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CHANGES IN STRATEGIC RESPONSES OF SELECTED LOW BUDGET AIRLINES FROM DIFFERENT CONTINENTS IN RESPONSE TO THE GLOBAL COVID-19 PANDEMIC

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Purpose: The aim of this paper is to indicate changes in strategy, financial, hygienic and service behaviour in relation to customers and aviation personnel. These changes are a response to the global COVID-19 pandemic.
Design/methodology/approach: The paper uses the desk research method of analysis. The analysis of publicly available values from the annual reports of selected low-cost airlines from six continents, i.e. Europe, Asia, North America, Australia, Africa and New Zealand and the examples described in the work made it possible to establish facts, verify data and present results. The research concerns not only the situation before and during the COVID-19 pandemic, but also predicts the future of individual companies.
Findings: The considerations presented in the paper indicate that low-cost airlines representing individual regions of the world had utmost difficulties in adapting to the changing conditions which resulted from the COVID-19 pandemic. They needed government support. A third of the air fleet was grounded, many employees in the aviation sector lost their jobs or received only 50% of their wages; furthermore, international travel decreased significantly. Only the cargo sector, which had been unprofitable for years, benefited from the pandemic due to the transport of global cargo.
Practical implications: Several types of support for the aviation sector are recommended, i.e. rebuilding passenger confidence in air transport, introducing a uniform and globally recognized digital COVID certification, and quick and affordable access to tests.
Social implications: Social needs should always come first and implemented solutions should be adapted accordingly.
Originality/value: The article is an original approach to finding solutions in crisis situations that could improve the situation of the aviation industry and its passengers.

Keywords: airlines, world travel, airline staff during the pandemic, COVID-19, crisis management.

Category of the paper: research paper.

1. Introduction

The emergence of an unusual form of severe pneumonia in December 2019, which later turned into a pandemic on a global scale, surprised the health services of the city of Wuhan in the Chinese province of Hubei, inhabited by 9 million residents, in the early stages of its development (Duszyński et al., 2020). As early as three months after its detection, the disease was named COVID-19, and three days later the pathogen causing it began to be described as the SARS-CoV-2 virus (Duszyński et al., 2020). Over the next few months, as the United Nations wrote in its post-conference article titled "The Impact of the COVID-19 Pandemic on Trade and Development" of September 23, 2020, more than 31 million people were infected with the virus, and more frightening figures revealed that up to that day, 963,000 deaths (Figure 1) were attributed to COVID worldwide (United Nations, 2020).

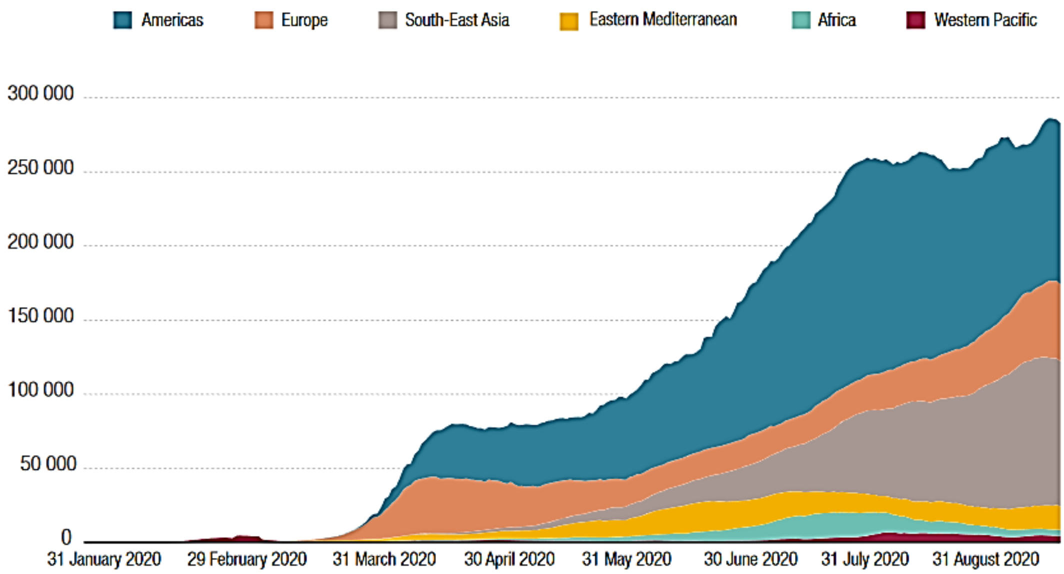

Figure 1. The SARS-CoV-2 virus in individual regions according to the markings of the World Health Organization. Adapted from: United Nations "Impact of the COVID-19 Pandemic on Trade and Development, Transitioning to a New Normal" by United Nations, Geneva 2020.

In the first wave, weekly deaths attributed to COVID-19 peaked in the week around 13 April 2020 at just over 51,000. This dropped down to fewer than 29,000 per week in late May 2020, but by mid-September 2020, deaths per week had increased again to around 37,000 (United Nations, 2020).

A more detailed analysis of the data showed that global economic development suffered much more than during the global economic crisis in the financial and banking markets in late 2008 and early 2009 (Figure 2).

The United Nations Conference on Trade and Development (UNCTAD) predicted that the gross domestic product (GDP) would fall by about 4.3 percent in 2020, which meant that developed economies were hit harder in 2020 than developing countries, at -5.8% and -2.1%, respectively (Figure 2). While at the turn of 2008 and 2009 this decline was almost imperceptible (or at least not on such a large scale as in 2020) in less developed countries, and at -3.4% in richer economies.

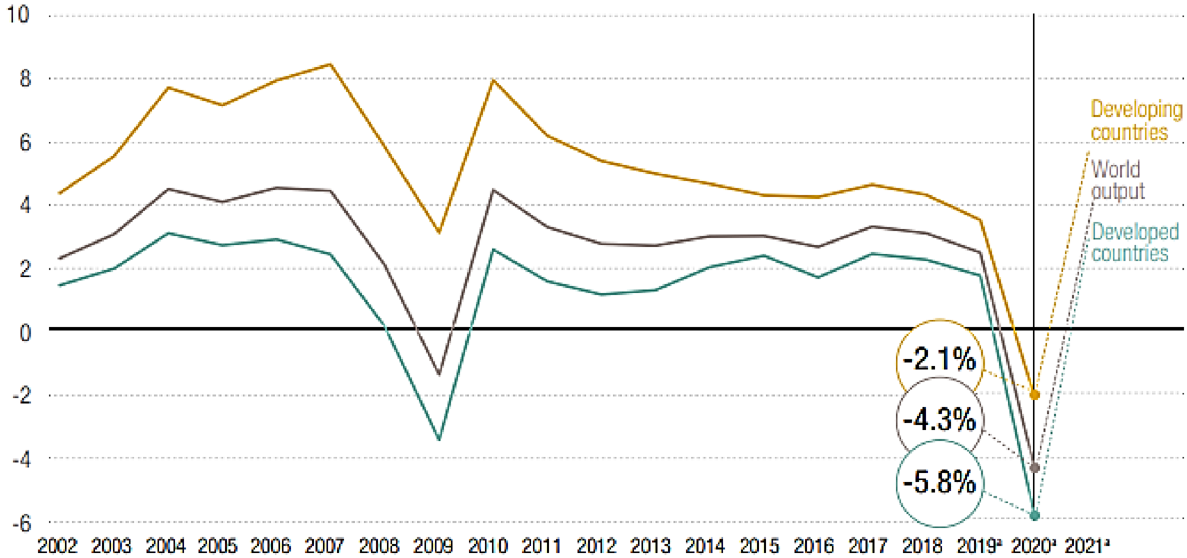

Figure 2. Trends in global economic development with percentage changes in less and more developed countries. Adapted from: United Nations Conference on Trade and Development by United Nations, Geneva 2020.

The only economic plane that has not suffered as a result of the pandemic, but actually considerably profited from this global crisis, is pharmacy. Medical products related to COVID-19, such as personal protective equipment, ventilators, thermometers and disinfectants recorded a very high growth in the second quarter of 2020. Sales of this type of products increased by 186% compared to the same quarter of the previous year. Other, non-medical, but heavily related to COVID-19 products such as office equipment including Wi-Fi routers, laptops or portable mass storage enjoyed a strong 34% growth in the second quarter (United Nations, 2020) (Figure 3).

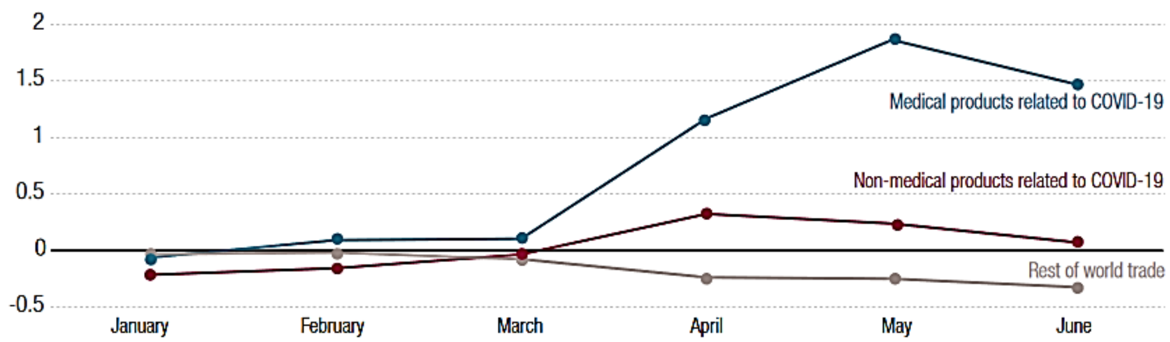

Figure 3. World trade in medical goods. Adapted from: United Nations Conference on Trade and Development by United Nations, Geneva 2020.

Such great changes in financial values were reflected in many areas of modern life. Many social life centres were closed, remote office operation and teaching in many educational institutions were introduced, the economy and many aspects of management changed.

In addition, there were changes in almost all areas of global tourism, travel and global air traffic. Statistical studies show that in the first half of 2020, global tourist travel decreased by 65% compared to the same period in the preceding year. The largest decrease was observed in:

- East Asia and the Pacific - 72%,
- Europe - 66%,
- Africa - 57%,
- Middle East - 57%,
- the Americas - 55%.

The year 2020 saw about 1 billion fewer tourist trips, which translates to US$ 1.2 trillion lost in tourism revenue and about 120 million jobs lost due to the pandemic (United Nations, 2020). It should be noted that not all places in the world were affected to the same extent. The pandemic had a much greater impact on economies heavily dependent on tourism, e.g. in Jamaica, where tourism accounted for as much as 20% of the GDP in 2018, two years later it suffered a loss of nearly 20% of the aforementioned financial value (United Nations, 2020).

On account of the global pandemic, many airlines also found themselves at a crossroads where their business models needed to be carefully reassessed and adjusted accordingly. The drastic fall in demand caused by the crisis put resilience and financial resources at the limit. Neither September 11 2001, nor the global financial crisis of 2008, nor the volcanic eruption in Iceland in 2010 were comparable to the financial shock brought by the COVID-19 pandemic (Bouwer et al., 2021). Most airlines required government support to stay in business. However, not all airlines have been affected to the same extent. Furthermore, the reasons why some business models may have been more successful during the crisis may not necessarily be aligned with expected changes in the post-COVID-19 era. The assessment of both cases became the aim of this paper.

2. World Situation

April 2020 saw the largest decrease in flights worldwide - 55%, and traffic data fell by 92.8% which is equivalent to a loss of 1.7 million passengers. On average, the aircraft's load factor was between 50% and 60%, with the lowest point of 27%. By the end of 2020, almost 51% of the total. The European fleet was grounded. The connectivity of the world's cities also decreased. In addition, European airlines reported revenue losses of €22.2 billion. European airports lost up to €33.6 billion as daily traffic decreased by 73% compared to 2019 (Bouwer et al., 2021).

Until the outbreak of the pandemic and the crisis associated with it, airports constituted the largest sub-sector of aviation in most regions outside North America. Globally, airports enjoyed combined annual economic gains of an average of $5 billion between 2012 and 2019, when their economic margins were around 3% (Bouwer et al., 2021).

Airports in different regions of the world achieved great financial results for a variety of reasons (Bouwer et al., 2021):

- in the Asia-Pacific region due to the competitiveness of its climate,
- Central and Eastern regions due to their location,
- Asian regions (primarily those located on the Indian peninsula) due to migrating demographics.

The declining traffic led to major economic losses of $32 billion, or 45% in 2020. The Airports Council International estimates that airport performance slightly improved in 2021, attracting 26% more revenue than in 2020. The only points whose financial balance sheets confirm a specific resistance to pandemics are the shipping and cargo sub-sectors. In 2020, both managed to generate healthy economic profits: 4% for shippers and 9% for air cargo carriers. In fact, the only five profitable airlines in 2020 (AirBridgeCargo, Atlas Air, Cargojet, Cargolux and Kalitta) were cargo carriers (Bouwer et al., 2021).

In the annual balance sheet, the sub-sectors with low fixed costs financially fared much better even though revenue flows decreased due to lower passenger traffic or fewer flights. Although revenue flows for catering companies and ground services largely depend on passenger traffic and the number of flights, a large part of their workforce is contract temporary staff, not a permanently employed group that requires constant financial security. This flexibility allowed these particular companies to partially compensate for the losses incurred as a result of the suppressed air traffic during the pandemic. Catering and ground services losses ($2.4 billion and $3.2 billion, respectively) were therefore less than those of companies in many other aviation sub-sectors (Bouwer et al., 2021). Unfortunately, the employment of contract workers caused a completely different post-pandemic problem. Financial instability meant that many of the people employed contractually were tired of this kind of uncertainty and found work in other economic sectors, which ultimately resulted in shortages of ground service at many airports today. Flights are delayed or cancelled, travellers have to wait in mile-long queues, and those employees who remained have irregular work schedules and are often overworked, which can affect not only the comfort of travel but – more importantly – the safety of this branch of tourism. As reported by Reuters, the low-cost airline EasyJet cancelled nearly 270 flights in just one week of April 2022, and the high-end British Airways cancelled 662 flights (Sandle, 2022). It is very difficult to predict the future behaviour of the market, especially on a global scale. Thanks to noticeable historical changes and figures, European passenger air traffic in 2020 was comparable to that of 1995 (Rodrigues et al., 2021). In general, it is estimated that a complete return to the situation from before 2019 is not expected until 2024, unless other unforeseeable crises have occurred.

3. Material and Methodology

The aim of the paper is to indicate changes in strategy, financial, hygienic and service behaviour in relation to customers and aviation personnel. These changes are a response to the global COVID-19 pandemic. The paper uses the desk research method of analysis. The analysis of publicly available values from annual reports of selected low-cost airlines from six continents, i.e. Europe, Asia, North America, Australia, Africa and New Zealand, and the examples described in the work made it possible to establish facts, verify data and present results.

4. Low-budget Airlines

The analysis of the obtained data covers the situation during the pandemic and predicts the future of six low-cost[1] airlines representing individual regions of the world, such as: Europe, Asia, North America, Australia, Africa, New Zealand (Table 1).

Table 1.
List of low-cost airlines representing different regions of the world

World Region	Name of the airline	Airline logo
Europe	Ryanair	
Asia	AirAsia	
North America	Spirit Airlines	
Australia	Bonza	
Africa	Kulula	
New Zealand	Jet Star	

Source: author's own study.

Over 60% of the European airline market in the pre-pandemic period belonged to high-budget carriers, and 38% was represented by cheaper airlines.

Those low-cost European airlines which were not financially supported in any way by the governments of the countries where they are based were the first to make adjustments in size and salaries, which allowed them to reduce their fixed and variable cost base. For example, the Irish carrier Ryanair terminated employment contracts with three thousand people, which

[1] Low-budget transport - this term was adopted in accordance with the Glossary of terms adopted for the needs of the Transport Development Strategy in Poland (with a perspective until 2030). Low-cost carriers offer passenger air transport services at lower prices than traditional airlines.

accounted for 15% of the total workforce and ensured a significant reduction in structural costs and nearly 250 administrative positions in offices in Wrocław, London, Dublin and Madrid. Those who remained were offered salary cuts: pilots were offered a 20% reduction over 5 years and stewardesses and ground staff got an offer of up to 10% reduction. The airlines also negotiated with national governments to reduce taxes under the threat of closing the base, which brought short-term success in some locations. This creativity in reducing costs proved to be the right way out for Ryanair as the annual balance sheet showed a financial loss of €185 million for the period January-June 2020, rather than the expected €232 million (Bréchemier, Combe, 2021). Although this choice of a quick and aggressive financial policy was an interesting decision and seemed to work positively, especially in the initial phase of the "financial rescue", the revenue at the end of the year was still at the level of 79.2% and was much lower than that of the competition, i.e. 2.7% than WizzAir (total 76.5%), 24.7% than SAS (total 54.5%), 27.2% than EasyJet (total 52%) (Bréchemier, Combe, 2021).

Europe generally saw the total of 277 million air passengers in 2020, a decrease of 73% compared to the preceding year. Unfortunately, as research proves, all the EU Member States recorded large decreases. The largest decreases were observed in Slovenia (83%), Slovakia (82%), Croatia (82%) and Luxembourg (67%) (Eurostat, 2021).

In the longer term, low-cost airlines in Europe will open bases for a better network, in a "post-pandemic" reality, as they already account for 40% of the market and are rebuilding their market position faster and faster every day (Bréchemier, Combe, 2021).

AirAsia is a strong representative of Asian low-cost airlines based in Malaysia. The company gained recognition when it carried over 237 million passengers in 2012, making it the largest carrier in Southeast Asia. It has been operationally profitable since 2001, with a pre-pandemic net income of approximately $354 million a year. The outbreak of the COVID-19 pandemic caused AirAsia's revenue to drop dramatically, down to $188 million in the first quarter alone (Khadijah, 2021). The company also owns the hotel chain "TuneHotels", but this business too suffered huge losses over time pandemic. As AirAsia is a low-cost airline whose revenues come from transporting passengers who could not be transported during the epidemic, and the airport fees for nearly 100 Airbus A320 aircraft parked at the airport increased dramatically, the company decided to change the commercial licenses for 60% of its aircraft and transform itself into a cargo transport company (AnnualReport…, 2020). AirAsia made it a priority not to lay off its employees, so they were sent on forced leaves, provided with psychological care in the *Peer Support* programme, risks were assessed, and then a decision was made to take on a food delivery project. In April 2021, AirAsia Farm was launched, wherein cooperation was established with the Ministry of Agriculture and Food Industry (MAFI), the Department of Agriculture (DOA) and the Federal Agricultural Marketing Authority (FAMA) of the company Perlis. The main purpose of AirAsia Farm has been to transport crops, fruits, vegetables or seafood from Tawau, Sabah to Kuala Lumpur, while fishermen in Kuala Lumpur could not sail due to restrictions (which resulted from the fact that there are usually more people on ships than in airplanes). Of course, the purpose of the Airbus A320 is to carry passengers. The partial rebranding during the crisis, along with the help of the government helped AirAsia to protect many of its employees, continue its strong position in the market and win the admiration of many customers.

According to the International Air Transport Association (IATA), the pandemic situation had a very negative impact on the entire Asian market and the Pacific region. An IATA analysis shows that as a result of the COVID-19 crisis, global airline passenger revenue in 2020 decreased by $314 billion, which was a 55% decrease compared to the preceding year and translates into a $88 billion decrease in revenue. Conrad Clifford, IATA's regional vice president for the Asia-Pacific region, asked in his address the governments of India, Indonesia, Japan, Malaysia, the Philippines, the Republic of Korea, Sri Lanka and Thailand for direct financial support, loans, credit guarantees, corporate bond market support and tax breaks. He also emphasized that each airline job supports another 24 people in the travel and tourism value chain, especially in the Asia-Pacific regions (Annual Report…, 2020). The year 2020 threatened 11.2 million jobs and therefore all the governments of the countries asked in the message offered their help, to varying degrees. Sri Lanka offered the smallest support, but it was adequate to the country's financial capabilities.

Headquartered in Florida, Spirit Airlines is the eighth largest low-cost airline in the Northern United States. Although they offer on average 30% lower ticket prices than their competition, they still do not enjoy a good reputation among their customers. Typically rated 2.5 stars out of 5, with 30% of negative reviews describing the line as "terrible" and the "worst possible" (Renfro, 2018). In 2020, total operating costs were $658.4 million, which represents a decrease of 22.1% compared to the pre-pandemic years (Spirit Airlines, 2021). Due to the COVID-19 pandemic, Spirit Airlines received $334 million in government assistance in the form of grants and loans under the Coronavirus Relief and Economic Security Act (CARES) in the same year. The company stated on its official website that despite the pandemic it avoided forced leave for its employees in the US by offering voluntary leave programs and other initiatives to reduce costs (Spirit Airlines, 2021). On social media, the company boasted about its financial achievements during the crisis so much that two companies, Fronties Airlines and JetBlue, made a proposal to buy Spirit in 2022 (Airbus, 2021) (in fact, the airline purchased one plane and boasted no lawsuits from dismissed employees, and, according to the official website of the company, those who left: "allegedly wanted to leave by themselves and by doing so they very much hurt the family atmosphere of the company") (Spirit Airlines, 2021).

The COVID-19 pandemic did not spare American airlines either. According to analyst estimates provided by FactSet, US carriers' net losses in 2020 exceeded $35 billion. "The pandemic ended a decade of gains that the industry enjoyed until 2020 during which it hired tens of thousands of workers, bought new planes and expanded its networks. In 2020, airline shares fell the worst in years. American Airlines' share price fell by 45%, its largest percentage drop since the carrier's merger with US Airways in 2013. Delta Airlines shares are down by 31%, while United Airlines is down by 51% in the past 12 months, which is its biggest drop since 2008. Southwest lost 14%. (...) The pandemic forced carriers to quickly reduce, shorten their routes and ground hundreds of jets. According to the Airlines for America trade group, US carriers increased their total debt by $67 billion in 2020 to over $172 billion to weather the crisis" (Josephs, 2021). The US government's aid to the aerospace industry was the world's largest recorded aid, amounting to $80 trillion, which is comparable to all other countries combined and multiplied by four (Top 10 Changes…., 2021). The staggering aid did not, however, protect the aviation industry from huge debts anyway, and it can safely be concluded that it was the largest and longest crisis in the history of this branch of the economy.

Undoubtedly, the pandemic has had a negative impact on many airlines around the world, leading many of them to bankruptcy. However, there are airlines that want to face the pandemic challenge. Bonza is a new low-cost airline that delayed its launch in Australia by several months, but is still very positive about its 27 destination routes across Australia (Bolton, Easton, 2022). At the moment, the airline has four jets of the American manufacturer Boeing. Their number is expected to double by the end of the year, with an order for 30 additional aircraft already placed in March 2021 (Bolton, Easton, 2022).

Bonza originally planned to operate 37 flights a week from its home airport in Queensland, where 83% of the announced routes were completely new. The business model of these airlines was taken from the American Breeze airlines, which offered flights between cities not served by any other airline. Therefore, the new airline Bonza intends to operate 92% of the offered routes from Sunshine Coast, thus doing something that has not been offered by any other airline before. The new low-cost carrier was to have no competition in places such as Albury, Avalon, Bundaberg, Cairns, Coffs Harbour, Gladstone, Rockhampton, Port Macquire and Whitsunday Coast (Bonza…, 2022). The future will show whether modelling on the American equivalent will be reflected in the company's finances. As of today, the 2020 annual balance sheet shows that the American inspiration Breeze Airlines carried over 330,000 passengers in seven months, despite the ongoing SARS-CoV-2 coronavirus pandemic (Bonza…, 2022).

In general, the Australian market suffered the restrictions related to the pandemic, but mainly in an international sense. Air services were first shut down completely, then slowly reopened, but only to fully vaccinated passengers, which was seen by many as very radical, especially in Australian culture. As for the domestic flights market, it also saw a decline, but not as much as anywhere else in the world. For example, Qantas, one of Australia's largest carriers, had flights between Melbourne and Sydney 58 times a day before the pandemic, while during the pandemic this number fell to 37 times a day over Christmas (Virgin, 2022; Baird, 2021). From the above data, it can be concluded that the decrease in domestic flights in Australia did take place, but it was not that drastic. However, as regards ground service of Australian carriers operating in other countries, most of them were sent on forced leave which was paid (in most cases) only for the first 90 days (AirlineCompetition…, 2021). Unofficial figures show that 80% of these workers returned to the country and worked in Australia after 3 months.

One of the most interesting low-cost airlines, primarily from the marketing point of view, is the South African Kulula based in Johannesburg. During its 20 years of operation, the airline had 10 aircraft covering six destinations in South Africa and as a British Airways franchise. Unfortunately, the pandemic, the forced suspension of flights, the partial layoff of the crew and having to rely only on the support of contract staff who were reluctant to fulfill their duties, no government support, outbreaks of riots in the country and constant political uncertainty pushed the company to be put up for sale. When this did not bring any success and no buyer was found within 24 hours from the broadcast of the advertisement, the company declared bankruptcy. The company's original marketing ranked the company third in terms of customer satisfaction. Unfortunately, a well-liked and safe airline had to close its operations, left without any support from a stable government.

The financial situation of low-cost airlines in South Africa is contained in the following figures: only four out of ten airlines of this type across the country survived on the market after the pandemic until June 2022. These companies were mainly supported by private investors or external funding sources (in the case of franchises) such as British government financial facilities guaranteed by the parent carrier – British Airways (SA Airlines…, 2022).

The low-cost airline[2] representing New Zealand is an Australian carrier JetStar, headquartered in Melbourne (Jetstar…, 2020), entirely owned by the Qantas Group. This airline carries 8.5% of all passengers travelling to and from Australia (Qantas…, 2022). It launched its New Zealand flights in December 2005, offering trans-Tasman services between Sydney and Christchurch. Now, 17 years later, it consists of 76 aircraft, offering over 200 domestic return flights a week between Auckland, Christchurch, Dunedin, Wellington and Queenstown (Jetstar…, 2020). As regards the COVID response to the business sphere, Jetstar suspended its operations in New Zealand on 15 August 2020, after the government introduced social distancing rules in response to the second outbreak in Auckland (Anthony, 2020). The company faced massive criticism after refusing to refund passengers whose flights were affected by cancellations, offering travel vouchers or date changes instead, a behaviour that was met with great cultural distaste (Lincoln, 2020). Just two months later, in mid-September 2022, Jetstar announced it was resuming domestic flights in New Zealand after the government lifted physical distancing requirements on planes. Since its post-pandemic return, Jetstar is operating at 110% schedule compared to March 2019. Financially, Jetstar is scheduled to operate more domestic flights in February and March than in any previous year, and travel demand exceeds the pre-COVID-19 levels (Lincoln, 2020).

[2] Low-budget flights - these are mainly short distance flights, in direct connections, where no business class, catering or additional services does not affect the passenger's decisions as to the choice of the carrier (Montwiłł, Drop, 2018), according to the managers of these airlines (e.g. Ryanair, easyJet, Wizzair).

In general, most New Zealand airlines suspended their flights, but only for two months and were able to recover all losses in a few post-pandemic months. No structural changes or annual financial declines have been recorded, so it may be concluded that a rich country which can afford to react quickly, even in the most critical situation, can well support various branches of tourism.

Summary

It is assumed that about 100 million jobs in aviation and broadly understood tourism were at risk due to the pandemic. Ground personnel, in-flight catering, airports, aircraft cleaning crews, aircraft mechanics and even trainers in training centres were all affected by the fact that a third of the world's air fleet was suddenly grounded. Government support for airlines cost the world $100 trillion. According to the European Cockpit Association, around 18,000 pilots lost their jobs during the pandemic. In Europe, one in five pilots was fired, while the rest were offered 50% of their salary. During the pandemic, international travel fell by 64%, which negatively affected many industries, contributed to the loss of $252 trillion in lost profit for airlines and $111 trillion in lost profit for airports (Top 10 Changes…., 2021). Tourism constitutes 8% of the global GDP and in some countries it accounts for 20% of their annual revenue. The only part of aviation that has gained from the pandemic is the cargo domain, which accounted for only 13% of global aviation (passenger aircraft were mainly responsible for transporting global cargo) before the COVID-19 and grew to 30% of global transport (Top 10 Changes…, 2021). It was amazing that for many years, the cargo department was unprofitable for many world airlines and these companies often gave cargo up, but during the pandemic it became a kind of rescue for them. In addition, many airlines gave up buying new planes while their construction has already started. The situation of business travel has also changed – it was largely transferred to online platforms. They will probably remain in some part, but they will no longer account for such a large, 36%, impact on the global budget of airlines.

In conclusion, in this financially dramatic situation, several types of support for the aviation sector are recommended. The most important thing is to re-establish passenger confidence in air transport, which is essential for a resumption of demand. The best way to achieve this would be to ensure consistency in the implementation of public sanitation measures, ensuring effective communication with the consumer so that they always feel well and timely informed. It would also be advisable to introduce a global, uniform, internationally recognizable, digital COVID certificate (this issue is very diversified and certificates can be different even in such closely related countries as Germany and Austria) and many digital solutions from the moment of buying a ticket, through check-in, to baggage claim. In addition, access to COVID tests at airports should be quick and affordable.

The aviation industry should consider better pay packages for its employees, including contract staff, so that in inevitable crisis situations they are not forced to look for other employment. The offer of attractive salaries would also encourage others to join the industry, which would provide better air and ground service, reduce queues at airports and possibly have a positive impact on flight cancellations – something that today's passengers are mostly complaining about. According to Grace Hopper, an American IT pioneer, "a ship can stay in a port, but ships are not built to stay in ports" (Yale News, 2017). It can also be added that "parking in ports" is not cost-effective. Business Insider reports that "in the case of the most popular Boeing 737-800, the cost of standard airport parking in Warsaw is about €3,200 per month, and about €1,400 per month for storing one aircraft" (Walków, 2020). In times of crisis, the flight crew should be adequately financially secured, because without them, airplanes, even the most beautiful and modern ones, mean absolutely nothing. Due to the limitations of the research that results from the magnitude and non-standard nature of the described crisis, the focus on a specific market forces caution about the possibility of drawing general conclusions, because the events are still "fresh" and the insights that can be obtained at the moment reflect the impact that can still be described as short term. As data becomes available, further research may delve into the long-term effects of the crisis as well as the impact on various business models that the future will need to implement in its handling mechanism, not just crisis management.

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