

AI Report

# The AI Journey: A New Way of Travel

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Tourism and Hospitality



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Aisha Al Matrooshi is leading tourism industry development in a visitor experience capacity at the Department of Culture and Tourism – Abu Dhabi. In her current role, she develops and implements strategies to enhance visitor experience, drive footfall, increase average length of stay in the emirate, and position Abu Dhabi as a destination of choice for world travelers.

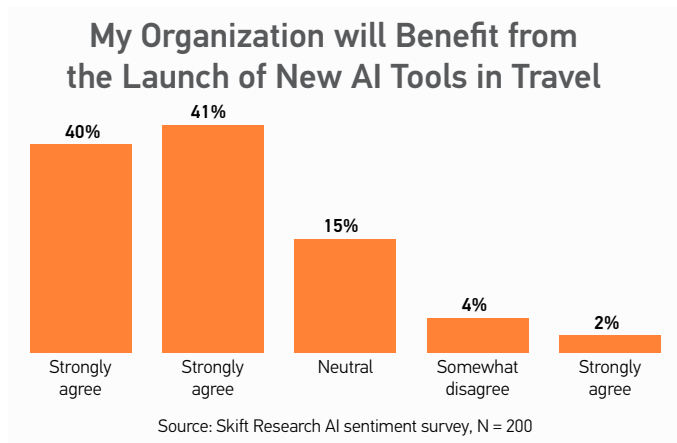
She possesses 17 years of experience in management, including 12 years in the hospitality industry, where she managed hotel operations at a variety of business and leisure 5-star hotels and resorts, leading guest-facing and non-guest-facing teams in achieving desired business and financial results.

Aisha holds a bachelor's degree in Management and Marketing, and is currently pursuing an MBA degree in Hospitality at the École hôtelière de Lausanne (EHL) in Switzerland.

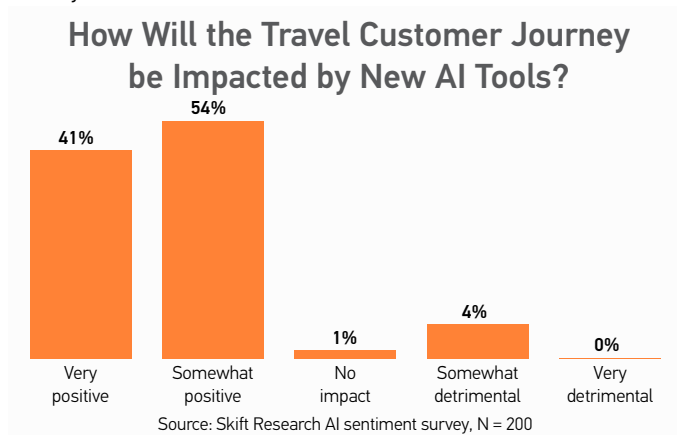
While preparing for a visit to Lausanne, upon finalizing my itinerary, a request for an academic training in Cologne landed in my inbox. Consequently, I had to alter travel dates and flights to accommodate this new journey. It took me little time to adjust my schedule, and optimize travel routes for the shortest possible layovers and overall travel time. While marveling at the seamless itinerary I had crafted, I became curious about the capabilities of ChatGPT – the Artificial intelligence (AI) powered chatbot – in creating a comparable travel itinerary. The suggestions by ChatGPT arrived instantly and were very similar to the flights I had booked. This recent example reminded me of the deep impact that AI will have in our industry.

**At the macro level, AI is already changing the tourism industry.** In 2021, AI contributed to over a fifth of large travel companies' revenue. This marks a rapid doubling from just 9% in 2018, [according to a global survey by Statista](#). But the pace of that rise is set to quicken further, with AI expected to play a part in 32% of revenue generation by 2024.

The technology has clear benefits for travel companies, and [research by leading travel news provider Skift](#) shows 81% of people working in the tourism sector believe new AI tools will boost their organization.



The benefits extend to travelers, too, with 95% of travel industry professionals seeing potential for AI to enhance the travel experience, according to Skift's AI in Travel: Sentiment Survey.



Experts in tourism map seven stages of the visitor experience journey:



AI is enriching all seven stages, and its impact can be broken down into three clear areas.

### Planning and booking

Entertainment giants Netflix, YouTube, and Spotify all [deploy recommendation algorithms](#). These work by tracking user activity, collating that data, identifying similar users, and then suggesting related content that might appeal to them.

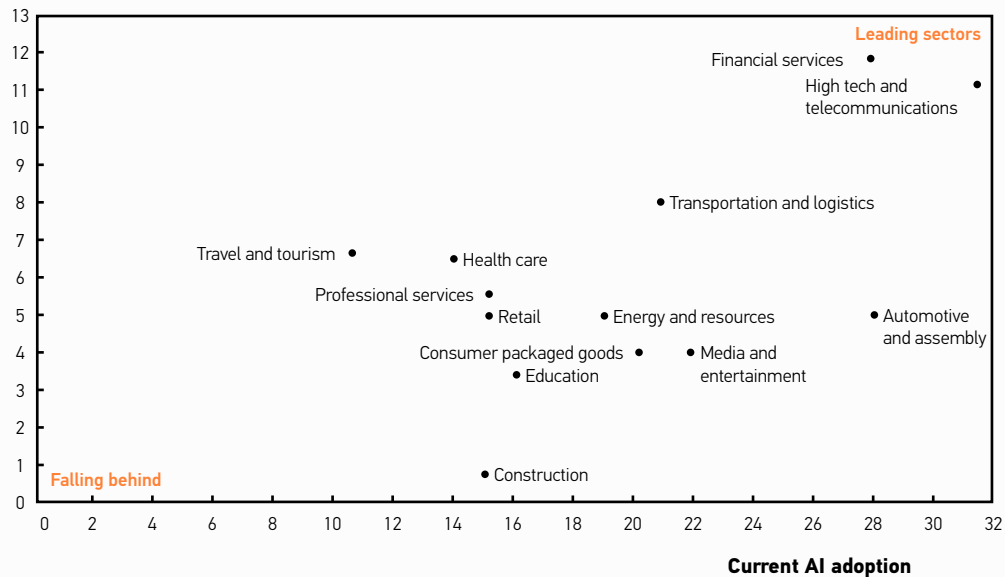
[Booking.com has long used such algorithms](#) to analyze customer preferences and behavior. Its programming uses a "guest first" principle to match users with suitable accommodations, drawing on information such as traveler reviews, price competitiveness, occupancy rates, and cancellation rates.

But the wider travel industry has lagged behind other sectors in adopting AI and making use of data, even with its AI uptake now estimated to increase faster than in several other sectors.

## Sectors Leading in AI adoption today also intend to grow their investment the most

Future AI demand trajectory<sup>1</sup>

Average estimated % change in AI spending, next 3 years, weighted by firm size<sup>2</sup>



1. Based on the midpoint of the range selected by the survey respondent.

2. Results are weighted by firm size. See Appendix B for an explanation of the weighting methodology.

SOURCE: McKinsey Global Institute AI adoption and use survey, McKinsey Global Institute analysis

**Current AI adoption**

% of firms adopting one or more AI technology at scale or in a core part of their business, weighted by firm size<sup>2</sup>

### Exhibit 4

The sooner the travel industry can get on board with AI, the better. [Algorithms tend to improve as they get access to more and higher-quality data](#). Netflix is a testament to that—[its recommendation algorithm now guides the viewing habits for 80% of users](#).

AI is also what travelers want. [Three-quarters of travelers worldwide think AI will help them with booking this year](#), according to Statista. Virtual assistants are one way this is already happening. [Expedia is beta testing a travel planning assistant powered by ChatGPT](#) that can engage in open-ended conversations with travelers, much as a travel agent would. It works on Expedia's mobile app and can suggest destinations, sites to visit, how to travel, and when to travel, as well as flights and car hire options.

### From arrival to departure

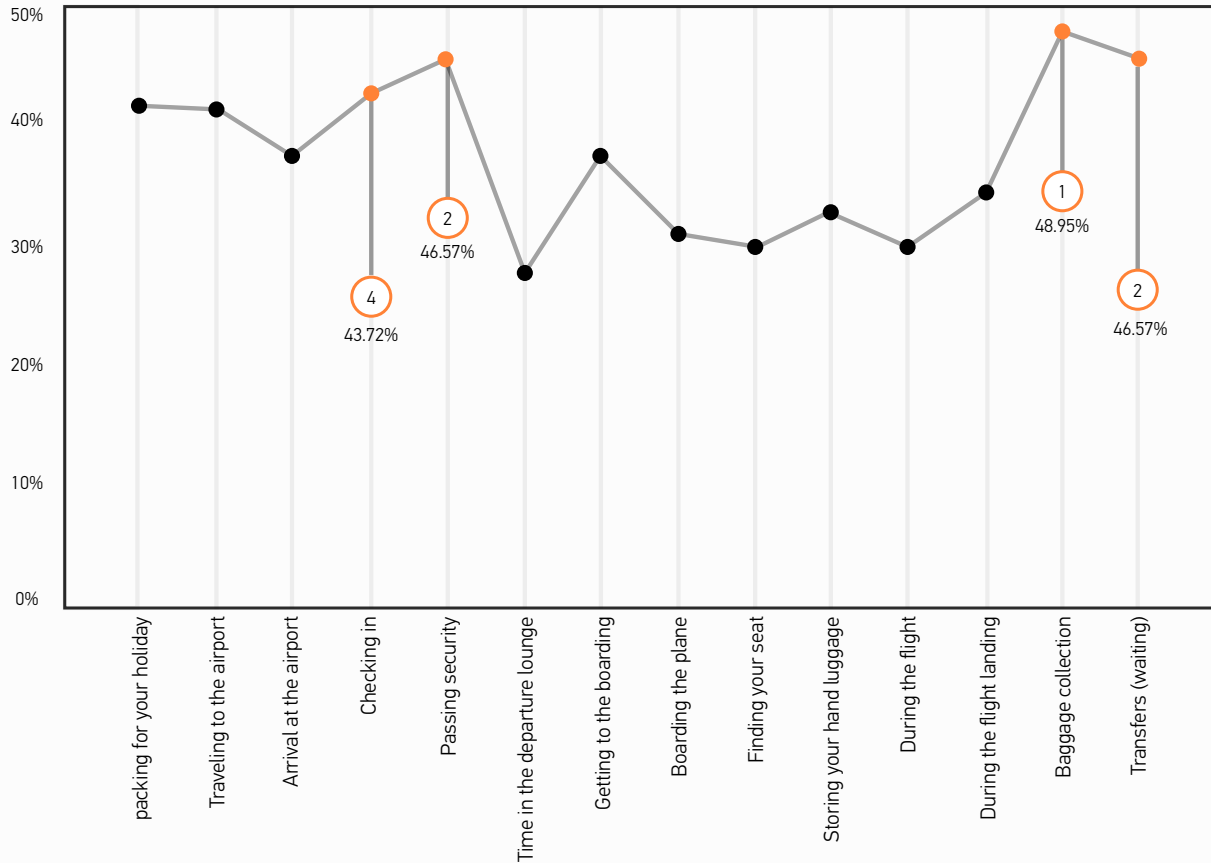
Facial recognition technology is becoming more widespread at airports. The [UAE was one of the first to use this technology](#), with [Dubai Airports introducing it in early 2021](#) and [Abu Dhabi Airports following suit in 2022](#).

The [AI-powered system relies on computer-generated filters](#) that take facial images and transform them into numerical expressions to map their similarity against another image.

These systems streamline the check-in and check-out process—US airline [Delta says this can take nine minutes off the boarding process](#). They also make the traveler's experience easier and more stress-free. Checking in and passing security are two of the most stressful elements of traveling, according to a survey by international airport lounge provider Priority Pass.

## What part of traveling to or through an airport do people find the most stressful?

these are the most stressful stage for people traveling to or through an airport.



[Privacy and security concerns](#) can arise as a result of airports having access to this data, because of hacking or potential misuse. Airports have to ensure they counter these risks by [anonymizing and encrypting data](#).

Facial recognition software is also in use outside airports. [The Hawaii Tourism Authority](#) used it to analyze travelers' reactions as they watched a marketing video. After identifying which footage evoked the most positive reactions, an algorithm provided customized holiday recommendations.

This is part of a trend of "[radical personalization](#)" in the [travel industry](#). A hotel company is piloting a program where algorithms analyze data about regular guests to improve service. With these AI-powered insights, staff can provide a coffee at the time of day the visitor usually has one or use the visitor's cell phone location to send offers for local shops and restaurants as they pass them.

AI travel assistants can offer personalized recommendations for restaurants and bars, bespoke budget advice, and customized itineraries. [GuideGeek](#) does this by categorizing

and filtering advice collated by travel experts at publisher Matador Network.

At Aloft Hotels, a [virtual front-desk service is now available to guests via their mobile phones](#). They can request in-room services or local information and will receive a response within five seconds. Aloft, owned by Marriott International, says the app improves with every use thanks to machine learning, and that two out of three guests are using it.

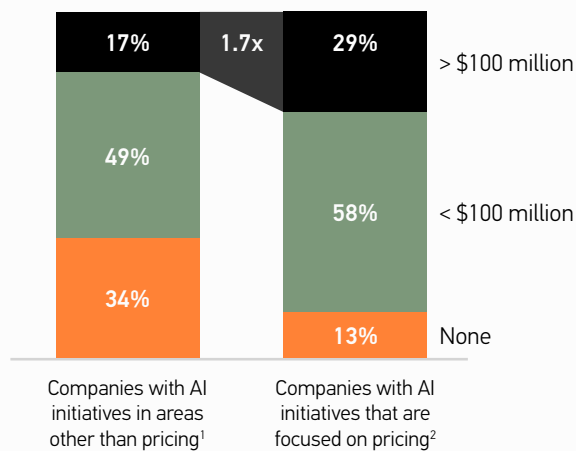
## Dynamic pricing

Hotels and airlines already use algorithms to dictate their [dynamic pricing strategies](#). Also known as "time-based pricing", it relies on data signals such as customer demand, current booking rates, and competitors' prices.

Using AI to optimize pricing can boost EBITDA by **2 to 5 percentage points**, according to [Boston Consulting Group](#). This is because it can work more quickly, handle more complex data, and operate with much larger datasets.

## AI pricing Transformations Generate Greater Financial Impact Than Do Other AI Transformations

Revenue benefit from an AI transformation



Source: A survey conducted by the Massachusetts Institute of Technology and the BCG Henderson Institute.

<sup>1</sup>Companies with more than \$10 billion in revenue.

Travel industry experts see the [potential for AI to turbocharge dynamic pricing models](#), according to Skift. One way it could do this is by uncovering demand signals from “unstructured data”, such as trending images posted on social media. McKinsey says that [advances in machine learning](#) could allow pricing models to take into account individual customer’s willingness to pay certain rates, as is already done in e-commerce.

Dynamic pricing for flights is already used by companies such as [Emirates Airlines](#). More advanced AI-powered price optimization will not only improve airline revenue, but also customer loyalty, according to [travel software company Datalex](#).

AI may be expected to contribute to **32%** of travel companies’ revenue generation by 2024, but its contribution to the travel industry is only just taking off.

AI will continue to transform the visitor experience journey, updating the ways in which we plan, enjoy and share new and innovative travel experiences. This will, in turn, create new standards in the industry around customer satisfaction, customer expectations and brand loyalty. Our industry is already considering how AI will contribute to more sustainable tourism practices, by analyzing traveler data and identifying opportunities for positive impact.

Understanding the visitor experience journey and utilizing the latest AI technologies can profoundly aid destinations and attractions to create more effective marketing strategies, improve the quality of visitor experiences, and foster long-term relationships with visitors.