

What AI Actually Changes in Payments

A practical guide for payments leaders on how operations evolve when AI moves from pilot to production

DEUNA **PLAYBOOK · NO.1**

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EXECUTIVE SUMMARY

Executive summary

AI has moved from experimentation to the center of most large companies' agendas, yet its results remain uneven. In payments, banking's largest revenue pool, the difference between promising AI initiatives and those that deliver measurable results depends on how deeply AI transforms the way the operation works. This guide examines three areas in which AI plays a key role (payments intelligence, performance optimization and process automation) and what each one means in practice for an enterprise payments team.

KEY FINDINGS

01 **Adoption is far ahead of impact.** Nearly 90% of respondents in McKinsey's 2026 survey use AI regularly, yet only 37% attribute any EBIT impact to it.

02 **The opportunity in payments is substantial.** McKinsey estimates that generative and agentic AI could unlock an annual operational productivity opportunity of up to $110 billion in payments.

03 **Data is the first barrier.** According to the Merchant Risk Council, 80% of merchant professionals struggle with at least one of five data and technology issues.

04 **Many payment decisions still rely on static rules.** Even the two most common authorization tactics, intelligent payment routing and strong customer authentication, are each used by only 4 in 10 merchants.

05 **Autonomy requires control.** Gartner expects more than 40% of agentic AI projects to be canceled by the end of 2027, due to escalating costs, unclear business value or inadequate risk controls.

06 **Back-office workload continues to grow.** Global chargebacks are forecast to grow 24% between 2025 and 2028, and 52% of merchant fraud professionals report spending more time on fraud prevention.

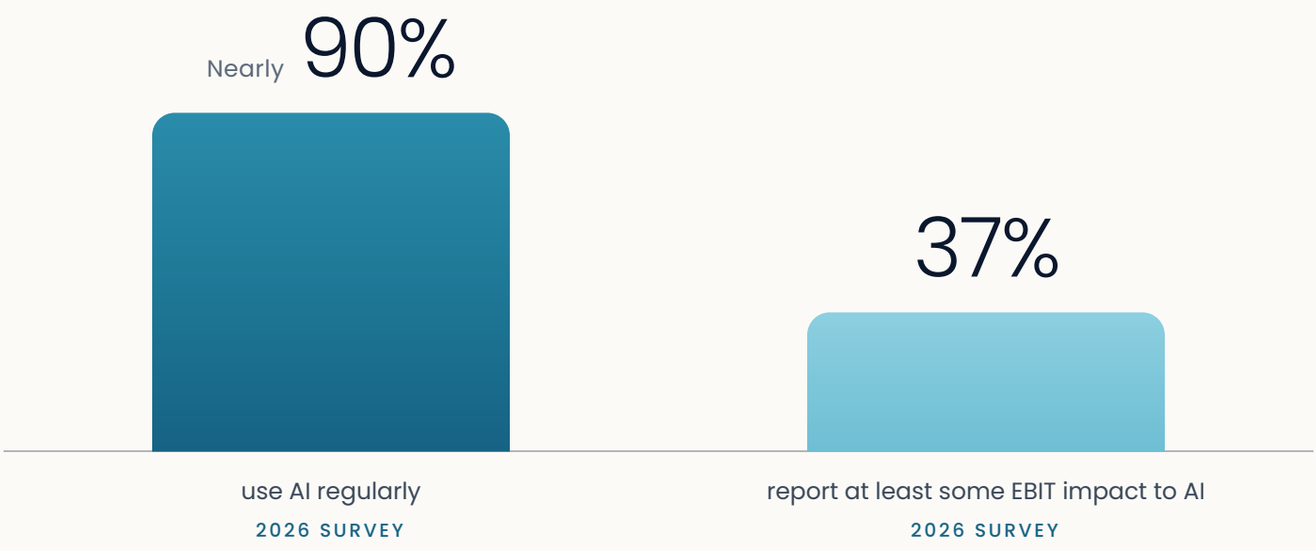
THE STARTING POINT

AI adoption is widespread. Its financial impact is not.

Most large companies are no longer evaluating whether to use AI. **Nearly 90% of respondents in McKinsey's 2026 State of AI survey report regular use of AI in at least one business function.**

Its impact, however, presents a different picture. **Only 37% attribute at least some EBIT impact to AI**, roughly the same share as the previous year. Adoption continues to expand, but for most organizations its effect on financial results has not grown at the same pace.

Nearly 90% use AI regularly vs. 37% report at least some EBIT impact (2026 survey)



WHY IT MATTERS

McKinsey's research shows that **the organizations achieving the strongest results from AI are far more likely to redesign their workflows around it, rather than insert it into existing processes.** In payments, the financial effect of this redesign can be especially visible, from approval rates to operating costs.

SOURCE McKinsey, The State of AI in 2026 (1,719 respondents in 97 countries, August 2026)

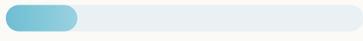
WHY PAYMENTS

Payments is one of the areas in which AI can create significant value

According to McKinsey's 2026 Global Payments Report, payments is banking's largest revenue pool. It accounts for roughly 41% of total banking revenue and generates approximately $2.6 trillion in revenue from 3.8 trillion transactions. Each of those transactions depends on a chain of operational processes.

This operational scale is where McKinsey identifies a substantial opportunity. **The report estimates that generative and agentic AI could unlock an annual operational productivity opportunity of up to $110 billion in payments**, across four areas:

Up to $110B a year in operational productivity

$50B Customer operations		15% to 20% higher efficiency in customer contacts, and up to 40% less administrative work after each contact
$30B Software engineering and IT		20% to 25% productivity gains through AI-driven engineering, such as automated code generation
$20B Support functions		15% to 20% higher efficiency in corporate functions, and a potential 2% to 3% increase in checkout conversion
$10B Product development		15% to 20% faster time to market and feature design



THE OPPORTUNITY AND THE CHALLENGE

The value at stake is significant and spans operations, technology and product development alike. **Capturing it, however, is not guaranteed.** It depends on the quality of the data behind each initiative, how AI is implemented and how deeply it is integrated into the way the operation works.



KEY CONSIDERATION

Even when gross operational task reductions exceed 60%, net reductions in the cost base typically range from 15% to 20%. Oversight, exception handling and the surrounding systems remain in place, which is why **the companies that capture the most value use AI to redesign how their operations run**, rather than to automate isolated steps.

SOURCE McKinsey, The 2026 Global Payments Report: Operational Excellence in an Invisible World (September 2026)

THE FRAMEWORK

Three areas in which AI plays a key role in a payments operation

Beyond the industry-level opportunity, the practical question for a payments leader is where AI fits within their own operation. Across enterprise payments operations, **there are three types of processes in which AI can play a decisive role.**

Payments intelligence

Developing a complete understanding of performance across the entire payment stack, in order to identify gaps, opportunities and their root causes.

Performance optimization

Defining and executing the actions that improve key payments metrics, such as acceptance rate, checkout conversion and processing cost.

Process automation

Managing critical back-office processes that still require extensive manual work, such as reconciliation, chargeback management, disputes and reporting.

All three share the same foundation: well-structured data, standardized across providers. Payments intelligence establishes that foundation. Performance optimization and process automation each build on it independently, allowing organizations to advance in the order that best fits their priorities.

01 · PAYMENTS INTELLIGENCE

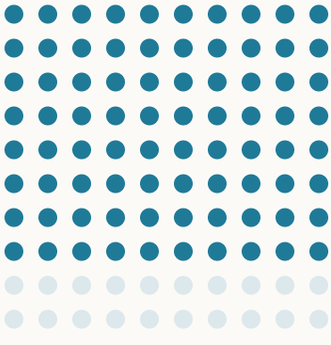
In payments, reliable data is the backbone of any AI implementation

Enterprise payments operations rarely rely on a single provider. Many large merchants operate with multiple processors, acquirers and payment methods across markets, and each provider delivers data in its own format, under its own definitions and on its own schedule. A “decline” in one report may not mean the same as a “decline” in another, and settlement files can arrive a day or more after the transactions they describe.

This is where AI initiatives in payments often succeed or fail. Regardless of the use case, an AI implementation cannot deliver reliable results without data that is standardized, consistent and connected across providers. The Merchant Risk Council’s 2026 survey of 1,278 merchant professionals shows how widespread this challenge is.

80%

of merchant professionals struggle with at least one of these five data and technology issues:



MRC, 2026 SURVEY

01	Effectively using data to manage fraud
02	Fraud prevention AI and machine learning accuracy
03	Data availability and access
04	Fraud tool customization
05	Gaps in fraud tool capabilities and features

WHY IT MATTERS

When data is inconsistent, a straightforward question such as “why did approval rates decline in Brazil last week?” can become a multi-day investigation. By the time the answer is available, the financial impact has already occurred.

SOURCE MRC, 2026 Global eCommerce Payments & Fraud Report (1,278 merchant professionals, 37 countries)

01 · PAYMENTS INTELLIGENCE · WITH AI

AI turns an ocean of payments data into a single source of truth

Payments operations generate an ocean of data, and without the appropriate capabilities, critical signals can be overlooked. **The first role of AI is to build a single source of truth for the entire operation.** In practice, this involves:

- **Automating data extraction** from every processor, acquirer and payment method, including transaction reports and settlement files
- **Standardizing definitions** so that acceptance, declines, cost and conversion are measured consistently across providers and markets
- **Updating data continuously**, so that decisions are based on current performance rather than on last month's reports

With this foundation in place, **full visibility across the payment stack becomes possible.** Teams can compare providers on equal terms, monitor performance in real time, detect anomalies as they emerge and query their data in natural language.

WITHOUT AI	WITH AI
Each provider measured by its own definitions	Shared definitions across every provider and market
Reports extracted and consolidated manually	Data extracted and standardized automatically
Issues identified in month-end reports	Anomalies flagged as they emerge
Questions answered by analysts over several days	Answers in natural language, within minutes



THE BACKBONE OF AI IMPLEMENTATION

A single source of truth is the starting point for faster, better-informed decisions. **It provides the baseline needed to identify opportunities to improve acceptance, optimize the mix of alternative payment methods in each market and reduce processing costs**, and it underpins every other AI use case in this guide.

02 · PERFORMANCE OPTIMIZATION

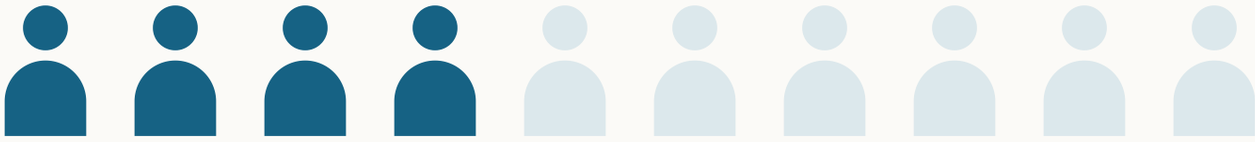
Payments run on trillions of real-time decisions. Many are still governed by static rules.

Every payment involves a sequence of real-time micro-decisions: **which checkout experience and payment methods to present to each customer, how to process the transaction, where to route it, how to configure the authorization request and whether to retry it if it is declined.** With approximately 3.8 trillion transactions processed globally each year, the payments industry operates on an immense volume of decisions.

For years, many of these decisions have relied on manually defined, static rules, such as presenting certain payment methods in a given market, sending a specific card type to a specific processor or retrying after a fixed number of hours. **Rules are easy to understand and audit, but they are static, while payments are highly dynamic.** Issuers adjust their approval models, processor performance fluctuates and customer behavior varies by market and season. A rule that was effective three months ago may be reducing approvals today.

4 in 10

MRC, 2026 SURVEY · MERCHANTS



Even the two most common authorization tactics, intelligent payment routing and strong customer authentication, are each used by only 4 in 10 merchants.

WHY IT MATTERS

An outdated rule rarely appears as a visible error. **Its impact appears as legitimate transactions declined and revenue that is never captured.** For many organizations, there is significant room to improve results with the providers they already have.

SOURCE MRC, 2026 Global eCommerce Payments & Fraud Report

02 · PERFORMANCE OPTIMIZATION · WITH AI

With AI, every transaction receives its own decision

AI agents can replace static rules with decisions made transaction by transaction across the entire payment journey: **adapting the payment methods presented to each customer, determining how each payment is processed and selecting the most efficient route.**

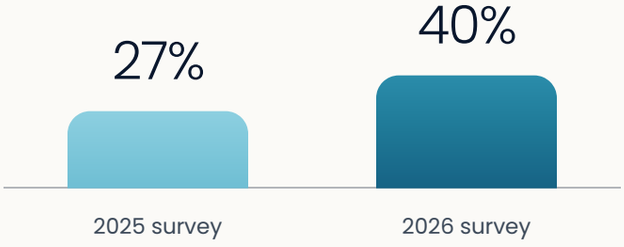
Payment processing illustrates how this works. **An AI agent relies on machine learning to identify the patterns that explain the probability of approval**, such as card type, issuer, market, amount and recent provider performance. It then **generates real-time predictions for each new transaction** to help define its optimal route. The same agent can further improve acceptance by **adjusting the configuration of each authorization message** and by **identifying which declined transactions should be retried and which should not.**

MANUALLY DEFINED STATIC RULES	AI AGENT
Defined once and updated manually every few months	Learns continuously from every transaction
Same logic applied regardless of context	Predicts the probability of approval for each transaction in real time
Fixed retry schedules for merchant-initiated transaction declines	Dynamic retry models for merchant-initiated transaction declines

Large organizations are increasingly open to this shift. Among McKinsey respondents from organizations with more than $1 billion in annual revenue, the share scaling AI agents in at least one business function rose from 27% in the 2025 survey to 40% in 2026. Gartner, in turn, predicts that by 2028 at least 15% of day-to-day work decisions will be made autonomously through agentic AI, up from 0% in 2024.

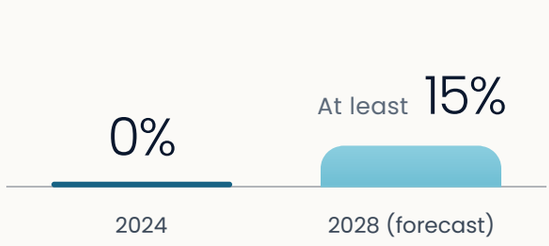
Large organizations scaling AI agents in at least one business function

Share of respondents from organizations with more than $1B in annual revenue



At least 15% of day-to-day work decisions made autonomously through agentic AI by 2028 (forecast)

Share of day-to-day work decisions



SOURCES McKinsey, The State of AI in 2026; Gartner (June 2025, forecast)

02 · PERFORMANCE OPTIMIZATION · GUARDRAILS

AI-driven decisions require clear guardrails

Allowing AI agents to make decisions raises a legitimate question: how does the business remain in control? Control is also central to whether agentic AI projects succeed. **Gartner expects more than 40% of these projects to be canceled by the end of 2027**, citing escalating costs, unclear business value and inadequate risk controls.

In payment processing, successful implementations define four guardrails from the outset:

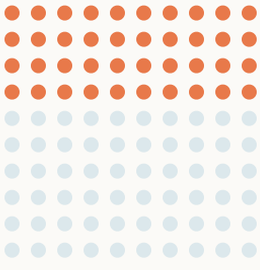
Provider eligibility: which processors, acquirers and payment methods may be used for each market, transaction type and channel

Commercial constraints: the contracts, volume commitments, pricing and business rules that every decision must respect

Risk and compliance: the fraud and exposure limits that no decision may exceed, and alignment with internal requirements such as sensitive data handling and system access

Model health and technical standards: metrics that monitor model performance and detect model drift, and compliance with technical standards such as latency

With these guardrails in place, AI agents optimize within boundaries defined by the business, and the team retains the ability to review, adjust or reverse any decision.



40%+

of agentic AI projects will be canceled by the end of 2027 (forecast)

GARTNER, JUNE 2025 FORECAST

SOURCE Gartner (June 2025, forecast)

03 · PROCESS AUTOMATION

Payments back offices still depend on highly repetitive, manual work

Some of the most critical work in a payments operation is also the most repetitive. Reconciliation, chargeback management, dispute responses and recurring reporting protect revenue and support compliance, yet most of these processes follow the same steps every time: collecting data from multiple systems, comparing it, documenting it and acting on it.

This workload continues to grow. In the MRC's 2026 survey, more than half of merchant fraud professionals reported spending more time on fraud management over the past year, and most expect time savings to shape their future investments in this area.

52%

of merchant fraud professionals report spending more time on fraud prevention management over the past year

62%

state that reducing the time spent on fraud management will be a moderate or major factor in their future fraud management investments

MRC, 2026 SURVEY

Disputes illustrate where this pressure is heading. **Research by Datos Insights for Mastercard forecasts that global chargeback volume will grow 24% between 2025 and 2028.**

Global chargeback volume

Chargebacks per year, 2025 estimate and 2028 forecast



DID YOU KNOW?

Approximately 45% of merchant chargeback volume globally is attributed to first- and third-party fraud.

SOURCES MRC, 2026 Global eCommerce Payments & Fraud Report; Mastercard, 2025 State of Chargebacks, research by Datos Insights (estimate and forecast)

03 · PROCESS AUTOMATION · WITH AI

AI absorbs repetitive work so that teams can focus on decisions

Built on a single source of truth, much of the repetitive work in the back office can be handled by AI:

- **Reconciliation:** transactions are matched automatically against settlements across every provider, and only exceptions are escalated for review
- **Chargebacks and disputes:** dispute data is consolidated and organized, so that the team can prioritize the cases that merit a response and identify the evidence each one requires
- **Reports and dashboards:** with generative AI, reports and dashboards can be created instantly and **are accessible to anyone on the team**, not only to analysts

WITHOUT AI	WITH AI
Transactions and settlements matched manually	Discrepancies matched and flagged automatically
Every dispute handled through the same process	Disputes prioritized so that the team focuses on the cases that merit a response
Reports and dashboards requested from analysts	Reports and dashboards generated instantly by any team member

Finance teams are already moving in this direction. **In Gartner's 2025 survey of 183 CFOs and senior finance leaders, 59% reported using AI in their finance function**, and among those that have implemented it, error and anomaly detection is one of the three most common use cases.

WHAT REMAINS THE SAME

Automation does not remove people from the process. Teams remain accountable for exceptions, policies and decisions with commercial or regulatory implications. **What changes is that their time is dedicated to analysis and judgment rather than to transferring data between files.**

SOURCE Gartner, AI in Finance Survey (183 CFOs and senior finance leaders, May to June 2025)

SELF-ASSESSMENT

Where does your operation stand today?

The following questions can help your team identify which area offers the greatest opportunity for your operation today.

01

PAYMENTS INTELLIGENCE

Does your organization have a single source of truth across all providers, with real-time visibility into acceptance, cost and conversion under shared definitions?

Target state: A single source of truth across all providers, with standardized definitions and data updated in real time.

02

PERFORMANCE OPTIMIZATION

What criteria currently determine which payment methods are presented at checkout, how each transaction is processed and routed, and when a declined transaction is retried? How often are those criteria reviewed?

Target state: Transaction-level decisions driven by continuously updated models, operating within clear guardrails defined by the business.

03

PROCESS AUTOMATION

How many hours per week does your team dedicate to reconciliation, chargebacks, disputes and reporting, and how much of that work follows the same steps every time?

Target state: Repetitive processes handled by systems, with the team focused on exceptions and decisions.

SOURCES

Sources

01 McKinsey & Company, The State of AI in 2026: On the Road to ROI, August 2026. Online survey of 1,719 participants in 97 countries, fielded May 4 to June 8, 2026.

02 McKinsey & Company, The 2026 Global Payments Report: Operational Excellence in an Invisible World, September 2026.

03 Merchant Risk Council, with Visa Acceptance Solutions and Verifi, 2026 Global eCommerce Payments & Fraud Report, March 2026. Survey of 1,278 merchant professionals in 37 countries, fielded November to December 2025.

04 Mastercard, 2025 State of Chargebacks: A Global View for Issuers and Merchants, March 2025. Research by Datos Insights, sponsored by Ethoca, a Mastercard company.

05 Gartner, Gartner Predicts Over 40% of Agentic AI Projects Will Be Canceled by End of 2027, June 2025.

06 Gartner, Gartner Survey Shows Finance AI Adoption Remains Steady in 2025, November 2025. Survey of 183 CFOs and senior finance leaders.

AI does not replace your payments stack. It enables the one you already have to deliver more.

From payments intelligence to performance optimization and process automation, DEUNA enables enterprise payments teams to apply AI across their entire payment stack.

Discover our solutions at deuna.com

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