

WHITEPAPER

# **PASSENGER EXPECTATIONS ARE RISING:**

## **HOW CAN WE MAINTAIN THAT ALTITUDE?**

# TABLE OF CONTENTS

<b>Introduction</b>	<b>03</b>
<b>Meeting Customer Expectations: Personalization, Retail Experience, and Brand Awareness</b>	<b>06</b>
Customization	06
The Retail Experience	06
Pre-Flight Brand Awareness	08
<b>Overcoming Data Challenges in the Airline Industry</b>	<b>09</b>
Data Security	10
Harnessing Data to Address Market Challenges	10
Using Data to Build Omnichannel Experiences	11
<b>Predictions For the Future of the Airline Industry</b>	<b>12</b>
Enhancing Air Travel with AI and Analytics	12
Culture of Data and Analytics	13
Attracting and Retaining Younger Travelers and Talent	13
Mobile Payments and Ancillary Services	14
<b>Transforming the Future of Airline Travel with Endava</b>	<b>15</b>



## 01

## INTRODUCTION

In today's fast-paced world, customers expect exceptional experiences from airlines in return for their business and loyalty. The COVID-19 pandemic accelerated the trend of travelers demanding more safe, seamless, sustainable, and personalized experiences when they fly. Yet, despite these rising expectations, customer satisfaction across nearly all industries has declined.

Some of the research conflicts, but the lesson is the same: Airlines have the opportunity to improve the customer experience. For example, research from J.D. Power found that overall passenger satisfaction with airlines in North America saw a drop of more than **20 points in 2022**, especially when it came to cost, flight crews, and aircrafts.



At the same time, the American Customer Satisfaction Index found that airlines received a customer satisfaction score of **75 out of 100, coming in 26th out of 47 industries**. While satisfaction with some benchmarks increased from 2021, customers were less satisfied with the quality of in-flight food and beverage, entertainment, and seat comfort.

Some fixes may be straightforward, however, to see a true shift in customer satisfaction in the long term, airlines will need to focus more on the next generation of travelers.

Millennials and Gen Z passengers are currently driving the digital shift in customer service expectations in the airline industry, boosting the need for on-demand, personalized, digital services and novel,

immersive experiences. Companies that fail to meet these expectations risk losing customers to competitors who can improve their journey rather than simply get them to their destination.

To keep up with the changing expectations of modern travelers, airlines are optimizing mobile apps to offer seamless check-ins, customized in-flight entertainment, real-time alerts on travel disruptions, and unique consumer experiences. But they're also leveraging collaborations and cross-industry alliances to adapt **artificial intelligence (AI), data analytics, business intelligence, the Internet of Things (IoT), and robotics** to improve the transport of people and commodities more efficiently, sustainably, and safely.





One particularly promising area is AI-driven facial recognition, which, if used ethically, has the potential to transform the travel experience by improving security and identification for travelers. To that end, the International Air Transport Association (IATA) is also working on creating a standardized identification system, known as 'One-ID,' to allow travelers to have a frictionless travel experience and cross borders with ease.

To some extent, the pandemic expedited a digital transformation that the airline industry was already undergoing. Now, the challenge is to learn from the past and predict future needs, all while remaining nimble and agile enough to adapt quickly to any unexpected changes in customer expectations, market conditions, and emerging technologies. This requires a mindset of flexibility, a willingness to experiment with new approaches, and the ability to implement changes quickly and efficiently.



## 02

## MEETING CUSTOMER EXPECTATIONS: PERSONALIZATION, RETAIL EXPERIENCE, AND BRAND AWARENESS

Here are a few ways that airlines are leveraging technology to meet customers' evolving expectations and build brand loyalty.



### Customization

Airlines are increasingly embracing AI to deliver personalized and proactive experiences that drive customer engagement. By leveraging AI, airlines can gain deeper insights into the customer data they already possess, including travel history, preferences, and behaviors. This allows them to tailor the travel experience appropriately, providing customized recommendations, offers, and promotions that meet their unique needs and preferences. AI-powered chatbots and virtual assistants also allow airlines to automate responses to

common customer questions, provide recommendations, and assist customers with booking flights or changing their seats in real time.

AI can even help airlines predict what customers will need or want before they even ask for it. By anticipating customers' preferences for in-flight entertainment, meal options, or seat assignments and making recommendations based on those preferences, airlines stand to increase customer satisfaction and loyalty.



### The Retail Experience

In the past, passengers would have to book each aspect of their trip separately through different vendors or companies in a time-consuming and sometimes confusing process.

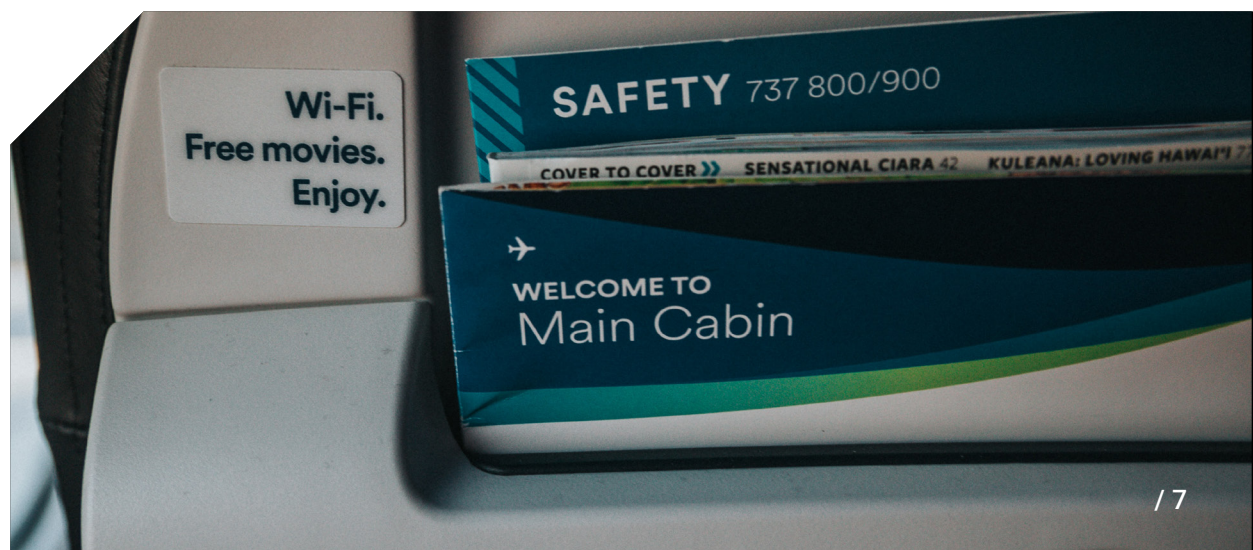


By connecting systems and vendors, airports can offer a cooperative ecosystem that allows passengers to book all elements of their trip in one place, including hotels, excursions, food, or tickets for events, either through kiosks or on passengers' smartphones. Additionally, the use of IoT sensors—which have long been used in both retail stores and airports—can be utilized to track which stores passengers visit and show interest in while traveling. This data can then be used to create personalized recommendations and promotions, providing a seamless transition to digital shopping and enhancing the overall travel experience.

These additional products and services can increase an airport's revenue streams

and profitability, which also benefit the airlines that serve them.

Airlines are also increasingly exploring blockchain-based solutions to improve the booking process and cryptocurrencies for payments. The use of blockchain technology eliminates the need for intermediaries and allows for faster, cheaper, and more secure transactions as airlines use non-fungible tokens (NFTs) to create and store flight tickets securely on a distributed ledger. Each NFT is unique and contains specific information about the flight, including the passenger's name, flight details, and seat assignment. This makes it virtually impossible for the ticket to be counterfeited, duplicated, or lost, enhancing the security and authenticity of the booking process.





## Pre-Flight Brand Awareness

The rise of social media and other digital channels has created new opportunities for airlines to meet customer expectations by building excitement and anticipation for travel.

By leveraging digital channels, targeted advertising tools, and data analytics to track and analyze customer behavior and preferences, airlines can target specific audiences with personalized ads and promotions that are relevant to their travel plans while also generating additional revenue for the airline.

For example, airlines can promote flight deals, upgrades, or other relevant services to customers who have shown interest in travel or who have searched for flights to a specific destination.





## 03

## OVERCOMING DATA CHALLENGES IN THE AIRLINE INDUSTRY

As the airline industry continues to evolve and adapt to new market conditions, the ability to collect, analyze, and utilize data has become increasingly crucial. While airlines have access to a wealth of data about their customers, the key to creating a unique and personalized customer experience lies in linking this data across multiple journeys and enriching it with external sources.

However, there are several challenges that must be overcome to fully leverage the potential of data.





## Data Security

One key challenge the airline industry faces is data security. While this is a high priority in any industry, it's especially complex for security-dependent airlines.

Customers are aware that their personal data is being shared across countries and want to ensure it's safe. Meanwhile, airlines must adhere to each country's standards for protecting their citizens' data regardless of where they travel.



## Harnessing Data to Address Market Challenges

In the wake of the COVID-19 pandemic, airlines and airports increasingly rely on technologies such as data analytics and cloud computing to gain better insight and improve operational quality.

However, leveraging these technologies requires having an optimal foundation in place. A "lift and shift" approach that moves existing IT infrastructure and

applications from on-premises systems to the cloud with minimal changes to the architecture or design may seem quick and easy, but it can result in significant cost increases for airlines.

Before transitioning to the cloud, it's vital to have hardware and software capabilities capable of running applications in a cloud environment, as well as data that is properly organized and prepared for migration.

Furthermore, it is important to effectively leverage data to address market challenges such as changing customer expectations and preferences, while still maintaining the safety and security standards of the airline industry and accounting for its environmental impact. By doing so, airlines and airports can stay ahead of the curve in a rapidly changing market and deliver a seamless and sustainable travel experience for their customers.





## Using Data to Build Omnichannel Experiences

These data analytics, cloud computing, and cybersecurity investments help airlines gather and analyze data across channels to better understand customer needs and preferences and build omnichannel experiences that carry from online to offline, allowing customers to transition between digital and physical touchpoints seamlessly.

Airlines are increasingly partnering with third-party vendors to enhance their capabilities in these areas.

*To help airlines improve customer experiences, Endava has partnered with companies like Snowflake and Salesforce to leverage the latest tools that help clients build innovative, customer-centric solutions.*



## 04

## PREDICTIONS FOR THE FUTURE OF THE AIRLINE INDUSTRY

As the airline industry continues to evolve, Endava has several key predictions for what lies ahead.



### Enhancing Air Travel with AI and Analytics

For the aviation sector to provide safe and effective experiences, AI and analytics will be essential. For instance, Lufthansa and Google Cloud have collaborated to precisely estimate wind patterns using machine learning, resulting in a **40% relative improvement in accuracy**. By doing so, Lufthansa is able to cut delays and cancellations, optimize routes and fuel usage, and enhance the entire customer experience.

Another area where airlines may use

AI to cut costs and enhance customer experiences is AI-enabled customer service. Airlines can lower the cost of providing customer support while enhancing response times and customer satisfaction by automating routine customer service inquiries and using natural language processing to give accurate and personalized responses. AI-enabled customer service can also anticipate passenger demands and deliver more individualized offers and recommendations.

Airlines may boost consumer engagement, create more revenue, and cut expenses by proactively detecting and resolving issues with predictive analytics and discovering cross-sell and upsell opportunities. By



increasing operational effectiveness, lowering maintenance costs, and limiting the effects of disruptions, these technologies can assist airlines in achieving cost reductions. These advantages may ultimately result in improved business outcomes, elevated profitability, and raised client happiness.



### Culture of Data and Analytics

Airlines will focus on creating a culture of data and analytics to develop a deeper understanding of customer needs and preferences, identify areas for improvement, and make data-driven decisions that improve the overall customer experience.

More specifically, data analytics can aid in creating personalized customer recommendations, alerting passengers to disruptions and delays, reducing cancellations via predictive maintenance technology, and analyzing customer feedback from multiple sources, including

surveys and social media, to improve staffing levels or decrease wait times in airports.



### Attracting and Retaining Younger Travelers and Talent

Younger travelers demand a more integrated digital journey. Airlines will need to respond by providing more seamless, personalized experiences across all touchpoints. **For example, Air Asia is offering passengers an all-in-one platform to pay for insurance, order food, obtain loans, and purchase fashion goods** through an integrated Super App called “Travel Companion.” This strategy strives to make the most of an existing customer base’s ability to generate sales, resulting in a more individualized and improved customer experience.

Augmented reality (AR), virtual reality (VR), and even metaverse technologies will not only create more immersive experiences in airports but attract younger talent to

work in the aviation industry by improving remote work options, enabling scalable operations, and upskilling workers.



### **Mobile Payments and Ancillary Services**

Enabling mobile payments, improving personalization, and growing ancillary services are expected to be focus areas for most airports.

Mobile commerce (m-commerce) and “buy now pay later” (BNPL) services will drive e-commerce growth and transform purchasing experiences throughout the passenger journey.



**See How Aer Lingus Transformed Their  
Payments Infrastructure**



## 05

## TRANSFORMING THE FUTURE OF AIRLINE TRAVEL WITH ENDAVA: LEVERAGING TECHNOLOGY TO MEET CUSTOMER EXPECTATIONS

The airline industry has recognized the potential financial benefits of prioritizing customer satisfaction and is now investing in innovative technologies to reshape the future of travel. One technology that has shown promise is New Distribution Capability (NDC), which allows airlines to cross-sell and up-sell their products and services, resulting in a more transparent and personalized shopping experience for customers.



Endava is committed to helping airlines integrate with industry-standard AI tools and build transformative AI-driven customer services that increase business value. Our capabilities and expertise in emerging technologies like VR and AR also position us well to support airlines as they navigate this digital transformation.

Looking ahead, we can expect to see a new era of travel emerge that features trusted digital identities, hyper-efficient metaverse-like airport operations, and centralized platforms to tackle new challenges. The International Air Transport Association's OneID initiative, which leverages biometrics and digital passes to gain travel efficiency and convenience, will play a key role in this new era.

Airlines are also experimenting with innovative pricing models like flight subscriptions and monetizing standby options to meet the needs of ultra-last-minute and budget-friendly passengers. Multiple airlines, including Frontier and Alaska, are already offering flight

subscription deals targeting flexible, budget-conscious travelers.

Another trend is the emergence of "buy now pay later" (BNPL) options, which allow passengers to spread the cost of their flights over a period of time. Alternately, "save now pay later" (SNPL) options enable passengers to save money towards their trip before paying for their flights. These new payment options are expected to become increasingly popular among customers, especially considering that 20% of Americans are currently saving up for travel.

As airlines continue to prioritize customer satisfaction and leverage technology to improve the travel experience, the industry is poised for transformation. At Endava, we are excited to be part of this transformation and look forward to partnering with airlines to unlock new revenue streams and enhance customer engagement while leveraging technologies like NDC to provide a more transparent and personalized shopping experience.



## GET IN TOUCH

To learn more about aviation and travel at Endava, get in touch with us at **[contactus@endava.com](mailto:contactus@endava.com)**