



Post Covid-19 innovations in the airline travel



Index



INTRODUCTION

SECTION 1

FIVE KEY MEGATRENDS IMPACTING AIR TRAVEL

SECTION 2

TOP FIVE TECHNOLOGIES DISRUPTING THE SECTOR

SECTION 3

A GLIMPSE INTO THE FUTURE:
THE NEXT LEAP IN AIRLINE INDUSTRY

CONCLUSION



WATCH DIGITAL FUTURES
VIDEO

DIGITAL FUTURES

DIGITAL FUTURES is an online content publication platform catering for technology business leaders, decision makers and users, by sourcing and sharing valuable information and best practices in connection to the latest emerging technologies trends and market developments that leverage capabilities and contribute towards enhanced enterprise-wide performance.



WATCH VIDEO

LEARN MORE >



Introduction

The travel market has been completely reset by Covid-19. The airline and tourism industry have had to take a stern look at their activities, reassessing their ways of operating and adjusting to the 'new normal'. With airlines grounding their entire fleets for months, the global pandemic has had an unprecedented and devastating effect on the aviation sector.¹

As a response to the Covid-19 outbreak, the cancellation of almost all flights to contain the spread of the virus has impacted the entire airline industry globally since the beginning of 2020. More and more countries around the world have closed borders and restricted domestic travel. During the week of October 12, 2020, the number of scheduled flights globally decreased by 46.4 percent compared to the week of October 14, 2019, with high cross-country fluctuations. In some countries, for example, the year-on-year drop in the number of passenger flights reached more than 90 percent, hitting a 98 percent drop in Italy. Compared to the same day in 2019, airline capacity in Europe plummeted by almost 88 percent on March 22, 2020. The volume of global air passengers reduced by nearly 1.2 billion passengers in the first half of 2020.

Therefore, it has been projected that the international airline industry will undergo a significant V-shaped decline in capacity during 2020, with cross-regional variances in terms of the severity of the decline.²

It has now been confirmed that the decline in passenger capacity massively impacted Europe with a 90 percent drop in passenger traffic in Q3 of 2020.³ According to IATA, 7.5 million flights were cancelled between January to July 2020 resulting in a USD 419 billion revenue loss worldwide just for 2020.⁴

1. Travel Reporter. (2020, July). Why airlines need to be innovative to ensure longevity during COVID-19 pandemic. IOL. Independent Online and affiliated companies.

2. Mazareanu, E., (2020, June). Coronavirus: impact on the aviation industry worldwide- statistics & facts. Statista.

3. SchengenVisaInfo.com. (2020, October). Number of passengers at some EU airports dropped for up to 86% in Q3 of 2020.

4. IATA. (2020, September). Dear Cabin Crew.

Introduction

Section 1

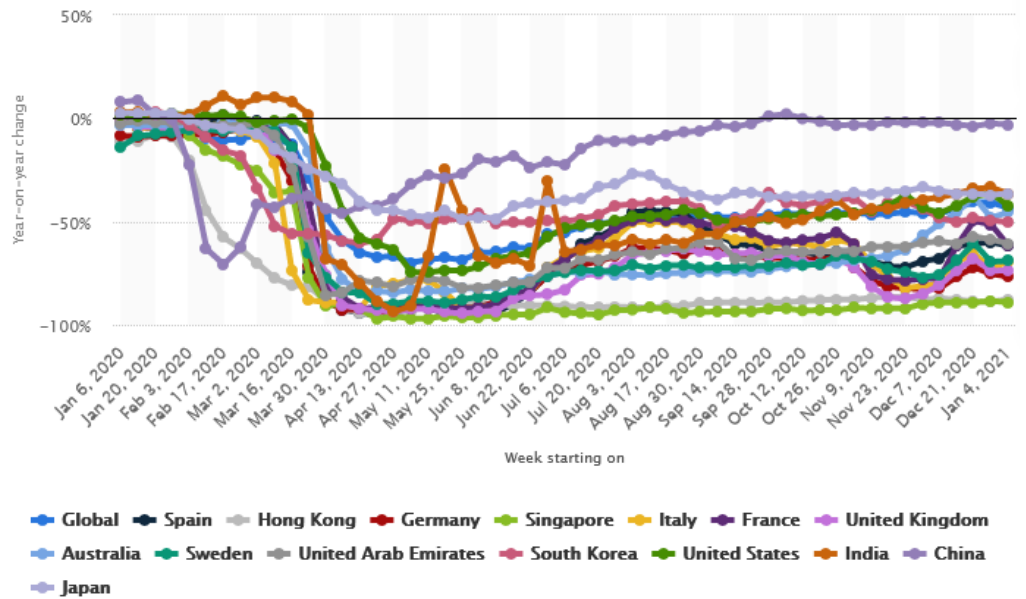
Section 2

Section 3

Conclusion



Figure 1. Year-on-year change of weekly flight frequency of global airlines from January 6 to November 23, 2020, by country. Statista (2020, November). Weekly flights change of global airlines due to Covid-19 as of November 2020.



Since the beginning of 2020, the airline sector as a whole was in the midst of a digital transformation in 2020, with Covid-19 bringing even more pressure to this effort. While in some regions, individual airlines succeed, no clear leader has emerged. Aviation could look to the retail industry, which was ahead of the game even prior to Covid-19, where all consumer brands have set standards for best practices. ⁵

Innovation and communication technologies will also play a crucial role in global UN Sustainable Development Goal attainment. International Civil Aviation Organization (ICAO) is embracing the advanced digitalization of air transport and international connectivity as never before, to achieve maximum sustainability results. Airports are going through a major digital renovation and the safety inspection posed specific challenges with the advent of the pandemic due to the usually high touch nature of the screening process and the tendency for congestion at this stage in the passenger journey. Even more technical advancement in this area has been encouraged through contactless practices. ⁶

5. Adobe (2020, June). A Post-Covid-19 strategy for airline passenger experience.

6. International Civil Aviation Organization. (2020, September). Digital innovations important to aviation 'building back better' from Covid-19. MHM Publishing.



**SECTION 1 |
FIVE KEY
MEGATRENDS
IMPACTING
AIR TRAVEL**



1.
Delivering a frictionless traveller experience by restoring traveller's trust



3.
Collaboration and consolidation in the aviation industry



2.
Touchless travel and connectivity through tech solutions



4.
Smart airline inventory management solutions



5.
Digital, AR and AI technology in air travel experience

1. Delivering a frictionless traveler experience by restoring traveller's trust

It is absolutely essential that airlines address the below concerns in order to rebuild traveler trust while they continue to concentrate on providing a seamless traveler experience. The heart of this objective lies in technology. Innovative technologies mean that at every stage of the reservation process, traveler preferences can be highlighted, since airlines could use secure customer data to customize services. This implies quick and efficient check-in procedures for passengers as well as re-allocation in times of disruption in a short amount of time. Relevant real-time information is more crucial now than ever before during the present period of uncertainty.⁷

In addition, developing seamless air travel is shown to contribute directly to the Sustainable Development Goals (SDGs) and ambitions. The main objectives for seamless travel and improved travel experience are:

- *Encouraging sustainable growth by managing travelers more effectively*
- *Improving the security and safety of travelers and recipient communities*
- *Promoting regional and local economies and creating more jobs through enhanced connectivity*
- *Facilitating sustainability through the control of visitor flows and the implementation of alternative modes of travel*

7. Jacobs Media Group Limited. (2020, June). Guest Post: Innovation is the key to airline recovery in a Covid world.



Introduction

Section 1

Section 2

Section 3

Conclusion



Figure 11. Augmented reality in aircraft maintenance.
NLR (2020, May).
Aerospace after Covid-19.



Introduction

Section 1

Section 2

Section 3

Conclusion





SMART PAPERS

