

BUSINESS AND MANAGEMENT 2022

May 12-13, 2022, Vilnius, Lithuania

NEW PERSPECTIVES ON MANAGEMENT AND RESILIENCE OF BUSINESS ORGANISATIONS http://vilniustech.lt/bm

MANAGING ORGANIZATIONAL CHANGES DURING THE COVID-19 PANDEMIC: THE CASE OF LITHUANIAN AIRPORTS

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Received 04 March 2022; accepted 21 March 2022

Abstract. Aviation is one of the most severely affected global industries by the COVID-19 pandemic: the total number of seats offered by airlines in 2020 decreased by about 50%, the number of passengers fell by about 60%, and this resulted in an estimated 371 billion USD loss. Thus, organizations in the aviation sector had to adapt their activities urgently to the changes in the external environment. This study aims to investigate how a state-owned company can adapt to such an extreme situation. In order to find out what measures have been taken to stabilize the situation, the empirical evaluation was carried out while using methods of case study, statistical data analysis, qualitative content analysis, and semi-structured interviews. The research results suggest that the state enterprise Lithuanian Airports has effectively managed organizational changes during the crisis by adapting strategy and everyday processes. The main factors which have helped the organization to adapt were decisive strategic changes and the ability to think outside the box.

Keywords: airports, aviation industry, case study, crisis management, organizational changes, pandemic.

JEL Classification: D22, L16, M10.

Introduction

The COVID-19 global pandemic, which started at the end of 2019, has had an immense impact on all economic sectors. Aviation industry was one of the most severely affected, including the passenger traffic, air cargo, airport workforce, and all daily processes.

The case of Lithuanian Airports will be analyzed in the context of managing organizations during the crisis. Lithuanian Airports is a state-owned company that unites and manages three main airports: Vilnius, Kaunas, and Palanga. This company coordinates the activities of airports, offering a wide range of services and sets high quality standards for customers and partners. This network of airports provides an opportunity to diversify activities and priorities for each one of them, as well as to supplement Lithuanian transport system in a coordinated manner. The ideology and strategy of Lithuanian Airports operations are based on the principle "United but different".

According to Jucevičius et al. (2017), a successful strategy requires full commitment of the organization, distributing the necessary resources and making a consistent effort to achieve the set goals. However, an uncertain external environment creates a paradoxical situation: the same strategy can be both successful and unsuccessful at the same time. To replace the unfulfilled commitments, an organization needs to quickly adapt internal changes to the pace of environmental change.

The object of this study is organizations in the aviation sector having to adapt their operational and longterm strategies urgently because of the changes in the external environment. Thus, we seek to answer the question how Lithuanian Airports adapted to the global pandemic situation that affected the whole aviation sector.

The aim of this paper is to reveal how the company has adapted to the pandemic situation during 2020–2021. For this purpose, *four research tasks* were identified:

- 1) determine the most important stages of organizational changes via the scientific literature analysis;
- 2) analyze the statistical data of the SE Lithuanian Airports and identify the main trends;
- analyze information in the media about the company's situation during the COVID-19 pandemic;
- 4) conduct a semi-structured interview with a representative of SE Lithuanian Airports and the Dean of VILNIUS TECH A. Gustaitis Aviation Institute to forecast the aviation sector's further development.

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Enabling technology	 Digital infrastructure providing richer connectivity; Affordable access to sophisticated tools of production; Cheaper, faster, more reliable shipping making the world smaller; Affordable sensors making the invisible visible.
Customer mindset	 From "wanting the best" to "accepting the basics"; From accepting standartized to expecting personalized; From ownership to access; From passive customer to active customer.
Platforms	 Aggregation and social platforms reducing isolation; Aggregation platforms reducing inventory and disruption costs; Scalable learning platforms reducing barriers to entry; Learning and aggregation platforms increasing collaboration.
Economy	 Sence of scarcity increasing willingness to share; Constrained buying power decreasing willingness to pay up front; Lower purchasing power increasing demand for affordable, versatile products; Challenging economic conditions increasing demand for "good enough".
Public policy	 Self-regulation and open source in place of protected IP; Regulatory and legislative structures adopting "wait and see" approach; Local decision making and budgeting; Changes in the tax or legal code.

Figure 1. Some representative catalysts describing shifts that occur in the global environment (source: Hagel et al., 2015)

The main methods of the research are statistical data analysis, qualitative content analysis and semi-structured interviews.

1. Environmental changes during COVID-19 pandemic

Until now, companies were designed to get more efficient by growing ever larger, and that is how they created considerable economic value (Hagel et al., 2015). But changes in the external or broader environment can serve as forecasts or indicators of possible disruption.

These external forces can spark changes in viability of a business model, enabling new technological or operational opportunities, or exceed the features of current products or services, or change the market or regulatory conditions. According to Hagel et al. (2015), there are five the most relevant catalysts in the broader environment: enabling technology, customer mindset, platforms, economy, and public policy (see Figure 1).

The global pandemic directly affected all of the external forces mentioned above, leading to radical changes in the aviation industry. An analysis of passenger flights provided by the International Civil Aviation Organization [ICAO] (2021) and the International Air Transport Association [IATA] (2021) shows that the total number of seats offered by airlines in 2020 decreased by about 50% and the number of passengers fell by about 60%. This resulted in an estimated 371 billion USD loss during 2020 compared to 2019.

2. Organizational change management

To successfully implement the organizational changes and to realize desired outcomes, leaders prepare the people, and provide the necessary resources to lead the transformation creating the environment. Change driven leaders organize the transformational process by developing and applying change vision, change leadership, a powerful coalition for change, psychological safety, and training the new way of working.

According to Kotter (2012), there are eight steps in implementing successful organizational changes:

- Establish a sense of urgency;
- Create the guiding coalition;
- Develop the vision and strategy for change;
- Communicate the change vision;
- Empower employees for broad-based actions;
- Generate short-term wins;
- Consolidate gains and produce more change;
- Anchor new approaches in the culture.

Although, according to Errida and Lotfi (2021), considering the complex nature of organizational change, understanding, and controlling change requires a holistic approach that includes all relevant factors and steps.

Change theorists who hold a positivist and objective view of history tend to see change as a difficult process that can be successful only through extreme levels of episodic intervention (Burnes & Jackson, 2011). The COVID-19 pandemic was an external event that created that sense of urgency to implement changes for many organizations. Changing environment can lead to destroyed key revenue streams, depleted business resources, or changed daily operating conditions and it can be extremely challenging for traditional organizations, such as SE Lithuanian Airports, to adapt quickly. Rapid changes require the ability to quickly reorganize the recourses, adapt the strategy and operational processes, and even adapt or change the business model.

3. Empirical research methodology

In order to analyze how the aviation sector adapted to the global pandemic situation, case study method was employed. Case studies are rich, empirical descriptions of particular instances of a phenomenon that are typically based on a variety of data sources (Yin, 2018). This research method allows a phenomenon to be studied in its real-world context (Bass et al., 2018).

This case study relies on holistic data collection strategies for studying the main case – Lithuanian Airports. It means that we use other technics to collect data within this case study. The first source of data was statistical and social media data. The other data source in our case study were interviews conducted in September 2021, using an open-ended semi-structured interview questionnaire (answers were recorded and transcribed). Moreover, statistical data analysis, qualitative content analysis, and semi-structured interviews as research methods are embedded within our case study research (see Figure 2).



Figure 2. Research methodology

The use of mixed methods allowed us to obtain more data, delve deeper into the situation, to provide valuable insights.

In order to assess the impact of the COVID-19 pandemic on SE Lithuanian Airports, the following data were collected from these sources:

- 1. A review of SE Lithuanian Airports statistics (2017–2021);
- 2. Activity and financial reports of SE Lithuanian Airports (2015–2021);
- 3. News in the media and on the website of SE Lithuanian Airports;
- Semi-structured interview with Aurimas Stikliūnas, Head of the Aviation Services Division of SE Lithuanian Airports on September 23 2021;
- 5. Semi-structured interview with the Dean of VIL-NIUS TECH Antanas Gustaitis' Aviation Institute, Dr. Justas Nugaras, on September 20 2021.

4. Characteristic of Lithuanian Airports

SE Lithuanian Airports identified the main stakeholders: customers, partners, colleagues, the public, and the shareholder. With this mindset, the company has formulated a mission, vision, and strategic direction for each of the stakeholders and for ensuring that their expectations would be met (Lietuvos oro uostai, 2021c). The COVID-19 pandemic not only had a negative impact on travel flows and company revenues, but also on the entire sectors of aviation and tourism. This was the deepest shock in the history of operations; thus, the company's leadership re-evaluated the strategy. The evaluation revealed that the chosen business model and key parts of the strategy remain relevant, with only minimal clarification of the vision and strategic directions.

Mission: bring the world closer to Lithuania.

- For customers: to offer a competitive network of travel directions and a variety of services.
- For partners: to be open and unbiased, creating an attractive business environment.
- For shareholders: to develop a safe and efficient infrastructure.
- For colleagues: to act in unison with a driven ambition approach in managing new partnerships.
- For society: to be the Wings of Lithuania's Prosperity and Sustainable Growth.

Vision: the implementation of Lithuanian airport development.

- For clients: increased attractiveness of Lithuania as a destination, satisfying the goals of incoming tourists/entrepreneurs.
- For partners: attractive to market leaders and enabling the implementation of mutually beneficial business models.
- For shareholders: upgraded airport infrastructure with a clear financing model that ensures sustainable returns.
- For colleagues: internationally recognized competencies for the efficient operations and development of airports.
- For the public: increased public support for the development of airports as a key to the economy.

The main *values of the company*: creativity, trust, ownership.

Creativity. I am looking for unconventional solutions; I find solutions with existing resources; I offer alternative solutions to achieve the goal; I encourage my colleagues to express themselves: to speak, to try, to learn.

Trust. I keep my agreements and keep my promises; I communicate in a timely and open manner about the course/activity/process; I do not pose risk to the company's reputation with my actions; long-term mutually beneficial relationship.

Ownership. I pick up the trash from the road; I treat the company's assets responsibly; I communicate about problems and look for solutions in my own and colleagues' environment; I share good practices with colleagues.

SE Lithuanian Airports receives revenue from aviation and non-aviation services. Aviation services include airport infrastructure services: passenger baggage handling systems, passenger embarkation/disembarkation galleries, general purpose terminal equipment package for passenger and baggage check-in, data storage and transmission and related technical facilities, aircraft power supply equipment and related services, fuel aircraft supply equipment and related services, aircraft catering, cargo handling (Lietuvos oro uostai, 2021d).

Non-aviation services include rent of buildings and premises, rent of parking lots, parking, advertising, business club, VIP services, land rent.

The target orientation of the organization (vision, mission, and values) is focused on the continuity of the organization's activities and adaptation to the external environment. In the conditions of the pandemic, this allowed the company to operate its activities, albeit at a loss.

5. SE Lithuanian Airports' revenue, employees, and flights analysis

Statistical analysis of the company's data enables the evaluation of their current state and the effect of the COVID-19 pandemic on the company's performance.

From 2015 to 2019, SE Lithuanian Airports revenue increased on average by 17% per year (aviation activities – 20%, non-aviation activities – 17%). In 2020, SE Lithuanian airports experienced a 53% decline in revenue (aviation activities – 58%, non-aviation activities – 44%), 3% less than the loss incurred by global civil aviation. In the first three quarters of 2021 the revenue increased by 6% compared to the revenue of Q1–Q3 2020 (see Figure 3) (Lietuvos oro uostai, 2021e).

A review of statistical data provided by SE Lithuanian Airports (Lietuvos oro uostai, 2016, 2017, 2018a, 2018b, 2019a, 2019b, 2020a, 2020b) shows that from 2015 to 2017 the number of employees increased by 9% (from 577 to 629 employees), decreased by 18% (to 515 employees) in 2018, increased by 29% (up to 662 employees) in 2019 and fell by 17% (to 552 employees) in 2020. According to the data of Rekvizitai.lt (n.d.), the company currently has 522 employees.

From 2015 to 2019, the number of passengers rose by an average of 11% per year. In 2020, it fell by 72%, and in 2021, grew by 37% (see Figure 4).



From 2015 to 2019, the number of flights rose by an average of 6% per year. In 2020, it decreased by 52% and in 2021, increased by 15% (see Figure 5).



Figure 5. SE Lithuanian Airports number of flights, thousands, 2015–2021

A review of the provided statistics shows that the volume of cargo from 2016 until 2019 rose by an average of



Figure 3. SE Lithuanian Airports' revenue, million EUR, 2015-2021

14% per year. In 2020, the volume of cargo transported rose by 16%, while the volume of cargo transported globally fell by 9% at the same time. In 2021, this number increased by 3% more (see Figure 6).

25 000



Figure 6. SE Lithuanian Airports cargo, tons, 2016-2021

One of the key drivers of the growing volume of air cargo is the surge in e-commerce flows provoked by the pandemic (Stikliūnas, 2021). SE Lithuanian Airports encouraged partners to increase the volume of cargo transported by developing new projects, for example, by opening a new express shipment terminal at Vilnius Airport.

6. SE Lithuanian Airports on social media

In order to obtain more information about SE Lithuanian Airports, an analysis of the articles on social media was performed in chronological order. We analyzed news articles from 2021 on Lithuanian news websites as well as Lithuanian Airport's own website.

January 19, 2021, ltou.lt article "Lithuanian Airports Review 2020: A Year of the Biggest Challenges for Aviation" states that in 2020, the need to transport international cargo by air increased worldwide, the volume of e-commerce and medical cargo grew. As a result, cargo traffic at Lithuanian airports also increased. One of the key factors in the external environment that is affecting the recovery of aviation is vaccination and the reduction of travel restrictions. The clear action plan approved by SE Lithuanian Airports is focused on promoting the smooth return of passenger aviation and the recovery of commercial services at airports (Lietuvos oro uostai, 2021b).

May 27, 2021, ltou.lt article "Financial Results of Lithuanian Airports in 2020: Revenue Declined, a Consistent Recovery Is Expected This Year" states that the pandemic led to declining revenue, however "despite the challenges of the pandemic, the airports have been able to generate positive operating profits, retain key partners and implement some of the expansion projects." Correct strategic and operational decisions, made in a timely manner, helped the organization retain key partners, manage high infrastructure costs, and generate positive operating profits (Lietuvos oro uostai, 2021a). December 28, 2021, lrt.lt article "Lithuanian Airports: Charter Flights Go Back to Pre-pandemic Times" states that "this year the number of charter flights' passengers in some months was almost identical to the pre-pandemic 2019" (BNS, 2021b).

On November 7, 2021, lrytas.lt reported that "as the intensive recovery of the aviation sector continues, it is planned that as many as eleven new flight directions will be launched from Vilnius and Kaunas airports by the end of the year, and it is planned to renew some of the previous routes."

On December 10, 2021, "Verslo žinios" reported that in November 2021 the passenger flows grew 7.2 times. The article quotes A. Stikliūnas, Head of the Aviation Services Division at SE Lithuanian Airports, stating that the recovery of aviation is illustrated not only by the increase in the number of passengers, but also by the increase in the average aircraft passenger load factor (PLF). A year ago, planes took off to an average of 36% PLF, and now that figure is 70%.

On September 17, 2021, lrytas.lt reported that Lithuanian Airports have halved CO_2 emissions during the last two years from 11.8 thousand tons in 2018 up to 6.1 thousand tons in 2020. Lithuanian Airports have joined the European Airports' initiative Net Zero in 2021 and have committed to achieving zero carbon dioxide emissions by 2050. The organization's CEO M. Gelžinis asserts that "carbon emissions were significantly reduced by pandemicrestricted flights. However, the fact is that the amount of CO_2 emitted by Lithuanian airports is decreasing, excluding the pandemic factor." Carbon emission reduction is not just plans, but specific actions. For example, the solar power plant installed at Vilnius airport generated 13.5 thousand kWh of electricity in 2020. It is also planned to install solar power plants at Kaunas and Palanga airports (ELTA, 2021).

The recovery of the aviation industry in Lithuania did not go unnoticed by the media. News website 15min.lt (2021) rated the recovery of the aviation industry at #10 in their story series "2021 in Lithuania: 50 Good Events Worth Remembering".

The analysis of social media content allowed to identify the following key keywords: challenge, action, recovery, cargo, positive, which indicate a positive trend towards the recovery of the aviation industry.

According to Zakarevičius (2012), new features of organizations objectively form under the influence of complex changes in economic and social processes, characterizing their adaptation to the changed environment. SE Lithuanian Airports has adapted to the changing conditions, not only taking advantage of the opportunity for cargo transportation during the pandemic, but also cutting their carbon emissions and aggressively restoring services and activities.

7. Interviews with the company representative and the Dean of VILNIUS TECH A. Gustaitis Aviation Institute

Aurimas Stikliūnas, Head of the Aviation Services Division of SE Lithuanian Airports, discussed the adaptation of the organization during the pandemic. The biggest challenge posed by the crisis was uncertainty. It was necessary to adapt to the decrease in traffic and passenger flows, find solutions to ensure and maintain operations, and to survive the decrease in revenue.

The significant changes and innovations that were implemented in the organization, as well as the optimization methods used, were discussed during the interview. A. Stikliūnas outlined the key financial and operational priorities during the pandemic and presently. Several recovery scenarios have been developed, drawing on the latest international business practices and examples, although there have been no similar crises to such an extent in aviation.

The crisis management plan was developed even before the mandatory quarantine. To optimize the organization, the headcount was reduced by about 30%, with some of the employees having been sent to downtime. At the same time, the workload of administrative staff increased significantly. The provided services were changing: airports were filled with aircrafts, the demand for aircraft parking increased significantly. The large available area was exploited by providing non-traditional services, such as open-air drive-in cinema or motorcycle shows. Operational priorities were refocused and as a result, some of the new investment projects were postponed. Nevertheless, the standstill period was an opportunity for renovations, the airports used quarantine time for infrastructure development (e.g., runway renovation, terminal, and platform development).

Being a state-owned enterprise, SE Lithuanian Airports encountered additional difficulties, such as requests for assistance from other companies. The organization took such measures as zero interest rate or rent deferral to maintain relationships with its long-term partners, even though it did not receive exclusive support from the state. A. Stikliūnas expects full recovery of the services by 2023–2024.

It has been difficult for organizations to adapt quickly to their strategic commitments in the rapidly changing external operating environment during the pandemic. Although the paradox of the strategy is difficult to control through the adaptation strategy, it is possible to reduce the tensions it poses or even use them to gain a competitive advantage, as SE Lithuanian Airports have done.

The situation of the Lithuanian aviation industry in the context of the pandemic, what are the possible forecasts for the recovery of the industry, and what aspects determine it were discussed during the interview conducted in September 2021.

The pandemic has been a disaster for the aviation industry, but the activity of market participants is currently growing. Dr. Nugaras says the aviation industry has already reached its lowest point of decline in 2021 and is currently expected to grow. The opening of new regular passenger routes also shows that the sector is recovering. According to the respondent, SE Lithuanian Airports partially managed to adapt to the challenges caused by the pandemic. The company suffered losses, but some of them were related to infrastructure upgrades. Public investment and infrastructure expansion show growth and positive results.

The interviews suggest that the development of the aviation sector will recover in the near future. Various actions are planned to reduce the impact of uncertainties on the organization's operations. According to Jucevičius et al. (2017), these actions aim to increase the flexibility of an organization's processes and responsibilities, diversify products, build partnerships at different levels and types, invest in risk-absorbing mechanisms, etc. This suggests that many of the impediments to successful change and adaptation in the aviation sector can be beaten by the ability to react to rapid environmental changes.

Conclusions

In the case of SE Lithuanian Airports, the paradox of strategy has emerged: the tension between strategic commitment and environmental uncertainty. Continually updating the strategy in response to changing environments and conditions has helped the organization achieve its goals.

From 2015 until 2019, there has been constant growth in the aviation sector, but from 2020 onward restrictions and regulations were imposed regarding traveling between all countries in order to manage the global pandemic. It led to a significant financial loss in operating revenues, passenger numbers, and flights, but 2020 became record-breaking in terms of cargo shipment, and that trend continued upwards in 2021. This helped SE Lithuanian Airports to remain a functioning organization even after its loss of pre-pandemic passenger flows.

The global demand for international cargo transportation by air has increased, and the total cargo flow at Lithuanian airports has also increased. SE Lithuanian Airports responded to unpredictable changes in the external environment by making the right strategic decisions.

The attitude towards the organization as a business entity, the competence of the management team and the accumulated management experience, a strong approach to the crisis as an opportunity, led to successful implementation of the recovery plan. According to A. Stikliūnas, SE Lithuanian Airports was the fifth in Europe in 2021 in terms of recovery criteria (returning passenger and flight flows).

Organizations typically implement not only operational-level risk mitigation actions in an environment of uncertainty but also develop strategic-level approaches. The results of the actions taken by SE Lithuanian Airports show that the aviation sector can survive and recover from the pandemic.

Based on the research and analyzed data, it can be stated, that in the case of SE Lithuanian Airports, a

state-owned company can be flexible and adapt to an emergency and crisis situation. This cannot be said for all state-owned organizations because of their different levels of autonomy and ownership. However, SE Lithuanian Airports, considering the scope of available resources and conditions dictated by the external environment, have adapted their strategy and operational actions to take the full advantage of the opportunities that have arisen in the market and society during the pandemic situation.

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