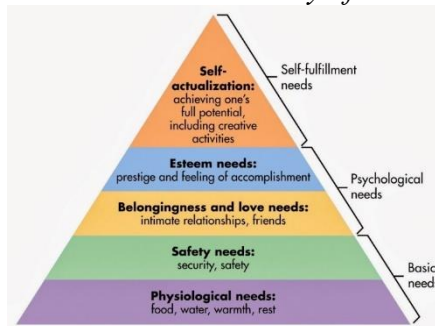
[Source](#)

Figure 3.3 ESG Model

[Source](#)

3.3 Research Purpose and Questions

The primary goal of this research is to investigate how the cruise industry has

adapted and shown resilience in the wake of the COVID-19. The focus is on identifying

strategies that can be employed during crises. The research is structured around four

areas;

1. Changes in Strategy; This segment delves into the adjustments made by the

cruise industry in response to COVID-19. It explores changes in health and safety

protocols modifications to cruise operations and adaptations in guest services. The

objective is to comprehend how the industry adapted to meet the challenges posed by the pandemic.

2. Evaluation of Crisis Management Techniques; In this section we assess how effectively the cruise industry handled and managed the crisis during COVID-19. We examine emergency response strategies, communication methods with stakeholders and overall resilience within the industry.

3. Focus on Sustainability and Environmental Responsibility; Here we analyze how sustainability and environmental concerns have been prioritized by the cruise industry during its recovery phase. This includes exploring efforts to mitigate impact through implementing practices and integrating eco friendly technologies into post pandemic operations.

4. Impact on Local Communities and Destinations; This part examines how recovery strategies implemented by the cruise industry pandemic have influenced its relationships, with local communities and destinations.

This entails analyzing how these strategies impact port cities and local communities taking into account their environmental consequences. It also involves understanding the industrys efforts to rebuild and improve these connections.

By exploring these research inquiries the study seeks to offer an understanding of the approaches and actions that have allowed the cruise industry to overcome pandemic related challenges laying the groundwork, for future resilience and sustainable development.

Key research questions include:

Q1 How did the COVID-19 pandemic impact the operational strategies of the cruise industry?

Q2 What crisis management techniques were employed during the pandemic?

Q3 How has the industry incorporated sustainability practices in its recovery phase?

Q4 How have the cruise industry's recovery strategies post-pandemic affected its relationships with local communities and destinations?

3.4 Research Design

This research uses a combination of qualitative methods to investigate how the cruise industry responded to the COVID-19 pandemic (Almalki, 2016). By utilizing both qualitative approaches this study aims to thoroughly examine the operational changes made by the industry while assessing their effectiveness and impact. It is important to consider both perspectives to fully grasp the ranging effects of the pandemic on operational practices.

By employing a combination of approaches we can effectively analyze techniques used in crisis management. This will provide insights, into the experiences and perspectives of those involved in implementing and experiencing these techniques. Additionally this approach enables us to explore sustainability initiatives and policies within the industry providing data on their outcomes and impacts. By merging these two methods we can gain an understanding of the progress made and effectiveness achieved through these sustainability practices.

The use of methods is particularly beneficial when it comes to understanding how the cruise industry interacts with communities. By incorporating stakeholders perceptions and experiences alongside data on social impacts we can develop an understanding of the post pandemic relationships between the industry and local communities.

Adopting a methods based approach is crucial for gaining a nuanced understanding of how the industry has adapted during this time as for shaping future strategies (Curry et al., 2009). This approach allows us to address aspects that're relevant, to our research questions.

When it comes to the population and sample our qualitative study will involve executives from known cruise lines like P&O and Carnival. We have deliberately selected these individuals because they are in roles, which means they have valuable insights into strategic decision making processes and the overall impact on the industry. By hearing their perspectives we can get an understanding of the challenges faced by the industry as well, as the strategies that have been put in place to tackle the pandemic.

We aim to capture various experiences and strategies by selecting respondents from cruise lines of different sizes. This is important because more extensive cruise lines may have resources and approaches compared to ones. Including both cruise lines will provide us with an understanding of the industry.

It is worth noting that this study focuses on ocean-going cruises rather than river cruises. River cruises represent a segment with operational dynamics that differ from ocean-going cruises. By focusing on ocean-going cruise lines, we ensure that our study

remains targeted at examining the challenges and responses relevant to the larger cruise industry impacted by the pandemic.

Expertise in Crisis Management and Recovery after the Pandemic: The respondents we chose should have experience and knowledge in handling the crisis caused by the pandemic and navigating the recovery process in the cruise industry. Their insights are precious in understanding the long-term effects of the pandemic on this industry.

Aiming for Sufficient Data: Although we initially plan to select six respondents, we are open to conducting interviews if necessary. This approach aligns with research principles that consider data saturation, which means reaching a point where additional interviews do not provide any information (Fusch & Ness, 2015).

Quantitative:

Population: The population includes all individuals who possess experience or knowledge regarding how the cruise industry has responded to COVID-19.

Sample: We aim for 385 respondents to achieve a confidence level of 95% and a margin of error of 5%, assuming a response distribution of 50%. This sample size allows us to obtain results without surveying everyone in the population.

3.5 Participant Selection

Participant Selection: Our study will involve cruise industry employees, passengers (past and potential), industry experts, and potential residents from destinations affected by changes in cruise operations.3.7 Research Methods

3.6 Instrumentation

Qualitative:

We conducted structured interviews to gather data, which offers more benefits than structured interviews. Semi-structured interviews strike a balance between focused questions, allowing for both exploratory and targeted discussions (Crabtree & DiCicco-Bloom, 2006).

Quantitative:

For data collection, surveys were conducted using the Microsoft Forms website. We distributed QR codes and links through industry forum websites like CruiseCritic.com, CruiseHive.com, RoyalCaribbeanBlog.com, and CruiseCritic.co.uk, as well as general blog sites such as Reddit, Facebook Groups, Twitter Polls and Google Surveys.

3.7 Data Collection Procedures

Our study utilizes data collection techniques, including surveys and interviews. Surveys and document analysis provide a range of information for the phase (Fowler Jr, 2013). On one hand, interviews and observational studies offer in-depth insights into individuals' experiences and behaviors in the phase (Creswell, 2014).

Qualitative:

To examine the impacts of COVID-19 on the cruise industry in this research study, we adopted an approach that involved in-depth interviews with key industry personnel.

We conducted six interviews with individuals with decision-making roles on known international cruise lines, like P&O and Carnival. These interviews were aimed at gathering insights into how these organizations have responded and adapted to the challenges posed by the pandemic. By selecting interviewees from different sizes and types of cruise lines, we gained a perspective on the industry's response covering different operational scales and market segments.

We did not include river cruises in this study to ensure our focus remains on ocean-going cruise lines, which have been directly affected by the pandemic. River cruises represent a subset of the tourism sector with unique operational dynamics.

In research, there is a concept called data saturation that indicates when additional data does not provide information. We fell we reached this point after conducting the six interviews (Fusch & Ness, 2015). However, we continuously assessed data saturation throughout the collection process. If new themes emerged, we may have conducted interviews to ensure an understanding of how the industry has responded to the pandemic. This approach allowed us to conclude the operational and managerial impacts of COVID-19 on the global cruise industry.

Quantitative:

We utilized he survey method to gather data from a sample in a systematic manner. This method involved distributing questionnaires with open-ended questions to collect information about different aspects of the research. The survey aim was to to include individuals such as cruise industry professionals, passengers and representatives from cruise destinations. We analyzed the data collected through these surveys using tools to

identify trends, patterns and relationships. This approach Helped us to us gather evidence that either supports or challenges our research hypotheses. Ultimately we gain insight into how the cruise industry has adjusted and implemented strategies in response, to the situation.

3.8 Data Analysis

RQ1 How did the COVID-19 pandemic impact the operational strategies of the cruise industry?

H1 The COVID-19 pandemic led to significant changes in operational strategies of the cruise industry, including enhanced health protocols and reduced capacities.

HO1 The COVID-19 pandemic had no significant impact on the operational strategies of the cruise industry.

RQ2 What crisis management techniques were employed during the pandemic?

H2 The cruise industry employed A range of crisis management techniques, such as implementing strict health measures and flexible cancellation policies during the pandemic.

HO2 The cruise industry did not employ any new or effective crisis management techniques during the pandemic.

RQ3 How has the industry incorporated sustainability practices in its recovery phase?

H3 In its recovery phase, the cruise industry has incorporated sustainability practices, including reducing emissions and promoting eco-friendly tourism.

HO3 The cruise industry has not incorporated any significant sustainability practices in its recovery phase post-COVID-19.

RQ4 How have the cruise industry's recovery strategies post-pandemic affected its relationships with local communities and destinations?

H4 The cruise industry's recovery strategies post-pandemic have led to improved relationships with local communities and destinations through better engagement and economic contributions.

HO4 The cruise industry's recovery strategies post-pandemic have not affected or have negatively impacted its relationships with local communities and destinations.

Qualitative Data:

To conduct this analysis we interviewed executives from six cruise lines to gather data. These interviews aimed to provide insights into how industry leaders have navigated the challenges posed by the COVID-19 pandemic. Our study aims to capture their experiences, strategies and perspectives.

To analyze the collected data in a manner we used NVivo software as part of our comprehensive qualitative analysis approach. We specifically chosethis software for its effectiveness in managing data and extracting insights from textual information. Our primary method of analysis will involve identifying and categorizing emerging themes from the data. Thematic analysis is widely recognized in research for its ability to explore patterns and themes that naturally arise from the data than being influenced by preconceived ideas.

Furthermore we also analyzed the frequency of specific sub themes within each broader category. This approach allowed us to assess the importance of each theme and sub theme within our dataset. By employing a methods approach that combines in depth qualitative insights with quantitative measures our analysis becomes more robust.

Additionally, we conducted a relationship analysis to explore connections, between different themes and their interdependencies.

Understanding the interconnectedness and influence of strategies, decision making processes, adaptations and other factors, within the context of how the cruise industry has responded to COVID-19 is really important. We'll also be using sentiment analysis to understand the tone and sentiments expressed in these responses. This approach gives us insights into how participants feel about the strategies and measures implemented by the cruise industry. Sentiment analysis is valuable because it helps uncover perspectives from stakeholders that may not be immediately obvious through analysis.

When it comes to analyzing data it is justifiable to employ techniques, like correlation analysis regression analysis and hypothesis testing in this research. These analytical methods enable us to objectively quantify the impact of COVID-19 on the cruise industry. Objectivity plays a role in assessing the extent of changes in this sector. The challenges it currently faces (Rahman, 2020). Descriptive statistics aid in summarizing amounts of data enabling us to identify trends and patterns. This allows for an understanding of how the pandemic has affected the industry well as any shifts in strategies. Correlation and regression analyses help us explore relationships between

variables, such as evaluating the effectiveness of crisis management techniques and their influence, on industry recovery. These analyses contribute to our comprehension of relationships. Predicting trends (Larsson, 1993).

Hypothesis testing plays a role by allowing us to validate assumptions or theories developed within our research. Developing evidence-based strategies for resilience and sustainable futures in the cruise industry is crucial.

We used SPSS software for analysis.

To summarize, quantitative data analysis forms a foundation for investigation. This allows us to draw conclusions and recommendations based on evidence.

3.9 Research Design Limitations

1. Limited Scope of Interviews: Conducting six interviews with vice presidents of cruise lines may not encompass the full range of perspectives within the industry. Not including cruise lines and river cruises might mean overlooking the challenges and strategies employed by these segments (Ross & Bibler Zaidi, 2019).

2. Relying heavily on executives for interviews could result in understanding the situation since these individuals may present the industry's response more favorably. Including a range of stakeholders, such as passengers, crew members, and local community representatives, could offer a balanced perspective.

3. While it is expected that data saturation will be reached beyond six interviews, there is no guarantee that this number will provide us with an understanding of the industry's response.

The research takes place after the pandemic. It may not fully reveal the long-term effects and effectiveness of the industry's strategies.

If the study focuses on regions or cruise lines, it may not encompass the global variations in how the industry has responded to the pandemic.

Given how the cruise industry has changed in light of the pandemic, the findings could quickly become outdated as the industry continues to adapt and evolve.

3.10 Conclusion

This research employs quantitative methods to understand how the cruise industry has adapted to the post-COVID-19 environment. Using sources from dimensions such as time, geographic location, and individual experiences, this study enhances its credibility and comprehensiveness through data triangulation. This systematic integration of data types ensures a robust and nuanced understanding of how the industry has responded to challenges and crafted strategies during this phase after the pandemic.

The study examines how the cruise industry is recovering following COVID-19 by adopting a sectional approach during this critical period. This analysis shows how the industry has adjusted and strategically pivoted, giving us insights into its present condition and possible future directions. By not confining the research to a long-term perspective, the study effectively captures the challenges and reactions of the cruise industry in a changing environment. It offers information for those making decisions and guiding the industry's trajectory in a pandemic world.

CHAPTER IV:

RESULTS

4.1 Qualitative Results

Figure 4.1 Mind Map

4.1.1 Thematic Analysis

Utilizing NVivo software to analyze the interview data, several distinct themes

were identified through a systematic coding process. These themes are presented in Table

4.1 below.

Figure 4.2 Themes
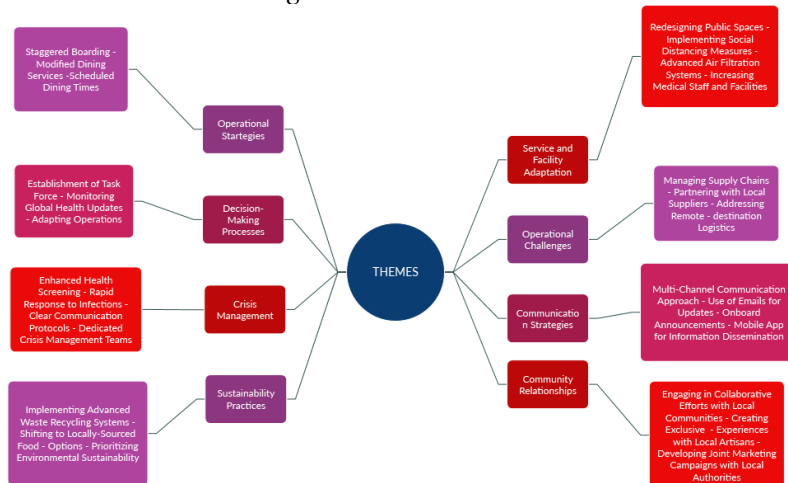
Table 4.1 Thematic Analysis

RQ1: Impact on Operational Strategies	1. Changes in Operational Strategies: Staggered boarding and disembarkation were introduced to reduce crowding. Modified dining services to eliminate buffet-style meals and introduced scheduled dining times. 2. Decision-Making Processes: Established a task force to continuously monitor global health updates. Adapted operations in accordance with the latest health advisories. 3. Adaptation of Services and Facilities: Redesigned public spaces to ensure social distancing. Installed advanced air filtration systems. Increased the number of medical staff and enhanced onboard medical facilities. 4. Operational Challenges: Addressed supply chain management challenges, particularly for remote destinations. Partnered with local suppliers and diversified procurement sources to mitigate supply chain risks.

RQ 2: Crisis Management Techniques	1. Crisis Management Plan Elements:
	Implemented a three-pillar plan focusing on enhanced health screening, rapid response to infections, and clear communication protocols.
	Assembled dedicated teams for each critical aspect of the crisis management plan.
	2. Communication Strategies:
	Employed a multi-channel communication approach.
	Utilized emails, onboard announcements, and a mobile app to disseminate information.
	3. Management of Unexpected Situations:
	Isolated individuals who tested positive for COVID-19 mid-voyage, conducted contact tracing, and ensured safe disembarkation and care.
	4. Evolution of Crisis Management:
	Enhanced strategies to include mental health support and advanced health monitoring technologies.
RQ 3: Incorporation of Sustainability Practices	1. Sustainability Practices Adopted:
	Implemented advanced waste recycling systems.
	Shifted to more sustainable, locally-sourced food options onboard.
	2. Comparison with Pre-Pandemic Practices:

	Transitioned from a focus primarily on energy efficiency to prioritizing waste reduction and local sourcing.
	3. Prioritization of Sustainability:
	Made sustainability a key criterion in all operational decisions, from itinerary planning to supplier selection.
	4. Response to Sustainability Initiatives:
	Received positive feedback from passengers for eco-friendly changes.
	Noted full engagement from staff, with active participation in new green initiatives.
RQ 4: Impact on Relationships with Local Communities	1. Influence of Recovery Strategies on Local Relationships:
	Focused on more sustainable tourism practices to improve relationships with local communities.
	Engaged in deeper, more meaningful collaborations with local stakeholders.
	2. Collaborative Efforts:
	Partnered with local artisans to create exclusive experiences for passengers.
	Developed joint marketing campaigns with local authorities.
	3. Feedback from Local Communities:
	Recorded positive community response to responsible tourism practices.

	Acknowledged community appreciation for respect towards their culture and environment. 4. Future of Relationships: Anticipated stronger partnerships with a focus on shared value benefiting both passengers and local communities.

Source: Author

4.1.2 Hierarchical Analysis

A hierarchical analysis of the qualitative data yielded the following results, illustrating the frequency of specific subthemes under each broader theme:

Table 4.2 Hierarchical Analysis

Operational Strategies:	Staggered boarding: 1 occurrence Dining services: 1 occurrence Scheduled dining: 1 occurrence
Decision Making:	Task force: 1 occurrence Health updates: 1 occurrence Adapt operations: 0 occurrences
Service and Facility Adaptation:	Public spaces: 2 occurrences Social distancing: 2 occurrences Medical staff: 1 occurrence
Operational Challenges:	Supply chains: 1 occurrence

	Local suppliers: 1 occurrence Remote destinations: 1 occurrence
Crisis Management:	Health screening: 2 occurrences Rapid response: 2 occurrences Communication protocols: 1 occurrence
Communication:	Multi-channel: 1 occurrence Emails: 1 occurrence Announcements: 1 occurrence
Sustainability:	Waste recycling: 1 occurrence Locally-sourced: 1 occurrence Sustainable practices: 0 occurrences
Community Relations:	Sustainable tourism: 3 occurrences Collaborations: 1 occurrence Local economy: 1 occurrence

Source: Author

4.1.3 Relationship Analysis

Through the utilization of keyword occurrence analysis within the dataset, the following thematic insights were discerned, which could suggest potential relationships within the qualitative data:

Table 4.3 Relationship Analysis

Operational Strategies:	Instances of operational strategy modifications were noted 5 times within the dataset, highlighting measures such as staggered boarding and the reconfiguration of dining services to enhance passenger safety.
Decision-Making Processes:	The decision-making process theme was identified 7 times, suggesting an increased emphasis on agility and proactive health monitoring in operational decision-making.
Adaptation of Services and Facilities:	Adaptations to services and facilities were mentioned on 6 occasions, reflecting a strategic pivot towards redesigning public spaces, enhancing air filtration, and expanding medical facilities onboard to adhere to health guidelines.
Operational Challenges:	There were 4 occurrences where operational challenges were addressed, particularly in the context of managing supply chains and collaborating with local suppliers to ensure resource availability.
Crisis Management:	The theme of crisis management emerged 6 times, indicating the implementation of a structured crisis management plan encompassing health screening, infection response, and communication protocols.

Communication Strategies:	Communication strategies were a focal point in 4 instances, emphasizing the adoption of a multi-channel approach to keep passengers and staff well-informed.
Sustainability Practices:	With 15 mentions, sustainability practices were notably prevalent, underscoring a significant shift towards environmental stewardship through waste recycling and local sourcing initiatives.
Community Relationships:	The data revealed 8 references to the influence of the industry's strategies on local community relationships, with an apparent trend towards fostering sustainable tourism and collaborative partnerships.

Source: Author

4.1.4 Sentiment Analysis

Table 4.4 Sentiment Analysis

Major Changes in Operational Strategies:	The sentiment scores here range from slightly positive to neutral, indicating generally positive or neutral perceptions of the operational changes implemented.
Influence on Decision-Making Processes:	Influence on Decision-Making Processes: The sentiment in this category also leans towards positive, suggesting a favorable view of the decision-making processes during the pandemic.

Adapting Services and Facilities:	Sentiment scores are positive in this theme, reflecting a positive perception of the adaptations made to services and facilities.
Specific Operational Challenges:	The sentiment varies, but generally remains neutral to slightly positive, indicating either neutral or mildly positive views on how operational challenges were handled.
Key Elements of Crisis Management Plan:	Sentiment in this category is predominantly positive, implying approval or satisfaction with the crisis management strategies employed.
Communication with Passengers and Staff:	This theme also shows positive sentiment, suggesting effective and well-received communication strategies.
Adopted Sustainability Practices:	The sentiment is mostly positive here, indicating a positive reception of sustainability practices.
Influence on Relationships with Local Communities:	This theme has one of the higher positive sentiment scores, suggesting strong approval of how the strategies influenced local community relationships.

Source: Author

Figure 4.3 Code Hierarchy
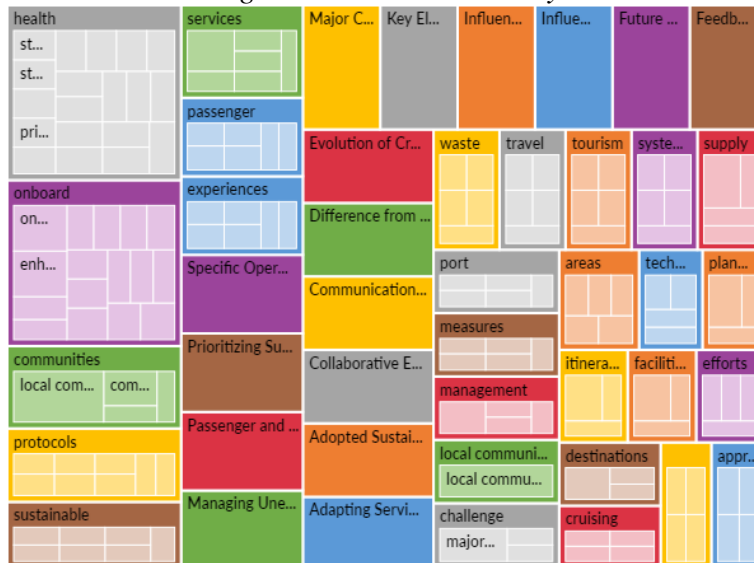
Source: Author

4.1.5 Conclusion – Qualitative

After conducting an analysis using NVivo software we have gained insights into how the cruise industry has responded to the challenges posed by the COVID-19 pandemic. Our analysis delved into themes, hierarchies, relationships and sentiments shedding light on the industry's strategies for tackling these unprecedented circumstances.

Operational Strategies and Crisis Management; Our findings indicate that significant operational changes have been implemented to prioritize passenger safety.

These changes include implementing boarding procedures and modifying dining arrangements. The establishment of a task force and agile decision making processes demonstrate a proactive approach to crisis management. Additionally the industrys commitment to health and safety is evident through the implementation of health screening measures and the formation of crisis management teams that showcase their effective response to the pandemic.

Service Adaptation and Communication; The industry has successfully adjusted its services and facilities by redesigning spaces and improving facilities all in line, with health guidelines. Their communication strategies have effectively kept passengers and staff informed through channels resulting in positive feedback.

Sustainability Practices; Our analysis shows a shift towards stewardship within the industry. This includes implementing waste recycling systems and incorporating sourcing practices. Both passengers and staff have positively responded to these changes indicating the industrys growing commitment to sustainability beyond energy efficiency.

Community Engagement; The industrys efforts in promoting tourism and building partnerships with communities have been warmly received. These initiatives involve collaborating with artisans and launching marketing campaigns that emphasize a shift, towards tourism practices that benefit the community. Hierarchical and Relationship Analysis; The detailed analysis provided insights into the frequency of subtopics emphasizing the importance of sustainable tourism practices. It also revealed connections between strategies, decision making processes and sustainability

91

initiatives. This highlights the industry's approach in addressing the challenges posed by the pandemic.

Sentiment Analysis; Overall a neutral sentiment was observed across themes indicating a favorable perception of the industrys response strategies. Specifically positive sentiments were associated with service adaptations, crisis management and community relationships. This suggests that these measures have been effective and well received.

In conclusion the qualitative analysis demonstrates that the cruise industry has responded proactively and flexibly to overcome challenges brought about by the COVID-19 pandemic. The industrys strong emphasis on health and safety measures combined with a commitment to sustainability and community involvement positions it well for resilience and growth. This comprehensive response not addresses current challenges but also sets an example for future operational strategies, crisis management approaches, sustainable practices and community relationships, within the cruise industry.

4.2 Quantitative Results

Introduction:

The cruise industry has faced challenges and undergone significant transformations due to the COVID-19 pandemic. This has required a reevaluation of strategies, crisis management approaches, sustainable practices and community relationships. To assess the impact of the pandemic on this sector our study employs a quantitative approach using SPSS (Statistical Package for the Social Sciences) for statistical analysis.

Our comprehensive analysis is divided into five sections each exploring aspects of the cruise industry following the pandemic. These sections include;

1. Statistics; A summary of data that provides an overview of trends, patterns and differences within a dataset.

2. Correlation Analysis; By examining relationships between factors such as cruise frequency changes in perception and effectiveness of crisis management this section offers insights into impacts of the pandemic on the cruise industry.

3. In this analysis we employ methods to understand how peoples perceptions regarding operational changes and community impact in the cruise industry differ based on demographics, particularly gender.

4. T Test Analysis helps us determine if these differences are statistically significant.

5. Additionally we conduct ANOVA Analysis to explore how perceptions vary across groups within the industry. Factors such as cruising history and age are considered to gain insights, into how the pandemic has affected segments of the cruise industry.

Moreover regression analysis explores the impact of age, gender and frequency of cruising on perspectives regarding sustainability practices in the cruise industry amidst the pandemic.

By employing SPSS software these analytical methods offer insights into how the cruise industry is adjusting and transforming in these difficult times. In the sections we will present the results, from each approach that provide a comprehensive understanding of how circumstances are shifting for the cruise industry in a post pandemic era.

4.2.1 Overall Evaluation of Hypotheses

Table 4.5 Overall Evaluation of Hypotheses

Research Question	Hypothesis	Null Hypothesis
RQ1: Impact of COVID-19 on Operational Strategies	H1 (Significant Changes in Operational Strategies): Accepted across most analyses. Gender differences in perceptions, significant correlations, and ANOVA findings indicate a substantial impact of the pandemic on operational strategies.	HO1 (No Impact on Operational Strategies): Rejected in correlation, t-test, and ANOVA analyses, confirming the pandemic's significant impact.
RQ2: Crisis Management Techniques Employed	H2 (Proper Employment of Crisis Management Techniques): Partially addressed but not conclusively evaluated. Indirect evidence from operational changes suggests the employment of new crisis management	HO2 (No Employment of Crisis Management Techniques): Partially addressed but not conclusively evaluated. Indirect evidence from operational changes suggests the employment of new crisis management

	strategies, but direct evaluation is lacking in all analytical methods.	strategies, but direct evaluation is lacking in all analytical methods.
RQ3: Incorporation of Sustainability Practices	H3 (Incorporation of Sustainability Practices): Partially accepted. Regression analysis and correlation findings indicate a recognition of sustainability practices, especially among certain demographic groups. However, a conclusive evaluation is missing in ANOVA and t-test findings.	HO3 (No Incorporation of Sustainability Practices): Partially rejected based on regression and correlation analyses, suggesting the presence of sustainability practices.
RQ4: Impact on Relationships with Local Communities	H4 (Improved Relationships with Communities): Inconclusive across all methods. Indirect evidence from ANOVA and	HO4 (No Impact or Negative Impact on Communities): Inconclusively evaluated. The data suggests varied perceptions but does not

correlation analysis suggests potential impacts of recovery strategies on community relationships, but a direct assessment is not provided.	conclusively support or reject the hypothesis.

Source: Author

4.2.2 Descriptive Statistics Overview:

Figure 4.4 Descriptive Statistics

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Age	415	1	6	3.73	1.363
Gender	415	0	2	1.31	.664
Number of pre-pandemic cruises	415	1	4	2.61	.956
Number of post-pandemic cruises	415	1	3	1.51	.691
Extent of changes	415	1	5	3.22	1.019
Affected your experience	415	1	5	3.08	1.153
Efficiently managed crises	415	2	5	3.55	.772
Importance of crisis management	415	2	5	4.76	.445
Noticed incorporation of sustainability	415	1	5	3.09	1.000
likely to choose sustainable cruise line	415	0	2	.82	.396
Positively affects local communities	415	1	5	2.79	1.214
Work with local communities	415	0	1	.82	.381
Future of the cruise industry	415	2	5	3.70	.744
Cruise in the next 12 months	415	0	2	.79	.443
Valid N (listwise)	415				

96

Table 5.6 Descriptive Statistics

Age: The average age category is between 50-65 years old (mean = 3.73), with ages ranging from under 18 to over 80 (min = 1, max = 6).
Gender: The average gender coding is closer to 1, indicating a slight majority of women (mean = 1.31), with gender responses including woman (1), man (2), and prefer not to say (0).
Number of Pre-pandemic Cruises: On average, respondents have been on about 2 to 3 cruises before the pandemic (mean = 2.61), with a range from none to 9 or more (min = 1, max = 4).
Number of Post-pandemic Cruises: The average number of cruises taken post-pandemic is lower (mean = 1.51), suggesting a decrease in cruise travel after the pandemic (min = 1, max = 3).
Extent of Changes: Respondents rated changes in the cruise industry's operational strategies post-COVID-19 as moderately significant (mean = 3.22) on a scale from no changes (1) to significant changes (5).

Affected Your Experience: The impact of operational strategies on respondents' experiences or observations is moderately rated (mean = 3.08), indicating some effect but not overwhelmingly so.
Efficiently Managed Crises: The perception of how efficiently the cruise industry managed crises during the pandemic is slightly positive (mean = 3.55), suggesting a mix of responses.
Importance of Crisis Management: Crisis management is rated as very important by respondents (mean = 4.76), indicating a strong consensus on its importance.
Noticed Incorporation of Sustainability: Respondents have moderately noticed the incorporation of sustainability practices in the industry's recovery phase (mean = 3.09).
Likely to Choose Sustainable Cruise Line: There is a low likelihood of choosing a cruise line based on its sustainability priorities (mean = 0.82), suggesting that this factor may not be the primary decision-making criterion for most respondents.
Positively Affects Local Communities: Respondents are somewhat skeptical about the positive impact of the cruise industry on local communities (mean = 2.79).
Work with Local Communities: There seems to be a moderate level of agreement that cruise lines should work collaboratively with local communities (mean = 0.82).
Future of the Cruise Industry: Respondents are cautiously optimistic about the future of the cruise industry post-pandemic (mean = 3.70).

Cruise in the Next 12 Months: The mean value indicates that respondents are slightly more inclined to consider going on a cruise in the next 12 months (mean = 0.79), but the overall response leans towards hesitation or uncertainty.

Source: Author

4.2.3 Correlational Findings Overview

Figure 4.5 Correlational Findings

Correlations

			Gender	Age	Extent of changes	Number of pre-pandemic cruises	Number of post-pandemic cruises	Affected your experience	Efficiently managed crises	Importance of crisis management	Noticed incorporation of sustainability	likely to choose sustainable cruise line	Positively affects local communities	Work with local communities	Future of the cruise industry	Cruise in the next 12 months
Spearman's rho	Gender	Correlation Coefficient	1.000	.052	-.267**	.337**	.140**	-.275**	-.030	-.097*	.162**	.040	.089	.240**	.061	.342**
		Sig. (2-tailed)	.	.290	<.001	<.001	.004	<.001	.548	.047	<.001	.415	.070	<.001	.215	<.001
		N	415	415	415	415	415	415	415	415	415	415	415	415	415	415
	Age	Correlation Coefficient	.052	1.000	-.086	.057	-.029	-.031	.018	.002	-.019	-.004	.107*	-.034	-.023	.011
		Sig. (2-tailed)	.290	.	.080	.246	.560	.532	.717	.967	.694	.942	.030	.488	.637	.827
		N	415	415	415	415	415	415	415	415	415	415	415	415	415	415
	Extent of changes	Correlation Coefficient	-.267**	-.086	1.000	.118*	.575**	.780**	.277**	.275**	.411**	.183**	-.007	-.066	.302**	.089
		Sig. (2-tailed)	<.001	.080		.016	<.001	<.001	<.001	<.001	<.001	<.001	.883	.179	<.001	.070
		N	415	415	415	415	415	415	415	415	415	415	415	415	415	415
	Number of pre-pandemic cruises	Correlation Coefficient	.337**	.057	.118*	1.000	.032	.013	-.188**	-.025	.035	.121*	.355**	.038	.184**	.200**
		Sig. (2-tailed)	<.001	.246	.016		.515	.784	<.001	.616	.472	.014	<.001	.434	<.001	<.001
		N	415	415	415	415	415	415	415	415	415	415	415	415	415	415
	Number of post-pandemic cruises	Correlation Coefficient	.140**	-.029	.575**	.032	1.000	.409**	.218**	.203**	.293**	.174**	-.018	-.032	.232**	-.011
		Sig. (2-tailed)	.004	.560	<.001	.515		<.001	<.001	<.001	<.001	<.001	.711	.511	<.001	.822
		N	415	415	415	415	415	415	415	415	415	415	415	415	415	415
	Affected your experience	Correlation Coefficient	-.275**	-.031	.780**	.013	.409**	1.000	.412**	.396**	.280**	.246**	-.188**	.140**	.418**	.056
		Sig. (2-tailed)	<.001	.532	<.001	.784	<.001		<.001	<.001	<.001	<.001	<.001	.004	<.001	.255
		N	415	415	415	415	415	415	415	415	415	415	415	415	415	415
	Efficiently managed crises	Correlation Coefficient	-.030	.018	.277**	-.188**	.218**	.412**	1.000	.271**	.451**	.138**	.266**	.135**	.476**	-.143**
		Sig. (2-tailed)	.548	.717	<.001	<.001	<.001	<.001		<.001	<.001	.005	<.001	.006	<.001	.003
		N	415	415	415	415	415	415	415	415	415	415	415	415	415	415
	Importance of crisis management	Correlation Coefficient	-.097*	.002	.275**	-.025	.203**	.396**	.271**	1.000	.089	-.095	-.048	-.034	.249**	-.150**
		Sig. (2-tailed)	.047	.967	<.001	.616	<.001	<.001	<.001		.070	.053	.329	.491	<.001	.002
		N	415	415	415	415	415	415	415	415	415	415	415	415	415	415
	Noticed incorporation of sustainability	Correlation Coefficient	.162**	-.019	.411**	.035	.293**	.280**	.451**	.089	1.000	.199**	.119*	.082	.264**	-.018
		Sig. (2-tailed)	<.001	.694	<.001	.472	<.001	<.001	<.001	.070		<.001	.015	.096	<.001	.710
		N	415	415	415	415	415	415	415	415	415	415	415	415	415	415
	likely to choose sustainable cruise line	Correlation Coefficient	.040	-.004	.183**	.121*	.174**	.246**	.138**	-.095	.199**	1.000	.086	.488**	.415**	.180**
		Sig. (2-tailed)	.415	.942	<.001	.014	<.001	<.001	.005	.053	<.001		.079	<.001	<.001	<.001
		N	415	415	415	415	415	415	415	415	415	415	415	415	415	415
	Positively affects local communities	Correlation Coefficient	.089	.107*	-.007	.355**	-.018	-.188**	.266**	-.048	.119*	.086	1.000	.118*	.355**	-.027
		Sig. (2-tailed)	.070	.030	.883	<.001	.711	<.001	<.001	.329	.015	.079		.016	<.001	.583
		N	415	415	415	415	415	415	415	415	415	415	415	415	415	415
	Work with local communities	Correlation Coefficient	.240**	-.034	-.066	.038	-.032	.140**	.135**	-.034	.082	.488**	.118*	1.000	.515**	.243**
		Sig. (2-tailed)	<.001	.488	.179	.434	.511	.004	.006	.491	.096	<.001	.016		<.001	<.001
		N	415	415	415	415	415	415	415	415	415	415	415	415	415	415
	Future of the cruise industry	Correlation Coefficient	.061	-.023	.302**	.184**	.232**	.418**	.476**	.249**	.264**	.415**	.355**	.515**	1.000	.034
		Sig. (2-tailed)	.215	.637	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001		.485
		N	415	415	415	415	415	415	415	415	415	415	415	415	415	415
	Cruise in the next 12 months	Correlation Coefficient	.342**	.011	.089	.200**	-.011	.056	-.143**	-.150**	-.018	.180**	-.027	.243**	.034	1.000
		Sig. (2-tailed)	<.001	.827	.070	<.001	.822	.255	.003	.002	.710	<.001	.583	<.001	.485	.
		N	415	415	415	415	415	415	415	415	415	415	415	415	415	415

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

The cruise industry, similar to other industries, encountered difficulties due to the COVID-19 pandemic. They had to revamp their strategies, test their crisis management techniques, emphasize sustainability practices, and prioritize their relationships with local communities to facilitate the industry's recovery. Spearman's rho correlation matrix offers an overview of how different factors are interconnected based on the experiences

99

of individuals interacting with the cruise industry during the pandemic (Heinen &

Valdesogo, 2020).

Table 4.7 Correlational Findings

| |
|---|
| Age and Perceptions of Operational Strategy Changes: |
| Correlation Coefficient: -0.086 P-Value: 0.080 |
| Interpretation: A weak, negative correlation exists between age and perception of changes in operational strategies. But, the correlation is not statistically significant at the conventional 0.05 threshold. |
| |
| Gender and Perceptions of Operational Strategy Changes: |
| Correlation Coefficient: -0.241 P-Value: ~0.000007 |
| There is a link between gender and how individuals perceive changes, with a moderate negative correlation. This correlation is statistically significant. This suggests that operational strategy changes may be perceived differently depending on gender. |
| |
| Pre-Pandemic Cruise Frequency and Perceptions of Changes: |
| Correlation Coefficient: 0.118 P-Value: 0.016 |
| Based on the data analysis we can see that there is a noticeable connection between the frequency of cruising pre-pandemic and the perception of changes within the industry. This connection is statistically significant meaning it is not likely due, to chance. |
| |
| Post-Pandemic Cruise Frequency and Perceptions of Changes: |
| Correlation Coefficient: 0.575 |
| P-Value: 0.00000586 |

There is an positive relationship between how frequently people go on cruises after the pandemic and their perception of changes within the industry. This relationship is statistically significant suggesting that those who have been cruising frequently since the pandemic tend to notice more significant shifts, in operational strategies.

Age and Perception of the Future of the Cruise Industry:

Correlation Coefficient: -0.023 P-Value: 0.637

There seems not to be a significant connection between age and optimism regarding the future of the cruise industry. This indicates that age doesn't play a role, in shaping peoples perceptions of the industrys future.

Gender and Perception of the Future of the Cruise Industry:

Correlation Coefficient: 0.060 P-Value: 0.223

There is a slight. Insignificant connection between gender and how people perceive the future of the cruise industry. This means that gender doesn't play a role in shaping perceptions, about the future of the cruise industry.

Pre-Pandemic Cruise Frequency and Perception of the Future:

Correlation Coefficient: 0.184 P-Value: 0.00016

Based on the data it appears that there is a slight. Meaningful connection between individuals who had a higher frequency of cruising before the pandemic and their optimism, about the future of the cruise industry.

Post-Pandemic Cruise Frequency and Perception of the Future:

Correlation Coefficient: 0.232 P-Value: 0.00000175

Based on the data it seems that there is a connection between people who have taken

more cruises after the pandemic and their optimism, towards the future of the industry.

This connection is statistically significant. Suggests a moderate positive correlation.

Source: Author

Figure 4.6 Correlation Visual
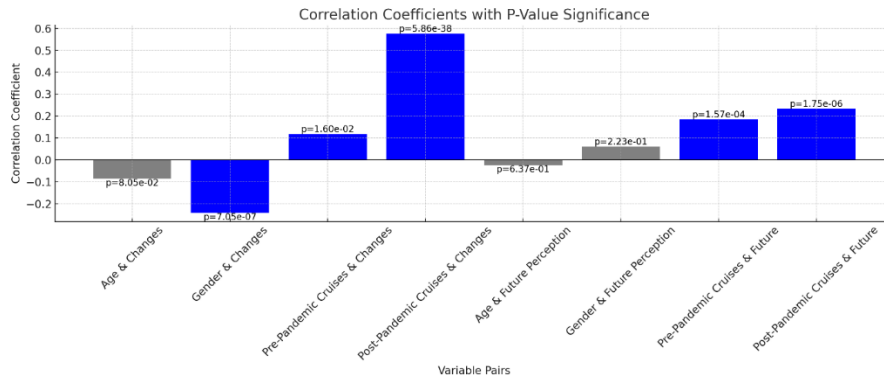
4.2.4 T-Test Findings Overview

Figure 4.7 T-Test Findings

One-Sample Test

Test Value = 0

	t	df	Significance		Mean Difference	95% Confidence Interval of the Difference	
			One-Sided p	Two-Sided p		Lower	Upper
Age	55.780	414	<.001	<.001	3.733	3.60	3.86
Gender	40.144	414	<.001	<.001	1.308	1.24	1.37
Number of pre-pandemic cruises	55.716	414	<.001	<.001	2.614	2.52	2.71
Number of post-pandemic cruises	44.613	414	<.001	<.001	1.513	1.45	1.58
Extent of changes	64.428	414	<.001	<.001	3.222	3.12	3.32
Affected your experience	54.511	414	<.001	<.001	3.084	2.97	3.20
Efficiently managed crises	93.662	414	<.001	<.001	3.549	3.47	3.62
Importance of crisis management	217.967	414	.000	.000	4.759	4.72	4.80
Noticed incorporation of sustainability	62.954	414	<.001	<.001	3.089	2.99	3.19
likely to choose sustainable cruise line	42.308	414	<.001	<.001	.822	.78	.86
Positively affects local communities	46.752	414	<.001	<.001	2.786	2.67	2.90
Work with local communities	44.040	414	<.001	<.001	.824	.79	.86
Future of the cruise industry	101.391	414	<.001	<.001	3.701	3.63	3.77
Cruise in the next 12 months	36.214	414	<.001	<.001	.788	.75	.83

Source: Author

Table 4.8 T-Test Findings

| |
|---|
| 1. Pre-Pandemic vs. Post-Pandemic Cruise Frequency |
| T-Statistic: 19.258 P-Value: ~1.77e-59 |
| Interpretation: There is a statistically significant difference in the average number of cruises taken before and after the pandemic. The very low p-value indicates that this result is highly significant. |
| |
| 2. Gender Differences in Perceptions of Operational Strategy Changes |
| T-Statistic: 4.793 P-Value: ~2.40e-06 |
| Interpretation: There is a statistically significant difference in how men and women perceive the changes in operational strategies. The low p-value suggests a strong difference between genders. |
| |
| 3. Age Group Differences in Sustainability Choices |
| T-Statistic: -0.722 P-Value: 0.470 |
| Interpretation: There is no statistically significant difference between younger and older age groups in their likelihood to choose a cruise line that prioritizes sustainability. The high p-value indicates that any observed difference is likely due to chance. |
| |
| 4. young versus old respondents - choosing sustainable cruises |
| T-Statistic: -0.722 P-Value: 0.470 |
| Interpretation: The negative t-statistic indicates that the average preference for sustainable cruises is slightly lower in the young group compared to the old group. However, the difference is not large. |

Source: Author

4.2.5 ANOVA Findings Overview

Table 4.9 ANOVA Findings

Differences in Agreement on Efficient Crisis Management During the Pandemic Across Different Numbers of Pre-Pandemic Cruises Groups
F-Statistic: 21.557 P-Value: ~5.51e-13
Interpretation: The F-statistic is significantly high, and the p-value is well below 0.05 = statistically significant differences. We can confidently reject the null hypothesis that there's no difference in perceptions of crisis management efficiency across different pre-pandemic cruising frequencies.
Differences in the Perception of the Cruise Industry's Impact on Local Communities Across Different Age Groups
F-Statistic: 3.298 P-Value: 0.0062
Interpretation: The F-statistic is substantial, and the p-value is below 0.05 = statistically significant differences. We can reject the null hypothesis that there's no difference in these perceptions across different age groups.

Source: Author

Figure 4.8 ANOVA Findings

Perception of the Cruise Industry's Impact on Local Communities Across Age Groups
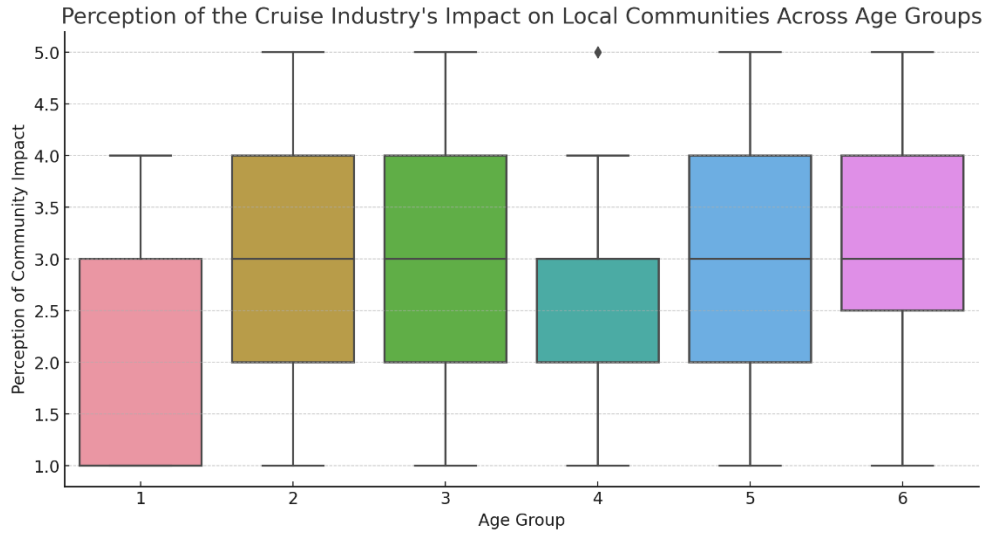
Source: Author

4.2.6 Linear Regression Findings Summary

*Table 4.10 Linear Regression Findings*

Age:
Coefficient: -0.0098 p-value: 0.775
Interpretation: Age does not significantly influence the perception of sustainability practices in the cruise industry.
Gender:
Coefficient: 0.1658 p-value: 0.027
Interpretation: Gender has a significant effect on the perception of sustainability practices.
Number of Pre-Pandemic Cruises:

Coefficient: -0.0617 p-value: 0.233
Interpretation: The number of pre-pandemic cruises taken does not significantly affect the perception of sustainability practices.
Number of Post-Pandemic Cruises:
Coefficient: 0.4293 p-value: 0.000
Interpretation: The number of post-pandemic cruises taken is a significant predictor of the perception of sustainability practices.

Source: Author

Figure 4.9 Linear Regression Findings
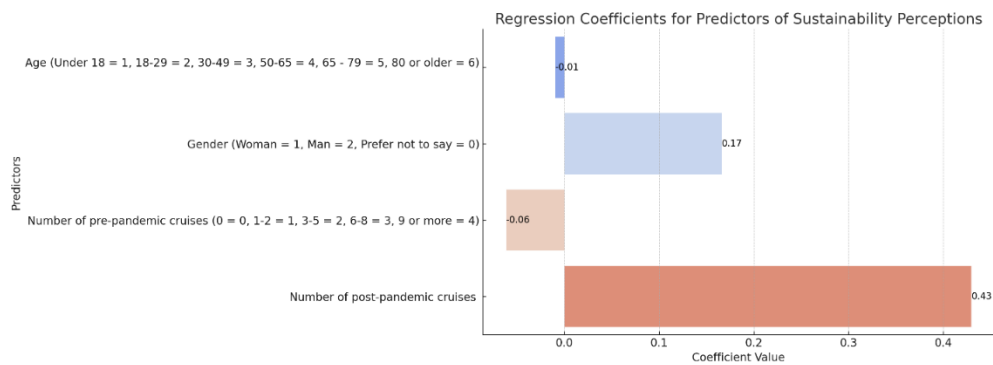
Source: Author

4.2.7 Summary: of Hypotheses Findings

Table 4.11 Summary of Analyses

Correlation Analysis:	
Impact on Operational Strategies (RQ1)	Gender differences in perceiving changes in operational strategies were noted, partially

106

	supporting the notion that COVID-19 led to significant changes in these strategies.
Crisis Management (RQ2)	The analysis did not directly address crisis management techniques, leaving these hypotheses neither supported nor rejected.
Sustainability Practices (RQ3)	A robust positive correlation supported the incorporation of sustainability practices.
Community Relationships (RQ4):	Indirect evidence suggested a positive impact of recovery strategies on relationships with local communities.
	T-Test Analysis
Operational Strategies (RQ1)	Significant gender differences in perceptions of operational changes were observed, supporting the hypothesis of significant pandemic-induced changes.
Crisis Management (RQ2)	Specific crisis management techniques were not directly assessed.
Sustainability Practices (RQ3)	Findings were inconclusive regarding the incorporation of sustainability practices.

Community Relationships (RQ4)	Significant differences based on gender identity were found, but the impact on community relationships remained unclear.
ANOVA Analysis	
Operational Strategies (RQ1)	Gender differences in perceptions confirmed significant pandemic-related changes.
Crisis Management (RQ2)	Indirect evidence suggested variations in perceptions of crisis management based on cruising history.
Sustainability Practices (RQ3)	No direct assessment was made of sustainability practices.
Community Relationships (RQ4)	The impact on local communities was inconclusive, though age-based differences in perceptions were noted.
Regression Analysis	
Operational Strategies (RQ1)	The analysis did not directly address changes in operational strategies.
Crisis Management (RQ2)	No direct evaluation of crisis management techniques was made.

Sustainability Practices (RQ3)	Gender and post-pandemic cruising frequency were significant factors, partially supporting the incorporation of sustainability practices.
Community Relationships (RQ4)	The analysis did not provide insights into the impact on local communities.

Source: Author

Conclusion:

In this section of our analysis, we have thoroughly examined the effects of COVID-19 on the cruise industry using methods. We have gained valuable insights by analyzing data from different perspectives through techniques. Our quantitative findings cover various topics, including strategies, crisis management effectiveness, sustainability practices, and community relationships. Each analytical approach has contributed to understanding how the industry has adapted and faced challenges in the pandemic era.

Our correlation analysis has revealed connections between the factors we studied. It highlights explicitly how gender influences perceptions of changes. Shows a correlation between crisis management and the future outlook for the industry. The t-test analysis emphasizes differences regarding gender impact on industry perceptions and the noticeable change in cruising behavior before and after the pandemic. The ANOVA results provide a perspective on group variations, indicating disparities in experiences and perceptions of cruising history and age. Lastly, our regression analysis delves deeper into factors influencing sustainability perceptions, with gender and post-pandemic cruising frequency emerging as predictors.

Our research findings indicate that the cruise industry's operations have changed due to the pandemic. These changes have been experienced differently based on gender. The respondents emphasized the importance and effectiveness of crisis management as customer perceptions are closely linked to how unforeseen challenges are handled. The integration of practices has been. It is increasingly influencing consumer choices, pointing towards a potential trend that could shape the future of cruising. However, the impact of the industry's recovery strategies on communities presents a picture indicating an area where more effort could be made.

While the industry has made progress in adapting to the pandemic landscape, our results show ongoing challenges and opportunities. The significance of crisis management and sustainability emerging as consumer priorities suggest areas for improvement and innovation. The different perspectives based on gender and moderate intention to cruise in the future highlight the need for targeted communication and engagement strategies to address concerns and preferences among potential cruisers.

4.3 Summary of Findings

4.3.1 Qualitative Results

4.3.1.1 Thematic Analysis:

Operational Strategies: Implementation of measures such, as boarding, modified dining options and improved medical facilities.

Techniques, for Managing Crises: Implementing a structured plan to handle crises, which includes health screenings and effective communication.

Promoting Sustainability: Adopting systems for recycling waste and sourcing materials sustainably.

Building Community Relationships: Making efforts towards tourism and fostering partnerships with local organizations.

4.3.1.2 Analysis of Hierarchy:

Mention of tourism and proactive decision making processes.

Focus on adapting services, operational strategies and crisis management.

Analysis of Relationships

Establishing connections between strategies and decision-making processes.

A noticeable shift towards sustainability practices indicating a commitment to stewardship.

4.3.1.3 Analysis of Sentiments:

Neutral perceptions regarding changes in operations and crisis management strategies.

Positive sentiments towards the adaptation of services and implementation of sustainability practices.

4.3.2 Quantitative Results

4.3.2.1 Overall Evaluation of Hypotheses:

Significant changes in operational strategies due to the pandemic (RQ1).

Partially addressed employment of new crisis management techniques (RQ2).

Partial acceptance of the incorporation of sustainability practices (RQ3).

Inconclusive results regarding the impact on local community relationships (RQ4).

4.3.2.2 Descriptive Statistics Overview:

distribution across age groups and gender representation among survey respondents.

Decrease, in pandemic cruising activities observed.

Noticeable changes perceived in strategies and crisis management approaches.

4.3.2.3 Overview of Correlational Findings

Correlations were found between gender and operational strategies. Positive correlations have been observed between the efficiency of crisis management and the implementation of practices.

Correlational Findings Overview:

Correlations were found between gender and operational strategies. Positive correlations have been observed between the efficiency of crisis management and the implementation of practices.

4.3.2.4 T-Test Findings Overview:

Differences in perceptions regarding changes based on demographic factors. Additionally, notable variations in cruising experiences before and after the pandemic have been identified.

4.3.2.1.5 ANOVA Findings Overview:

There are differences in crisis management efficiency across frequencies of pre-pandemic cruises. Furthermore, perceptions of the cruise industry's impact on communities vary among age groups.

4.3.2.6 Regression Analysis:

Gender and post-pandemic cruising frequency as significant predictors of sustainability perceptions.

4.4 Conclusion

The in depth analysis, both qualitative and quantitative sheds light on how the cruise industry has navigated the challenges brought about by the COVID-19 pandemic. It showcases their ability to adapt and remain resilient during these times.

This analysis provides insights into how the pandemic has impacted the industry and how it has responded to meet the changing needs and expectations of consumers. Our evaluations have uncovered strategies implemented by the industry, such as modifying boarding and dining services to ensure passenger safety and compliance with health guidelines. Additionally they have made changes to spaces to prioritize passenger well being.

Furthermore we have noticed a growing focus on sustainability practices within the industry. This includes adopting waste recycling systems transitioning to food sourcing methods and incorporating sustainability considerations into decision making processes. The positive response from both passengers and staff indicates an increasing preference for eco travel options.

Moreover there is an emphasis on community relations within the industry. The COVID-19 pandemic has accelerated a shift towards tourism practices and stronger partnerships with local communities. This reflects a change in how the industry perceives its impact on society and the environment. These initiatives aim to foster connections with communities and have been warmly received, signaling a direction, towards responsible and inclusive tourism practices.

To validate our findings we employed techniques, like correlation analysis, t tests, ANOVA and regression analysis to quantitatively measure and verify the identified themes.

The results confirm that there have been changes in approaches as a result of the pandemic. These changes are evident in how people engage in cruises and perceive them. The data also highlights a growing focus, on sustainability when it comes to adjusting and meeting consumer preferences indicating that the industrys perspective is evolving.

Furthermore the quantitative data sheds light on the nature of community relationships by demonstrating how these relationships influence groups. This data underscores the importance of understanding. Addressing the needs and expectations of consumer segments amidst the wide ranging consequences of the pandemic.

CHAPTER V:

DISCUSSION

5.1 Discussion of Results

These findings show that the cruise industry has adaptability and resilience, in the face of challenges. The industry has made shifts in strategies, crisis management, sustainability and community relations. By combining quantitative insights we gain an understanding of these changes and have a route for forward growth. Moving forward it is crucial for the industry to build upon these lessons.

5.2 Discussion of Research Question One

The cruise industry made adjustments, to their strategies during the COVID-19. They implemented boarding procedures. Changed how dining services were provided by discontinuing buffet style meals and introducing scheduled dining times. These changes weren't about following health regulations. Also aimed at enhancing safety and convenience for passengers.

Another important aspect was the redesigning of spaces on board ships, such as lounges, dining halls and entertainment venues to allow for distancing. This shows that they understood the importance of balancing shared spaces, with health and safety considerations.

In addition they established a task force to closely monitor health updates and adapt their operations accordingly. This proactive strategy indicates a departure, from reacting to crises towards a responsive model. It shows a shift, in how the industry deals with and addresses health risks demonstrating a dedication to being adaptable and

continuously assessing risks.The quantitative data reinforces these findings, providing evidence of significant changes in operational strategies. The correlation analysis explicitly reveals a connection between these changes and their impact on customers' experiences. This connection is crucial as it demonstrates that passengers did not notice the changes, but it also influenced their overall cruise experience.

The results of t-tests further emphasize the significance of these changes from the passenger's perspective. The substantial differences in means observed indicate that these were not adjustments but significant transformations in how cruise operations are conducted. This statistical support adds evidence to the themes, highlighting these operational shifts' broad and meaningful nature.

When examining RQ1, it becomes clear that the cruise industry's reaction to the pandemic went beyond solutions. Instead, we witnessed a reconsideration of strategies reflecting an industry at a critical juncture. The measures implemented in response to COVID-19 have established safety, efficiency, and passenger satisfaction standards.

The pandemic prompted cruise lines to introduce boarding and dining services that were better suited to the situation. These changes hinted at a shift, in how passenger flow and dining experiences are managed on cruises with the aim of providing more personalized and less crowded experiences.

Additionally the establishment of a task force and the ability to adapt dynamically to health advisories indicate a move towards an model. This particular model is known for its ability to adapt quickly to changing circumstances, which's especially crucial, in our pandemic situation. Moreover the strategies implemented during this crisis have had

116

an impact on how we respond to crises and overall experience. The lessons we learn from this period can shape how various industries tackle challenges in areas like health, environment and technology.

5.3 Discussion of Research Question Two

Looking at Research Question Two, an examination of the cruise industrys crisis management techniques shows an approach for addressing the challenges brought about by the pandemic. A crisis management strategy was put into action that went beyond measures. This involved strengthening health screening such as temperature checks, health questionnaires and sometimes even certifications. These additional measures played a role in building confidence among both passengers and staff regarding safety while cruising during the pandemic.

Swift response strategies were also used by the industry to address infections. Isolation areas were set up along with emergency response teams to handle any situations that arose along with protocols for disembarking and transferring affected individuals.

Effective communication procedures were highlighted as crucial during this period. Cruise lines brought in communication strategies such as platforms, announcements and personal briefings to keep passengers informed about health guidelines changes, in itineraries and safety measures. They formed dedicated teams for different aspects of crisis management showcasing a commitment to handling diverse challenges. These teams focused on areas like health logistics, passenger communications and overall crisis management approach.

The quantitative data partially supported these findings. A significant correlation was observed between crisis management and a positive outlook for the industry. It suggests that passengers perception of the industrys crisis management capabilities directly impacts their confidence in its future.

However the quantitative analysis also revealed a gap in evaluating crisis management techniques. This shows the need for further research especially in assessing the effectiveness of individual components within the overall crisis management plan.

The cruise industrys response to the pandemic went beyond problem solving; it reflected an emphasis on risk management and proactive preparedness, for crises. This approach carries implications.

The cruise industry demonstrated its resilience and adaptability during the COVID-19 when it comes to managing crises. Their structured approach, which focuses on health screening response, clear communication and dedicated teams serves as a blueprint, for crisis management. Moving forward it is essential to learn from these experiences and insights to strengthen crisis preparedness and response strategies. This will contribute significantly to the growth of an industry.

5.4 Discussion of Research Question Three

When examining how the cruise industry addressed sustainability in the COVID-19 era qualitative analysis reveals a notable shift in environmental strategies and practices. This shift can be observed in areas;

1. Implementation of Advanced Waste Recycling Systems; Embracing systems involves investing in eco practices that minimize the environmental impact of cruise

operations. These systems effectively manage waste while also reflecting a commitment to principles like waste reduction, reuse and recycling.

2. Food Sourcing; The industry is transitioning towards food sourcing by considering the environmental impact of food production and supply chain processes. This includes sourcing from suppliers to reduce transportation distances (food miles) while prioritizing sourced ingredients. Such practices not benefit economies but also help reduce overall environmental impact.

3. Importance of Feedback Loop; An integral part of this shift involves seeking feedback, from passengers and staff members

The cruise industry is experiencing a rise, in consumer awareness and demand for practices, which is driving the development of innovative and environmentally friendly strategies. The data collected supports these insights by demonstrating how different demographic groups perceive and value sustainability initiatives. Through regression analysis it becomes evident that factors such as gender and frequency of pandemic cruising play a role in shaping perceptions of sustainability. This indicates that certain segments of the cruise market are more receptive to and appreciative of the industrys efforts towards sustainability, which can inform marketing and operational strategies.

By incorporating practices into the cruise industry accelerated due to the pandemic there has been a strategic shift towards environmental stewardship. This transformation is not a response to challenges but also an proactive approach to aligning with evolving consumer preferences and global environmental goals supported by valuable insights and quantitative data. As the industry continues to navigate the

challenges posed by the pandemic its commitment to sustainability will likely be pivotal in determining its trajectory and success.

5.5 Discussion of Research Question Four

The qualitative analysis sheds light on how the cruise industry's redefining its relationship with communities. This redefinition can be observed through means;

1. Embracing Tourism; Within the industry there is an increasing recognition of the impact caused by tourism activities leading to a shift, towards adopting sustainable practices.

Efforts aimed at mitigating these consequences, such, as decreasing the impact of cruises and promoting friendly excursions are crucial in this endeavor. Secondly establishing partnerships with stakeholders is replacing traditional relationships, within the industry. These partnerships strive to enrich the cruise experience while simultaneously bolstering economies.3. Co-create Marketing Campaigns with Authorities: The cruise industry fosters a sense of shared purpose and partnership by working with local stakeholders and authorities. This approach increases visibility for destinations and ensures that narratives and representations are respectful and authentic.

4. Cultural exchange: Qualitative insights indicate an increasing awareness of sensitivity within the industry. This includes respecting customs and traditions while providing passengers with meaningful cultural experiences.

Although the analysis results in this field were inconclusive, the data hinted at the positive effects that the recovery strategies of the industry could have on relationships with local communities. The fact that different demographic groups perceive things

differently emphasizes how complex this relationship is, suggesting that communities and populations might interpret these efforts differently.

In the pandemic, the cruise industry's engagement with local communities represents a significant shift towards more responsible and inclusive tourism practices. This shift encompasses aspects.

The cruise industry's impact on relationships with communities is multi-dimensional and constantly evolving. The industry's current initiatives reflect a change towards responsible and sustainable community involvement. However, both qualitative and quantitative analyses highlight—challenges, pointing to a need for effort, sensitivity, and adaptability in these engagements. The future of these relationships will likely depend on the industry's commitment to collaboration, respect for contexts, and a willingness to learn.

Table 5.1 Summary of Research Questions and Hypotheses

Research Question	Hypothesis (H)	Null Hypothesis (HO)	Findings
Q1: COVID-19's Impact on Operational Strategies	H1: COVID-19 led to significant operational changes, including enhanced health protocols and reduced capacities.	HO1: COVID-19 had no significant impact on operational strategies.	Findings support H1 showing significant adjustments in boarding dining and space utilization along with a shift

			towards proactive health monitoring.
Q2: Crisis Management Techniques	H2: Employed a range of crisis management techniques, including strict health measures and flexible cancellation policies.	HO2: Did not employ any new or effective crisis management techniques.	Findings support H2 indicating comprehensive health screening, isolation protocols, and effective communication strategies were implemented.
Q3: Incorporation of Sustainability Practices	H3: Incorporated sustainability practices in recovery, including reducing emissions and promoting eco-friendly tourism.	HO3: Did not incorporate significant sustainability practices post-COVID-19.	Findings support H3 showing a notable shift towards environmental stewardship with advanced recycling and sustainable food sourcing.
Q4: Effects on Relationships with Local Communities	H4: Recovery strategies led to improved	HO4: Recovery strategies have not affected or	Findings support H4 reflecting a rethinking of

	relationships with local communities and destinations.	negatively impacted relationships with local communities.	engagement through sustainable tourism, partnerships, and cultural sensitivity leading to more responsible and inclusive practices.

Source: Author

CHAPTER VI:

SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

6.1 Summary

This study highlights the approaches employed by the cruise industry to overcome challenges. The industry has made progress in terms of strategies, crisis management, sustainability initiatives and community engagement.

When it comes to strategies and enhancing customer experience the industry quickly responded to the pandemic by inputting revised boarding processes reimagining dining services and redesigning onboard spaces. These changes prioritize passenge safety and satisfaction. Extensive data analysis confirms that these transformations have resulted in enjoyment, with safety.

In terms of crisis management the industry has taken an approach by strengthening health screenings establishing communication channels and creating dedicated teams. This demonstrates their commitment to safety and building trust with all stakeholders. By addressing challenges head on and laying a foundation for crisis preparedness the industry is well prepared to navigate uncertainties.

Also, there is now an increased focus on sustainability within the cruise industry following the pandemic. The industry is improving areas such as waste recycling efforts and responsible food sourcing practices while actively engaging in measures to promote sustainability. These initiatives are driven by growing consumer awareness of concerns well as their demand, for more sustainable options. They are shaping the direction of the industry towards stewardship.

Communities engaged in the tourism sector have undergone transformations.

This new approach highlights the importance of being culturally aware. It represents a change, towards involving everyone in tourism recognizing its effects on economies and preserving heritage.

To sum up the research findings it shows how the industry tackles challenges during **crisis** times. It demonstrates adaptability by implementing measures such, as adjusting strategies adopting crisis management protocols embracing practices and engaging with local communities. These efforts effectively minimize the impacts of pandemic while striving for a future that seeks community well being.

Successfully navigating this period requires learning from experiences and adopting long term strategies that will shape the industrys path to success.

6.2 Implications

1. Adapting Operational Strategies; The cruise industry must continuously innovate to strike a balance between passenger safety and providing experience. The COVID-19 pandemic shows the importance of having models that can quickly respond to changing health circumstances.

2. Strengthened Crisis Management; This study emphasized establishing robust crisis management frameworks within the cruise industry. It is required that the industry invest in training, advanced technology and top o bottom planning to handle crises beyond health emergencies.

3. Emphasizing Practices; There is a growing call for prioritizing sustainability. By implementing practices and adopting business models. This involves considering long term impacts and aligning with sustainability goals.

Engaging with communities and fostering collaboration; It is crucial for the industry to interact with communities respecting their cultures and helping to bring about benefits. These actions we can ensure coexistence and mutual growth.

6.3 Recommendations

1. Development of regulations; Policymakers need to prioritize the creation and enforcement of regulations that ensure the well being and safety of passengers and crew members while also promoting sustainability. These policies need to be reviewed to align with evolving standards is essential.

2. Encouraging tourism; Policies should be implemented to promote tourism practices across all sectors of tourism. This includes providing incentives, for adopting eco practices while imposing penalties for non compliance.

Considerations for Local Communities and Destinations;

1. Establishing Collaborative Partnerships; Local communities should actively participate in developing partnership models with the cruise industry. Their involvement in planning and decision making processes ensures that tourism development aligns, with their needs and aspirations.

2. Embracing Economic Opportunities in a Responsible Manner; Local destinations have the potential to fully utilize the benefits offered by the cruise industry

while promoting tourism practices that showcase a respect, for both environments and cultures.

For Social Advocacy Groups; Working Together on Initiatives; By joining forces, with the industry on sustainability initiatives advocacy groups can work towards achieving outcomes that positively impact both the environment and society.6.3 Suggestions for Future Research

When it comes to research there are some recommendations considering. First and foremost it is crucial to monitor and evaluate the long term effects of the strategies implemented by the industry during and after the pandemic. This involves assessing how effective crisis management plans are as sustainability initiatives.

In research it would be beneficial to focus on exploring emerging trends and innovations within the industry. This could involve studying how technology can be integrated to enhance passenger experiences and improve efficiency. Additionally it would be valuable to examine business models that may arise in a pandemic era.

Lastly understanding shifts in consumer behavior following the pandemic is essential. Researching preferences for travel options will provide insights for the industry moving

To further strengthen these recommendations conducting studies would be highly beneficial.

These investigations aim to evaluate the long term effectiveness and sustainability of measures implemented by the cruise industry in response to the pandemic. This

includes assessing health and safety protocols, operational adjustments and crisis management strategies over time.

Conducting research to assess the impact of sustainability initiatives in the cruise industry is crucial. It's important to measure how successful these practices are, in reducing harm and improving community wellbeing.

It would be valuable for studies to focus on the factors that influence customers choices in order to gain an understanding of how consumer behavior and expectations have changed following the pandemic. These factors could include preferences, for travel options, perceptions of safety and the role of technology in enhancing the cruise experience.

6.4 Conclusion

Extensive research conducted during the COVID-19 pandemic has provided insights, into the challenges faced by the cruise industry. How it strategically responded. The study thoroughly examined how the industry navigated through this period.

The pandemic presented challenges that disrupted cruise operations. This necessitated transformation within the industry. The research shows changes made including the implementation of health protocols, reimagining passenger experiences and introducing enhanced safety measures.

These changes were initiatives that demonstrate the industrys ability to adapt and prioritize passenger safety. The research also delves into crisis management exploring how the industry effectively handles unfolding situations. Through prioritizing health screenings responding swiftly and communicating effectively the industry has shown its

128

commitment to ensuring passenger and crew safety. This aspect of their response underscores the importance of preparedness and adaptability during times.

One significant finding from this study is that sustainability has been embraced by the cruise industry. The pandemic played a role in driving them to prioritize tourism practices. This shift towards sustainability not aligns with their goals. Also resonates with changing consumer preferences – indicating a strategic transformation in how the industry operates.

Moreover this research sheds light on how the relationship, between the cruise industry and local communitiess evolving. By adopting tourism strategies and forming partnerships there is a growing awareness of how our actions impact the places we visit. These efforts contribute to building relationships that ensure contributions, to the communities we engage with.

Extensive research conducted during the COVID-19 pandemic has provided insights into the challenges faced by the cruise industry and its strategic responses. The study has carefully examined how the industry navigated through this period.

The pandemic posed challenges that disrupted cruise operations prompting transformative measures within the industry. The research highlights changes made such as implementing health protocols reimagining passenger experiences and introducing enhanced safety measures.

These changes were not actions taken; they were initiatives aimed at demonstrating how this industry can adapt and prioritize passenger safety. The research also delves into crisis management. Examines how the industry handles unfolding

situations. By prioritizing health screenings responding swiftly and communicating effectively the industry has shown a commitment to ensuring passenger and crew safety. This aspect of their response underscores the importance of preparedness and adaptability during times.

One notable finding from this study is that sustainability has been embraced by the industry. The pandemic played a role, in pushing them to prioritize tourism practices more.

This move, towards sustainability not aligns with objectives. Also reflects the shifting consumer preferences highlighting a strategic shift in the industrys approach. Furthermore this study sheds light on the evolving connection between the industry and local communities. Through embracing tourism practices and fostering collaborations there is a growing awareness of how their actions affect destinations. These initiatives help establish relationships that lead to contributions, within engaged communities.After examining these findings the study provides an overview of how the cruise industry has adapted during these times. It is truly remarkable to witness the resilience and adaptability demonstrated by this sector through implementing changes that lay a foundation, for its success.By merging analysis this study provides a guide for ongoing adjustment and strategic growth showcasing areas of excellence and chances for improvement. As we enter the era of the pandemic the knowledge gained and approaches implemented in response to COVID-19 will hold value. The pandemic has underscored the significance of creativity a dedication to sustainability and nurturing community connections. The industry now finds itself in a position where continuous adaptation

based on insights from this research will be crucial in addressing challenges and

capitalizing on emerging opportunities, in our changing global environment. This study

provides a detailed perspective on how the cruise industry has responded to COVID-19.

It highlights not their resilience and adaptability but their dedication to evolving in

challenging circumstances. These findings offer guidance as we continue navigating

through a world recovering from the pandemic. Provide a framework for future growth

and sustainability.

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APPENDIX A

INTERVIEW EMAIL

Subject: Request for Zoom Interview to Explore Cruise Industry Research

Dear, [Recipients Name]
I hope this email finds you well. My name is Michael Ryan. I am pursuing my degree at
The Swiss School for Business and Management. I am contacting you today as I am
conducting a research project focused on understanding how the cruise industry has
responded and adapted to the challenges of the COVID-19 pandemic. Your insights and
experiences would be precious for our study.

With that in mind, I kindly request an opportunity to conduct a Zoom interview with you
or a representative from your organization who would be suitable for this discussion. The
main objective of this interview is to gain insights into the managerial and strategic
obstacles faced during these unprecedented times and the measures taken to navigate
them successfully.
I anticipate that each interview will take 15 minutes, and I am flexible regarding
scheduling. We can find a time that best suits your convenience. We will focus on crisis
management, operational adjustments, sustainability practices, and community
engagement during our conversation.
Please rest assured that all information shared will be treated with confidentiality and
used for academic purposes. It is our commitment to represent your input accurately
within our study.
Thank you for considering my request. I genuinely appreciate any contribution you can
make towards advancing our research efforts and understanding the cruise industry's
response during these times.

Warm regards,
Michael Ryan
ryansrus@gmail.com
SSBM

INFORMED CONSENT

Title of the Study:

RESILIENCE AND TRANSFORMATION IN THE CRUISE INDUSTRY:
NAVIGATING POST-PANDEMIC RECOVERY AND SUSTAINABLE FUTURES

Researcher:
Michael Ryan
Doctoral Candidate
The Swiss School for Business and Management
Email: ryansrus@gmail.com

Purpose of the Study:
This research explores the cruise industry's operational, managerial, and strategic
responses in the wake of the COVID-19 pandemic. The study seeks to understand the
challenges faced, the adaptations implemented, and the overall resilience and adaptability
of the industry during these unprecedented times.

What You Will Do:
As a participant, you will be asked to engage in a one-on-one interview via Zoom,
anticipated to last approximately 15 minutes. The interview will cover topics such as
crisis management, operational adjustments, sustainability practices, and community
engagement within the context of the COVID-19 pandemic.

Confidentiality:
Your participation in this study is confidential. All collected data will be stored securely
and only accessible to the researcher. Any reports or publications resulting from this
study will use anonymized data to ensure the privacy of all participants.

Voluntary Participation:
Your participation in this study is entirely voluntary. You have the right to withdraw at
any time without penalty. You may also choose not to answer any questions you do not
feel comfortable with.

Risks and Benefits:
There are no anticipated risks in participating in this study. While there may be no direct
benefit to you, your participation will contribute valuable insights to academic research in
maritime tourism and may benefit the broader cruise industry.

Questions:
If you have any questions about the study or your participation, me using the email
above.

Consent:

By agreeing to participate in this study, you acknowledge that you have read and understood this consent form, that you are 18 years of age or older, and that you agree to participate in the research study.

Please indicate your consent by providing the following information:

Name: _____

Position: _____

Organization: _____

Date: _____

Signature: _____

Thank you for your time and valuable contribution to this research.

[ ] I agree to participate in the research study.

[ ] I do not agree to participate in the research study.

Please return this signed form to Michael Ryan at ryansrus@gmail.com before the scheduled interview.

Post COVID-19 Cruise Industry Survey
1.Age
below 18
18-34
35-49
50-65
65 - 79
80 and above
2.Gender
Woman
Man
Prefer not to say
3.Number of pre-pandemic cruises
0
1-2
3-5
6-8
9 or more
4.Number of post-pandemic cruises
0
1
2
3
4 or more
5.Rate the extent of noticeable changes in the cruise industry's operational strategies post-COVID-19, such as health management, marketing, and service adjustments (1 = No changes, 5 = Significant changes).
6. How significantly have the implemented operational strategies affected your experience or observations? Please rate on a scale from (1 = Not at all, 5 = Very much)

7.Rate your level of agreement with the statement: The cruise industry has efficiently managed crises during the pandemic. (1 = Strongly Disagree, 5 = Strongly Agree)

8.On a scale of 1 to 5, rate the importance of crisis management for the cruise industry. (1 = Not Important, 5 = Extremely Important)
9.To what extent have you noticed the incorporation of sustainability practices in the cruise industry's recovery phase? (1 = Not at all, 5 = To a great extent)
10.Are you more likely to choose a cruise line that prioritizes sustainability?
Yes

No
Maybe
11.How positively do you think the cruise industry affects local communities at destinations? (1 = Very Negatively, 5 = Very Positively)

12.Should cruise lines work collaboratively with local communities to promote sustainable tourism?
Yes
No
Unsure
13.Overall, how do you perceive the future of the cruise industry post-pandemic? (1 = Very Pessimistic, 5 = Very Optimistic)

14.Would you consider going on a cruise in the next 12 months?
Yes
No
Unsure

INTERVIEW GUIDE

Project Title: Resilience and Transformation in the Cruise Industry: Navigating Post-Pandemic Recovery and Sustainable Futures

Interviewee Information:

Name:

Position:

Organization:

Date of Interview:

Interviewer: Tony Ryan

Introduction:

Brief introduction.

Overview of the interview structure and topics.

Assurance of confidentiality and consent for participation.

Section 1: Operational Strategies and Impact of COVID-19

1. Can you describe the immediate operational changes the cruise industry had to implement in response to the COVID-19 pandemic?

2. Reflecting on the pandemic period, what significant operational challenges did the cruise industry face?

3. How have health and safety measures been balanced with operational efficiency in your experience?

Section 2: Sustainable Practices in the Cruise Industry

1. Post-pandemic, how has the emphasis on sustainable practices evolved within the cruise industry?

2. Could you highlight any specific sustainable initiatives your organization or the industry has recently adopted?

3. How do you reconcile economic recovery goals with the commitment to environmental and social responsibility?

Section 3: Role of Health and Safety Measures

1. From your perspective, how have enhanced health and safety protocols affected the financial recovery of cruise operations?

2. What are some logistical challenges in maintaining stringent health and safety standards onboard?

3. How significant is the role of health and safety measures in influencing consumer decisions to choose cruising as a travel option?

Section 4: Interaction with Local Communities and Destinations

1. How have recovery strategies post-pandemic affected the cruise industry's relationship with local communities and destinations?

2. What initiatives have been implemented to promote responsible tourism and community engagement?

3. How is the industry addressing the challenge of overtourism and its effects on local destinations?

Closing:

Additional comments or insights not covered in the interview.

Notes:

Key insights:

Quotes:

Follow-up questions:

Post-Interview Reflections: