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INGENICO SIGNALS

What forces are shaping the future of commerce?

[RETAIL EXPERIENCE]

Ingenico Signals 2025

The payments industry is on the brink of an extraordinary transformation, and understanding what lies ahead requires more than just observing trends or making general predictions. At Ingenico, our global payments specialists go beyond the surface to uncover specific, actionable insights grounded in years of expertise. Our goal is to empower businesses to navigate the complexities of 2025 with clarity and confidence, ensuring they stay competitive in an ever-evolving landscape.

Ingenico Signals is designed to illuminate the forces shaping the future of commerce. Combining insights from Ingenico's regional experts, each edition provides a comprehensive view of the opportunities and challenges ahead in Retail, Payments, and Technology.

Retail is fast emerging as the next frontier for payment innovations, where technology and evolving consumer expectations converge to redefine the shopping experience. In 2025, businesses will embrace payment strategies that transcend mere transactions, crafting ecosystems that are seamless, personalized, and efficient. From progressive web apps revolutionizing loyalty programs to biometric authentication enabling secure, frictionless interactions, retail is no longer just about selling—it's about forging meaningful connections.

This paper delves into the powerful interplay of retail and technology that is reshaping the future of payments globally. In North America, connected commerce is becoming the norm, setting new benchmarks for convenience. In APAC (Asia-Pacific), the rise of unattended payment solutions underscores the region's shift toward self-service economies. Meanwhile, Europe's adoption of digital receipts reflects a growing demand for sustainability, harmonizing innovation with practical, eco-conscious solutions.

The views and analysis presented in this paper reflect Ingenico's perspective and understanding as of the publication date. While we aim to provide helpful information, this content is shared for general informational purposes only and should not be considered as professional advice. Although we've taken care in preparing this content, we cannot guarantee its absolute completeness or accuracy.

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#Artificial Intelligence



- **Invisible Enhancements:** AI will elevate retail payments behind the scenes—optimizing systems, enhancing security, and creating seamless, hyper-personalized experiences.
- **GenAI's Role:** Driving innovations like automated fraud detection, frictionless biometric transactions, and predictive analytics for intuitive interactions.
- **Effortless Experiences:** Retailers embracing AI will deliver faster checkouts, fewer errors, and tailored options, fostering trust and loyalty.

Yassine Mahfoufi
Head of Solution Marketing
and Sales Enablement



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 SIGNAL 1

Artificial Intelligence Will Quietly Begin to Reshape Retail Payments, Elevating the Customer Experience

Artificial Intelligence (AI) is set to start redefining retail payments in 2025, not by dazzling consumers with overt technologies but by seamlessly improving the processes behind the scenes. The transformative power of AI lies in its ability to operate invisibly, optimizing systems, enhancing security, and delivering hyper-personalized experiences while making customer journeys feel effortless. GenAI will play a pivotal role, powering smarter payment interfaces, automating fraud detection, and enabling frictionless biometric and voice-activated transactions. These AI-driven advancements will create integrated ecosystems where every interaction—whether through conversational AI, predictive analytics, or automated systems—feels natural and intuitive, yet sophisticated and secure.

As Yassine Mahfoufi, Head of Solution Marketing and Sales Enablement at Ingenico, explains: **"The AI of 2025 isn't about what customers see—it's about what they feel. By removing friction, predicting needs, and quietly running complex operations in the background, AI ensures that retail payments move from being a process to being a seamless experience. Retailers who embrace these invisible AI transformations are setting the stage for trust, convenience, and long-term customer loyalty."**

Key areas where AI will deliver this invisible impact include:

- Hyper-personalization without intrusion: Tailoring payment options and rewards based on behavior, ensuring relevance without overwhelming customers.
- Sustainability: Optimizing supply chains to meet environmental goals without disrupting the customer experience.
- Effortless security: Real-time fraud detection for safer payments with fewer false alerts.

Consumers may not notice these advancements, but faster checkouts, fewer errors, and relevant recommendations will become a hallmark of the modern retail experience.



#Unattended Payments

- **Ubiquitous Convenience:** Self-service solutions like vending machines, EV chargers, and smart lockers are transforming consumption with 24/7 availability and ease of use.
- **Regulatory Support:** Laws mandating EMV payment terminals for EV chargers and similar initiatives are accelerating adoption across sectors.
- **Market Growth:** With over 34M+ machines in use and 1.8M+ terminals shipped annually, unattended payments are reshaping business models and consumer expectations.

Vincent Bernard
Head of Unattended Solutions



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SIGNAL 2

The Inevitable Rise of Unattended Payments Will Continue to Reshape Our Consumption Habits

The self-service market and unattended payment solutions will continue to reshape our habits and our daily life, building on years of constant growth and an accelerated adoption due to the COVID crisis. Increasingly, vending machines, EV chargers, smart lockers for fresh food, open payment for public transportation, automatic stores, and so on, are becoming part of the landscape. Always more convenient and easier to use, installed everywhere, available 24/7, these self-service machines are popular with their users and deeply alter the world of retail. In addition, regulations support this evolution (for example, laws to equip fast chargers for electric vehicles with EMV payment terminals in the U.S. or in the EU).

"An indicator of this is how at least 44 terminal manufacturers (proposing 160+ different unattended terminals) are addressing a market estimated at 34M+ machines to be equipped with 1.8M+ terminals shipped annually, organized around verticals (EV charging, parking, transportation, vending, and retail) with each their specific technical needs," notes Vincent Bernard, Head of Unattended Solutions at Ingenico. **"Unattended solutions are revolutionizing commerce across sectors. It's more than a trend, it's already a well-established and profitable segment that is rewriting business models and changing consumer expectations. The era of self-service is here, and it's growing faster than ever. It is clear to me that self-service payment is already on track to be a major pillar of the payment industry"**

#Unattended Payments

- **Driving Efficiency:** EV charging, high-value vending, and smart dining kiosks are redefining convenience, addressing labor shortages, and enhancing economic scalability.
- **Regulatory Support:** Frameworks like Singapore's Payment Services Act ensure growth aligns with consumer protection and market innovation.
- **Smart Systems:** IoT and AI empower unattended solutions with real-time adaptability, predictive maintenance, and secure, tailored transactions for APAC's dynamic economies.



Xavier Michel
Ingenico Japan President



 SIGNAL 3

RETAIL EXPERIENCE

APAC

Unattended Payments Will Reinforce APAC's Transition to Seamless, Self-Service Economies

Asia-Pacific's self-service landscape is transforming rapidly, driven by the adoption of unattended payment technologies in sectors like EV charging, high-value vending, and automated dining. In a region where fast-paced urbanization meets a mobile-first population, unattended systems are more than just tools of convenience—they are catalysts for economic efficiency and innovation. The EV charging boom exemplifies this: as governments invest in electrification, seamless payment options at charging stations are indispensable. High-value vending, from luxury goods to electronics, demands secure systems for managing larger transactions. Meanwhile, smart dining kiosks and micro-markets are reshaping food services for an increasingly digital, time-sensitive consumer base. In markets like Japan, demographic shifts amplify this need. An aging population and shrinking workforce are driving demand for unattended solutions that address labor shortages while ensuring accessibility. These systems help businesses scale efficiently while adapting to societal changes.

This shift, however, goes beyond technological advancement. The role of supportive regulatory frameworks, such as [Singapore's Payment Services Act 2019](#) and [Japan's Payment Services Act](#) amendments, are pivotal in ensuring these innovations align with market growth and consumer protection. The Internet of Things (IoT) and AI are embedding intelligence into unattended systems, enabling real-time adaptability and predictive maintenance to sustain operational efficiency. As Xavier Michel, Ingenico Japan President, puts it: **"Unattended payment systems are transforming customer interactions into streamlined, intelligent processes. They're not just making transactions faster—they're making them smarter, more secure, and tailored to the region's dynamic economies."** Xavier adds: **"By bringing scale and precision to self-service ecosystems, these technologies are setting the stage for APAC's payments landscape to thrive in ways we couldn't have imagined even a few years ago."**

#Artificial Intelligence



- **Optimized Supply Chains:** AI systems can predict demand, helping to reduce waste and overstocking.
- **Enhanced Customer Experiences:** Machine learning personalizes recommendations and pricing while aligning inventory with customer preferences.
- **Strategic Advantage:** Early adoption of AI positions retailers to lead in efficiency and innovation across the EMEA region.

Fabien Darné
Head of France,
Benelux, North Africa



RETAIL EXPERIENCE

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Artificial Intelligence Will Start to Transform Large Retailers' Operations in EMEA

Artificial intelligence (AI) is set to transform large retailers' operations across the EMEA (Europe, Middle East, and Africa) region. Early adopters are leading this transformation, showcasing the profound impact of AI on inventory management, customer experience, and operational efficiency.

[A major French retailer](#), has integrated AI into its supply chain to optimize inventory levels and reduce waste. By analyzing data from stores, warehouses, and e-commerce platforms, the retailer's AI system accurately forecasts demand, ensuring products are available where needed and minimizing overstock. This approach has already led to impressive results, such as preventing 265 tons of pastries from going to waste!

Similarly, [a leading European online fashion platform](#) leverages AI to enhance customer experiences and streamline operations. The company utilizes machine learning algorithms to provide personalized product recommendations, optimize pricing strategies, and manage inventory efficiently. This AI-driven approach can enable retailers to anticipate customer preferences, reduce overstock, and minimize waste, thereby improving overall operational efficiency.

Fabien Darné, Head of France, Benelux, and North Africa, observes: **"We are in an exploratory phase, which could last anything from one to several years. Those who embrace AI early and refine its application will benefit from a decisive advantage in the market."**



#Receipts

- **Coexisting Formats:** Printed receipts remain essential in many regions, while digital receipts are gaining traction as eco-friendly, seamless alternatives.
- **Regional Trends:** In Europe, SMBs often print for internal use, while customer-facing printed receipts dominate in markets like the US and Mexico.
- **Modern Engagement:** Digital receipts offer retailers a chance to enhance customer interactions and sustainability while retaining practical printed options.

Fabien Darné
Head of France,
Benelux, North Africa



Angelo Panarella
Business Leader for
Italy, SEE & Middle East



RETAIL EXPERIENCE

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Digital Receipts Will Coexist With Printed Receipts in a Hybrid Mode

The future of receipts in Europe is evolving, with digital receipts (DR) gaining significant traction, especially in the retail sector. According to an Ingenico survey* conducted with merchants across six global markets, printed receipts remain highly relevant, reflecting entrenched habits in many European countries. However, the adoption of digital receipts is on the rise, with growing interest in offering customers seamless, eco-friendly alternatives. In countries like France and Spain, SMBs often print receipts for themselves, while in the US and Mexico, printed receipts are more commonly issued to customers—a dynamic that underscores regional differences in usage.

As Fabien Darné, Head of France, Benelux, and North Africa, observes: **"The rise of digital receipts marks an important shift in how merchants engage with their customers, providing an opportunity to modernize and to create a business interaction with their customers, while retaining the practicality of printed options."** Similarly, Angelo Panarella, Business Leader for Italy, SEE, and Middle East, adds: **"Retailers are leading the charge in adopting digital receipts, offering consumers a more efficient and sustainable way to track their purchases."** The coexistence of printed and digital receipts reflects the diversity of merchant needs and consumer preferences across regions, setting the stage for a hybrid model in 2025 and beyond.

*To be published 2025

- **Retail Leadership:** In Chile, retailers are driving payment innovation, with retail payments comprising a significant share of GDP, setting regional benchmarks.
- **Wider Impact:** Retail innovations in countries like Brazil, Mexico, and Colombia modernize payment systems and expand financial access across LAR.
- **Tech Empowerment:** Android-based payment devices integrate payments with business tools, enhancing operations, reducing costs, and elevating customer engagement.



#Demand

Eduardo Oliveira
Chile Country Leader



RETAIL EXPERIENCE

LAR

 SIGNAL 6

Retailers Are Driving Payment Evolution in Latin America

Retailers across Latin America (LAR) are becoming the backbone of commerce development. In Chile, for example, retailers are leading the way in changing payment habits, breaking the traditional pattern where banks take the lead. According to [The Paypers](#), Chile has the second-highest volume of retail payments as a share of GDP in the LAR region, demonstrating the important role of its retail ecosystem. This robust retail environment is fostering innovation not only in payments but also in eCommerce and digital solutions, with ripple effects felt across the region.

Eduardo Oliveira, Chile Country Leader at Ingenico, emphasizes: **"Chile's retail sector is driving meaningful change in how commerce is conducted across Latin America. The innovations born here are creating scalable models for neighboring countries, setting benchmarks for efficiency, sustainability, and customer experience."**

This influence extends beyond Chile. In countries like Brazil, Mexico, and Colombia retail innovation is modernizing the payments infrastructure and improving access to financial services. A key enabler of this transformation is the adoption of Android-based payment devices that are redefining how businesses connect with customers. These devices provide a versatile platform that integrates payments with business tools, empowering retailers to enhance operations, reduce costs, and improve customer interactions.



#Connected Retail

- **Seamless Solutions:** U.S. shoppers increasingly prefer e-wallets, wearables, and contactless methods for faster, more convenient payments.
- **Smart Checkout:** AI-powered carts with integrated payment systems eliminate traditional checkout lines, enhancing in-store experiences.
- **Retail Leadership:** Early adoption of frictionless technologies positions U.S. retailers to meet rising consumer demands and set industry benchmarks.

Anthony Walsh
Head of Retail Sales U.S.



RETAIL EXPERIENCE

NAR



U.S. Shoppers Now Expect Fully Frictionless and Connected Retail Payment Solutions

The U.S. retail sector is on a steady path toward adopting frictionless payment solutions, reshaping how consumers and businesses interact. [According to a blog post from PayPal](#), technologies like e-wallets, wearables, and other contactless payment methods are increasingly favored by shoppers due to their convenience and speed. These innovations align with the complex POS and payment systems that many U.S. retailers already have in place, enabling swift integration of cutting-edge solutions. In particular, [advancements in "smart checkout" systems](#), such as AI-powered smart carts, are transforming the in-store shopping experience. These carts are equipped with sensors and payment technology, allowing customers to scan items as they shop and complete purchases directly from the cart eliminating the need for traditional checkout lines or employee assistance. By integrating such tools, U.S. retailers are not just enhancing convenience and efficiency but redefining the very essence of the in-store shopping experience, setting a benchmark for the future of retail.

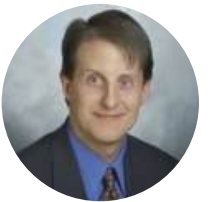
As Anthony Walsh, Head of Retail Sales U.S. at Ingenico, explains: **"Retailers in the U.S. have always been early adopters of new technologies, leveraging their sophisticated payment infrastructures to lead the charge. Frictionless technologies such as e-wallets and smart checkout systems are not just trends—they're becoming the foundation of a new retail era. American shoppers expect seamless, efficient, and contact-free experiences, and businesses that prioritize these innovations will set themselves apart in a competitive market."**

#SoftPOS



- **On-the-Go Payments:** SoftPOS enables contactless transactions on NFC-enabled devices, meeting customers wherever they shop—aisles, curbside, or pop-ups.
- **Rapid Growth:** With the global market projected to surpass \$1 billion by 2030, SoftPOS is redefining frictionless, secure, and convenient retail payments.
- **Flexible Integration:** Complementing traditional terminals, SoftPOS empowers retailers to innovate and adapt across dynamic and complex payment scenarios.

Mark Bunney
Head of Retail
Enterprise Strategy



RETAIL EXPERIENCE

NAR



SoftPOS Will Be at The Forefront of Retail Innovation, With a New Approach to Customer-Centric Payments

Retailers are embarking on a transformative journey with mobile payment technologies, enabling transactions to occur wherever the customer is - be it curbside, in the aisle, or at pop-up events. At the forefront of this evolution is SoftPOS - sometimes referred to as Tap on Mobile payment solutions—a solution that allows merchants to accept contactless payments directly on NFC-enabled devices, including smartphones or tablets. As highlighted in [Ingenico's SoftPOS whitepaper](#), the global SoftPOS market, valued at \$248.5 million in 2022, is projected to exceed \$1 billion by 2030, growing at an impressive 20.4% CAGR. This rapid adoption signals the retail industry's shift toward creating frictionless shopping experiences that cater to modern consumers' expectations of speed, security, and convenience.

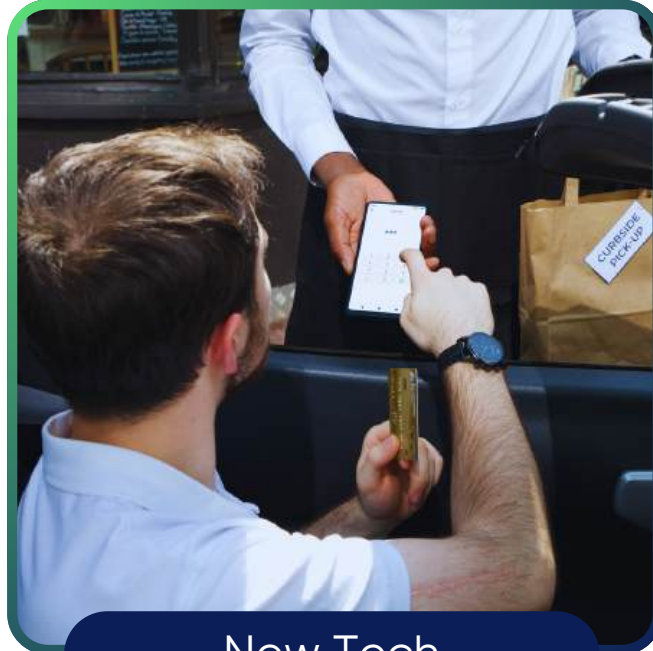
This transformation transcends efficiency - it redefines the retail experience by uniting innovation with practicality. SoftPOS complements traditional payment terminals, offering a mobile-first solution that seamlessly integrates with existing hardware to address every payment scenario. Together, they empower retailers to meet customer demands in any context, from dynamic in-store setups to more complex environments. Built with ease of integration in mind, it offers developers a streamlined implementation process, making it as accessible as it is transformative. According to Mark Bunney, Head of Retail Enterprise Strategy at Ingenico: **"In this consumer-driven era, where convenience and speed are non-negotiable, SoftPOS isn't just a payment tool—it's a retail revolution, enabling businesses to capture more value, optimize operations, and lead in an increasingly competitive landscape."**

Conclusion



Artificial Intelligence

In 2025, AI will silently run the show—revolutionizing payments and operations, slashing waste, predicting needs, and reshaping retail from the inside out.



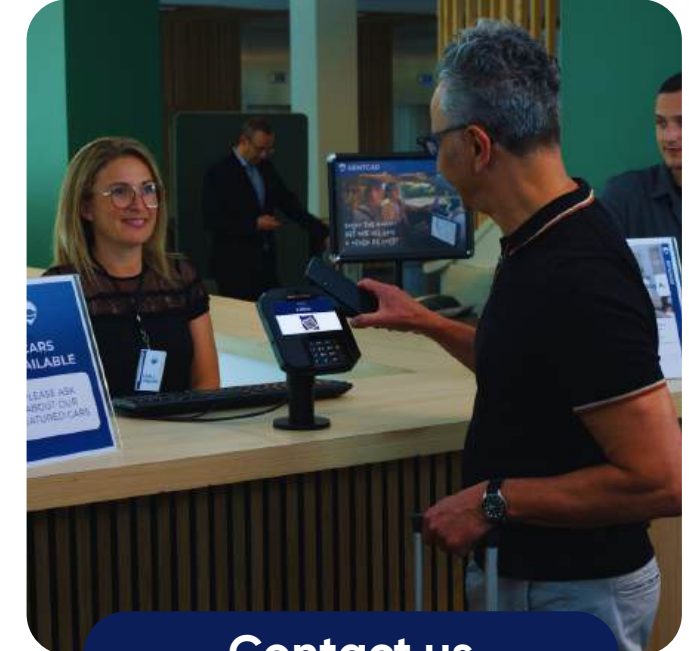
New Tech

Emerging technologies like SoftPOS and smart carts are enabling retailers to enhance operational flexibility and customer satisfaction.



Regional changes

Regional transformations—from APAC's self-service economies to Europe's hybrid receipt models—demonstrate the power of localized innovation in a global market.



Contact us

Let Ingenico guide your journey toward retail payment excellence.

Moving Commerce Forward

Ingenico is the global leader in payment acceptance and services. We support our customers, and their customers to do more with payments. Active in 37 countries, with over 3,500 employees we have been at the forefront of the commerce landscape for over four decades.

With more than 40 million payment devices deployed worldwide, powered by over 2,500 apps, the company is servicing the needs of millions of consumers every day. Through our advanced integrated solutions and network of partnerships, we simplify the world of payments and bring value added services to move commerce forward.



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