Shaping flexible organizations –
How digital solutions, services and technologies help organizations become more flexible and improve the travel experience for passengers

Digital services based on disruptive technologies are core pillars of any flexible and future-ready organization. Deploying them alongside the travel journey helps to create a customer centric, seamless experience and restores lost trust during times of crisis. The greater an organization's digital competence, the more flexible it is. According to trend study results, passengers demand digital solutions to accelerate and control their journey. They recognize them as a means to recover COVID-19 induced lack of confidence and feelings of insecurity. For organizations capable of respectively shifting management focus and meeting certain requirements already during crisis recovery, this will mean future flexibility, adaptability, customer retention and long-term profitability.

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The virus will leave us uncertain

The COVID-19 pandemic continues to keep the world in suspense, with infection numbers reaching new record levels just over 8 months after the start of the pandemic. An apparently almost never-ending crisis that will mean 59.6% fewer global passengers in 2020 according to ACI World[1]. The crisis, its consequences and the accompanying uncertainties will take hold in the minds and behaviors of those who still fly or want to fly again. Volatility has become a normal part of everyday life and will most likely continue to exist, especially over the next few months and until medical solutions such as vaccines are found and comprehensively deployed. Passengers worldwide face lack of confidence in travel, fueled by inconsistent and changing government policies. Approaching them in a way that meets uncertainties, new passenger needs and requirements and at the same time restores trust for the future seems to be a holy grail.

Digital means flexible

Digital services based on disruptive technologies readily have the potential to make additional requirements and processes along the new "sanitized" air travel customer journey more bearable for passengers. Airlines and airports are well advised to assign new importance to digital services with which they can exceed passenger expectations, create emotional proximity in times of physical distance and restore lost trust. Digitization, data usage and technology are core pillars of any flexible, learning, continuously adapting an eventually resilient organization. As simplified in figure 1, there is an exponentially increasing dependence between digital competence and organizational flexibility. Since technology and digital solutions are both scalable and learning effects can be expected, investment expenditure decreases over time. When rolled out organization-wide, their ease of

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[1] https://store.aci.aero/wp-content/uploads/2020/08/COVID19-4th-Economic-Impact-Advisory-Bulletin.pdf

adaptation allows them to define the future-readiness of organizations in increasingly agile environments.

Lufthansa Consulting experts believe that the targeted deployment of digital services and technology alongside the customer travel journey is an integral part of any customer centric approach. By highlighting the passenger perspective on digital services, giving concrete examples of today's mostly debated technological solutions, and describing advantages and requirements for organizations, this article follows on from the article "Shaping flexible organizations – A customer experience perspective on how to deal with COVID-19-induced uncertainties" published in October.
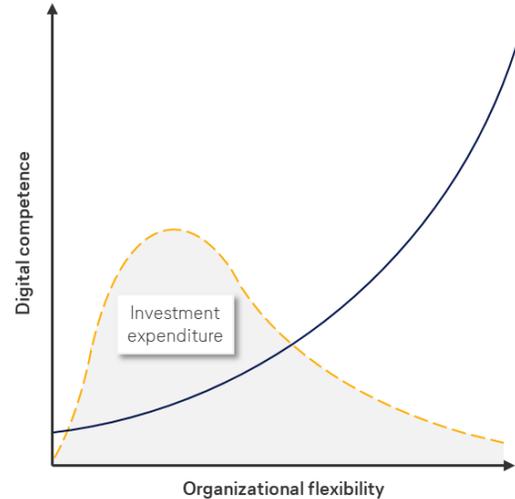

Figure 1. Digital competence vs. orga. flexibility
Source: Lufthansa Consulting

Passengers want it digital

In fact, passengers recognize and request digitization and technology as a means to accelerate and control their travel journey. According to *IATA's 2019 Global Passenger Survey*, 70% of passegers are willing to share additional personal information including biometric identifiers to speed up airport processes. Information is power, and passengers claim this power through their mobile devices with 72% of them eager to be kept digitally informed via travel notifications throughout their journey[2].

Preliminary results of a currently conducted trend study by Lufthansa Consulting indicate that a

digitally backed seamless travel journey is still the most important trend apart from current pandemic-related subjects. Passengers demand a frictionless experience with more efficient and digital security, boarding and baggage claim processes. As shown in figure 2, all four top topics that, from the passengers' point of view, would provide the most for a seamless journey are based on digital solutions.
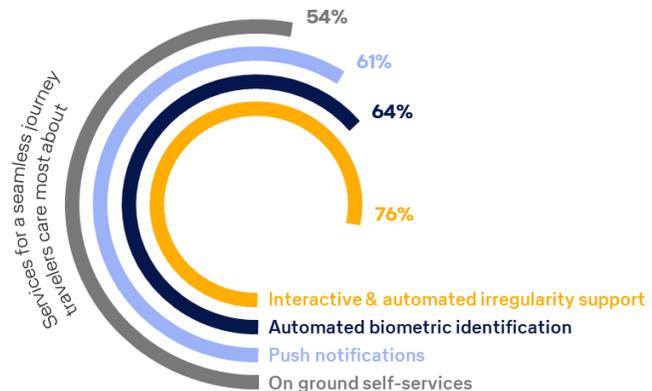

Figure 2. Digital services travelers care most about
Source: Lufthansa Consulting

Especially in the current crisis, digitization and automation may restore trust and a sense of security. Participants say that digital boarding (60%), automated health record check (48%) and biometric boarding (46%) have a positive effect on their perceived feeling of security.

Seamless for the passenger, advantageous for the organization

Many or almost all of the selected digital services and technologies in figure 3 are not tied to single customer touchpoints but integrate the entire travel chain into a holistic and seamless experience.

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[2] https://airlines.iata.org/news/global-passenger-survey-discovers-passengers-key-desires

	To airport	Check-in	Security	Dwell time	Boarding	Flight	Bag collect
Passenger touch points							

Digital services at customer touch points (selective)

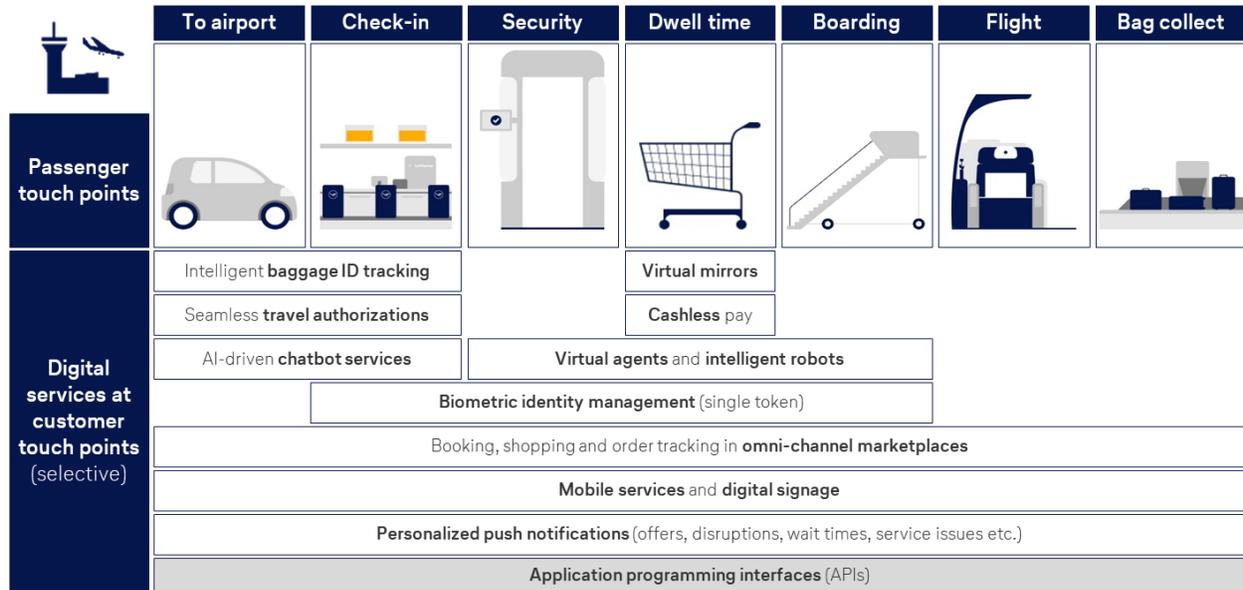|	
Intelligent **baggage ID tracking**	Virtual mirrors
Seamless **travel authorizations**	Cashless pay
AI-driven **chatbot services**	Virtual agents and intelligent robots
Biometric identity management (single token)	
Booking, shopping and order tracking in **omni-channel marketplaces**	
Mobile services and digital signage	
Personalized push notifications (offers, disruptions, wait times, service issues etc.)	
Application programming interfaces (APIs)	

Figure 3. Examples of digital services and technologies alongside the customer journey
Source: Lufthansa Consulting

Application programming interfaces (APIs) play a special role here because they represent the technical infrastructure that enables the integration of applications and services. APIs absorb and collate data from different sources, such as boarding times, number of meals needed on a flight, weather conditions at the airport or baggage numbers. A resulting comprehensive overview of what's actually going on can then be used for example to send notifications along the entire travel chain.

Selectively listed advantages of technology-driven organizations offering these digital services can be summarized in 4 key topics, as shown in figure 4:

1) Customer focus	2) Flexible organization	3) Lean processes	4) Solid financials
▪ **Differentiation** through **customer centric approach**	▪ **Flexibility, speed, resilience and agility**	▪ **Efficient processes and space use** (e.g. reduction of queues and waiting times)	▪ **More cost-effective preservation** of digital solutions
▪ **Focus on customer needs** (self-service, access to information, personalization etc.)	▪ **Continuous learning** towards **future readiness**	▪ **Scalability of digital solutions** and data processing	▪ **Increased reach and revenues**
▪ Increased **customer loyalty** and **retention**	▪ **Foundations for industry collaboration** in future (data sharing)	▪ **Reduced costs and increased productivity** (efficient resource allocation)	▪ **Return to profitable growth** in the long-run
		▪ **Centralized and fast decision making**	

Figure 4. Advantages of technology-driven organizations offering digital services
Source: Lufthansa Consulting

Shifting investment priorities towards IT

What is now required by an organization to shape its flexibility through technology and digital service offerings and thus answer passenger requirements in the same breath?

Certainly, investments are required to implement the digital solutions described above and to satisfy passenger needs accordingly. Even if corresponding budgets are currently not available in times of crisis recovery, it makes a lot of sense to think through and conceptualize these issues with regard to future priorities. And when you do this, there are key requirements to keep in mind:

- **Organizational change culture** towards agility
- **Customer feedback management** to explore acceptance and benefits of potential solutions
- **Brand management** based on integrity and trust that radiate to customers
- **Crisis and disruption management**
- **Holistic approach to digitization and data**
- **Data protection** and **cyber security** as core disciplines within the organization
- **R&D investment priorities** on technologies enabling the travel journey of the future, e.g. AI, blockchain, IoT, robots or wearable technologies for staff
- **Strong external relations** seeking governmental and regulatory guidance
- **Excellence in requirements engineering** and **use case development** to meet expectations
- **Business intelligence**, **data management** and **cloud-based analytics** capabilities

According to *SITA's Air Transport IT Insights 2019*, airlines and airports are in fact not so far from it and have already started to shift R&D investment priorities towards IT:
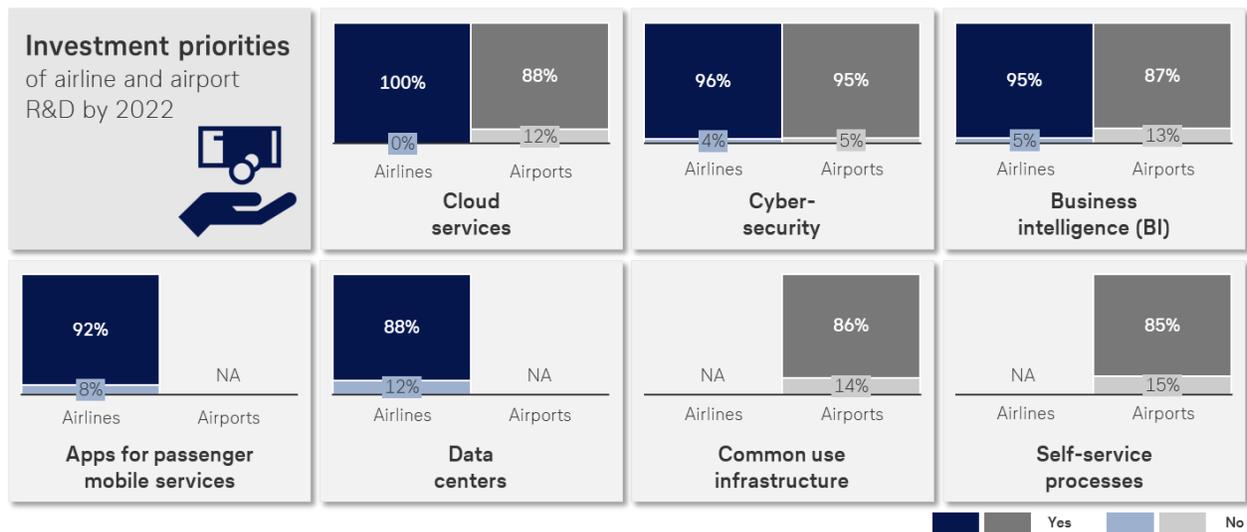

Figure 5. IT investment priorities of airlines and airports until 2022
Source: SITA, 2019[3]

At the heart of enabling these digitization and technology priorities is information, i.e. data. In the future, flexible organizations will be able to react quickly and easily to internal and external influences and changes. Digital services and technology will help but are useless if the basis for decision making in the form of data is missing. How to integrate, manage and exploit data as well as the enormous potential of sharing it among industry stakeholders will be discussed in an upcoming article by Lufthansa Consulting.

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[3] https://www.sita.aero/resources/type/surveys-reports/air-transport-it-insights-2019

Invest into the future

In order to path their way towards organizational flexibility, Lufthansa Consulting recommends aviation companies to invest in digital services and technology as core pillars of any future-ready and resilient business model. Respective solutions will assist in delivering a seamless customer journey and restoring lost trust. For organizations capable of respectively shifting management focus, this will mean flexibility, adaptability, customer retention and long-term profitability.

To learn more and discuss how your organization could benefit from Lufthansa Consulting's expertise on Crisis Recovery, please get in touch at ALcrisis-solutions@LHConsulting.com. **Together, we can make it through to better days.**

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Further insights from Lufthansa Consulting's aviation experts are available at
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