

## How do you transform the travel industry with AI agents?

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By now I'm sure you are already familiar with AI agents. These small pieces of software code use a combination of machine learning and [Generative AI](#) to intelligently respond to queries or undertake entire tasks. Importantly, as the name 'agent' suggests, they can be designed to have 'agency', not just finding information but reasoning and acting too. They can act with autonomy, proactively solving problems while adapting to changes in their environment.

Today, AI agents are already undertaking simple tasks and acting as co-pilots to human workers to help them achieve more. In the future, multi-agent systems, made up of many different AI agents that can communicate with each other, promise to increasingly automate complex tasks.

The combination of agents with increasingly sophisticated Generative AI models is nothing short of transformative. It's a once-in-a-generation technology advance that has huge implications for every area of the economy, but particularly for travel.

Travel is a case in point. Due to the importance of unstructured information, our industry is part of a group of sectors, alongside e-commerce and education, that have the greatest potential to positively transform with AI agents and all the associated enablers, like modern data platforms.

From finding the optimum trip to organizing operations at an airport, many of the 'problems' we seek to solve in travel have similar characteristics. They require analysis of vast amounts of unstructured data, which is often siloed and hard to access. They then require intelligent decision making based on that analysis, resulting in an action – perhaps booking a flight or assigning an aircraft to a particular gate. Downstream systems and stakeholders must then be updated.

AI agents can automate this type of work. They can flexibly access data if permitted by the traveler, and apply increasingly advanced reasoning to recommend the best course of action. Importantly, they can also take that action and automatically update the required systems.

That's why we at Amadeus view Generative AI as a genuine 'once-in-a-generation' breakthrough. By mimicking human capabilities to 'use' our existing applications, by obtaining greater contextual understanding about our needs, by communicating with humans or other agents, and by undertaking actions, it is increasingly clear that agents will take on a wide variety of tasks.

**Amadeus and Microsoft have recently created [a report](#) exploring the potential of Agentic AI in the travel industry.**

The study focuses on AI Agent use cases that drive operational efficiency for airlines, airports, travel sellers and hospitality companies. Quite frankly, the sky is the limit and I do see Agentic AI adding value to every type of business application and business process in travel.

Within the report, we have provided initial details about the first batch of six AI Agents being explored across Amadeus' solution portfolio, for the first time. While these initial agents tend to be assistants rather than fully autonomous, some of them are already live and delivering value today.

## Airline fare rule expert

One of the most common and time-consuming requests travel agents deal with are traveler queries on their air purchase. Answering simple questions like ‘how much will it cost to change my ticket?’ ‘what’s the latest date I can make a change?’ can take upwards of 10 minutes.

Now, travel agents can answer such questions in an instant by chatting with an AI agent. The AI agent has been trained on airline fare rules relating to both EDIFACT and NDC content, using data from ATPCO, PDF documents direct from airlines, airline B2B portals and Amadeus so it is able to return highly relevant results that replace the need for travel agents to phone airlines.

## A PNR Guide

[Passenger Name Records \(PNRs\)](#) contain several pages of cryptic information, which can be time consuming to sort through. This AI agent helps human travel sellers to more quickly answer questions relating to a booking, acting as a PNR guide. You can chat with this agent rather than analyzing a PNR as well as understanding which of your colleagues has made previous changes to a PNR.

## An assistant that monitors your inbox

This AI agent has been specifically designed to play the role of an assistant that reads each in-bound email a travel seller receives to check all necessary information has been provided. The AI agent can analyze the email text to detect the traveler’s intent and any information that’s missing. It then creates an email reply, which is reviewed by the travel agent, before being sent to the traveler. By automating this task human agents can spend more time consulting with clients and upselling.

## Cross and up sell specialist

This agent provides cross and up sell recommendations, making it easier to add ancillary services and grow the overall basket size. This agent monitors offers created for the traveler and can prompt the human travel agent to offer relevant extras.

For example, if a premium economy flight has been offered the AI agent might notice that if the traveler departs two hours later, they could fly in business class for only a minor price increase. During a phone interaction, the human agent would receive this prompt through [Selling Platform Connect](#). Similarly, this agent can continually monitor flight and hotel prices to ensure the best possible rates and value are always offered.

## Garv – operations advisor for airports and airlines

Garv is an AI agent developed for airport operations teams, enabling users to query complex operational data through natural language or speech and receive contextual,

actionable insights. For instance, when asked to analyze passenger processing times per airline for March, Garv delivers accurate results, identifies outliers, and explains the reasons behind unusual patterns, helping teams conduct root cause analysis, address underlying issues, and optimize airport capacity and passenger flow. With intuitive conversational access, Garv empowers users to move beyond raw data, quickly resolve operational bottlenecks, and make informed, data-driven decisions to enhance overall airport efficiency and throughput.

## **Amadeus Advisor – a hospitality analyst**

The first of several AI agents designed to enhance the value hospitality companies can gain from data analytics. [Amadeus Advisor](#) is already live and in-use by Agency360® customers today, and it's being implemented in Demand360® too. Rather than a General Manager needing to send a question down the chain and wait a week for a report, they can simply ask the agent and get an instant response in the form of a data visualization and precise text-based answer.

For example, a General Manager might ask “How does our revenue performance compare to our competitors over the past six months?” or “Which agencies have reduced their bookings with us over the past six months?”. Subsequent data visualizations can inform onward actions, like a focused sales push to specific agencies or running a new marketing campaign.

It truly is an exciting moment to be working in travel technology. By harnessing the full potential of transformational technology and working together with transformational partnerships, we can deliver a positive impact for both the traveler and our industry.

Although I'm hugely proud of this initial batch of agents and my colleagues that developed them – we're only beginning to scratch the surface of what's possible. Agentic AI is going to deliver entirely new operating models and significant efficiency gains. Stay tuned to see how Amadeus, alongside our partners, continues to embrace the impact and implications of technologies to transform travel.