

Travel, Logistics & Infrastructure Practice

What AI means for travel—now and in the future

Travel is at an all-time high—and woes can sometimes seem widespread. Here's how AI could help.



“Revenge travel.” It’s what a lot of people are doing these days—hitting the runways in big numbers to make up for travel time lost during the pandemic. On this episode of *The McKinsey Podcast*, McKinsey partners Alex Cosmas and Vik Krishnan join global editorial director Lucia Rahilly to discuss a new report on travel in the age of AI: what the technology’s promise and pitfalls are and what it may mean for the travel industry overall.

This transcript has been edited for clarity and length.

The McKinsey Podcast is cohosted by Roberta Fusaro and Lucia Rahilly.

The promise of AI

Lucia Rahilly: Much of the research for the report drew from interviews with executives at 17 companies across five types of travel businesses. One of those executives is Luca Zambello, CEO of Jurny—an AI-fueled hospitality platform. He says AI will be the new normal.

Luca Zambello: We’re at the very beginning of the hockey stick. Economically, we are at the start of what is potentially the biggest technology disruption that humanity has ever seen.

Lucia Rahilly: So everyone is talking about the disruptive juggernaut that is AI, and particularly gen AI [generative AI]. At a super-high level, and acknowledging that we’re still in early days, what do we expect this to mean for the travel industry in particular?

Vik Krishnan: The travel industry is unquestionably going to be significantly disrupted by AI. Whether it’s gen AI or other forms of AI that have been around for some time remains to be seen. It’s quite clear that if you work through the customer journey and the process of trying to understand where you want to go, where you want to stay, what are the things you want to see, how you want to plan your day-by-day itinerary, gen AI significantly eases the process of travel discovery.

If you then step into what this means for travel suppliers, which includes airlines and hotels and cruises and car rentals and rideshare providers, the promise of AI is very much to help them deliver on the promises, both explicit and implicit, that they make to their customers.

What I mean by that is, very often, the expectations of travel are that your flight is on time, your bags get delivered to you safely, you then get to your hotel, your hotel room is available to check into when you get there, and you have a room that provides exactly what you asked for. That baseline expectation is one that many travel companies have historically struggled to meet.

What AI can do is help airlines ensure that planes are on time. It can help hotels ensure that what they deliver in terms of staffing and the product promise is consistent with what they advertise in their marketing and branding strategies.

Alex Cosmas: Not only is travel and hospitality the world’s largest sector, but it’s actually the most

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intimate sector. That means the answer for each of us to what a good experience looks like—whether I’m traveling for leisure or for business—is, by definition, fundamentally different. And the promise of AI has been to take the pattern of history, take the pattern of millions, and boil that down to the individual response that is relevant to me as a segment of one.

Nowhere is that promise needed more than in travel, where the experience should be a segment of one. That’s what makes it magical. To be clear, AI is already being applied in the travel sector in spades—specifically, in the operation of schedule assets and the optimized allocation of rooms and crews. That’s been true for decades, and it’s only getting better.

But the customer-facing applications of AI are only now really becoming next-generation. And for the most part, in travel, the best AI applications will largely be opaque to customers, because they’ll still be delivered through the mediums that customers prefer: often through humans, through the front line, through desk agents, through guest agents.

That’s ideally the promise. But the starting point is to say we can’t suddenly expect that customers will prefer to interact through more digital channels than they have in the past. Travel is a very human-centric business. And so the best AI, the best models, will be delivered through traditional channels.

How AI can change travel—for the better

Lucia Rahilly: What kind of value might come from using gen AI in the travel industry?

Alex Cosmas: Our latest estimates suggest that gen AI alone, across sectors, is bound to unlock \$2 trillion to \$4 trillion of incremental value.

Lucia Rahilly: Wow.

Alex Cosmas: Therefore, not surprisingly, capital is chasing the disruptive sector of AI.

Lucia Rahilly: What are some good examples of products that customers might expect to be using or that might be in the background enhancing customers’ experiences in the future?

Vik Krishnan: Imagine the last time any of you tried to book a trip. You probably started on a search engine such as Google, or you started at an online travel agent such as Expedia, or you started at an actual supplier website if you had some certainty on what airline you wanted to fly or which hotel you wanted to stay at. You probably started with a little box where you put in your destination, you put in your approximate dates, and then you had the search engine present to you a series of results that may or may not have met your needs.

What we're imagining in a future with gen AI or AI in general is that you start with something much more free-form and say, for example, "I'm looking to plan a trip with my family to New Orleans for a week in October. Can you help me find a hotel that has a pool for my seven-year-old and is within walking distance of the French Quarter?"

Wouldn't that experience be much easier in terms of trying to figure out where you want to stay and what you want to do, as opposed to getting a list of a thousand hotels in an order that may or may not meet your specific preferences and what you actually want out of that trip? It is one of the most obvious examples wherein customers can see a real difference in what gen AI can do to help them with the travel discovery process.

Alex Cosmas: The other application of AI that I'm excited about is this: every customer gives tells. They drop digital breadcrumbs of things they like and don't like when they bounce off of the page of a dot-com when they're shopping; when they abandon a cart; when they return less frequently to search; when they arrive on a page only to check a single itinerary on a single day, on a single fare, rather than browsing for 20 minutes.

All of these are small tells that we as consumers provide travel brands. And so the ability to record, "I actually know what Alex is keen on in general and frankly less keen on and less likely to convert on," and turn that into relevant offers is really important.

AI is only part of the answer

Lucia Rahilly: Where are we in terms of companies really embracing the use of this next-gen AI and other related technologies?

Alex Cosmas: We're pretty far down the path of companies both embracing traditional AI and experimenting with gen AI. Very few of the airlines, hotels, cruise lines, and suppliers that I've interacted with are not already embracing deployment and actively experimenting with advanced tech. It's only going to grow.

But there is risk. More is not always better. Faster is not always better. There's a bit of, let's say, a cautionary tale that we've learned from other sectors, which is that first off, AI is only part of the answer.

The digital-delivery mechanism is how I go about delivering the answer: a mobile app, a push notification, an e-commerce experience, a kiosk, digital signage, or data just given to the front line. Those mechanisms are as equally important as or, I'd argue, even more important than the predictive and gen AI models behind them.

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Vik Krishnan: To build on Alex's point about getting the delivery wrong, many of you listening have probably been on an airplane in the last year. How

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many times have you experienced the outcome of landing, pulling toward the gate, stopping short on the tarmac somewhere, and it turns out the gate's not available yet. Therefore, you have to wait for the other aircraft to taxi out, so your plane can then pull into the gate.

The reality is that putting together an operational execution plan involves data from so many different sources that aren't necessarily pulled together in a large model. So it doesn't necessarily enable or unlock this type of orchestration. And this is where AI can be enormously helpful.

There are companies out there that try to understand turning an aircraft, which is the process of essentially getting it from arrival to departure for the next flight. That involves actions both above the wing—for example, getting passengers off and onto the plane, getting the aircraft catered—and below the wing—for example, getting bags on and off the plane.

It involves refueling aircraft. It involves a number of other maintenance-related and ground-handling-related activities that many consumers don't see. All of that is an extremely delicately orchestrated ballet that happens at an airport every single day, while involving multiple third parties and several different suppliers. It involves a fuel provider. It involves a ground handler. In some instances, it involves a different gate agent than the airline itself. That orchestration requires data and communication of very, very large volumes of information.

There are companies out there that are now saying, "We can actually identify when, during an aircraft turn, something didn't happen according to schedule." In other words, that catering truck didn't pull in three minutes after arrival as it was expected to, which induced a delay. And that delay then allowed for a replanning of the entire turn process, so as to deliver an on-time departure. AI has an extremely large role to play in helping deliver on that promise in a way that suppliers have historically struggled to.

Don't be AI stranger

Lucia Rahilly: In order to deliver on that process, understanding the data is critical. Here's Ella Alkalay Schreiber, the GM of fintech at Hopper.

Ella Alkalay Schreiber: Machine learning is important, gen AI is important, predictive AI is important—but the actual challenge is to understand the data, ask the right questions, read prediction versus actual, and do this in a timely manner. The actual challenge is the human thinking, the common sense.

Lucia Rahilly: "Know your customer" is really a business axiom at this point. What does understanding your customers mean specifically for the travel industry?

Alex Cosmas: It means a few things. AI models learn the same way humans learn. It's a test-and-learn process. I ask a question. I observe a behavior. That reinforces either my false or positive conception of who you are and what makes you tick. If you can't measure cause and effect precisely, then avoid running an experiment entirely.

This is what our general advice is to our clients. I'd rather they experiment correctly on something small than swing for the fences and have no idea where the ball lands. That's particularly true in microexperiments, where I have individual customers, where I provide individual treatments, but I have to be able to measure the response. If you can't measure it, don't bother. Focus your energy and resources on a different experiment.

If a brand, for example, doesn't have the digital tech to be able to send a tailored offer to me as an individual, then you don't really need to know my personal willingness to pay. In that case, stick to the microsegment or the macrosegment and take action that way. If you can't send a personalized message without making it feel generic, then don't.

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Vik Krishnan: The experience of hyper-personalization has to feel authentic. So in other words, a flight attendant coming up to you and saying, “Hey, I know you normally like a Diet Coke with a slice of lime. Is that what you’d like this time?” is different from presuming what your preferred drink might be. That might be an example of how AI actually delivers on hyper-personalization, but with a bit of a human touch so it doesn’t appear creepy.

Lucia Rahilly: Both of you are deep in this industry. Any examples that come to mind of companies that are really doing AI right? And if so, how?

Vik Krishnan: Hotels that actually understand or acknowledge your past history of staying at that specific property—that’s quite a personal touch I really appreciate. But the reality is many hotels struggle to even understand basic facts such as the frequency, duration, and purpose of a recent stay. Many hotels don’t easily make that type of information available to their frontline staff. And so empowering those employees to use that information to deliver a hyper-personalized greeting or experience is a good example of companies using AI well.

Alex Cosmas: If done right, the frontline workforce should look and feel like superheroes powered by AI. There’s a luxury fashion retailer that arms its sales

associates with iPads to link shoppers to the styles and the sizes they searched for online. That’s pretty cool. Now, augment that with the propensity models in the background that give the agent a steer to what a customer wants, and suddenly they appear clairvoyant. Think about that application in travel. There are far more interactions on average in a travel journey.

So as consumers, how do we preserve the magic of travel, which is more about heads-up time and being immersed in our surroundings, rather than about heads-down time and researching on a device? It means more agents who surprise and delight; say, “Welcome back”; say, “Happy birthday”; know you arrived earlier than planned; and swap the room preemptively so you could get in and get on your way. And that’s what we call knowing your customers like you know your friends.

I’ll share one example. When I check into a hotel, I really don’t like the kiosk and the app check-in. But I love it for checking out. For other customers, the complete inverse is true. My hotel can know that. It certainly knows how I check in and check out. It should act on that or understand the why, just as you understand your friends. This is the test-and-learn experiment that we talked about earlier and that most suppliers can begin right now.

AI and talent: What's next?

Lucia Rahilly: Alex, that makes a very nice segue to Christiaan Hen, chief customer officer at Assaia, talking about frontline talent using AI as an assistant.

Christiaan Hen: Sometimes, people say automation might be a risk to people's jobs, but that's not the case here, because there are not going to be enough people to do these jobs in the first place. I like to see it as we're equipping people with the right tools to do their jobs in a better way to accommodate for the additional workload that is coming.

Lucia Rahilly: This clip invokes the palpable fear that AI and automation will eliminate people's jobs. We hear that time and again. How do you see these advanced technologies changing things for the front line in the travel industry?

Vik Krishnan: I see technology helping frontline employees do a better job more than I see it eliminating those jobs. We don't necessarily see, for example, AI reducing flight attendant staffing any time soon, because those flight attendants are on the airplane to provide primarily for your safety, followed by the guest experience.

We see AI in many instances allowing those flight attendants to deliver a better customer experience, because they know that passenger in seat number 17C better as a result of the information provided to them. But it's not replacing their jobs.

In certain pockets of the economy, technology and AI will end up replacing people. The reality in travel, though, is that the quality of the guest or passenger experience for so many people is tied to human interaction. Consequently, we don't necessarily see a large-scale replacement of people here by technology and AI.

Alex Cosmas: Let's look at the facts for a moment. Post-COVID-19, the travel sector employs 12 percent fewer staff than pre-COVID-19. And that's not necessarily by choice. It is hard to find folks with the

hospitality gene who genuinely want to deliver for guests, engage with them, and serve at the highest level day in and day out.

That's part of the reason we see a smaller workforce in travel today than we have in the past. It takes twice as long, an average of five to six weeks, to fill roles as it did before the pandemic. Those with that hospitality gene would love nothing more than spending less time fixing broken itineraries, fixing issues that frankly could be automated. They'd rather spend their energy serving, which is what travel and hospitality is all about.

It should be a net-positive growth. The travel sector itself should grow as a result, creating jobs. We estimate the travel sector to grow at roughly 6 percent over the next decade, which is twice the rate of the overall economy.

Lucia Rahilly: Could AI and related technologies help with training folks who don't come by that gene naturally but could be trained to fill those roles more efficiently?

Alex Cosmas: Absolutely. We're already seeing applications of virtual reality, augmented reality, and AI coming together to offer more efficient ways to enhance and accelerate employee training, because you can throw live, immersive scenarios in front of employees at a higher clip than they would get organically on the job.

Oftentimes, the same is true not just of the front line but also of training corporate and call center employees. AI can learn from the patterns of thousands upon thousands of call-ins and transcripts—which no single human can ever be expected to go through—boil them down to the top ten core issues and suggest outcomes that seem to resolve 70 percent of situations. That's the power of AI in training.

Lucia Rahilly: Alex, you mentioned virtual reality. Would travel drop if you could experience Bhutan from your sofa rather than actually having to take an arduous flight?

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Alex Cosmas: Here's my honest read on it. We've been able to visit Bhutan virtually for over a decade through YouTube and through *National Geographic*. And yet, travel is at an all-time high. And it's because we all, as social animals, continue to enjoy experiencing new things, meeting new people, hearing new stories, and being inspired by a new site's history and cuisine.

The numbers also suggest that we are in an unprecedented growth phase for travel. We are also in a phase where, over the past 15 years, customer satisfaction has steadily grown, despite how much we all like to beat up on our travel suppliers.

Consumers are admitting that the area they want to splurge on in the next year is travel and hospitality, such as experiences and restaurants. So they're giving us that gift of their wallets and their trust. We have to deliver on that expectation as a sector. Gen AI, traditional AI, augmented reality, virtual reality, and digital technologies are going to help us deliver on the promise.

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