

AI in Merchant Acquiring: From Fraud Mitigation to Revenue Generation



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AI in Merchant Acquiring

Merchant acquiring has long been treated as one of the least glamorous segments of payments: essential, highly competitive, operationally demanding and chronically exposed to margin pressure.

For years, success depended largely on processing scale, uptime, pricing discipline and the ability to manage fraud without disrupting conversion.

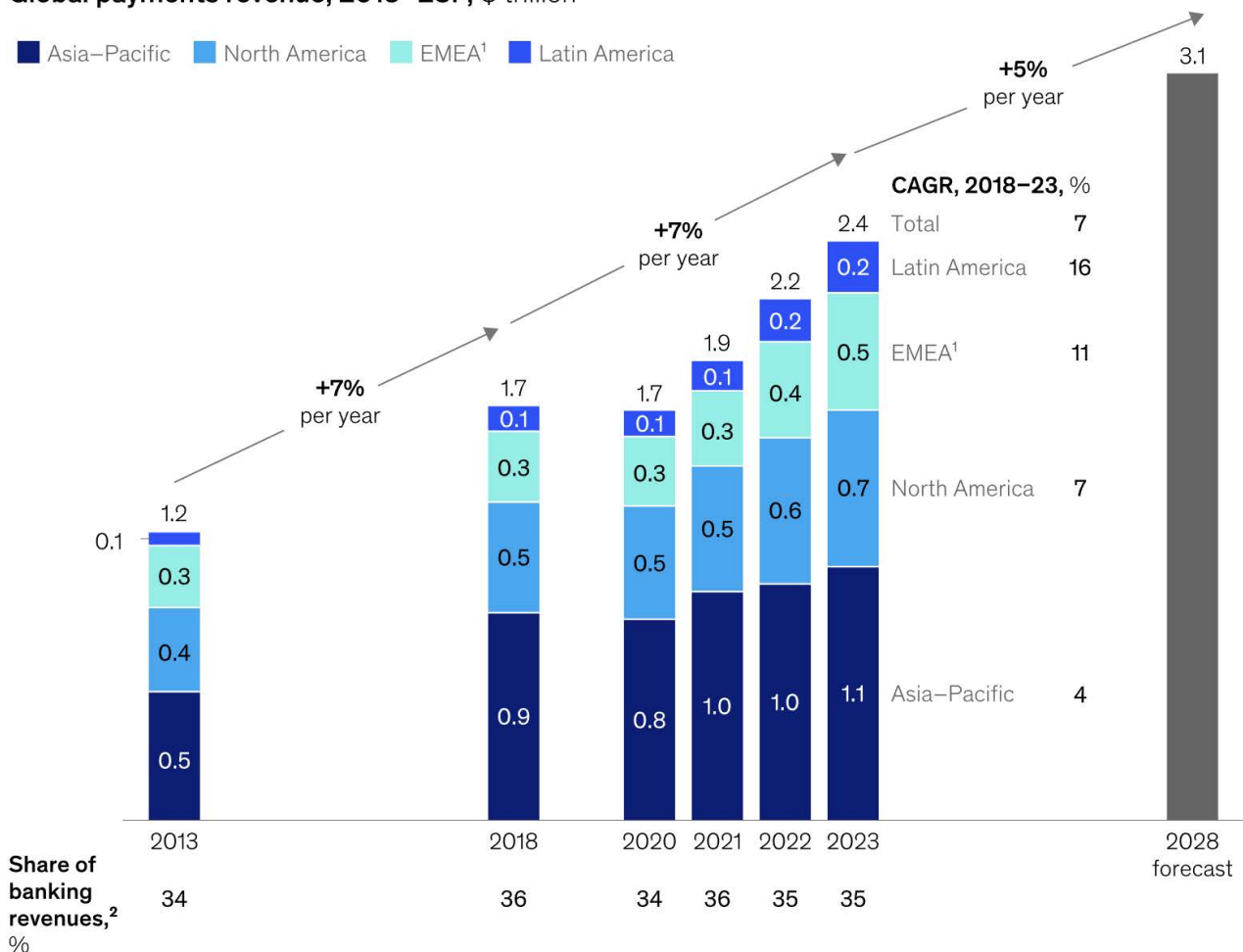
That model is now changing.

Artificial intelligence is pushing merchant acquiring beyond its traditional defensive role and turning it into a more strategic, data-rich and commercially differentiated business.

The size of the opportunity helps explain why this matters. McKinsey estimates that the global payments industry generated \$2.5 trillion in revenue from \$2.0 quadrillion in value flows, supported by 3.6 trillion transactions worldwide. It expects that revenue pool to grow at around 4 per cent annually to reach \$3.0 trillion by 2029.

Global payments revenue grew seven percent per year from 2018 to 2023

Global payments revenue, 2013–28F, \$ trillion



Within that broader expansion, value is steadily shifting away from commoditised processing and towards software, analytics, orchestration and value-added services.

This transition matters because the acquiring market itself has changed fundamentally. Merchants have become more sophisticated in how they buy, manage and optimise payments. Multi-acquiring is now mainstream among larger retailers, and orchestration is rapidly becoming the control layer through which merchants compare performance, manage routing, improve resilience and extract better economics from their payment stack.

Against that backdrop, AI is no longer simply an efficiency tool. It is becoming the intelligence layer that allows acquirers to optimise thousands of decisions in real time.

This is where a unified intelligence layer becomes essential, providing acquirers with a real-time, integrated view of risk, routing, pricing, merchant performance, and operational decision-making.

In practice, it is the mechanism through which AI moves from isolated tools to a more coordinated commercial capability.

From defensive controls to offensive value creation

Historically, AI and machine learning in acquiring were deployed primarily in fraud detection, charge-back prevention and transaction monitoring. These remain crucial use cases, particularly as fraud typologies become more adaptive and as acquirers are asked to protect more channels, more payment types and more complex merchant portfolios.

AI's ability to assess behavioural signals, transaction context and merchant-specific patterns in milliseconds makes it more effective than static rule-based systems in identifying suspicious activity without generating excessive false positives.

Yet the more important development is that AI is no longer confined to defence. It is increasingly being used to generate revenue, improve merchant performance and strengthen client retention. This is the real strategic shift. AI can now support dynamic pricing, predictive routing, merchant churn analysis, personalised service recommendations and broader portfolio optimisation. In other words, it enables acquirers not only to protect value, but to create it.

That evolution is entirely consistent with the direction of the market.

McKinsey argued in its Global Payments Report that, within five years, 40 per cent of merchant acquirer revenues would stem from activities other than payment processing. That is a striking signal: the profit pools in acquiring are moving towards intelligence-led services, not just transaction handling.

Fraudulent transactions that are approved create direct losses, disputes and reputational risk. But legitimate transactions that are wrongly declined also destroy value by reducing conversion, damaging customer trust and, in some cases, sending merchants to a competitor.

AI-driven risk scoring improves this balance. By learning from broader datasets and continuously adapting to new patterns, models can distinguish between high-risk and low-risk transactions more accurately than conventional rule engines.

That allows acquirers to approve more good transactions while still controlling exposure. The commercial implications are considerable: stronger authorisation rates, fewer unnecessary declines, lower chargeback costs and greater confidence in launching or scaling new payment methods.

This capability is particularly relevant in Latin America, where fraud intensity in many markets makes acquiring more operationally demanding and commercially sensitive. In such environments, advanced analytics are not a luxury; they are core infrastructure.

AI allows acquirers to apply more adaptive authentication, better transaction screening and more resilient approval strategies in markets where the cost of getting risk decisions wrong can be especially high.

Dynamic pricing: bringing precision to margin management

The second pillar is dynamic pricing. Traditional acquiring pricing models often rely on broad merchant segmentation, historical assumptions and relatively static commercial frameworks. AI enables something much more precise.

By analysing transaction mix, channel behaviour, cross-border exposure, seasonality, fraud risk, merchant lifetime value and servicing costs, acquirers can price relationships with greater sophistication.

This matters in a sector where blanket discounting is becoming harder to sustain. McKinsey noted that as commerce shifted towards digital channels, merchants' payment-acceptance costs were expected to rise by an incremental \$8 billion to \$15 billion. That pressure creates demand for acquirers that can do more than offer generic fee reductions. They must be able to show how better decisioning, better acceptance and better optimisation improve the underlying economics of payments.

AI supports that shift by enabling pricing models that better reflect the actual value and risk profile of each merchant. That makes commercial propositions more competitive without simply resorting to lower fees.

Merchant churn: intervening before revenue walks away

The third area is churn prediction. Merchant acquiring has often been reactive in how it manages retention. By the time a merchant raises concerns or shifts volumes away, the relationship may already be weakening.

AI changes that by identifying early warning signals: deteriorating acceptance rates, service issues, volume volatility, pricing sensitivity, changing channel mix or declining engagement with platform tools.

With the right models, acquirers can flag merchants at risk of attrition before churn becomes visible in traditional reporting.

That creates room for commercial intervention, whether through revised pricing, proactive service outreach, performance optimisation or targeted value-added services. In sectors where acquiring relationships are increasingly contestable, this kind of predictive retention can materially improve portfolio economics.

Personalised VAS: the next frontier of differentiation

Perhaps the most commercially attractive AI use case lies in personalised value-added services. Merchant acquiring has traditionally been sold on acceptance, pricing, service and coverage. These remain important, but they are no longer enough to create durable differentiation. The future lies in helping merchants perform better.

AI enables acquirers to turn transaction data into actionable recommendations: which payment methods to promote in specific markets, how to optimise checkout flows, where routing rules are depressing conversion, which geographies warrant local acquiring, where cross-border costs can be reduced and which customer segments may benefit from alternative payment options.

This is where the market opportunity becomes especially clear.

If acquiring revenues are increasingly expected to come from services beyond core processing, then AI is not merely a technology enhancement; it is a route to a different commercial model. It allows acquirers to monetise insight, not just volume.

Why APAC and Latin America matter

The regional dimension of this story is especially important. In APAC, the scale and velocity of digital commerce create exceptionally rich data environments. High transaction volumes across diverse payment ecosystems give acquirers the raw material to train, refine and benchmark AI models more effectively.

McKinsey's 2022 Global Payments Report also noted that Asia-Pacific accounts for over half of global payments revenues, underlining the scale of the opportunity and the strategic importance of data-rich payments ecosystems in the region.

Latin America presents a different, though equally compelling, picture. Here, fraud pressures, payment diversity and variable market conditions make advanced risk analytics especially valuable. AI can help acquirers operate with greater precision in environments where trust, approval performance and fraud resilience are central to merchant value.

A new strategic model for acquiring

The larger conclusion is that AI is concentrating value in the layers above commodity processing. Processing volume will remain important, but it is no longer sufficient.

The strategic battleground is shifting towards intelligence, orchestration, optimisation and the ability to convert data into merchant outcomes.

Merchant acquiring is therefore entering a new phase. The defensive era, in which AI's role was largely confined to stopping fraud and reducing operational friction, is giving way to a more expansive model. Real-time risk scoring, dynamic pricing, churn prediction and personalised value-added services are not isolated innovations; together, they form the architecture of a more profitable and more strategic acquiring business.

As digital commerce grows more complex, the winners in acquiring will be those that can monetise intelligence as effectively as they monetise transaction flow. That is precisely where AI creates strategic advantage.

The acquirers that succeed will not be those that simply automate yesterday's controls, but those that use data, decisioning and software-led services to participate in the next phase of payments growth.

A key advantage lies in how this system signals the operational shift from isolated functions to a unified approach. It marks the moment when risk, routing, pricing, merchant analytics, and value-added services move from being managed separately to being orchestrated under a single, intelligence-guided acquiring framework.

For providers seeking to move beyond commodity processing, that is where AI becomes not just a technology layer, but a commercial one.

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