PayPal Open

AI and predictive analytics:
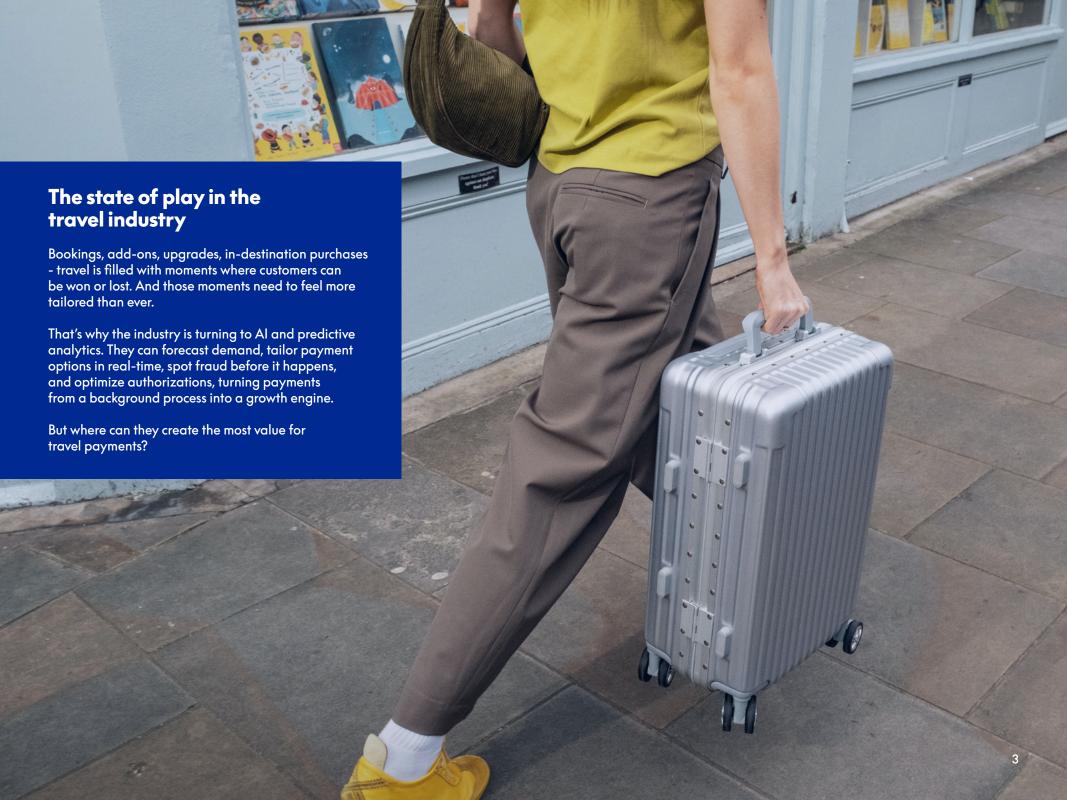# Evolving travel payments

How AI can boost travelers' payment experiences

Contents

The state of play in the travel industry

Bookings, add-ons, upgrades, in-destination purchases - travel is filled with moments where customers can be won or lost. And those moments need to feel more tailored than ever.

That's why the industry is turning to AI and predictive analytics. They can forecast demand, tailor payment options in real-time, spot fraud before it happens, and optimize authorizations, turning payments from a background process into a growth engine.

But where can they create the most value for travel payments?

AI-powered travel experiences are more popular than ever

AI is transforming the way travel businesses connect with customers, streamline operations and deliver personalized payment experiences, and it's not just travel businesses leveraging AI, travelers are too.

In 2024, 41% of US and Canadian travellers had recently used generative AI for trip inspiration or to plan an itinerary, up from 34% in August 2023. [1]

New ways to connect with customers

Conversational AI, like chatbots and virtual assistants, is now handling everything from first-time enquiries to complex booking changes. Available 24/7, they reduce wait times, cut service costs and provide instant support.

Making payment processing smarter

Intelligent systems analyze transaction patterns in real time, detect anomalies, and choose the best payment route based on card type, issuing bank and transaction amount.

The result is higher authorization rates, lower costs, and fewer failed payments. For US travel businesses on thin margins, even small recovery gains can mean significant revenue.

Payment experiences that get personal

With AI Travel companies can tailor payment experiences in real time. Whether that's recommending the preferred method (PayPal, BNPL, digital wallet), optimizing currency display or timing installment offers.

When payments feel relevant and familiar, customers are more likely to book and return. Presenting the right options at the right moment helps turn checkout from a point of friction into a loyalty-building opportunity. It's a small change in the payment flow that can have a big impact on conversion, spend, and repeat business.

[1] Oliver Wyman, 'Why generative AI is a game changer for leisure travel', 2024, Available at: https://www.oliverwyman.com/our-expertise/insights/2024/may/generative-ai-leisure-travel-planning-and-inspiration.html (Accessed: July 2025)

Predictions powered by AI

Predictive analytics give travel companies the power to see what's next and act before customers drop off.
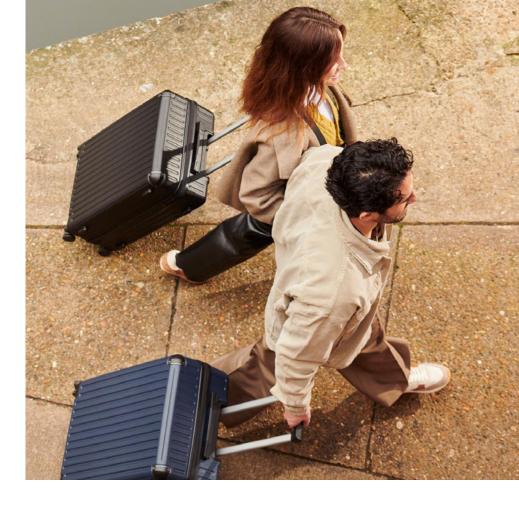
Anticipating customer needs

AI analyzes booking history, search patterns, and seasonal trends to forecast traveler behavior, by:

- Predicting which payment methods will be preferred for specific routes or destinations
- Optimizing checkout flows to match those preferences
- Anticipating demand for extras like upgrades or add-ons

Pricing that matches demand

Dynamic pricing models adjust in real time based on demand, competition, and customer value, which:

- Increases uptake of premium packages
- Encourages repeat bookings with tailored offers
- Aligns payment options with customer lifetime value

Keeping travelers happy

Predictive analytics can flag customers at risk of abandoning a booking or not returning at all, by:

- Identifying early warning signs in the booking process
- Triggering targeted offers, discounts, or incentives to recover the sale
- Reducing cart abandonment and strengthening loyalty

The impact on travelers

Every payment moment shapes the traveler's experience. AI is helping to remove friction keeping customers secure, without slowing them down.

A low friction payments journey

From booking to boarding, travelers hit multiple payment points, each one a chance to delight or frustrate. AI-supported payment systems smooth the path, reducing checkout abandonment rates and boosting satisfaction.

Meeting customers where they are

AI makes it possible for travelers to pay within the flow of their own journey, without being redirected or interrupted. This 'contextual commerce' approach blends payments into the experience, whether it's booking an excursion in-app or upgrading a seat mid-journey.

Getting ahead of fraud with AI

Traditional fraud tools can create friction, declining legitimate transactions and frustrating customers. But AI takes a smarter route, analyzing hundreds of data points in milliseconds to assess risk, sending instant verification requests when needed, and keeping checkout fast, secure, and customer-friendly.

The reality of implementing AI

Research and Markets valued the AI in travel market at

$165.93 billion in 2025

and projects it to grow to

$531.95 billion by 2029.[2]

This represents a significant opportunity for travel companies to reimagine payments, but maximizing it requires having the right people, processes, and partners in place.

Start with your internal teams

Skills are the foundation of AI success.

In 2024, 73% of business leaders agreed that AI adoption will fundamentally change personalization and marketing strategies.[3]

- Many travel companies still lack expertise in both payments and AI
- Building cross-functional teams with technical know-how and payment insight will unlock the full value of AI

Get your customers on side

Travelers are open to AI-powered payments, but trust is key.

- Be transparent about how AI works and the benefits it brings
- Show how it could keep transactions secure while speeding up bookings
- Positive first experiences build long-term loyalty

Make space for AI in your business

AI adoption requires both technological and operational change, like:

- Breaking down silos to accelerate adoption
- Aligning teams around shared goals to ensure AI is embedded, not just implemented

The payoff is smoother payments, faster operations, and more satisfied customers.

[2] Research and Markets, 'Artificial Intelligence (AI) in Travel Market Report 2025', 2025, Available at: https://www.researchandmarkets.com/reports/6035331/artificial-intelligence-ai-in-travel-market (Accessed: July 2025)
[3] Twilio Segment, 'The State of Personalization 2024', 2024: Available at: https://segment.com/state-of-personalization-report/ (Accessed: July 2025)

Where to start with AI implementation

The most successful AI strategies start with a clear picture of the traveler journey. You need to map where customers:
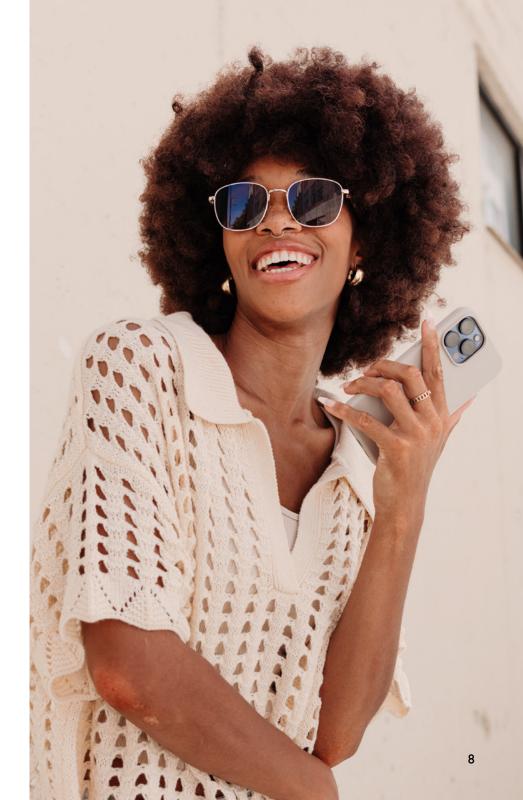
1 Hit friction

2 Abandon bookings

3 Raise the most enquiries

4 Experience payment-related frustrations

Once you have this information, you can ensure your AI investments directly target the biggest opportunities for improvement.

Pick the quick wins first

Quick wins build momentum and prove the value of AI internally, getting your teams on side. Look for use cases that deliver measurable results in 3–6 months:

- **Intelligent payment routing** dynamically selects the best processor for each transaction, boosting authorization rates without disrupting the customer journey

- **Targeted fraud screening** adjusts intensity based on history and transaction type, cutting false declines for legitimate travelers

- **Abandoned cart recovery** identifies why a booking was abandoned, from missing payment options to unexpected fees, and triggers a personalized recovery strategy

Look at the long-term opportunities

While quick wins are important, the biggest payoffs come from AI capabilities that take longer to implement (12–18 months):

- **Predictive personalization** can offer the right payment option at the right time, such as installment plans for higher-value trips or displaying preferred currency automatically

- **Invisible payments**, where payment fades seamlessly into the travel experience, such as automatically billed upgrades or in-destination purchases

- **Proactive exception handling** that spots potential issues, from failed payment authorizations to mismatched booking data, and resolves them before the customer is even aware

A balancing act

It's key to remember that AI should enhance the customer experience, not replace the human touch. Travel companies should look to:

- **Automate routine tasks** such as booking confirmations or price adjustments, while keeping human support available for complex issues

- **Offer clear contact options** such as a call center number or live chat alongside AI-powered booking flows

- **Follow industry best practices** and compliance guidance from bodies, ensuring AI is transparent, explainable, and trustworthy

- **Use travel-specific safeguards** – for example, price automation tools should always allow a customer to speak to a representative before finalizing a high-value booking

The strategic foundations for success

For US travel businesses, AI and predictive analytics have become essential to staying competitive. Integrated into payment systems, they turn moments of friction into opportunities for personalization, efficiency, and revenue growth.

PayPal Open gives you the foundation to put this into action. From PayPal Checkout, BNPL, and Enterprise Payments to advanced fraud protection and global payouts, it's built to help you harness AI's potential while delivering the seamless experiences customers expect.

With the right partner and a clear vision, you can move from AI experimentation to real-world results, boosting conversion, strengthening loyalty, and leading the market in a new era of travel.

Ready to see what AI-powered payments could do for your travel business?

Get in touch today

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