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# Airline Resilience in the Dual Crisis: Case Finnair

## Strategic Adaptations in Finnair's East Asia Operations During the COVID-19 and the Russia-Ukraine War

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**ABSTRACT:**
The aviation industry is a complex sector vulnerable to numerous risks such as health crises, natural disasters, and geopolitical tensions. While there is substantial research on crisis management and resilience building in the aviation industry in the face of one crisis, less academic attention has been given to resilience research during multiple simultaneous crises. This study aims to investigate the resilience-building of firms operating in high-risk industries, such as aviation, in the face dual crises. Resilience is a crucial aspect of research across various disciplines and is especially important in sectors prone to risks. Research on resilience has grown significantly since the 1990s, and the predicted trend of multiple emerging crises in the future suggests an outlook of the increase in resilience research.

This study is conducted as a single case study focusing on the Finnish airline Finnair. It comprehensively examines Finnair's operational activities during the dual crisis, specifically the COVID-19 pandemic and the Russia-Ukraine war, highlighting the airline’s East-Asia operations. The study analyzes the strategic measures implemented by Finnair from the outbreak of the pandemic to the beginning of 2024, covering the pandemic years and the uncertain times after the Russian invasion of Ukraine. The case is approached using a theoretical framework developed from resilience literature, encompassing the main elements of resilience: preparedness and anticipation, adaptation and response, recovery and continuity, and bouncing back and forward. These elements, along with the aviation industry's priorities of safety, security, and operational efficiency, form the foundational basis of the theoretical framework from which the empirical part of the study is constructed.

The study's findings emphasize the need for cost-effective measures, improving operational efficiency, diversifying revenue streams, enhancing customer satisfaction and trust, and building and managing partnerships. The increased cargo operations were particularly important for the case company’s business continuity. The results confirmed that during a dual crisis, it is crucial to rely on the core elements presented in the theoretical framework. Additionally, the study highlights the importance of innovation and proactive strategies, challenging the traditional "bouncing back" approach by emphasizing the "bouncing forward" mindset, which focuses on adapting to new realities and leveraging opportunities for growth and improvement.

**KEYWORDS:** Resilience, Crises, Aviation, Adaptation, COVID-19, Russian invasion of Ukraine 2022

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**TIIVISTELMÄ:**

Ilmailuala on moniulotteinen sektori, joka on altis lukuisille riskeille kuten pandemioille, luonnonmullistuksille, ja geopoliittisille jännitteille. Vaikka tutkimusta kriisinhallinnasta ja resilienssin kehittämisestä kriisin aikana on ilmailualalla kiitettävästi, vähemmän akateemista huomiota on kirjallisuudessa kiinnitetty resilienssin rakentamiseen kahden tai useamman kriisin uhatessa. Tämän tutkimuksen tavoitteena onkin tutkia yritysten sopeutumiskykyä ja resilienssin kehittämistä kriisien aikana, erityisesti tilanteissa, jossa yritys kohtaa useita kriisejä samanaikaisesti. Resilienssi on olennainen osa monien tieteenalojen tutkimusta ja erityisen tärkeää aloilla, jotka ovat alttiita riskeille. Käsitteenä resilienssi sisältää piirteitä kuten joustavuus, selviytyminen, sopeutuminen, sekä ennakoiva toiminta. Tämä tutkimus pyrkii lisäämään ymmärrystä resilienssin rakentamisesta kaksoiskriisien aikana, jolloin ulkoiset tekijät vaikuttavat organisaatioiden toimintaan, korostaen tarvetta mukautumiseen muuttuvissa olosuhteissa. Resilienssin tutkimus on kasvanut merkittävästi 1990-luvulta lähtien, ja ennustettu trendi useiden kriisien samanaikaisen esiintymisen lisääntymisestä viittaa resilienssitutkimuksen kehittymiseen tulevaisuudessa.
Tämä tutkimus toteutettiin yksittäistapausta tutkivana tapaustutkimuksena (single case study), tutkimuksen kohteena suomalainen lentoyhtiö Finnair. Tutkimus käsittää laaja-alaisesti Finnairin operatiivisen toiminnan tarkastelun yhtiötä kohdanneiden kriisien, koronapandemian ja Venäjä-Ukrainan sodan aikana, keskittyen erityisesti Finnairin Itä-Aasian toimintaan. Tutkimus analysoi Finnairin laatimia ja toteuttamia strategisia toimenpiteitä koronapandemian alusta alkaen vuoden 2024 alkuun, kattaen pandemiavuodet ja Venäjän hyökkäyksen Ukrainaan. Tapausta käsitellään resilienssin kirjallisuudesta kehitetyn teoreettisen viitekehyksen avulla, joka kattaa resilienssin pääpilarit: valmistautuminen, sopeutuminen, reagoiminen, palautuminen, jatkuvuus, ja toipuminen. Nämä elementit yhdessä ilmailualan prioriteettien - turvallisuus, varmuus ja operationaalinen tehokkuus – kanssa rakensivat perustavanlaatuisen pohjan teoreettiselle viitekehykselle, jonka näkökulmasta tutkimuksen empiirinen osa on luotu.

Tutkimuksen tuloksissa korostuivat kustannustehokkaat toimenpiteet, toiminnallisen tehokkuuden parantaminen, tulovirtojen monipuolistaminen, asiakastyytyväisyyden ja -luottamuksen kehittäminen, ja kumppanuuksien rakentaminen ja hallinta. Erityisesti lentoyhtiön rahtioperaatiot olivat tärkeässä osassa toiminnan jatkuvuuden kannalta. Tutkimuksen tulokset varmistivat, että kaksoiskriisin aikana on keskeistä tukeutua teoreettisessa viitekehyksessä esiteltyihin pääelementteihin. Tutkimukset myös haastoivat edellisiä tutkimuksia ja korostivat kirjallisuudessa vähemmälle huomiolle jäänyttä ”bouncing forward” -ajattelutapaa, joka painottaa innovatiivisuutta ja luovuutta organisaatioissa kriisien turbulenssissa.


**KEYWORDS:** Resilience, Crises, Aviation, Adaptation, COVID-19, Russian invasion of Ukraine 2022

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# 1 Introduction

The discourse surrounding resilience has been increasing gradually since the 1990s (Google Ngram, 2024), especially during times of uncertainties concerning significant events such as economic downturns, geopolitical tensions, health crises, and climate change (Hung & Liu, 2005). The concepts of resilience, organizational resilience, and resilience in the aviation context have been studied by various scholars, aiming to define it through characteristics such as robustness (Kahan et al., 2009), recovery (Janic, 2015), or a capacity of an enterprise to survive, adapt, and grow in the face of turbulent change (Fiksel, 2006). Resilience is needed in various situations and contexts among individuals, organizations, and governments, underscoring its universal importance in a world full of potential adversities. In the face of challenges encountered by individuals in their personal lives or the crises faced by communities and organizations, building and fostering resilience becomes essential (King & McSpedon, 2022).

The global aviation industry is in particular need of resilience, operating within a dynamic and challenging environment, frequently subjected to difficulties and obstacles (Williams et al., 2017). Recent years have witnessed a unique series of two significant challenges to the global industries: the COVID-19 pandemic and the Russia-Ukraine war, which have led to unforeseen disruptions and uncertainties within the aviation industry (Prakasa et al., 2022; Dube et al., 2021). Airline companies across the world have faced severe complexities, including rapidly decreasing passenger numbers, travel restrictions implemented by governments, and the absolute necessity to reevaluate their operational strategies to survive and secure their future operations. The aviation industry is known for its vulnerability to external disruptions; thus, it works as a testing ground for airlines' strategic capability (Sun et al., 2023).

The sudden arrival of the COVID-19 pandemic and severe health concerns brought significant changes to the nature of air travel, including lockdowns and travel restrictions implemented by governments globally (Su et al., 2023). Airlines across the world experienced a sharp decline in demand and suffered massive financial losses, forcing them to respond rapidly (Dube et al., 2021). In 2022, when the aviation industry was still trying to get back on its feet, the Russia-Ukraine war added sudden complexities to global geopolitics, impacting flight routes, airspace accesses, and trust among airlines' passengers. These challenging circumstances posed a serious challenge to airlines, demanding immediate and extensive strategic adjustments (Prakasa et al., 2022).

Albach et al. (2015) and Pinkwart et al. (2023) argued that we can see a trend toward multiple and more regularly emerging crises. Due to this prediction, it is crucial for organizations and whole economic areas to develop and improve their resilience strategies (Pannes et al., 2022). In the field of aviation, there is limited discourse surrounding resilience within the context of multiple crises. Throughout the progression of this thesis, most academic papers or studies examined singular crises, predominantly focusing on events such as the COVID-19 pandemic or the Ukraine War, alongside with other geopolitical crises. However, the distinctiveness and relevant significance of this study concerning airline resilience in the face of multiple crises underscore the necessity for additional discourse on the subject, particularly given by the complex nature of the topic. The aviation industry is essential for global connectivity and economic development, thus there is a continuing need for research in this specific context.

This research is conducted as a single case study research of airline Finnair, an airline severely and simultaneously impacted by the COVID-19 pandemic and the Russia-Ukraine war. The findings section of the study delves into an investigation and exploration of the airline's experiences, strategic adaptations, and long-term initiatives through a comprehensive analysis of documents, reports, articles, and interviews with Finnair's two executives. The empirical part includes the examination of the airline's preparedness, adaptation, recovery, and the ability to bounce back and forward, as outlined in the theoretical framework in the literature review. Moreover, the findings may offer valuable lessons not only to stakeholders within the aviation industry but also to those dealing with strategic management and resilience questions in the face of complex crises.

The particular focus of this thesis lies in the case company's East Asia operations, a region that has played an important role in the strategies of many airlines, fostering growth and global competitiveness. Airlines with a strategic positioning like Finnair have relied on their extensive networks in this region to connect Europe to various Asian destinations, thus establishing it as their competitive advantage (Unnikrishnan, 2023). Therefore, the disruptive events stemming from the dual crises raised the research questions for this study: how did airlines operating in the East-Asia market adapt their strategic management approaches during the COVID-19 pandemic and the Russia-Ukraine war to ensure resilience and sustainability? Furthermore, this study aims to investigate how firms operating in high-risk industries, such as aviation, build resilience amidst the dual crisis.

Following the introduction, the literature review of the study aims to provide the reader with key concepts of resilience, organizational resilience, and resilience in the aviation context. Furthermore, it explains the nature and consequences of the COVID-19 pandemic and the Russia-Ukraine war, exploring their respective impacts on the airline industry. The methodology section outlines the research approach, explaining the rationale behind research methods, and discussing the advantages and limitations of employing a single case study. It also explains the details of the study's data collection and analysis process, as well as the considerations of validity and reliability. The findings of the study are presented in the fourth chapter, and lastly, the discussion chapter further analyses and consolidates the findings while also addressing managerial implications, limitations of the study, and suggestions for future research.

# 2 Literature Review

During times of increasing uncertainty and volatility, the concept of resilience has emerged as a central concept for organizations, industries, and societies. From the micro-level complexities in the organizational environment to the macro-level challenges of global pandemics and geopolitical conflicts, resilience means adaptation, continuity, and growth in the face of adversity (Fiksel, 2006). The literature review encompasses the various dimensions of resilience across various contexts, including theoretical frameworks and practical strategies. The literature review begins by defining resilience as a fundamental concept, then explores how resilience manifests within organizational and industry-specific contexts. Concerning the challenges imposed by the COVID-19 pandemic and the Russia-Ukraine war, this literature review also examines the dual crises that are shaping the industry's resilience and adaptive capabilities. By analysing the effects of these sudden crises on air travel operations, financial robustness, and strategic planning, the literature review illustrates the complex situations encountered by airlines globally. The theoretical framework of this study integrates the key concepts and frameworks from the resilience literature, providing a structured perspective for analysing real-world phenomena. Ultimately, this literature review aims to contribute to a deeper understanding of resilience concepts and resilience-building efforts across high-risk sectors.

## 2.1 Resilience

Resilience plays a crucial role in the context of this thesis, as within the aviation industry facing various disruptions such as natural disasters, economic downturns, and pandemics, building resilience is paramount (Hung & Liu, 2005).

### 2.1.1 Resilience in Research

According to Wildavsky (1988), "*Resilience, as a strategy, emphasizes how an organization defines and manages its relationships with the environment in coping with uncertainty.*" Janic (2015) defines resilience as the ability of a system to recover from a disruption and return to normal, previous conditions.

Discussing resilience is essential as it enables individuals, organizations, and communities to defend themselves against disruptions and challenges (Anderson & Jones-Bodie (2022). According to Anderson & Jones-Bodie (2022), resilience is essential when facing various situations encountered by individuals and organizations, ranging from personal setbacks to large-scale disruptions requiring adaptive and rapid responses. Particularly during crises like natural disasters or severe economic downturns, the ability to "bounce back", meaning returning to normal conditions, is crucial for survival. Maintaining and enhancing organizational performance is a critical aspect, where resilience helps organizations to resist disruptions and uncertainties. Additionally, resilience plays a crucial role in building and maintaining relationships between organizations and stakeholders, realizing the need for effective communication and collaboration during challenging times. Furthermore, resilience enables individuals and organizations to respond constructively to disruptions, learn from setbacks, and adapt strategies for future challenges, thereby "bouncing forward" to create a new and improved normal (Anderson & Jones-Bodie, 2022; Jing You, 2023). Organizations should focus on proactively building resilience, as the cost of adversities is not always predictable in advance. Industries and organizational environments such as healthcare, aviation, nuclear power, and chemical processing demand ongoing efforts toward resilience due to the high levels of uncertainty and risks involved. Organizations operating in high-risk industries or operating in unpredictable settings must actively nurture resilience to ensure consistent performance in the face of uncertainties and emerging threats (Williams et al., 2017).

In literature, there are several different definitions of resilience, often defined by their respective experts and their contexts and viewpoints. Kahan et al. (2009) addressed

resilience through the threats and risks to safety and security, thus choosing to present the following definition from Allenby and Fink (2005):
*”Resiliency is defined as the capability of a system to maintain its functions and structure in the face of internal and external change and to degrade gracefully when it must” (*Allenby & Fink, 2005). From this perspective, the fundamental and crucial essence of resilience is recognized. As mentioned earlier, within the discourse on resilience multiple alternative definitions exist depending on the context. For example, organizational resilience can be defined in a following way: *“Organizational resilience describes the ability of organizations to fend off actual or potential threats, prepare for them, account for them, handle them, recover from them, and successfully adapt over and over again”* (Kretschmer & Singer-Coudoux, 2023; Scharte et al., 2014). In the article by Kretschmer & Singer-Coudoux (2023), the VUCA (volatile, uncertain, complex, and ambiguous) perspective is also acknowledged: the authors address that the ability to operate in a VUCA environment is essential for both survival and the realization of potential benefits regarding the resilience-building. C.S. Holling (1973) characterizes resilience as "*a measure of the persistence of systems and of their ability to absorb change and disturbance and still maintain the same relationships between populations or state variables.*" Furthermore, Hollnagel et al. (2006) add that "*the essence of resilience is therefore the intrinsic ability of an organization (system) to maintain or regain a dynamically stable state, which allows it to continue operations after a major mishap and/or in the presence of continuous stress*."

Kahan et al. (2009) suggest that resilience can be defined through eight principles that explain the critical features of resilience: “*threat and risk limitation, robustness, consequence mitigation, adaptability, risk-informed planning, risk-informed investments, harmonization of purposes, and comprehensiveness of scope*.” According to the author, these principles encompass the essential components necessary for achieving and maintaining resilience in the face of diverse challenges and disruptions.
The first principle, threat and hazard limitation, underscores the prevention of potential damage from threats and hazards through proactive measures aimed at blocking and

defeating damage mechanisms. This principle emphasizes the importance of mitigating the impact of potential damage to critical systems and functions by addressing multiple potential damage mechanisms from human threats or natural hazards through active and passive countermeasures.

The second principle, robustness, refers to the capacity and capability of critical systems to tolerate severe internal and external stresses while maintaining the organization's key functions. This principle highlights the ability of systems to "degrade gracefully", referring to returning to its basic functions when required, highlighting the aspect of resistance.

Consequence mitigation, the third principle, acknowledges the reality that crises cannot always be avoided. It stresses the importance of managing and mitigating the damage effects, underscoring the importance of ensuring a quick recovery.

The fourth principle, adaptability, underscores the capacity of resilient systems to flexibly respond to changing circumstances in the face of adversity.

Risk-informed planning, the fifth principle, emphasizes the importance of planning solutions. This principle emphasizes the need for comprehensive and inclusive planning processes that effectively address potential risks and vulnerabilities.

The sixth principle, risk-informed investments, underscores the necessity of informed investment decisions to establish resilience ways and means for critical systems. It addresses the importance of allocating resources based on risk assessments and informed decision-making to incorporate resilience solutions into the key functions of critical systems, thus, ensuring the implementation of essential resilience measures to limit potential damage and enhance recovery capabilities.

Harmonization of purposes, the seventh principle, addresses the need for efficient cooperation among the six previous principles.

Finally, the eighth principle, comprehensiveness of scope, highlights the recognition that resilience encompasses all aspects necessary for the organization (Kahan et al., 2009).

In conclusion, Kahan et al. (2009) present a comprehensive set of principles that collectively define the critical features of resilience, encompassing proactive measures to limit potential damages. While the authors specialize in national security research, understanding these principles is as well valuable for business and management scholars as they provide insights into effective risk management, adaptability, resource allocation, interconnectedness of systems, and the importance of a comprehensive approach. By applying these principles, organizations can enhance resilience, agility, and long-term success in dynamic and complex business environments.

Despite the multiple definitions of resilience within scholars including their variations, several common themes can be found in them. Kretschmer & Singer-Coudoux (2023) and Allenby & Fink (2005) both underscore the significance of adaptation and response in resilience. Similarly, they emphasize the importance of recovery and continuity in maintaining organizational functions. Thus, both authors seem to agree on the aspects of adaptation, response, recovery, and continuity in the successful application of resilience. Holling (1973) shares similar views on the continuity, focusing on the system's ability to persist and maintain relationships despite disturbances. Furthermore, Hollnagel et al. (2006) highlight resilience as the essential ability of an organization or system to maintain a stable state. The definition by Kahan et al. (2009) aligns with the common theme of preparedness and anticipation in resilience. The authors also suggest that resilience can be achieved through principles such as risk-informed planning and investments, emphasizing proactive measures to address potential risks and uncertainties. These similarities in definitions underscore the shared principles of adaptation, response, recovery, continuity, preparedness, and anticipation as essential components of resilience across different contexts.

However, while studying the different definitions, diverse interpretations emerge. Holling (1973) seems to emphasize the system's ability to absorb any change or disturbance without altering its fundamental operations, while Hollnagel et al. (2006) highlight the importance of regaining a stable state, “bouncing back”, after a major accident or continuous stress. Due to the concept’s broad applicability and extensive scope, variations in the definitions exist, demonstrating the diverse perspectives and contexts in which resilience is applied. Variations underscore the dynamic nature of resilience as a concept that evolves with changing circumstances and multidisciplinary insights. Despite the differences in definitions, the recurring theme of resilience remains consistent: the ability to adapt, recover, and thrive in the face of adversity. As the exploration and refining the concept of resilience continues, it is essential to acknowledge and embrace its versatile nature to address the complex challenges of today's business environment.

Within the academic discourse, resilience is frequently characterized by the expression of "bouncing back" (Jing You, 2023). This viewpoint refers to the traditional view of resilience, where the focus is on bringing the systems and operations back to their prior condition after facing a threat or disruption. However, Jing You (2023) suggests that the "bouncing back" approach may pose challenges due to the potential vulnerability it can create for organizations. If the organization returns to its previous equilibrium following a disruption but the markets and consumer behavior have changed too significantly, the organization might not be able to adapt, thus increasing vulnerability within the organization (Jing You, 2023). In the same article, the author noticed some challenges in the resilience literature.

The first observation was the fragmentation of the existing literature on organizational resilience across various levels inside the organizations. The author noted that resilience might have been conceptualized differently at different levels: at the individual employee level, it is seen as psychological capital developed through personal growth processes; at the organizational level, it is defined as the organization's ability to adapt positively to challenges while maintaining its core functions; and at the system level, resilience is perceived as specific features, such as culture and social connections within the organizational system that enhance its collective capacity to respond to difficulties. According to the author, conceptual similarities and differences in organizational resilience across these levels have not been thoroughly explored.

Secondly, the author suggests that the existing theories on organizational resilience primarily emphasize the internal resources and capabilities of an organization to maintain performance during challenging times. However, they tend to overlook the external environment, with which organizations continuously engage to obtain various resources such as materials, labor, capital, and information (Jing You, 2023).

van der Vegt et al. (2015) and Xiao & Cao (2017) discuss the need for research to strengthen the comprehension of resilience, including its measurement, mechanisms of realization, and its relationship with other components of the organization. The authors point out that while there has been some development in comprehending the concept of resilience, there is still a lack of advanced discussions on the topic, indicating a need for further research (van der Vegt et al., 2015; Xiao & Cao, 2017). As illustrated in Figure 1, the existence of resilience in literature has seen a major increase since the 1990's, suggesting continuing growth in the future. In the context of future research, Xiao & Cao (2017) and Linnenluecke (2017) identified the need for developing the context of resilience, strategies for organizing for resilience, methods for measuring resilience, and the multi-level and cross-disciplinary approaches as the primary areas for research in the future.

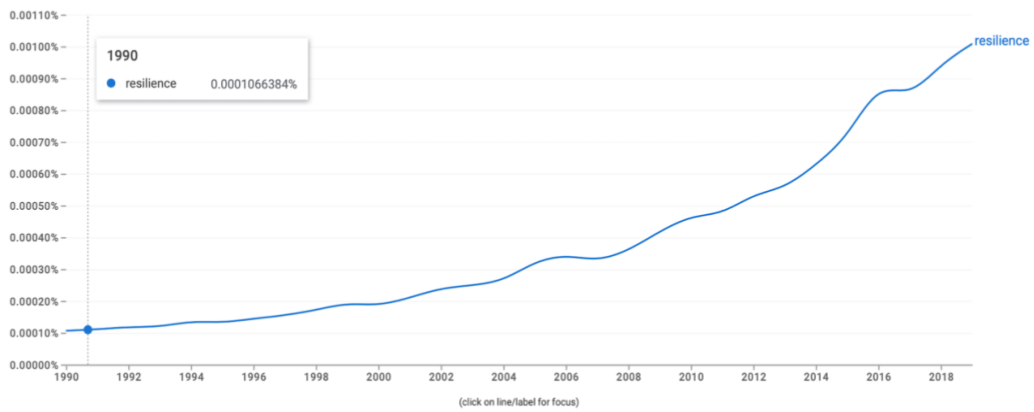


**Figure 1.** Google Ngram illustrates the percentage of publications in English featuring the term "resilience" 1990-2018 (Google, 2024).

### 2.1.2 Organizational Resilience

As mentioned in the previous chapter, organizational resilience can be defined as an organization's ability to adapt and respond to challenges and threats, and to recover quickly from disruptions (Kretschmer & Singer-Coudoux, 2023; Scharte et al., 2014). It involves building the capacity to anticipate, prepare for, and respond to unexpected events, while also maintaining the ability to continue operating during and after a crisis (Jayasundera, 2023). According to Fiksel (2006), resilience in a business context refers to *"the capacity of an enterprise to survive, adapt, and grow in the face of turbulent change."* The concept of organizational resilience has its roots in the field of disaster management, where it was originally used to describe the ability of communities and organizations to recover from natural disasters. However, it has since been applied to a wide range of contexts, including business, healthcare, and government (Manyena, 2006).

The importance of organizational resilience has been highlighted by recent events such as the COVID-19 pandemic, which has had a profound impact on organizations around the world. The pandemic has demonstrated the need for both business and non-business organizations to be able to adapt quickly to changing circumstances and to be able to continue operating in the face of significant events, disasters, or disruptions (Firmansyah & Harsanto, 2023). The definition by Jayasundera (2023) focuses on organizational resilience in specific contexts, emphasizing the ability of an organization to adapt and respond to challenges and threats, recover quickly from disrupting situations, and maintain operational continuity. In contrast, the earlier mentioned definition by Kretschmer & Singer-Coudoux (2023) describes organizational resilience as the ability of organizations to prevent threats, prepare for them, handle them, recover from them, and adapt successfully over time.

Due to the two core concepts introduced in this thesis: "resilience" and "organizational resilience", it is necessary to specify the distinctions between them. The definition by Fiksel (2006) highlights resilience in the organizational context as "*the capacity of an enterprise to survive, adapt, and grow in the face of turbulent change*." This organizational-level perspective differs from the definition by Allenby & Fink (2005), which defines resilience as “*the capability of a system to maintain its functions and structure in the face of internal and external change*.” The definition by Firmansyah & Harsanto (2023) emphasizes the dynamic nature of resilience and the need for organizations to adapt quickly to changing circumstances, such as during the COVID-19 pandemic. This perspective on resilience differs from the definition by Allenby & Fink (2005), which focuses on the system's capability to degrade to its basic functions in response to internal and external changes. These differences in definitions highlight the diverse interpretations and applications of resilience across different disciplines and contexts.

In essence, organizational resilience is a concept that encompasses the resilience of all aspects of both business and non-business organization, including their respective operations. When discussing “organizational resilience” specifically, the focus is on resilience within the context of organizations and their operations. This differs from resilience in general terms, which can address various forms of resilience, such as an individual's personal resilience. Moreover, as previously mentioned, resilience is crucial for confronting the daily challenges experienced by individuals and organizations (Anderson & Jones-Bodie, 2022). Underscoring this is crucial because while the term "resilience" can be applied across different contexts, "organizational resilience" specifically refers to resilience within the organizational context alone.

One approach to explain and explore organizational resilience is the use of complexity theory to understand and manage complex systems. Complexity theory provides a framework for understanding the interconnectedness of different parts of an organization, and for identifying the key drivers of resilience in complex systems (Castellani & Gerrits, 2021). The theory and framework have gained increasing attention in recent years as a way of understanding complex systems and phenomena. In the context of organizational resilience, complexity theory can be used to understand how organizations respond to unexpected events and disruptions. By understanding the complex interactions between different components of the organization, including employees, customers, suppliers, and other stakeholders, organizations can develop strategies to build resilience and respond to unexpected events (Castellani & Gerrits, 2021).

One of the key insights of complexity theory is that complex systems are characterized by non-linear relationships between different components (Andersson, 1999). This means that small changes in one part of the system can have large and unpredictable effects on other parts of the system. In the context of organizational resilience, this suggests that organizations need to be prepared for unexpected events and disruptions and to develop strategies that can respond to these events in a flexible and adaptive way (Castellani & Gerrits, 2021). Another key implication of complexity theory for organizational resilience is the need for organizations to be able to adapt to changing circumstances. According to Burnard and Bhamra (2011), organizations that are able to adapt quickly to changing circumstances are more likely to be resilient in the face of unexpected events. This requires organizations to be flexible and agile. Additionally, an important implication is being able to learn from experience. According to Ashiru et al. (2022), organizations that show the ability to learn from experiences are more capable of resilience. Organizations must be able to reflect on their experiences, to identify areas for improvement, and implement changes based on what they have learned. Dahlberg (2015) defines resilience as the ability of a complex system to adapt to disturbances and changing conditions. Complexity, on the other hand, is described as the dynamic and ever-changing nature of complex adaptive systems that interact with unpredictable human behavior. These systems are characterized by their ability to adjust to conditions that cannot be predetermined during the design phase. Therefore, resilience and complexity are interconnected concepts that underscore the adaptive and dynamic nature of systems in response to disturbances and uncertainties, emphasizing the need for organizations to navigate and thrive in complex environments (Dahlberg, 2015).

According to Dahlberg (2015), a complex system is characterized by several attributes.

In contrast to the theories presenting the perception of linearity, such as Heinrich's Domino-model in 1931, Erik Hollnagel and David D. Woods, among other safety researchers who founded the Resilience Engineering movement in 2004, took more of a non-linear approach. According to this approach, complex systems involve components that are connected by nonlinear relationships, leading to emergent properties that cannot be predicted by studying the individual components separately.

Another attribute typical for complex systems is unpredictable behavior: unlike simple or complicated systems with predictable behavior, complex systems possess unpredictable behavior due to interactions and interdependencies within the system. Additionally, complex systems generate synergies and emergent properties through interactions among their components, resulting in behaviors that cannot be programmed or designed. However, it is possible for complex systems to be cultivated and exercised (Dahlberg, 2015).

According to Taleb (2012), non-complex systems or matters can be called “mechanical”, and complex systems or matters “organic”. The mechanical or non-complex matter requires maintenance, thrives in stable conditions, and ages when used, while the organic or complex matter is able to heal itself, handle small disruptions, and ages when not in use, thus it has the ability to benefit from disruptions. Furthermore, complex systems are influenced not only by their current being but also by their history, implying that the system's past states and interactions play a crucial role in shaping its present behavior. In contrast, systems or matters that lack nonlinear relationships, display predictable behavior, lack synergies and emergent properties, do not benefit from disruptions, and lack historical dependence, may be considered non-complex. For example, simple or complicated systems with linear relationships, predictable outcomes, and no emergent properties, would fall outside the existing discourse on complex systems (Dahlberg, 2015).

Resilience, in this context, aligns with complexity theory in several ways. Firstly, resilience is described as an emergent property of complex systems, indicating that the ability to adapt to disturbances and changing conditions is a characteristic that arises from the complexity of the system itself. Also, resilience is highlighted as the system's ability to adapt to unforeseen disturbances by absorbing shocks and evolving to a more advanced state better suited for future challenges. This adaptive capacity is closely linked to the dynamics of complex systems and their ability to respond to changes in their environment. Lastly, *c*omplex systems, characterized by nonlinear relationships and emergent properties, provide the context within which resilience operates. The interconnectedness and unpredictability of complex systems shape the way resilience is manifested and sustained (Dahlberg, 2015).

### 2.1.3 Strategies to Build Resilience

In addition to theoretical frameworks and approaches, there are several strategies that organizations can use to build resilience. For example, Williams et al. (2017) suggest that organizations can build resilience by developing a culture of risk management, investing in technology and infrastructure, and by building strong relationships with stakeholders. The authors suggest that establishing and nurturing a culture of awareness within the organization involves creating an environment where employees are encouraged to identify and communicate potential issues or challenges proactively. By fostering a culture that values risk management and encourages open communication about potential threats, organizations can better prepare for and respond to adverse situations. This proactive approach to risk management can help organizations to anticipate and address challenges before they escalate, thereby enhancing their overall resilience. Another strategy is investing in technology and infrastructure. Enhancing organizational capabilities through investments in technology and infrastructure can improve the organization's ability to recognize and respond to crises effectively. Investing in the right tools and systems can enable organizations to adapt quickly to changing circumstances and maintain reliable functioning despite challenges (Williams et al., 2017).

Additionally, engaging in organizing practices that prioritize building and maintaining strong relationships with stakeholders is crucial for enhancing organizational resilience. By nurturing the collaborative partnerships and effective communication with stakeholders, organizations can access additional resources, support, and expertise during times of crisis. Strong relationships with stakeholders can help organizations survive the challenges, coordinate responses, and leverage external support networks to enhance their resilience (Williams et al., 2017).

### 2.1.4 Resilience in Aviation Context

The study of resilience is multifaceted and highly applicable based on the context due to the lack of common agreements and precisely determined definitions (Cook et al., 2023). Moreover, research within aviation resilience remains relatively narrow and continues to evolve (Martin-Breen & Anderies, 2011). Cook et al. (2023) explored the existing literature focusing on crises and airline responses, aiming to develop the concept and general understanding of airline resilience in 2023, as well as to offer insights for future research in the field. Notably, the authors noticed an increase in scholarly publications, during and following the pandemic, reflecting the growing need for airlines to demonstrate resilience in the face of uncertainty. Over the past three decades, there have been various crises in the aviation sector, including infectious diseases, terrorism, and financial crisis. Although natural disasters like the 2010 Eyjafjallajökull volcano eruption in Iceland have affected air travel, their effects are primarily localized (Cook et al., 2023).

In this regard, airline resilience can be categorized into operational, financial, and commercial dimensions. Operational resilience in aviation encompasses various measures including capacity adjustments such as reducing fleet size and personnel numbers, network adjustments such as delaying the launch of new destinations, frequency adjustments such as reducing the flight frequencies, schedule flexibility, and adaptability adjustments allowing for schedule modifications, temporary suspension of routes, and alterations in service quality. Furthermore, financial resilience in aviation includes measures such as liquidity of assets, return on investment, financial bargaining power, market share, and share price volatility. Finally, commercial resilience in aviation encompasses measures such as corporate social responsibility and customer retention strategies, achieved through maintaining customer-centric services and quality (Cook et al., 2023).

In the aviation context, resilience refers to a company's ability to withstand and recover from external shocks, such as the COVID-19 pandemic (Hung & Liu, 2005). This includes the ability to adapt to changing market conditions, maintain financial stability, and continue to provide essential services to customers. Various external shocks impact the financial performance of the airline industry in both short and long term. Therefore, resilience is a critical factor in the aviation industry, particularly in times of crisis, as it enables airlines to maintain operations and continue to provide essential services to their passengers (Hung & Liu, 2005; Bjelicic, 2012). Moreover, Janic (2015) argues that resilience in the aviation context involves the ability of airlines and airports to maintain their essential functions, such as safety, security, and operational efficiency, during and after the disruptive event. The resilience of airlines and airports is influenced by various factors, including government support, airline size, network connectivity, and contingency planning (Janic, 2015). Furthermore, Su et al. (2023) argue that airlines with larger networks and government support are more resilient to the effects of massive disruptions such as pandemics. Therefore, smaller airlines and airports with limited connectivity are more vulnerable to these disruptions (Su et al., 2023). Additionally, Hung & Liu (2005) found that several firm characteristics contribute to corporate resilience in the aviation industry. These include financial strength, operational efficiency, and effective crisis management strategies. Airlines with higher liquidity, lower leverage, investments in technology and innovation, and more diversified revenue streams are better able to withstand external shocks and maintain financial stability. Operational efficiency, including effective cost-cutting measures and streamlined operations, can also help airlines to adapt to changing market conditions and maintain profitability. Effective crisis management strategies, such as contingency planning and rapid response to changing circumstances, are critical in promoting resilience in times of crisis, such as in the face dual crisis involving the COVID-19 pandemic and Russia-Ukraine war (Hung & Liu, 2005).

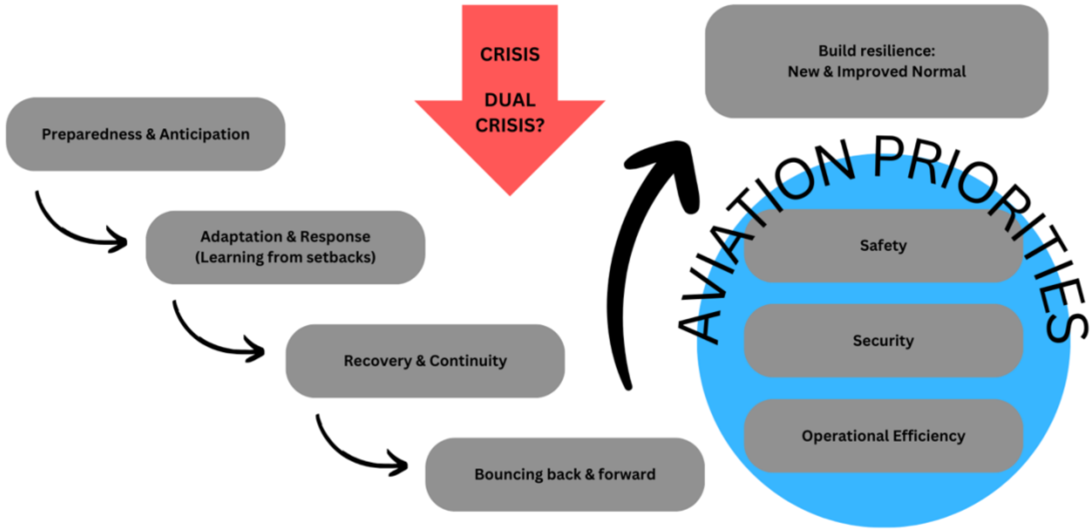


**Figure 2.** Theoretical framework

The theoretical framework of this research, as displayed in Figure 2, draws upon concepts of resilience proposed by scholars such as Anderson & Jones-Bodie (2022), Kahan et al. (2009), Dahlberg (2015), and Williams et al. (2017), among others, alongside insights specific to resilience in aviation from Janic (2015), among others. This framework highlights strategic efforts aimed at enhancing resilience, particularly in the aviation sector, focusing on preparedness and anticipation, adaptation and response, recovery and continuity, bouncing back and forward, and ultimately building resilience by establishing a new and improved normal state of business. The framework suggests that the aviation priorities presented by Janic (2015) have a pivotal significance, highlighting crucial components for the continuity of the aviation industry: safety, security, and operational efficiency. The rationale behind resilience-building within this framework stems from crises, both singular and dual crisis. Defined by Merriam-Webster Dictionary (2024), crisis refers to "*an unstable or crucial time or state of affairs in which a decisive change is impending, especially one with the distinct possibility of a highly undesirable outcome.*" In this context the initial crisis faced by the global aviation industry was the COVID-19 pandemic in early 2020, immediately leading to a sharp decline in passenger traffic and significant revenue losses across the industry (Dube et al., 2021).

Subsequently, the dual crisis emerged with the Russian invasion of Ukraine in February 2022, severely disrupting aviation operations, particularly for airlines like Finnair, reliant on Russian airspace for efficient routes between Europe and Asia. Despite extensive research on aviation crises from scholars such as Su et al. (2023) and Dube et al. (2021), especially during the pandemic, exploration of dual crises remains limited. Hence, the theoretical framework will serve as a guiding structure for examining real-world phenomena. Through this empirical analysis, the study aims to explore how Finnair navigated through these unprecedented challenges and implemented strategic adaptations to enhance its resilience amidst the dual crisis scenario.

## 2.2 The Dual Crisis: COVID-19 and Ukraine War

The aviation industry has encountered significant operational and economic challenges in recent years, primarily due to the COVID-19 pandemic and the Russia-Ukraine war. These events have significantly impacted air travel, leading to disruptions in flight operations, increased costs, and complex operational challenges for airlines and airports. This chapter aims to explore the challenges posed to the aviation industry by these two impactful events.

### 2.2.1 The Covid-19 Pandemic: Tourism Shutdown

The COVID-19 pandemic had a profound impact on the global aviation industry, leading to a sharp decline in air passenger traffic and airline revenues. The closure of borders, travel restrictions, and lockdown measures resulted in a significant reduction in air travel demand, causing airlines to reduce flight schedules and face financial stress. The pandemic forced airports and airlines to implement health control measures and adapt their operations to ensure passenger safety (Su et al., 2023).

The COVID-19 pandemic was caused by a coronavirus, SARS-CoV-2, which emerged in December 2019. The virus spread globally quickly and has been highly contagious due to its ability to spread through respiratory droplets when an infected person talks, coughs, or sneezes. The virus can also be spread by touching a surface contaminated with the virus and then touching a person's face. The virus can cause a wide range of symptoms ranging from mild respiratory issues, flu-like symptoms, and temporarily loss of smell and taste, to severe and potentially fatal pneumonia. The severe consequences of the pandemic led multiple countries to impose travel restrictions, resulting in an immediate and rapid decline in flights and air passenger volumes. The pandemic triggered an economic downturn that severely disrupted the travel market supply chain. Airlines faced significant revenue losses, leading to bankruptcies in many cases due to the travel restrictions and prolonged grounding of aircraft, a phenomenon known as the 'mass grounding of aircraft'. Mass grounding of aircraft reached its peak worldwide from March to June 2020, leading to difficulties in finding parking space for aircraft and resulting in increased parking fees and additional maintenance. This further weakened the already fragile economy (Dube et al., 2021). Data from The International Air Transport Association (IATA) revealed that the pandemic caused significant declines in airline share prices between February and April of 2020, affecting shareholders and the capital value of the global airline industry (IATA, 2020; Dube et al., 2021).

Airlines implemented various safety measures to address the situation, including enhancing cleaning protocols, social distancing measures, mandatory mask-wearing, contactless check-in procedures, and improved air filtration systems onboard the aircraft. The pandemic's impact on the aviation industry has been severe, necessitating the adoption of comprehensive measures to ensure customer safety and security as the industry navigates the challenging path to recovery. Stakeholders in the sector emphasized the need for a sustainable and resilient recovery for the aviation industry post-pandemic. It was suggested that recovery efforts should focus on protecting travelers, reducing costs, increasing efficiency, and ensuring a quality customer experience while aligning with sustainable development goals (Dube et al., 2021).

### 2.2.2 The Russia-Ukraine War: Humanitarian and Geopolitical Crisis

The Russian invasion of Ukraine in February 2022 presented unique economic challenges to the aviation industry, particularly through the closure of airspace and the increase in oil prices. The war led to the closure of flight routes, forcing airlines to reroute flights, resulting in higher operational costs and disruptions in flight schedules. The termination of international flights to and from Russia by various countries further impacted global aviation traffic, while sanctions and energy supply blockades imposed by Russia added to the challenges faced by airlines. The war has not only disrupted flight paths but also led to a humanitarian crisis, affecting the movement of individuals and airport operations (Prakasa et al., 2022).

The Russia-Ukraine war escalated significantly on February 24, 2022, when Russia attacked Ukraine, with a major escalation marking a critical point in the ongoing situation between the countries. The war has its roots in geopolitical tensions between Russia and Ukraine, dating back to Russia's annexation of Ukraine's Crimea in 2014. The 2022 escalation saw increased military actions, including the closure of airspace, leading to widespread impacts on various sectors, including global aviation transportation. The war has resulted in significant disruptions, refugee crises, and economic challenges, with implications extending beyond the region to affect international relations and global stability. The background of the Russia-Ukraine war is characterized by extensive historical tensions and geopolitical interests that have caused military confrontations, political unrest, and most devastatingly the widespread and prolonged humanitarian crises in the region (Prakasa et al., 2022).

In terms of aviation, the war has had multiple effects largely due to the closure of airspace and the significant increase in oil prices. The Russia-Ukraine war resulted in the closure of flight routes, causing operational challenges for airlines, disruptions in flight schedules, increased costs, and rerouted flights, significantly impacting air travel efficiency. Additionally, many countries, including members of the European Union, the United Kingdom, and the United States, suspended international flights to Russia, resulting in a substantial decrease in global aviation traffic. The European Union imposed sanctions on Russia, and in response, Russia blocked its international energy supply, resulting in fluctuations in aviation fuel prices. In response to these sanctions, Russia closed its airspace to all EU countries and several other "unfriendly countries", according to Russian policies. This closure forced airlines to reroute their flights, impacting their usual shortest paths (Prakasa et al., 2022). As a result, many global flights have been forced to make detours to bypass restricted Russian airspace (Chu et al., 2024). This closure caused disruptions in flight schedules, increased operational costs, and rerouted flights with often significantly longer flight times, impacting the efficiency of air travel (Prakasa et al., 2022). Airlines have been forced to detour around restricted airspace, leading to longer flight distances and increased fuel consumption. This results in higher operating costs for airlines, as they need to allocate more resources for these extended routes. Additionally, closure of airspace has necessitated airlines to adjust their flight paths, leading to longer flight times. This increase in flight duration translates to higher operational expenses for airlines, including additional crew costs, maintenance expenses, and other operational costs. The closure of Russian and Ukrainian airspace has had ripple effects on global aviation costs, impacting airlines worldwide. The increased costs associated with rerouting and operational changes have added to the financial strain on the aviation industry, affecting profitability and operational efficiency (Chu et al., 2024). Moreover, the war led to a humanitarian crisis, affecting the peace and independence of the people of Ukraine (Prakasa et al., 2022).

Before the year 2020, Finnair had implemented a strategic analysis of its worst-case scenarios. Regrettably, these scenarios included a global pandemic, and a geopolitical event involving Russia. While the COVID-19 pandemic made the airlines suffer quite equally, the airspace restrictions have affected Finnair more than most airlines, destroying its most profitable strategy: utilizing the fastest route to connect North and East Asia with Europe. Since then, the restoring profitability has been the priority (Unnikrishnan, 2023).

Despite the differing natures of these crises, both the COVID-19 pandemic and the Russia-Ukraine war have underscored the aviation industry's vulnerability to external shocks. Therefore, it is imperative to underscore the significance of resilience, adaptability, and strategic planning in effectively tackling future challenges.

The COVID-19 pandemic and the Russia-Ukraine war serve as prime examples of severe crises with far-reaching impacts, showcasing the industry's vulnerability to sudden and multifaceted disruptions. By drawing upon concepts displayed in the theoretical framework in Figure 2, including preparedness, adaptation, recovery, and continuity, and examining real-world responses to these crises, this study aims to identify the key strategic adaptations to build resilience during the dual crises.

# 3 Methodology

The objective of this research is to investigate strategies for building resilience in firms operating within high-risk industries, such as aviation, during dual crises. By collecting a vast amount of data and exploring these approaches, the study seeks to comprehend how airlines operating in the East-Asia region ensured resilience in the face of unforeseen challenges. Additionally, this research aims to analyze the long-term strategic initiatives implemented by airlines during COVID-19 and the Ukraine war. Through this investigation, the study seeks to discuss the strategies incorporated by airlines to achieve sustainable growth, resilience, and competitive positioning.

This study is conducted from a positivist point of view. From the perspective of research philosophy, positivism suggests that the world consists of a single objective reality that is independent regardless of the perception of individuals, and that can be explained and understood through empirical observation and trustworthy scientific methods (Rashid et al., 2019; Tenny et al., 2022). In a positivist approach to case study methodology, researchers like Eisenhardt (1989) emphasize the importance of empirical data in developing hypotheses and theories that can be tested and applied across different settings. Eisenhardt's model of theorizing is grounded in empiricism, where observation serves as the basis for theory development. In this approach, theory is induced from data, reflecting a belief that such theories closely mirror reality and are therefore more valid. Moreover, Eisenhardt underscores the objectivity of the observation process, aiming to achieve validity and reliability by minimizing bias (Eisenhardt, 1989; Paavilainen-Mäntymäki et al., 2011).

Yin (2009) proposes that case studies serve not only for exploration but also for explanation. While agreeing with Eisenhardt’s view of theory building, Yin suggests that case studies are best suited for the questions of “how” and “why” (Eisenhardt, 1989; Paavilainen-Mäntymäki et al., 2011; Yin, 2009). Historically, the case study has encountered skepticism regarding its efficacy as a scientific method. Single case studies, in particular, have been criticized for their limited generalizability, prompting

recommendations for employing multiple case studies to enhance the reliability of theory building (Dubois & Gadde, 2002). However, a single case study can have a valuable role in theory development, and they can be particularly acceptable when the case is unusually revealing, exemplar, or offering a unique research access, thus providing opportunities for significant theoretical insights. Single-case studies may even facilitate the development of more complex theories than multiple-case studies, as researchers can tailor their theories precisely to the nuances of the specific case (Yin, 2009; Eisenhardt & Graebner, 2007; Mariotto et al., 2013).
Over time, the scientific community has witnessed a shift in attitude towards case studies, driven by a growing realization that findings are not stable but rather evolve over time. Therefore, learning from individual cases has emerged as a strength rather than a limitation. This recognition underscores the importance of understanding the interaction between a phenomenon and its context which is best comprehended through in-depth case studies. As a result, the case study approach has become a usual method among scholars (Dubois & Gadde, 2002). Ultimately, the goal of single-case studies is not to uncover general laws but to provide deeper insights and explanations into particular phenomena, enhancing our understanding of complex realities (Yin, 2009; Eisenhardt & Graebner, 2007; Mariotto et al., 2013).

The abductive approach refers to exploring the connections between common language and concepts. This approach involves a reasoning process distinct from both deduction and induction approaches, making it particularly valuable for theory development in case research. The abductive logic empowers researchers to navigate the interconnectedness of different elements in their research work by continuously moving back and forth between empirical observations and theory, leading to an expanded comprehension of both theoretical frameworks and empirical phenomena. The theoretical framework is utilized in the abductive approach by serving as a cornerstone in the research process. The evolving framework in systematic combining is essential for guiding the research activities and providing a reference point for the researcher when entering the empirical world. The theoretical framework is pivotal for theory development and the establishment of new insights through systematic combining of theory and empirical observations (Dubois & Gadde, 2002; 2014). In this study, the theoretical framework, presented in Figure 2, provides key concepts that create integrity and function as a guideline throughout the whole research process.

## 3.1 Research Approach

Authors such as Dubois & Gadde (2002) and Paavilainen-Mäntymäki et al. (2011) suggest that case studies facilitate in-depth analysis of context in international business research, and that the interplay between a phenomenon and its context is best comprehended through an in-depth case study. Case studies provide unique ways to develop theory through profound insights into empirical phenomena and their context, and learning from a specific case should be considered an asset rather than a liability (Dubois & Gadde, 2002; Paavilainen-Mäntymäki et al., 2011).

The decision to utilize qualitative research methods in this thesis was grounded in the nature of the research questions and the complexity of the studied phenomena. Qualitative methods are well-suited for exploring complex experiences, such as strategic management responses in the aviation industry during crises, as they facilitate a thorough exploration of nuances and contextual factors that shape decision-making processes and organizational strategies (Lincoln, 2021). This research seeks to define and explore a specific phenomenon and delve as deeply as possible into the complex issues of airline resilience which could have only been implemented by focusing on the relevant data and details. The decision to employ qualitative research methods in investigating airline resilience within the context of the case company Finnair was driven by the identification of the complicated nature of the phenomenon under research. Qualitative research offers a deeper exploration into real-world problems, focusing on individual experiences, perceptions, and behaviors rather than numerical data points or interventions typical in quantitative research (Tenny et al., 2022). Moreover, qualitative research offers flexibility, allowing researchers to adapt their methods according to the unique research context. Qualitative methods like interviews and focus groups enable thorough exploration and comprehensive data collection, allowing the collection of diverse perspectives and insights from key stakeholders engaged in the building of resilience. By directly involving airline executives, qualitative research facilitates a closer examination of complex issues (Tenny et al., 2022). In this case study of airline resilience, qualitative methods help to identify motivations, challenges, and adaptive strategies incorporated by organizations such as Finnair in response to the dual crisis.

## 3.2 Single Case Study: Advantages and Limitations

A case study is a research method that aims to deeply explore a specific phenomenon within its real-life context. In single case studies particularly, researchers closely examine one unit of analysis. A case study is a widely adopted research design by international business scholars, and they are typically qualitative studies (Fletcher, 2008). According to Yin (2002), case study design is primarily chosen between multiple case and single case studies. Single case studies are chosen based on criteria like importance, uniqueness, typicality, ability to reveal insights or potential for long-term observation. The objective of a single case study is to offer a thorough understanding of the particular case under investigation, allowing researchers to examine and explore its complexities. By concentrating on a single case, researchers can uncover detailed insights and information that may not be achievable with broader research methods. Some advantages of employing a single case study include the in-depth insights, specificity to the context, flexibility in approach, and a focus on the individual case (Fletcher, 2008).
According to Yin (2009), there are five primary rationales why a researcher might select a single case study design: criticalness, extremeness, typicalness, revelatory power, or longitudinal possibility.
Firstly, a single case may represent a critical case for evaluating a well-defined theory, where the theory provides clear propositions and conditions for the evaluation. In such cases, the single case can confirm, challenge, or extend the theory, contributing significantly to knowledge and theory building, as well as the research in the whole field of study.

Secondly, a single case study might be suitable when the case represents an extreme or unique situation.

Thirdly, it can be used to study representative or typical cases, capturing everyday or common situations of an average individual or institution.

Fourthly, a single case study can serve as a revelatory case, allowing researchers to investigate phenomena previously inaccessible to scientific study.

Lastly, a single case study can involve longitudinal analysis, studying the same case at different points in time to observe changes (Yin, 2002).

This thesis was implemented as a single case study primarily due to the uniqueness and extremeness of the studied situation and phenomena. This case represents an extreme situation in which Finnair navigates the complexities of not single, but two significant crises simultaneously. Such a scenario presents a rare opportunity to study the strategic adaptations and resilience efforts of an airline operating in highly challenging circumstances. By examining Finnair's responses to these crises, the study can provide valuable insights into how airlines can adapt to and survive unprecedented challenges, offering lessons that can inform future research and industry practices.

However, single case studies have been criticized due to their vulnerability to misrepresentation, requiring careful investigation and sufficient data collection to minimize risks and ensure accuracy (Yin, 2002). Addressing this concern is crucial in research and must be taken into careful consideration. Therefore, this study has incorporated a large amount of data sourced from data from various locations such as internal interviews, financial reports, and documents to mitigate potential issues and fully represent the phenomena.

According to Yin (2002), there might be more than one unit of analysis included in the same single case study. The case study is conducted using an embedded case study design when attention is also directed towards subunits. For example, this occurs when the study focuses on a single organization, but the analysis encompasses outcomes related to specific services and staff members. However, if the case study only focuses on the general, global nature of an organization, a holistic case study design is used (Yin, 2002).

Both of these designs have their strengths and weaknesses. Yin (2002) argues that a holistic design may be a beneficial choice in cases when there are no logical subunits or when the relevant theory surrounding the case study is holistic in nature. However, in this design the common problem occurs when the case study is executed at an abstract level, thus lacking comprehensive measures and data. Another challenge arises when the nature of the case study changes throughout the research. While the initial study questions are considered in the beginning, the direction of the case study may evolve and change, leading to the emergence of different orientations and the evidence addressing different sets of research questions. This issue can be avoided by having a set of subunits, and the embedded design could be an appropriate choice in many cases. The embedded case study design also poses some challenges, particularly when the case study emphasizes the subunit level or some of the levels and ignores the larger, general unit of analysis (Yin, 2002).

This research is conducted by employing the holistic single case study design which allows focus on the organization's resilience in the dual crisis and enables an in-depth investigation of Finnair and the phenomena. The holistic approach allows the examination of Finnair's overall resilience strategies and responses to the dual crisis, and their impacts on Finnair's operations. A holistic single case study design offers a broad exploration within the specific context, making it an appropriate choice for this investigation. Furthermore, the unit of observation is the item or items that a researcher collects and observes in order to gain information of the unit of analysis (DeCarlo, 2018). The unit of observation in this study includes various sources of evidence such as interviews with the organization's executives, articles, documents, and financial reports.

## 3.3 Data Collection

Primary data for this research was collected from professional insiders: Finnair's executives located in East Asia, working in leadership positions. The two experts interviewed for this thesis possess extensive areas of responsibility: the Regional Head is responsible for the commercial activities of Southern China, Hong Kong, Macau, Taiwan, and Philippines. The Sales Director is responsible for Finnair's whole Asian market regarding the cargo operations. The interest in the specific East-Asia perspective developed during researcher's two semesters of study in East-Asian countries - Taiwan and Hong Kong – as part of the master's degree program, prior to writing this thesis. In addition to the relevance of the researcher's firsthand experience and understanding of East Asian cultures and business environments, East Asia has been particularly important to the case company Finnair due to its pre-pandemic long-term strategy, which was heavily influenced by the significant passenger volumes from the East-Asian regions and the geographic advantage of having the shortest flight route between Europe and East Asia.

One of the primary sources of information in case studies is interviews, which are crucial for gathering detailed insights. These interviews should be executed as guided conversations rather than strictly structured set of questions. During the interview process, researchers have dual responsibilities: to pursue their own research agenda outlined in the case study protocol and to pose questions in an unbiased manner that facilitates the exploration of relevant topics. It is essential to balance these objectives by asking open-ended questions in a polite and non-threatening manner. Focused interviews, conducted over a short period of time, may follow a predetermined set of questions derived from the case study protocol. It is essential to formulate specific questions in a way that expresses genuine curiosity about the topic (Yin, 2002).

The interviews for the thesis were conducted according to specified guidelines. Two interviews were conducted with durations of one hour and one and a half hours. The duration of each interview varied due to the open-ended structure of the interview questions and the organic flow of the conversations. The interviews were conducted in both English and Finnish languages to accommodate the preferences and language proficiency of each participant. The first interview took place on September 27th in Hong Kong with a Hong Kongese executive, while the second interview occurred on April 26th via Teams conference platform, with the researcher located in Finland and the Finnish executive in Hong Kong. These interviews were structured to gather comprehensive insights into the approaches and experiences of the two key executives at Finnair.

Additionally, online documents and textbooks play a significant role in data collection for case studies, requiring systematic searches for relevant materials and their careful selection However, already in early 2000's, Yin acknowledged the challenge posed by the abundance of online resources, highlighting the significance of critical reading and reliance on reliable sources (Yin, 2002). Nevertheless, the abundance of secondary sources can also be viewed as a strength, as it provides significant opportunity to verify all details through a comprehensive review and conduct a highly rigorous analysis within the framework of this study. According to Cheong et al. (2023), exploring secondary qualitative data can provide valuable insights that primary data analysis may not be able to uncover. Yin (2002) emphasizes the crucial role of documents in case study data collection, highlighting the significance of systematically searching for relevant documents. The case evidence used in this study is diverse, incorporating data from various sources such as textbooks, academic articles, documents, news articles, and financial reports, along with interviews. The sources are carefully selected to ensure reliability. For instance, they are sources reputable databases accessible through university libraries or well-known online newspapers. A substantial amount of data is also gathered from case company Finnair's official website, offering a vast amount of up-to-date information including travel restrictions, flight route changes, financial reports, and other relevant updates.

## 3.4 Data Analysis

When conducting the empirical part of the study, semi-structured interviews were utilized as the primary data collection method. This approach provided in-depth insights from key stakeholders within the East Asia aviation market and enabled the uniqueness of this study. The semi-structured interview format facilitated open-ended and fruitful discussions, allowing participants to share their perspectives, experiences, and strategic responses when navigating the challenges caused by the dual crises of the pandemic and Russia-Ukraine war.

The analysis of data in this thesis involved a combination of primary data obtained through interviews with key insiders at Finnair's East Asia operations and secondary data sourced from documents, articles, books, and reports. The structured interviews, while allowing for open-ended discussions, were designed to collect comprehensive insights into Finnair's strategic adaptations in response to crises. Complementing the primary data, secondary sources such as online documents and textbooks were systematically searched and selected. Overall, the integration of primary interviews and secondary sources facilitated a holistic understanding of Finnair's strategic management approaches during the dual crisis.

The analysis of the interviews against the theoretical framework involved a systematic examination of the key concepts of resilience proposed by various scholars, with a specific focus on preparedness and anticipation, adaptation and response, recovery and continuity, the process of bouncing back and forwards, and building resilience within the aviation industry's principles of safety, security, and operational efficiency. Each interview question was established through this lens to collect meaningful insights into how Finnair navigated through the dual crises of the COVID-19 pandemic and the Russia-Ukraine war, particularly in the East Asia region. For instance, responses to questions regarding operational challenges and strategic adaptations illustrated how the airline prepared for and responded to disruptions. Insights into customer engagement and safety measures provided valuable information on the airline's adaptability and response to changing market dynamics. Additionally, discussions on partnerships and financial strategies offered insights into Finnair's resilience-building efforts and its ability to maintain financial stability in the middle of the crises. Furthermore, responses regarding long-term plans and vision displayed the airline's commitment to sustainable growth and resilience in the East Asia market. Overall, interviews aligning with the theoretical framework offered a comprehensive understanding of Finnair's capabilities and strategies to recover from the dual crises and build resilience in the East Asia region.

## 3.5 Validity and Reliability

According to Yin (2002), validity and reliability are essential aspects to ensure the quality of empirical social research. One crucial aspect is to construct validity, which involves creating accurate operational measures for the concepts under the study. Case study research often faces challenges in this matter, as critics of case study highlight the reliance on subjective judgments and insufficiently operationalized measures. To address this, researchers should use multiple sources of evidence, establish a solid chain of evidence, and review the draft case study by key informants. Internal validity, particularly relevant for explanatory or causal studies, focuses on establishing causal relationships between conditions. Moreover, the aspect of external validity concerns the degree to which the findings of a study can be applied to other contexts beyond the specific case under investigation. However, generalizability has been a contentious challenge in case studies due to concerns that single cases may offer a limited basis for generalization. Finally, reliability concerns ensuring that study operations, including data collection procedures, can be replicated with consistent results. The aim is to minimize errors and biases, ensuring that later investigators following the same procedures would make similar findings and conclusions as the original study (Yin, 2002).

Several ethical considerations played a critical role in ensuring the integrity and credibility of this research process. Obtaining informed consent was a key ethical consideration, especially when conducting interviews or other interactions with individuals associated with Finnair. Ensuring that the participants were fully informed about the research purpose and procedures was crucial for ethical research conduct. The published material only includes the statements and information for which permission has been obtained. All the secondary material is sourced from online publications that are accessible to audience. Respecting cultural sensitivities was an important ethical consideration, particularly in the context of Finnair's East-Asia operations. Acknowledging and honoring diverse cultural backgrounds, norms, and values when engaging with participants or interpreting findings is essential for ethical research practice. Maintaining transparency in reporting research findings was also taken into careful consideration. Providing an accurate representation of the data collected and avoiding any limitations or biases in the study were essential components of this research.

In addition to the considerations outlined above, it's crucial to address the issue of sample size. Finnair is a large organization with over five thousand employees (Statista, 2023), yet only two individuals were interviewed for this study. While these interviewees possess significant expertise in the subject matter, representing valuable insights, it's essential to acknowledge that a larger and more diverse sample could have provided richer data and a broader range of perspectives. Including executives from various countries within Finnair's East-Asia market could have offered additional insights. It's important to note the potential biases caused by the limited sample size for the sake of transparency in the research. Due to this limitation, extensive secondary data analysis was employed to mitigate this shortcoming to the greatest extent possible. By addressing these ethical considerations thoughtfully and consistently throughout the research process, the study was conducted ethically and responsibly, contributing meaningfully to the field of aviation resilience.

# 4 Findings

The pandemic left a profound and far-reaching impact on the nations and economies worldwide, as well as on the global aviation industry. Travel restrictions and lockdown measures resulted in significant disruptions to the supply chain and caused substantial revenue losses in firms. Passenger traffic experienced a sharp decline, leading to reduced capacity utilization, financial challenges, and job losses within the industry (Dube et al., 2021). Finnair confronted the consequences of this health crisis, only to survive it and confront another crisis, emerging from what seemed to be its worst-case scenarios.

The findings section of the study begins with providing an overview of Finnair, the case company, before delving into an analysis of the dual crises posed by the COVID-19 pandemic and the Russia-Ukraine war. Utilizing the theoretical framework outlined in Figure 2, this analysis proceeds in chronological order. It begins with the examination of the impacts of the pandemic and the strategic adaptations implemented in response, followed by an exploration of the impacts of the Russia-Ukraine war and the strategic adaptations executed, and finally analyzing the combined impacts of these crises. Aligned with the theoretical framework, the analysis encompasses various stages, including preparedness and anticipation, adaptation and response, recovery and continuity, and the process of bouncing back and forward aligning with the aviation priorities of safety, security, and operational efficiency. Additionally, it addresses the crucial aspect of building resilience and adapting to the new normal within the aviation industry. The primary objective of this analysis is to respond to the thesis's core purpose: to investigate how firms operating in high-risk industries like aviation can effectively build resilience in the face of dual crises.

## 4.1 Case Company

Founded in 1923, Finnair is Finland's flagship airline and one of the oldest airlines in the world (Finnair, 2024). A member of the Oneworld alliance holds a prominent position in the global aviation industry, achieving 24th place in the Skytrax World Airline Awards ranking in 2023 (World Airline Awards, 2023). Operating from Helsinki Airport, Finland, Finnair has connected Europe and Asia through its extensive domestic and international flight network. With a focus on high-quality service, efficient operations, and sustainability, Finnair positioned itself as a bridge between the two continents (Finnair, 2022). Initially a national carrier serving domestic routes, Finnair successfully shifted its focus to international expansion and transit traffic, capitalizing on Helsinki's strategic location. However, the profitability of Finnair has been significantly impacted by the COVID-19 pandemic and the Russian-Ukraine War (Unnikrishnan, 2023).

Sustainability lies at the core of Finnair's mission, with a long-term vision of achieving carbon neutrality by the end of 2045. With sustainability as a guiding principle, Finnair aims to minimize environmental impact across all sectors of its business. Operating from its transfer-friendly hub at Helsinki Airport, Finnair serves over 80 destinations across Finland, Europe, Asia, North America, and Middle East with a fleet of over 70 aircraft, predominantly consisting of Airbus models. Capturing the essence of a Modern Nordic Airline, Finnair's brand is characterized by its dynamic and forward-thinking nature, underscored by a commitment to simplicity and functionality (Finnair, 2024).

Over the years, Finnair’s strategy has focused on the growing passenger volumes between Asia and Europe, leveraging the advantageous geographic location of its Helsinki hub, which offers the shortest route between Europe and North and East Asia. The strategic position which had been in the making for two decades, allowed Finnair to serve the majority of its routes in twenty-four-hour rotations, enabling the high utilization rate of aircraft and optimal crew allocation. The shortest route between the two continents flies over the airspace of Russia, and the utilization of this airspace saves up to four hours in flight time compared to the flights departing from European and

Middle Eastern hubs (Evli, 2020; Cohen, 2022). Since the closure of Russian airspace, flight durations have notably increased. For instance, routes such as Helsinki to Tokyo, previously nine-hour journey, now extends to as much as thirteen hours (Rains, 2022). The airline now makes a detour around Russia, either taking the southern or northern route depending on weather conditions. The prolonged flight duration has posed several challenges that threaten the outlook of Finnair: the detour around Russia has led to increased fuel costs, cabin crew costs, and navigation costs, among other expenses (Finnair, 2022).

## 4.2 Covid-19 Pandemic

According to Finnair’s Regional Head and Sales Director, interviewed for this research, the airline encountered significant operational challenges during the COVID-19 pandemic. These challenges necessitated significant strategic adaptations to maintain the continuity of operations and ensure customer satisfaction. The Regional Head emphasized the considerable difficulties caused by rigorous travel restrictions in East Asia, particularly in Mainland China and Hong Kong, where the interviewed executives are based. These restrictions drastically affected the travel volumes and complicated the airline’s operations in the region.

During the years of pandemic, the situation was further worsened due to Finnair's operational structure. Since 2015, Finnair has outsourced its cabin crew for Hong Kong flights to OSM Aviation, employing local cabin crew members based in Hong Kong alongside Finnish pilots (Tanninen, 2022). This arrangement became problematic under Hong Kong's COVID-19 regulations, which imposed different requirements for foreign-based and locally-based crew members. In 2022, the Hong Kong government introduced updated cabin crew member regulations stating that “a non-locally based aircrew member must not be arranged by his airline to be on board the same flight with a locally based aircrew member employed by his airline” (HKBAC, 2022). In response to this regulatory environment, Finnair was compelled to suspend all Hong Kong flights for five months starting in February 2022, resuming operations in July of the same year (Seet, 2022). Despite this suspension, Finnair managed to operate four cargo flights per week to Hong Kong in February, increasing to five in March (Tanninen, 2022).

Furthermore, Hong Kong authorities established a regulation that imposed a ban on passenger flights if a certain number of COVID-positive passengers arrived on the airline's flights within a specific time window. Unfortunately, Finnair received such a ban in January 2022 when Hong Kong authorities detected twelve imported COVID-19 cases on a flight in late December 2021. This resulted in two-week suspension of Finnair’s flights, along with suspensions for Airlines and Cebu Pacific Air (Møller, 2022).
Throughout the pandemic, Hong Kong maintained some of the most rigorous travel restrictions globally. Citizens from eight countries, including the United States and the United Kingdom, were prohibited from travelling to Hong Kong under any circumstances. Travelers from permitted countries faced a mandatory, self-covered hotel quarantine lasting fourteen or twenty-one days upon arrival (Møller, 2022).

Hong Kong serves as a major hub in East Asia, making it an essential destination for Finnair and other airlines, largely due to its strategic location and exceptional connectivity. Hong Kong International Airport functions as a global hub, facilitating air travel connections to various destinations worldwide. A key aspect of the airport’s brand is its claim of being able to reach half the world's population within five hours of flying time. Moreover, Hong Kong's status as one of the world's leading aviation hubs underscores its importance as a major link between the East and the West, and a gateway to China (HKIA, 2017; French, 2022).

### 4.2.1 Preparedness & Anticipation

In late February 2020, Finnair announced a profit warning due to "the fast-developing situation with the coronavirus and its wider than originally estimated impact on the global aviation market" (Yle, 2020). Earlier that month, the carrier had anticipated that the financial impact of COVID-19 would be “relatively limited,” despite the suspension of flights to China which was expected to last until the end of the first quarter (Yle, 2020). In the same announcement, Finnair withdrew its forecast of a four percent capacity growth for 2020 and outlined plans to reduce costs by forty to fifty million euros, targeting personnel, sales, marketing, and development expenses (Yle, 2020).

In June 2020, airline revealed its intentions of extending temporary layoffs until March 2021, affecting approximately 6,100 employees in Finland. In May 2020, Finnair had transported only 26,700 passengers, representing a significant decline of 97.9 percent compared to the same period the previous year (Yle, 2020).

The COVID-19 pandemic significantly impacted the tourism industry, causing widespread layoffs during the times of strict travel restrictions and lockdowns. Subsequently, as travel began to rebound, the industry faced significant challenges in recruitment (Tourism Recovery, 2022). Research by Tourism Recovery (2022) indicates that employees in the tourism sector felt a lack of reliable communication from their managers during the crisis, which may have affected their willingness to return to the industry post-pandemic. Williams et al. (2017) echo these views, emphasizing the importance of fostering a culture of awareness in human resource practices.

In the first fiscal quarter of 2020, Finnair faced a sudden and dramatic shift in its operational environment due to the global COVID-19 pandemic, leading to significant impacts on both its operations and financial performance. Finnair's revenue decreased by 16% in the first quarter, primarily due to the outbreak of the pandemic. The number of passengers decreased by 15.6%, reflecting the pandemic's effects across all traffic areas. Market capacity between Helsinki and European destinations, especially Spain, Italy, and within Finland, also declined. Initially, demand on European and domestic routes was strong, but it was heavily impacted by route cancellations and travel restrictions later in the quarter (Finnair, 2020).

In response to the crisis, Finnair implemented several cost-reduction measures. These included temporary layoffs for all employees, adjustments to the network, cuts in sales and marketing expenses, and reductions in supplier agreements, IT costs, and investments. Management salaries were reduced by 15%, and the Board of Directors waived its compensation. Despite these efforts, Finnair's comparable operating result significantly deteriorated compared to the previous year, resulting in an operating loss of €91.1 million. The company issued profit warnings in both February and March as the situation rapidly worsened (Finnair, 2020).

Finnair anticipated a gradual recovery in aviation from July onwards, expecting the passenger numbers to return to 2019 levels in two to three years. The company prepared for prolonged temporary layoffs and resource adjustments to align with the decreased traffic. Additionally, Finnair assessed the impact of the coronavirus on its long-term strategy, including financial targets and fleet investments. Despite the challenges, Finnair remained committed to seeking sustainable, profitable growth and acknowledged the importance of its personnel, customers, brand, and ownership structure in overcoming the crisis during the year 2020 (Finnair, 2020).

### 4.2.2 Adaptation & Response

In the second fiscal quarter of 2020, Finnair initiated a gradual adjustment of its operations in response to the ongoing impact of the COVID-19 pandemic. The airline began the quarter with a substantial reduction in capacity, operating at approximately 3% of the previous year’s level. Despite this, Finnair maintained critical flight connections to Finland, with cargo flights playing a crucial role in supporting supply chain security and generating additional revenue. Over 70% of Finnair's revenue in the second quarter was derived from cargo operations (Finnair, 2020).

Finnair reported significant losses for Q2, consistent with the airline's expectations. Revenue decreased by 91.3%, and the comparable operating result was a loss of €174.3 million. The airline processed flight ticket refunds totaling more than €270 million for canceled flights, issuing refunds to over 650,000 passengers. To manage this, Finnair employed additional resources and automation. Fuel costs also decreased in line with the reduced volume of operations. Finnair's cost savings program aimed to achieve permanent annual cost savings of €80 million by 2022. The program targeted various areas such as real estate costs, aircraft leases, and IT costs (Finnair, 2020).

Indeed, Finnair took several measures to minimize costs and maintain financial resilience. By the end of 2020, approximately 80% of its workforce was on furlough, and the airline permanently reduced 1,000 positions from its pre-pandemic workforce of around 6,700 employees. These job cuts primarily affected land operations and headquarters functions, representing about 30% of the workforce in those areas prior to the pandemic. In addition to workforce reductions, Finnair underwent a comprehensive business reorganization. This included redefining cross-functional processes, maximizing automation, and enhancing digitalization to significantly improve organizational productivity (Lewis, H., 2023). Executives in East Asia reported that these cost-cutting measures also involved downsizing offices and reducing travel expenses. Finnair adopted a work-based implementation strategy for furloughs, adjusting employee furloughs based on available work to maintain an optimal balance and avoid both overstaffing and understaffing. Despite these efforts, the airline was compelled to reduce its workforce by approximately 1,000 positions in late 2020 (Yle, 2020). As passenger numbers began to increase again, the tourism sector, including aviation, faced significant recruitment challenges (Tourism Recovery, 2022). Nevertheless, the strategic preparedness approach enabled the airline to adapt its staffing resources in real-time, mitigate labor costs, and enhance organizational resilience in the face of the crisis.

The introduction of mandatory mask-wearing by Finnair marked a significant step in the airline's adaptation to the COVID-19 pandemic. Both staff and passengers were required to wear face masks during flights, following a similar policy announced by Helsinki airport operator Finavia for its staff across all Finnish airports. The mask became mandatory for Finnair's flight crew on May 18th, 2020, with the initial plan to remain in place until the end of August of the same year. Passengers were expected to bring their own masks onboard, although Finnair assured that masks were also available at airports. Additionally, the airline maintained a supply of masks onboard the aircraft as a precautionary measure. Children under the age of seven were exempt from the mask requirement, and other passengers could request exemptions in advance for health reasons. Finnair emphasized the importance of maintaining a safe environment onboard, encouraging individuals with COVID-19 or other respiratory infection symptoms to avoid traveling. Additionally, Finnair implemented measures to prevent the spread of the virus, including reducing passenger density on flights and adjusting boarding procedures to minimize contact (Pajunen, 2020).

In early 2021, an incident occurred on a Finnair flight that highlighted the complexities and controversies surrounding mask usage during the pandemic. A passenger chose not to wear a mask throughout the one-hour and twenty-minute flight, opting instead to consume nuts despite repeated requests from the crew to comply with the airline's guidelines. This refusal led to a six-month flight ban for the passenger (Alanne, 2021). This incident underscored the seriousness of the pandemic and the significance of mask policies at the time. It also emphasized the importance of effective communication, sensitivity, and transparency from companies. Despite Finnair's efforts to communicate its mask policy and regulations, this incident revealed the challenges of navigating novel situations like the COVID-19 pandemic. On 25th of April 2022, Finnair discontinued the mandatory use of masks on its flights, unless required by the authorities of the destination or departure country (Pekkonen, 2022).

During the pandemic, the implementation of mandatory mask-wearing by airlines sparked discussions concerning both legal and practical issues related to customer satisfaction and safety. Due to the discourse surrounding the widely discussed topic at the time, legal experts stepped forward to assert that Finnair had the right to enforce these safety rules to protect its passengers and personnel. However, questions arose regarding the definition of an acceptable mask and the protocol for passengers who declined to wear one due to health concerns. Additionally, there was confusion surrounding the treatment of passengers who had purchased tickets before the mask rule was enforced. Moreover, the discourse involved comparisons with other sectors in

Finland such as national rail services and the retail sector, which had not implemented mandatory mask-wearing. As the debate about mask-wearing continued during the pandemic, businesses and organizations had to consider factors such as masks availability and the impact mandatory masks might have on their operations (Yle, 2020).

During the pandemic, several countries in Asia implemented some of the strictest COVID-19 policies and travel restrictions in the world, significantly impacting global travel (Crabtree, 2020). To ensure the continuity of Finnair's operations in China to continue, the Chinese government imposed additional requirements on airlines. In response to the challenges posed by China's COVID-19 regulations and to facilitate the continuation of Finnair's weekly flight to Shanghai during the pandemic, Finnair collaborated with the Finnish health service company Terveystalo to offer a service package to passengers transiting through Helsinki Airport from a third destination and bound for China. Customers had the option to purchase the testing package in advance through customer service, at the check-in counter or transfer desk in Helsinki Airport, or upon arrival at Helsinki Airport from their originating destination. Priced at two hundred euros per person, the package included various services. Upon arrival at Helsinki Airport, Finnair's ground crew directed passengers to the testing area, which was operational only on the previous evening prior to the weekly Shanghai flight. Health care staff conducted PCR tests from nose and throat and IgM tests through a blood sample. Passengers transferring from domestic flights in Finland to China were exempt from testing in Helsinki. After testing, passengers had approximately sixteen hours at Helsinki Airport and could collect a comfort package containing essentials from Finnair's transfer desk. Travelers with negative results could then obtain their boarding pass to Shanghai the following morning and complete the Electronic Health Declaration form required by Chinese authorities. In the event of a positive result, individuals were required to undergo a ten-day quarantine in a hotel at their own expense. The ground crew at the transfer desk provided assistance during the transfer period (Baitours, 2020). Finnair's operations in China hold significant strategic importance for the airline, primarily due to the substantial passenger volumes from the region, dating back to the establishment of Finnair's China flights in 1988 (Singh, 2023).

### 4.2.3 Recovery & Continuity

In the third quarter of 2020, Finnair continued to navigate in turbulent operational landscape due to the ongoing impact of COVID-19. Strict travel restrictions remained in force, causing the airline to operate at approximately 10% of its usual capacity. Despite the weakened operational capacity, demand for cargo services remained strong. Finnair reported significant losses in Q3, aligning with the airline's expectations. Revenue decreased by 88.7% compared to the previous year, resulting in a comparable operating loss of €167.0 million. Despite the challenging operating environment, Finnair achieved a record-breaking Net Promoter Score (NPS) of 56 in Q3. This notable increase indicated that customers appreciated Finnair's efforts in implementing health and safety measures, as well as the efficiency of its customer care services (Finnair, 2020).
Continuing its focus on cost-saving initiatives, Finnair raised its target for annual permanent cost savings to €140 million beginning in 2022. These savings efforts included comprehensive reviews of organizational and operational processes, alongside negotiations with employees that resulted in a reduction of 1000 jobs. Finnair strengthened its cash position through various financing transactions, including the issuance of a new €200 million hybrid loan. Fuel costs decreased in line with the decrease in traffic volumes (Finnair, 2020).

In the first quarter of 2021, Finnair continued to face more global travel restrictions, resulting in limited operational capacity. During this period, the airline operated approximately 75 passenger flights per day, carrying around 3,000 passengers daily, representing only about 10% compared to early 2020 levels. However, Finnair experienced a strong quarter for cargo, conducting 547 cargo-only flights, with March emerging as a record month in terms of cargo revenue. The sustained demand for cargo services also facilitated the operation of long-haul passenger flights. In March 2021, the

European Commission announced its approval of €351.38 million in support for Finnair, marking a significant milestone in ensuring the airline's survival amidst the COVID-19 pandemic. This financial assistance, provided in the form of a hybrid loan, aimed to compensate for the substantial losses Finnair had faced during the pandemic, particularly between March and December 2020, when travel restrictions severely impacted its international operations. Additionally, the Finnish government approved further financial aid of up to €400 million from an existing budget, underscoring the importance of Finnair's sustainability for Finland's economy and global connectivity (European Commission, 2021; Jokinen, 2020). During the first quarter, Finnair aimed to exceed its cost savings target, raising it to €170 million from the initial €140 million. The airline’s strategic focus remained on building long-term competitiveness by emphasizing cost efficiency, customer and product enhancements, agility, and flexibility while maintaining a committed workforce (Finnair, 2021).

In the second quarter of 2021, Finnair dedicated its efforts to preparing for the gradual recovery of air travel by bringing its fleet back to Helsinki and continuing cabin crew training programs. Operating approximately 70 flights per day on average, Finnair witnessed a slight increase in passenger numbers compared to Q1. Despite the ongoing challenges, customer satisfaction remained high, with a Net Promoter Score (NPS) of 45. During this period, Finnair entered into a joint business agreement with Chinese airline Juneyao Air on the Shanghai route, enhancing connectivity and cooperation in the region. Additionally, the airline introduced new ticket options, offering customers greater flexibility and choice in both economy and business travel classes. Finnair's Cargo business continued to demonstrate resilience, with cargo revenue accounting for over half of the total revenue (Finnair, 2021).
The company surpassed its cost savings target, aiming for permanent savings of €200 million based on 2019 operational volumes. Despite continued challenges, Finnair gradually reintroduced services and increased flight frequencies, although bookings remained below pre-pandemic levels (Finnair, 2021).

In the third quarter of 2021, Finnair experienced both positive developments and challenges in the aviation industry. The airline achieved positive operating cash flow for the first time since Q4 2019, signaling an improvement in its financial health.
Passenger numbers increased notably, with a rise in bookings, particularly for leisure travel within Europe. Finnair's Cargo business experienced exceptional demand due to global supply chain disruptions, with air freight prices more than doubling compared to pre-pandemic levels. Cargo operations played a significant role in supporting long-haul passenger flights, with one-third of long-haul flights operating as cargo-only.
Several regions, including the European Union, the United Kingdom, and Thailand, began reopening for fully vaccinated travelers, contributing to an anticipated increase in capacity towards the end of 2021. Finnair's strategy focused on capturing market growth, modernizing its premium offering, improving cost efficiency, and emphasizing sustainability as a key differentiator (Finnair, 2021).
In the fourth quarter of 2021, Finnair experienced a mixed landscape of recovery and new challenges. While the long-haul markets began to reopen, with significant improvements in passenger numbers, particularly in Europe and the United States, the emergence of the COVID-19 variant towards the end of the quarter reintroduced tighter travel restrictions in several countries, decreasing demand for air travel once again (Finnair, 2022).

In February 2022, Finnair announced its highly anticipated Premium Economy product for long-haul passengers coinciding with the gradual increase in passenger demand. The brand-new cabin class featuring a capacity of twenty-six seats per aircraft offers a 50% increase in space compared to Economy Class. According to the airline, it has comfortable features such as memory foam cushions, deep recline, whole leg supporting leg rest, plenty of storage, noise-cancelling headsets, and improved in-flight entertainment systems. The new cabin introduced two meal services with elevated three-course meal options and complimentary beverages throughout the flight, enhancing the overall travel experience. Collaboration with Finnish design brand Marimekko for unique textiles in Premium Economy further elevates the ambiance of the cabin, adding warmth and style. Furthermore, as part of Finnair's €200 million investment in its long-haul aircraft fleet, the Economy Class was refreshed to provide passengers with an improved onboard experience (Cision, 2022; Ollila, 2022).

According to the Regional Head, Finnair's collaborations with other stakeholders, such as hotels, travel agencies, and local organizations, remained active during the pandemic. These partnerships played a crucial role in sustaining Finnair's operations, as they facilitated the continuity of business relationships even when passenger flights were disrupted. The solidarity and shared efforts of building resilience demonstrated by Finnair and industry partners during the crisis deepened their relationships and improved future collaboration. The emphasized communication, joint efforts, and mutual support strengthened both customer and partnership relations in the East-Asia region.

### 4.2.4 Bouncing Back & Forward

Throughout the uncertainties of the COVID-19 pandemic, Finnair navigated a complex landscape of challenges, demonstrating a commitment to bounce back from the crisis. In the second fiscal quarter of 2020, Finnair initiated the gradual adjustment of its operations, maintaining critical flight connections for Finland while operating at only around 3% of its capacity compared to the previous year. Despite the serious losses during this period, Finnair processed flight ticket refunds totaling more than €270 million for cancelled flights, addressing customer concerns and showcasing its determination to bounce back and forward. The aim for resilience was further evident in the third quarter of 2020, as Finnair continued to face significant challenges due to ongoing travel restrictions, now operating at only around 10% of its capacity. However, the airline's cargo demand remained strong, highlighting its ability to adapt and find opportunities for growth during turbulent times (Finnair, 2020).

Cargo operations not only contributed significantly to revenue but also supported long-haul flights, especially in Asian routes where passenger demand remained low due to strict travel restrictions. Finnair's competitive advantage in the East-Asia market was significantly supported by its cargo operations, which provided crucial support during the crisis. The demand for cargo transportation remained relatively stable compared to the volatile passenger segment, allowing Finnair to maintain a steady source of revenue and minimize the impact of reduced passenger traffic. As Finnair’s Cargo Sales Director pointed out, the income from cargo flights balanced out the expenses of running passenger flights with low occupancy rates. Without the support from cargo operations, Finnair would have faced significant challenges in sustaining flights with minimal passenger numbers, for instance, flying from Helsinki to Japan with just two passengers aboard. This underscored the importance of diversification and the role of cargo operations in enhancing Finnair's competitiveness and resilience in the East-Asia market during times of crisis.

Furthermore, Finnair's Net Promoter Score (NPS) rose to a record high level of 56 in Q3, reflecting positive customer responses and indicating trustworthiness as an airline. As Finnair progressed into the third quarter of 2021, it experienced significant increases in passenger numbers, signaling a positive trend of recovery. Through these resilience-building actions, Finnair demonstrated its ability to adapt, respond, and ultimately bounce back from the challenges posed by the COVID-19 pandemic, confirming its commitment to sustainability and growth in the aviation industry (Finnair, 2021).

## 4.3 Russia-Ukraine War

Finnair faced significant operational challenges due to the Russian invasion of Ukraine and subsequent Russian airspace restrictions. According to Finnair’s Head of Network Strategy and Development, these challenges made the pandemic's difficulties seem like "a walk in the park" (Casey, 2023). The executive noted that Finnair’s most significant strategic asset—its flight routes between Europe and Asia, which utilized Russian airspace—had become a liability due to the geopolitical situation. Before the pandemic, Finnair’s key strategy involved connecting Europe and Asia via the shorter northern route over Russia. However, the airline was forced to adjust its strategy temporarily and focus on North American destinations such as Dallas, Chicago, Los Angeles, New York, and Seattle, due to effective COVID-19 travel restrictions particularly affecting its Asian routes in 2022 (Casey, 2023; Singh, 2023). The head of network strategy and development underscored the necessity of restructuring Finnair’s Asia-centered network and revealed that the airline had even considered establishing an alternative hub in Anchorage, Alaska. Moreover, the invasion of Ukraine made many flight routes to Asia financially unsustainable due to operational challenges (Casey, 2023).

### 4.3.1 Preparedness & Anticipation

In February 2022, Finnair estimated that its average capacity would remain 15-20% below the pre-pandemic level of 2019. Factors such as the exceptionally high cost of jet fuel, the ongoing indefinite disruption caused by the closure of Russian airspace, and accelerating inflation contributed to uncertainties regarding the operating environment. Additionally, the overall economic uncertainty affected the predictions of travel demand growth for the year. Despite anticipating a significant improvement in revenues, Finnair did not expect to reach pre-crisis revenue levels and reported a notable operating loss of approximately €164 million for the full year 2022. Although the airline achieved a positive operating profit in the fourth quarter of 2022, it acknowledged the long and challenging path toward sustainable annual profitability. In response to these challenges, Finnair began implementing a revised strategy in 2022 aimed at restoring profitability, with a focus on achieving a comparable earnings margin of 5% by mid-2024 (Kaminski-Morrow, 2023; Salonen, 2023).

In the first quarter of 2022, Finnair faced significant challenges due to the impacts of COVID-19 variants on travel demand and the closure of Russian airspace. The variants caused a notable decrease in travel demand in January and February, leading to operational complexities and increased staff costs. However, a significant rebound in travel demand was observed after the Finnish winter holidays in February, particularly in European, North American, and South Asian markets, while travel to North and East Asia remained limited due to strict restrictions (Finnair, 2022).
Operational adjustments were necessary to address longer routing caused by airspace closures, resulting in increased fuel, staff, and navigation costs. To mitigate the financial impact, Finnair implemented a new €60 million cost-saving program in addition to the existing €200 million program, focusing on operational efficiency and renegotiation of agreements. Additionally, the company initiated the leasing of aircraft and crews to other airlines for the summer season, providing employment for 600 Finnair employees and generating additional income (Finnair, 2022).

#### 4.3.2 Adaptation & Response

In the second quarter of 2022, air travel demand continued to strengthen, driven particularly by increased passenger numbers in Europe and the United States. However, the quarter was marked by historically high fuel prices and the prolonged closure of Russian airspace. Despite the robust demand, Finnair reported a negative comparable operating result of -€84 million, primarily due to the significant negative cost impact of fuel prices. Additionally, the strengthened US dollar further compounded the fuel bill. Despite these challenges, Finnair's revenue rose to €550 million (Finnair, 2022).
Travel restrictions particularly affected North and East Asian traffic, where capacity remained limited to about 30% compared to 2019 levels. To address financial concerns,

Finnair withdrew €290 million of the €400 million capital loan from the Finnish government. Increased uncertainty stemming from various global factors, including the COVID-19 pandemic, the war in Ukraine, energy price volatility, foreign exchange fluctuations, and inflation, urged Finnair to develop a new strategy aimed at enhancing profitability and strengthening its financial position. Despite these challenges, Finnair remained committed to providing a positive in-flight experience for passengers, leveraging investments made during the pandemic to improve customer satisfaction. (Finnair, 2022).

Finnair adjusted its network by establishing new partnership with a fellow Oneworld alliance airline, Qatar Airways, increasing its capacity to the Middle East. This collaboration involved launching daily services from Helsinki, Stockholm Arlanda, and Copenhagen to Qatar’s capital city Doha in December 2022, and opening extensive transit flight options across the Middle East, Africa, and Oceania (Casey, 2023). The airline emphasized that this would be a long-term strategic cooperation aimed at mitigating challenges posed by increased fuel prices, the COVID-19 pandemic, and the ongoing Russia-Ukraine war (Reuters, 2022). Additionally, Finnair aimed to enhance connecting services between the United States and India via Helsinki due to high passenger volumes between these regions. The airline also planned to add flights within Scandinavia and the Baltics to balance the seasonality of its network. The objective of these adjustments was to formulate a financially sustainable traffic plan. As Finnair undertook these restructuring efforts, the vital significance of agility and flexibility became increasingly evident (Reuters, 2022; Casey, 2023).

Moreover, Finnair and Qantas, the flag carrier of Australia, agreed to a two-phase collaboration during the spring 2023. This collaboration included a wet lease of two Airbus A330 aircraft to Qantas for two years period. Subsequently, Finnair would dry lease two A330s to Qantas for 2.5 years starting in 2025. This partnership was aimed at optimizing Finnair's Airbus A330 fleet utilization due to the limitations caused by the closure of Russian airspace. During the wet lease period, Finnair pilots operate flights from Helsinki to Singapore and Bangkok, then transition to Qantas flights between Singapore, Bangkok, and Sydney. Cabin crew and maintenance are handled by Finnair partners at Qantas destinations. [1] The collaboration enhanced the efficiency of Finnair's A330 fleet deployment and was another successful example of Finnair committing to strengthen its relationships with Oneworld partners as a part of its updated strategic approach (Cision, 2023).

### 4.3.3 Recovery & Continuity

In the third quarter of 2022, Finnair witnessed a continuation of the trends observed in the first half of the year, with a strengthened demand for air travel. This supported total revenue, which saw a clear increase compared to both the previous year and the previous quarter. However, the quarter was also marked by accelerated inflation and high fuel prices, with the negative cost effect of fuel prices amounting to approximately 125 million euros compared to the previous year (Finnair, 2022).
Despite challenges such as COVID-19 restrictions and the prolonged closure of Russian airspace impacting travel to North and East Asia, Finnair achieved a positive comparable operating result of 35.2 million euros for the first time since Q4 2019. However, the net income remained at -37.2 million euros, primarily due to the significant financial costs linked to notable debt, and exchange rate losses due to the strengthening of the US dollar. In September, Finnair announced a new strategy aimed at restoring profitability, focusing on achieving a more geographically balanced network, fleet optimization, revenue strengthening, partnership utilization, cost reduction, and sustainability initiatives (Finnair, 2022).

[1] *A wet lease refers to one airline leasing another an aircraft, crew, maintenance, and insurance. A dry lease only includes the aircraft itself (Cision, 2023).*

The goal was to reach a comparable operating profit of at least 5% from mid-2024, aiming to restore pre-pandemic levels. In terms of strategy implementation, Finnair made progress across various areas, including network expansion with new routes and partnerships, negotiations with personnel to achieve unit cost targets, streamlining of the organizational structure, and efforts to increase digital sales and efficiency in distribution channels (Finnair, 2022).

Finnair responded to the prolonged closure of Russian airspace by implementing a series of commercial and operational adjustments aimed at ensuring its survival in the face of the geopolitical crisis. These adjustments included a shift in its network, with a greater emphasis on flights to the Middle East and India rather than East Asia, along with necessary cost-cutting measures and temporary fleet reduction initiatives, such as leasing aircraft to other carriers. Notably, Finnair's decision to wet lease two Airbus A330s and their crews to Qantas Airways underscored the airline's anticipation of the prolonged closure of Russian airspace. Finnair's former CEO, Topi Manner, pointed out that this strategic decision enables the airline to keep the possibility of restarting flights to Asia open, even if the airspace remains closed for several years. This forward-looking approach was crucial given the uncertainty surrounding the duration of the Russian airspace closure which could extend for five years or even a decade, according to Finnair's experts (Russel, 2023). The airline's strategic adjustments aimed to position itself for sustainable growth in the aftermath of the dual crisis.

*"We have, however, an excellent foundation to build on: our excellent, differentiating product, strong safety culture, strong brand, our high-quality execution capabilities, our commitment to sustainability as well as our track record of adapting and renewing ourselves"* (Topi Manner, the former CEO of Finnair, Airline Weekly, 2023).

### 4.3.4 Bouncing Back & Forward

In the fourth quarter of 2022, Finnair managed to achieve a positive comparable operating result for the second consecutive quarter, amounting to 18 million euros. This achievement, coupled with the return to profitability in the net result for the first time since Q4 2019, marked a notable progression towards the company's financial recovery. However, the path to full-year profitability remained complicated, given the uncertainties in the operating environment, including the high jet fuel prices, inflation, and the closure of Russian airspace (Finnair, 2023).

Despite these challenges, Finnair entered a recovery phase in the fourth quarter, marking the end of a three-year crisis period. Positive developments, such as the reopening of travel in Japan and China's abandonment of its zero COVID-19 policy, provided glimpses of hope for the aviation industry's recovery. Furthermore, the strategic collaboration with Qatar Airways expanded Finnair's network reach, particularly in the Middle East, with the introduction of daily flights between Doha and Copenhagen, Stockholm, and Helsinki. This partnership not only enhanced Finnair's market presence but also facilitated seamless transfers to various destinations in Africa and Asia (Finnair, 2023).

Moreover, Finnair remained committed to cost management and efficiency enhancement initiatives. The conclusion of change negotiations resulted in a global workforce reduction of 150 jobs, complemented by long-term savings agreements with selected personnel groups. Additionally, extending the pension premium loan until 2025 strengthened Finnair's financial resilience. Investments in digitalization, dynamic pricing, and direct distribution yielded positive outcomes (Finnair, 2023).

Overall, Finnair demonstrated resilience and adaptability in responding to dual crises, prioritizing safety, maintaining operational efficiency, and fulfilling its commitment to customer service in the East-Asia region and across its whole network.

As Finnair announced in September 2022, the airline’s new strategic direction was stated to be centered around the objective of establishing a competitive airline, with the aim of restoring its comparable EBIT level to at least 5% from mid-2024, comparable to pre-pandemic levels. To accomplish its strategic objectives, the airline outlined several key initiatives. Firstly, Finnair planned to enhance its network connectivity by establishing a more balanced geographical presence, with a focus on linking Europe to Asia, India, the Middle East, and North America through its Helsinki hub, while maintaining a comprehensive domestic network. Additionally, the airline intended to optimize its fleet composition to better align with its future network requirements. Furthermore, Finnair aimed to strengthen its unit revenues by investing in digital products and automation, enhancing product competitiveness, and providing greater customer choice. Leveraging strategic partnerships, particularly within the Oneworld alliance and joint ventures, was another pivotal aspect of the strategy to enhance distribution, network reach, and product offerings. Cost reduction measures were also prioritized, with Finnair targeting a 15% reduction in unit costs from 2019 levels, excluding fuel expenses. Moreover, the airline was committed to maintaining a sustainable financial position to support future investments, while aspiring to be among the sustainability leaders within the aviation industry. These strategic actions, coupled with over 200 million euros in cost savings achieved since the end of 2019, underscore Finnair's commitment in adapting to the changing aviation landscape and positioning itself for long-term success (Inderes, 2022).

## 4.4 Building Resilience in the Face of Dual Crisis

Figure 2 portrays the theoretical framework, illustrating the resilience-building elements particularly considering the priorities within the aviation industry: safety, security, and operational efficiency. In terms of element of preparedness and anticipation, Finnair proactively engaged with its customers in the East-Asia market to ensure passenger safety and rebuild confidence in air travel during the COVID-19 pandemic and the Ukraine War. By utilizing social media platforms, Finnair connected with customers and built a strong online presence to positively impact the company. Organizing activities locally in East Asia further helped to engage with customers and foster trust between passengers, partners, and the internal stakeholders. Additionally, Finnair implemented several safety protocols onboard flights and at the airports, including enhanced cleaning procedures, mandatory mask-wearing, and social distancing measures, to protect passengers and reassure them during these challenging times. Regular updates regarding flight schedules, travel restrictions, and safety guidelines were provided to keep customers informed and maintain a trustworthy reputation.

In late February 2020, Finnair issued a profit warning, acknowledging the evolving situation with the pandemic and its possible broader impact on the global aviation market. Despite the earlier estimates of limited financial consequences, Finnair recognized the necessity to reduce costs by forty to fifty million euros and announced intentions for temporary layoffs until March 2021, affecting approximately 6,100 employees in Finland. The airline experienced a substantial decline in passenger numbers, transporting only 26,700 passengers in May 2020, marking a significant drop of 97.9% compared to the previous year. Understanding the profound impact of the COVID-19 pandemic on the tourism industry, Finnair proactively addressed human resource matters, including layoffs and employment contracts, recognizing the importance of providing reliable information to employees during times of crisis. Throughout the pandemic, Finnair implemented cost-reduction measures, adjusted its network, and prepared for a slow recovery in aviation, aiming to align resources with decreased traffic while remaining committed to long-term sustainable growth and resilience. Despite facing challenges such as the ongoing closure of Russian airspace and accelerating inflation, Finnair adapted its strategy to restore profitability, focusing on achieving a comparable earnings margin of 5% from mid-2024. In response to challenges posed by COVID-19 variants and the closure of Russian airspace in the first quarter of 2022, Finnair implemented operational adjustments, initiated additional cost-saving programs, and leased aircraft and crews to other airlines to mitigate financial impact and ensure operational efficiency. Through the preparedness and anticipation, Finnair demonstrated resilience in the face of the complexities of dual crises.

When considering adaptation and response as illustrated in the theoretical framework in Figure 2, Finnair's adaptation and response to the dual crises of the COVID-19 pandemic and the closure of Russian airspace were characterized by strategic adjustments, cost-saving implementations, and innovative solutions to ensure operational resilience and financial stability. In the second fiscal quarter of 2020, Finnair began the process of adjusting its operations, operating at only around 3% of the capacity compared to the previous year. Despite the drastic reduction in passenger flights, critical flight connections for Finland were maintained, and cargo operations played a pivotal role in supporting supply security, with more than 70% of revenue generated by cargo flights. Despite heavy losses in revenue and a comparable operating result of €174.3 million, Finnair prioritized cost-saving measures to achieve permanent annual cost savings of €80 million by 2022, targeting areas such as real estate costs, aircraft leases, and IT expenses. These efforts involved significant workforce reductions, with approximately 80% of its workforce on furlough by the end of 2020 and a permanent reduction of 1,000 positions. Finnair also underwent a comprehensive business reorganization, maximizing automation and digitalization to improve productivity and operational efficiency. These strategic initiatives enabled Finnair to adapt its staffing resources in real time, mitigate labor costs, and enhance organizational resilience amidst unpredictable challenges. Additionally, Finnair implemented various safety measures during the pandemic, including mandatory mask-wearing for passengers and crew, and introduced innovative solutions to facilitate the continuity of operations, such as partnering with a healthcare company to offer testing packages for passengers transiting to China. Despite the complexities and controversies surrounding mask policies, Finnair remained committed to ensuring passenger safety and compliance with government regulations. Moreover, Finnair Cargo emerged as a stable and essential component of Finnair's operations during the pandemic, demonstrating adaptability and resilience in transitioning to cargo-centric services.

In the first quarter of 2023, Finnair demonstrated the ability in building resilience in the face of ongoing challenges in the aviation industry. Despite traditionally being a loss-making quarter, Finnair marked a positive comparable operating result of one million euros, marking the third consecutive quarter of profitability. This strong performance was accomplished due to several factors, including strong demand, and effective execution of the company's strategic plans. Particularly, Finnair's unit revenue strategy developed significant improvements, with unit revenue increasing by 30% from Q1 2019 and 40% from Q1 2022, despite challenges posed by the COVID-19 variants and the closure of Russian airspace. The company implemented measures to reduce unit costs, including signing a savings agreement with Finnish cabin crew and discontinuing in-flight product sales on long-haul routes, leading to reduced fuel consumption and emissions. Finnair made changes to its domestic network to enhance efficiency and sustainability. Additionally, the company demonstrated its commitment to sustainability by purchasing a significant batch of sustainable aviation fuel (SAF), representing a small portion of total fuel consumption. Fleet adjustments, including purchasing narrow-body aircraft and deferring wide-body aircraft deliveries, were made to align with strategic objectives and optimize cash flow. Finnair expected to operate at 80-85% capacity compared to 2019 levels, supported by strong demand for travel (Finnair, 2023).

In the second quarter of 2023, Finnair achieved a positive comparable operating result for the fourth consecutive quarter. The strong financial performance was possible thanks to favorable supply-demand dynamics, ongoing strategy implementation, and effective cost management. Finnair capitalized on exceptionally strong demand, leveraging its balanced network and successful pricing strategies. Additionally, the company's cost management efforts developed positive outcomes, supported by favorable fuel price developments. Customer satisfaction remained high, as reflected by Finnair being recognized as the best airline in Northern Europe for the 13th consecutive time by Skytrax. The company aimed to focus more on customer needs, data-based retailing, and increasing customer loyalty across all segments. Investments in analytics and fleet optimization were expected to drive growth and competitiveness (Finnair, 2023).

In the third quarter of 2023, Finnair achieved a positive comparable operating result for the fifth consecutive quarter. The company sustained cost-effectiveness, although facing increased fuel prices towards the end of the quarter, and customer satisfaction remained high. Finnair made strategic moves during the quarter, including the renewal of the Finnair Plus loyalty program, and announcing investments in new, larger lounges at

Helsinki Airport to meet growing customer needs. Finnair reaffirmed its dedication to achieving carbon neutrality by the year 2045 (Finnair, 2023).

Referring to recovery and continuity as portrayed in the theoretical framework in Figure 2, during the dual crisis Finnair demonstrated those by applying strategic resilience, financial rebuilding, and innovative implementations aimed at adapting to the evolving landscape of global aviation. Despite facing significant challenges in the third quarter of 2020, including tight travel restrictions, and operating at only around 10% of its capacity, Finnair maintained a focus on cost-saving measures while strengthening its customer satisfaction, with the Net Promoter Score reaching a record-high level of 56. Financially, Finnair raised its target for annual permanent cost savings to €140 million and strengthened its cash position through various financing transactions, including the issuance of a new €200 million hybrid loan. The approval of substantial financial support by the European Commission and the Finnish government underscored the recognition of Finnair's importance for Finland's economy and global connectivity.

In subsequent quarters, Finnair continued its preparations for the gradual recovery of air travel, introducing new services, expanding its network through partnerships, and enhancing its premium offering with the introduction of the Premium Economy product. Despite challenges such as the emergence of COVID-19 variants and the closure of Russian airspace, Finnair achieved positive operating cash flow for the first time since Q4 2019 in the third quarter of 2021, indicating improved financial health and strategic resilience. The airline responded to the prolonged closure of Russian airspace with commercial and operational adjustments, including network shifts and cost-cutting measures, aimed at ensuring its survival in the aftermath of the dual crisis.

Referring to the element of bouncing back and forward as illustrated in the theoretical framework in Figure 2, Finnair showcased its successful efforts throughout the turbulent period of the dual crisis. In the face of drastically reduced capacity and heavy losses during the second fiscal quarter of 2020, Finnair initiated gradual adjustments to its operations while maintaining critical flight connections for Finland, demonstrating its commitment to resilience. Notably, the airline processed substantial flight ticket refunds, exceeding €270 million, reflecting its dedication to addressing customer concerns and navigating the crisis with forward momentum. As the pandemic persisted into the third quarter of 2020, Finnair continued to face significant challenges, operating at only around 10% of its capacity. However, the airline's cargo operations emerged as a beacon of resilience, contributing significantly to revenue and supporting long-haul flights, particularly in Asian routes where passenger demand remained low. The strategic importance of cargo operations in sustaining Finnair's competitiveness and revenue stream during turbulent times was evident, highlighting the airline's ability to adapt and find opportunities for growth amidst adversity. The Cargo Sales Director emphasized that leveraging the cargo operations was crucial to compensate for decreased passenger traffic while optimizing the flight routes and aircraft capacity helped maximize the efficiency in the face of changing travel demand patterns. Maintaining and nurturing the existing partnerships enhanced operational resilience and adaptability through common objectives within the aviation and tourism sector. Furthermore, both interviewed executives highlighted the increased need for human interaction during the uncertain times. The significance of maintaining close relationships with partners and providing personalized communication indicated a message of trustworthiness associated with Finnair, emphasizing safety, security, and the restoration of confidence in travel.

Despite the challenges posed by the COVID-19 pandemic and the Russia-Ukraine War, Finnair continued its presence in the East Asia market, benefiting from reduced competition as other airlines, such as Scandinavian Airlines and Virgin Airlines, faced disruptions. Moreover, after the beginning of the Russia-Ukraine War Finnair renegotiated contracts with some of its partners, including General Sales Agents (GSAs), to reduce commission rates and achieve significant cost savings. However, according to the Cargo Sales Director, no cargo-related partnership was terminated during the dual crisis in the East Asia region. These strategic initiatives enabled Finnair to navigate the turbulent times in the East-Asia market while ensuring financial resilience and sustainability.

Furthermore, Finnair's focus on customer satisfaction, as reflected in its record-high Net Promoter Score, underscored its commitment to maintaining trust and reliability as an airline. As Finnair progressed into subsequent quarters, it experienced notable increases in passenger numbers, signaling a positive trajectory of recovery and reaffirming its resilience in bouncing back from the challenges posed by the pandemic. Despite ongoing uncertainties, Finnair achieved a positive comparable operating result in the fourth quarter of 2022, marking a significant milestone in its financial recovery journey. In the fourth quarter of 2023, Finnair saw that an efficient utilization of the A330 fleet, coupled with strategic collaborations with Qatar Airways and Qantas, contributed to significant milestones. The acquisition of nine previously leased narrow-body aircraft developed significant cost savings, enhancing financial stability. The company expanded its capacity, with plans to increase total capacity by over 10% in 2024, primarily focusing on Asian and European markets. Despite ongoing uncertainties related to inflation, interest rates, international conflicts, and global political instability, Finnair remained optimistic about continued growth in global air traffic (Finnair, 2024). Strategic collaborations, cost management initiatives, and investments in digitalization further underscored Finnair's efforts in building resilience in the dual crisis.

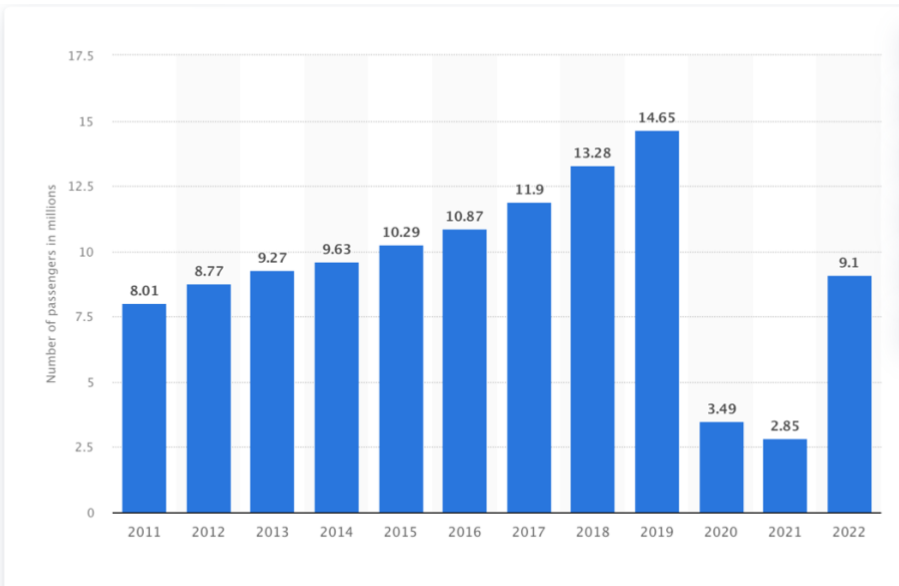


**Figure 3.** Number of passengers of Finnair from 2011 to 2022 (Statista, 2023).

# 5 Discussion

This chapter combines the key findings of this study from theoretical and managerial perspectives, addresses the limitations of the study, and suggests the concerns for the future research. This study aimed to investigate the strategic approaches adopted by airlines operating in the East-Asia market during the dual crisis to ensure resilience. Therefore, it sought to investigate how firms in high-risk industries, such as aviation, can build resilience during the dual crisis.

Early 2020 witnessed a significant illustration of crises, highlighted by the COVID-19 pandemic, causing sharp declines in passenger traffic and significant revenue losses across the industries (Dube et al., 2021). Subsequently, the emergence of a dual crisis scenario unfolded with the Russian invasion of Ukraine in February 2022, critically disrupting aviation operations, particularly for airlines like Finnair whose strategy was reliant on routes between Europe and Asia over the Russian airspace. While the research has extensively focused on aviation crises during the pandemic, exploration of dual crises remains limited. Hence, this study aimed to fill the gap of resilience-building in the dual crisis, extensively investigating the phenomenon through the Finnair case.

Throughout the years of crisis, Finnair dealt with exceptional challenges in the aviation industry primarily due to the global COVID-19 pandemic and the Russia-Ukraine war. In response, Finnair implemented a series of strategic adaptations aimed at addressing immediate concerns while also considering long-term resilience and growth.

The findings display that a firm's resilience is anchored in a comprehensive and forward-thinking approach which consists of measures such as cost reduction strategies, workforce management, operational adjustments, and the exploration of additional revenue streams. Finnair focused on reducing costs by tens of millions of euros through measures like temporary layoffs and reduction of personnel, network adjustments, and cuts in sales and marketing. Adaptations and enhancements, such as fleet optimization, acquiring new partnerships, and introducing new products like Premium Economy travel class, helped to position Finnair for long-term competitiveness and overall sustainability. Moreover, the exploration of additional revenue streams, particularly through increased cargo operations, provided a strong income source when the passenger demand was fluctuating.

## 5.1 Theoretical Contributions

Resilience, as defined by Janic (2015), refers to the ability of a system to recover from disruptive events and return to normal conditions. The importance of resilience is underscored by scholars across the field such as Anderson & Jones-Bodie (2022), who highlight its necessity across various settings, from everyday situations to major crises. The discourse surrounding resilience agrees that it enables organizations to defend against disruptions, bounce back from setbacks, and even “bounce forward” to create an improved state of normality. The proactive development of resilience is crucial, particularly in industries prone to uncertainty and risks, such as the aviation industry, as emphasized by scholars such as Williams et al. (2017). Kretschmer & Singer-Coudoux (2023) and Allenby & Fink (2005). The authors emphasize the significance of adaptation, response, recovery, and continuity in organizational-level resilience, aligning with Fiksel's (2006) perspective of resilience in the business context as the capacity to survive, adapt, and grow amidst turbulent change. Additionally, Kahan et al. (2009) underline preparedness and anticipation as key principles in resilience.

This study extends the knowledge by adding more information to resilience building, particularly in the face of dual crisis, an area that has received limited attention in previous research. This study challenges the traditional view of “bouncing back” to a prior state after a disruption, emphasizing the component of “bouncing forward” along with Jing You (2023). This study agrees that while the approach of “bouncing back” is indeed valuable, it may overlook the potential vulnerabilities created by returning to a previous state in a changed external environment. This is particularly important in the dual crisis, where the external environment has been shaped by not only one but multiple crises. This theory suggests a pivotal need to expand resilience theory to encompass not only recovery but also proactive adaptation and innovation to thrive in a dynamic environment.

Another extension to current resilience theory considers the emphasis on internal resources and capabilities of organizations that might overlook the role of external factors. The findings from this study underscore the significance of external factors, such as geopolitical tensions, health crises, and consumer behavior, in influencing organizational resilience, especially in the dual crisis, and demonstrate the importance of integrating the external environment in comprehensive resilience-building efforts.

This study contributes to the existing literature by shedding light on the resilience building in high-risk industries during the dual crisis. While agreeing with the established theories proposed by scholars such as Anderson & Jones-Bodie (2022), Kahan et al. (2009), Dahlberg (2015), and Williams et al. (2017), among others, which emphasize the significance of preparedness, anticipation, adaptation, response, recovery, continuity, bouncing back, and establishing new and improved normal state of business, this study seeks to enhance our understanding of resilience-building in the context of dual crises and shed light on how organizations function amidst multiple crises.
The findings underscore the necessity of innovation and proactivity, particularly in situations where simply “bouncing back” may not be sufficient due to the negative impacts of a dual crisis. In such circumstances, it becomes crucial for firms to adopt a forward-thinking approach and focus on long-term solutions rather than quick fixes.

## 5.2 Managerial Implications

The findings of this study suggest that there are several steps managers should consider when aiming to build resilience in the face of a dual crisis. It is paramount for managers to adopt a forward-thinking approach and possess a holistic understanding of internal and external factors shaping the market environment. Embracing innovation, agility, and proactive strategies is paramount. To ensure organizational profitability, managers must prioritize preparedness and anticipation, adaptation and response, recovery and continuity, and bouncing back and forward, thereby building resilience by creating an improved state for their operational environment. Practical steps for managerial use highlighted in this study include strengthening the relationships with strategic partnerships, focusing on high-quality service and appropriate safety measures to sustain trustworthiness among customers, and concentrating on efficient operations and long-term sustainability. Janic's (2015) aviation priorities, encompassing safety, security, and operational efficiency, should guide managerial decisions comprehensively. It is pivotal to be innovative with the strategic initiatives in such challenging circumstances and add initiatives such as operational streamlining, digitalization of services, automation of processes, investing strategically to enhance customer satisfaction, nurturing partnerships, and enhancing productivity and operational flexibility. A comprehensive understanding of market dynamics when operating in a high-risk industry such as aviation is fundamental, particularly during a dual or multiple crisis. In essence, organizations must cultivate the ability to adapt swiftly to changing circumstances, as noted by Burnard and Bhamra (2011), and to learn from their experiences, as highlighted by Ashiru et al. (2022). Furthermore, the managers in the tourism sector must foster a positive organizational culture characterized by effective communication, trust, and respect, as this can enhance the relationships within the organization during challenging times. Given the challenges in recruiting skilled personnel in the tourism sector, it is vital to assess the industry's image and factors influencing employee job satisfaction.

These insights contribute to a more holistic understanding of organizational resilience and provide practical guidance for organizations seeking to enhance their resilience in dynamic and uncertain environments. Ultimately, Finnair's ability to adapt, innovate, and collaborate with stakeholders serves as a tool for firms operating in complex industries seeking to navigate dual crises and build resilience.

## 5.3 Limitations and suggestions for future research

The primary limitation of this study lies in its scope, as it is conducted as a single case study. By examining only one organization within the aviation industry, particularly one operating in a unique geographical and environmental context, the study's generalizability to the broader scope may be limited. The focus on Finnair's operations in the East-Asia market and the interviews conducted with experts from that region further narrow the study's applicability. The study's interviews were limited to just two executives, both located in Hong Kong, which may have influenced the findings, and potentially made them more regionally specific. Consequently, extended amount of secondary data was utilized to offer a broader perspective on the research topic. Finally, it is important to note that the researcher's affiliation with the case company as an employee may introduce bias. Prior knowledge and experiences within the company could influence the interpretation of findings.

In the light of future research suggestions, as this study was conducted as a single case study from a unique case, it could be valuable to conduct similar studies focusing on dual or multiple crisis as a multiple case study. Additional airline companies from either similar or diverse geographic locations could be included. Another suggestion involves incorporating multiple industries within the same case study to investigate how organizations across diverse sectors are impacted differently. Future studies could also explore different perspectives, such as those focusing on customer satisfaction or employee well-being. Incorporating human-centric approaches could offer valuable insights and practical insights for developing resilience-building strategies.

Albach et al. (2015) and Pinkwart et al. (2023) highlighted a concerning trend towards the occurrence of multiple and increasingly frequent crises. While existing literature on aviation resilience has predominantly focused on singular crises such as the COVID-19 pandemic or the Ukraine War separately, this research aimed to examine airline resilience in the face of multiple crises. The unique perspective and distinct relevance of this study emphasize the need for further discourse on the subject, particularly given the complexity of the topic and the opportunities it holds for future exploration.

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# Appendices

**Appendix 1.** Semi-structured interview guide

1. What were the most significant operational challenges faced by Finnair in the East-Asia region during the COVID-19 pandemic and Russia-Ukraine war? Mitkä ovat olleet merkittävimmät operatiiviset haasteet, joita Finnair on kohdannut Itä-Aasian alueella koronapandemian ja Ukrainan sodan aikana?

2. What were the key strategic adaptations that Finnair implemented in response to the dual crises in East-Asia? Mitkä ovat olleet tärkeimmät strategiset sopeutumismenetelmät, joita Finnair on toteuttanut tuplakriisin aikana Itä-Aasiassa?

3. How did Finnair engage with its customers in the East-Asia market during these periods? What measures were taken to ensure passenger safety and rebuild passenger confidence in air travel? Kuinka Finnair kommunikoi asiakkaidensa kanssa Itä-Aasian markkinoilla tuplakriisin aikana? Mitä toimenpiteitä luotiin turvallisuuden ja luottamuksen uudelleenraketamiseksi?

4. Did Finnair form new partnerships or alliances, or alter existing ones, to navigate the turbulent times? How did these partnerships impact the East-Asia market and the airline's overall strategy? Loiko Finnair uusia kumppanuuksia tai alliansseja, tai muuttiko jo olemassa olevia, selviytyäkseen kriisistä? Vaikuttivatko nämä kumppanuudet Itä-Aasian markkinoihin ja lentoyhtiön strategiaan?

5. Could you discuss the financial strategies and cost-cutting measures done by Finnair to build financial resilience in the East-Asia market during the crises? Mitä taloudellisia strategioita ja kustannussäästötoimenpiteitä Itä-Aasiassa luotiin taloudellisen resilienssin luomiseksi kriisin aikana?

6. In terms of market positioning and competitive strategy, what were the most important measures taken in order to stay competitive when travel patterns and passenger needs were changing? Miten Finnair onnistui pysymään kilpailukykyisenä, kun matkustuskäytännöt ja matkustajien tarpeet muuttuivat?

7. Looking ahead, what are Finnair's long-term plans and vision for the East-Asia market, considering the lessons learned from the recent crises? Are there specific strategies or initiatives in place to ensure sustainable growth and resilience in the region? Mitkä ovat Finnairin pitkän aikavälin suunnitelmat ja näkymät Itä-Aasian markkinoille, ottaen huomioon viimeaikaiset ja nykyiset kriisit? Onko Finnairilla tiettyjä strategioita, joilla varmistetaan kestävä kasvu tulevaisuudessa?