

# AI takes flight:

**How artificial intelligence is reshaping the customer experience in the aviation industry**





**Finding new ways of staying ahead of customer demands**

There is no question that the use of artificial intelligence (AI) will have an increasing impact on the commercial aviation industry. Adoption is still in its early stages, but AI has the potential to reshape the entire business and emerge as a key enabler of future business success. While artificial intelligence will impact all activities in the value chain, the area of customer experience (CX) is particularly poised to quickly leverage AI and reap its benefits. From airports to airlines, companies that truly align their business around CX are leading the industry. But even for these leaders, staying ahead of ever-changing customer demands and delivering exceptional experiences is a constant challenge. The industry is facing expectations for customised offerings that are intuitive,

frictionless, and contextualised in real time, but which also span all touchpoints and customer journeys. While the resulting complexity can be perceived as overwhelming, a targeted use of AI offers the most promising management response.

**The AI boom: Navigating between hype and real business value**

Artificial intelligence has a rather long history, characterised by uneven evolutionary steps in terms of business and societal adoption. However, significant developments in recent years have led to the current AI boom, with artificial intelligence being one of the hottest topics worldwide. In particular, starting with the launch of OpenAI's ChatGPT in November 2022, the public is less and less likely to think of AI as an elusive collection of technologies and

is increasingly experiencing its actual practical uses and capabilities. Just over a year later, seemingly every major tech company has unveiled advanced versions of their own AI models, with Google's Gemini seen as the most likely challenger to the market leader, OpenAI's GPT-4 (backed by Microsoft).

Aviation industry leaders today face an internal and external environment that is extremely challenging to manage. They have the difficult task of distinguishing between hype and applications that are achievable and deliver real business value – while still developing and pursuing a long-term vision and strategy. At the same time, euphoric future scenarios are increasingly facing backlash from parts of society and the customer base due to AI-related fears, including privacy, discrimination, lack of control, and even

job loss. In addition, unresolved questions about legal implications and evolving regulations are gaining momentum. Navigating these rapidly changing conditions requires a carefully considered approach. And, particularly in the area of CX, no AI initiative will achieve lasting success without the emerging currency of artificial intelligence: consumer trust.

### **Leveraging AI will elevate CX to unprecedented levels**

However, there is no reason to be pessimistic – quite the opposite! For CX leaders in the aviation industry, it is essential to follow an incremental and well-defined plan that allows for the necessary flexibility to respond to fast-moving changes in the business environment. In doing so, AI will open up new opportunities that can take the customer experience to a level that was previously unattainable. Superior CX is based on recognising, understanding, and responding to the needs and desires of each individual. At the same time, it is important not to downplay the human touch as a critical pillar of CX, as customer-facing employees are at the heart of the travel experience. However, it is equally undeniable that data represents the backbone of the customer experience. In the past, many organisations focused on data collection, but quickly realised that they were unable to unlock the potential of the incredible amount of data that accumulates during modern online and offline customer journeys. This is where AI becomes the game changer. Making large data sets manageable is a core capability of artificial intelligence. But, of course, this is only one fundamental benefit of using this type of

technology. AI can be seen as an umbrella term for various fields – ranging from machine learning (ML), natural language processing (NLP), and expert systems to speech recognition and machine vision, to name just a few. Although the level of sophistication in these fields varies, the true value of artificial intelligence lies in its contribution to how an organisation collects, analyses, and acts on data.

### **Exploring the wide range of current uses cases**

The potential applications of artificial intelligence to improve the passenger experience already span every stage of the travel journey. In doing so, AI is predestined to deliver direct benefits to both customers and businesses. This is because many improvements are based on both operational efficiency and customer satisfaction. Investing in artificial intelligence is therefore a very worthwhile investment, as it can not only optimise the use of internal resources in the short term, but also reap the benefits of a close customer relationship in the long term.

Based on the recent disruptive developments in the field of Generative AI (GenAI), use cases from marketing and service communications are the frontrunners for implementation, as these applications are particularly suited to deliver measurable improvements quickly.

Across the globe, airlines are starting to significantly enhance their chatbot and virtual agent solutions with AI technology. For example, in 2023, IndiGo launched a new chatbot that leverages the power of cutting-edge GenAI. Customers benefit from instant and personalised support that is available around the clock.

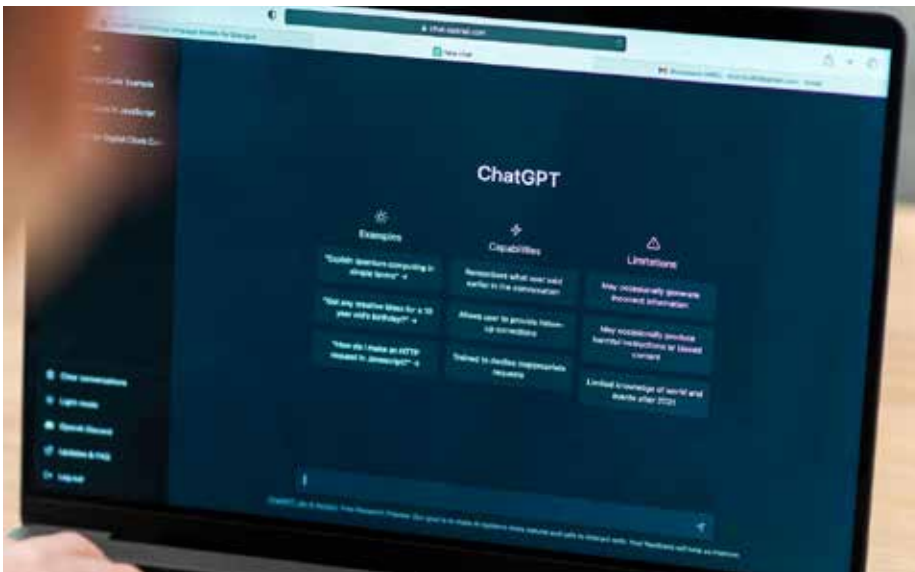


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In addition, the multilingual solution is capable of responding to both typed and verbal requests, and not only responds to them, but actually performs essential corresponding tasks such as booking or check-in. This seamless experience not only increases customer satisfaction – it also has an immediate business impact, with IndiGo reporting a 75% reduction in the customer service agent workload due to tangible improvements in efficiency and effectiveness. Ethiopian Airlines has also already achieved great success with the use of AI-based engagement solutions during the pandemic. By using machine learning technologies from its solution partner Genesys, for example, significant improvements in service levels (25% increase) and faster response times (60% increase) were reached in its contact centre – a significant improvement in the experience for their customers, achieved without additional staff.

Other use cases that are already being implemented also focus on service or marketing. For example, artificial intelligence is being used to analyse customer sentiment and enable more granular segmentation. Employing GenAI, these results are then used to proactively initiate service recovery and automatically create content to support service or marketing campaigns. Internally, the technology can support customer-facing agents with real-time, contextual information and enhanced decision-making, while externally it is being used to further empower passengers to travel more independently throughout the customer journey by using self-service options.



Nevertheless, these applications represent just a glimpse of the possible areas where AI can help to deliver a much more convenient, stress-free, personalised, and satisfying travel experience. On a broader scale, artificial intelligence is enabling radical improvements in operations that address the root causes of serious pain points along the journey. From biometric passenger identification to queue management, from operational and staffing planning to delay forecasting and baggage handling, all are poised to improve performance for the benefit of the customer. In addition, recommendations of Next Best Offers will further personalise the traveller experience, enabling optimised pricing and increased ancillary revenues.

**The way forward on the path to success**

In conclusion, artificial intelligence is not only here to stay – its application is

already on the verge of becoming one of the most important success factors in the aviation industry. While the use cases and stages of development may still vary considerably from one business area to another, the customer experience is an area where AI is ready to take off. Airlines and airports have the opportunity to dramatically improve the experience they provide and deliver real value to their customers, while simultaneously realising cost savings, increasing revenue, and achieving new levels of operational efficiency and effectiveness.

The important message is that the use of AI is not only reserved for companies that already have a high level of digital maturity or can draw on pronounced internal capabilities. In most cases, it is not necessary to develop AI solutions in-house, as the market of AI solution providers is growing rapidly, and initial use cases can be implemented with a

relatively low budget. In this way, initial experience can be gained at all levels, quickly leveraging the benefits, and laying the basis for scaling at a later stage.

However, given the significant implications for future success, managers are advised to make a clear distinction between short- and long-term actions. As mentioned, it is essential to gain experience and learnings from AI as soon as possible. The focus should be on proven use cases that can be implemented quickly, such as virtual agents or sentiment analysis for service recovery. Nevertheless, managers should also not rush into comprehensive AI programmes. They must ensure that their approach to AI is aligned with the overall strategy, follows a clearly structured road map, is synchronised with the necessary development of internal capabilities, and, last but not least, does not outpace the customer base.