Visa
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Imagining an open
future for payments

Why payment innovation matters for small businesses

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Key takeaways

- **Technology drives innovation and growth:** In many parts of the world digital payments are ubiquitous. Advancements in mobile and information technology and computing have enabled innovation in digital payments and made them more accessible than ever. Nearly 60 percent of adults worldwide now use some form of digital payment in their daily lives.

- **Tokenization is a key unlock for MSMEs:** Adopting token technology can help micro, small, and medium-sized enterprises (MSMEs) leapfrog business growth by allowing them to quickly adopt advanced financial systems and tools without the need to build out infrastructure incrementally or significant investment in resources. On average, tokenized payments reduce fraud by 34 percent and increase authorization rates by 4.7 percent. Research estimates that this has generated $7.9 billion in benefits for merchants between 2019 and 2024 due to reduced fraud and higher authorization rates.

- **MSMEs are vital to economic growth:** MSMEs account for 90 percent of businesses, 70 percent of employment, and 50 percent of the GDP globally. They are some of the biggest job creators and help reduce poverty. The public and private sector have proven that by working together they help advance technology adoption among MSMEs.

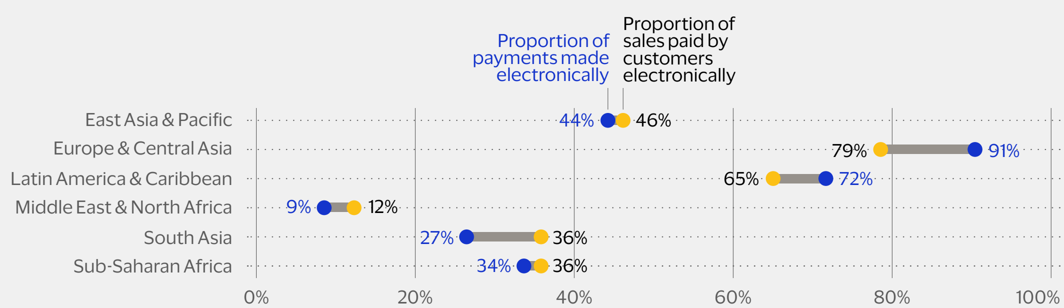
Introduction

Technology can be a powerful driver of growth. Innovations in mobile devices, information technology and computing have made digital payments more accessible and commonplace. For example, near-field communication (NFC)–a wireless technology that enables data exchange between nearby devices–allows merchants to use their mobile phones as a point-of-sale and accept multiple payment types through a single wireless device. Tokenization–a process that replaces sensitive card details with a random string of characters called a "token"–allows consumers to securely store a card online and automate a monthly recurring order while protecting their sensitive personal information. These technologies have factored into the growth of digital payments. In 2021, 59 percent of adults used some form of digital payments, up from 45 percent in 2017 (World Bank, 2021).

Despite the significant growth in digital payments many small, and medium-sized enterprises (SMEs) do not use or underutilize digital payments, missing out on critical benefits like more secure transactions, the ability to scale business, and access to financial tools and services. Globally, only 37 percent of person-to-business (P2B) payments to SMEs are made using digital payments. In developing regions like the Middle East and North Africa it's as low as 12 percent. In East Asia and the Pacific, South Asia, and Sub-Saharan Africa, SMEs are using digital payments for business-to-business (B2B) transactions less frequently than for P2B (see Figure 1).

SMEs as well as micro merchants (MSMES) are a key driver of economic growth. According to the United Nations (2024), MSMEs account for 90 percent of businesses, 70 percent of employment, and 50 percent of gross domestic product (GDP) globally. MSMEs also create jobs, foster innovation, and contribute to economic growth. This is especially true in developing countries where MSMEs are often the only source of job creation and help reduce poverty. Given the importance of MSMEs, policymakers should support payment technology innovations to help MSMEs go digital, increase efficiency, and foster growth.

Figure 1: Digital payment usage by SMEs in the formal sector



Source: Enterprise Surveys, The World Bank.

Note: Data is from surveys completed between 2022 and 2024 with enterprises ranging in size from small (5-19), medium (20-99), and large (100+). For a full methodology please visit http://www.enterprisesurveys.org/.

The impact of innovation

The benefits to MSMEs of going from an informal or cash-based operating model to accepting digital payments are well documented (see *Perspectives on Accelerating Global Payment Acceptance*, *The Impact of Payment Cards on Economic Growth*, and *Financial Inclusion Global Initiative*). Less studied but also impactful is the technology layer on top of payment systems. Innovation in the payments industry is driving a wave of technological advancements that are addressing critical challenges faced by MSMEs. These innovations are not only enhancing the efficiency and security of transactions but are also providing robust, behind-the-scenes solutions that empower MSMEs to grow, scale, and innovate. Below we look specifically at one innovation: tokenization.

Tokenization secures millions of payment transactions each year by replacing sensitive financial information with a unique token that does not reveal actual payment information, such as a credit card number. Tokenized payments first became prevalent in 2014, and currently support in-store, in-app, and online secure digital transactions.

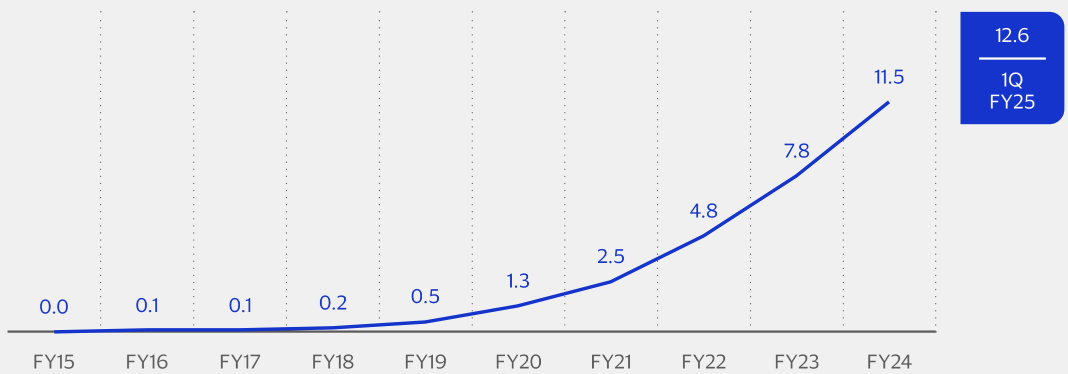
How do network tokens work?

When you add a card to a digital wallet, your 16-digit card number–known as a PAN–is replaced with a random set of characters. There is not a need to store the actual card number on the device or on digital wallet servers. Instead, the card details are sent to the issuer and payment network, which generates a unique network token that represents your card. This token is encrypted and securely stored on your device. When you make a payment the network token acts in place of the PAN throughout the transaction chain, from the merchant to the payment service provider, to the payment network. Network tokens are not specific to a processor, which means the same token can be used across different payment processors and merchants.

Source: Visa Commercial Solutions (2024).

This initial use of tokenization was limited to in-person payments via digital wallets and in-app purchases. Over time, businesses recognized the broader benefits of tokenization beyond in-person purchases, or one-off mobile transactions and tokenization expanded to online merchants and other use cases. Over the past decade the number of tokens issued has grown significantly with over 12 billion tokens deployed to date (Figure 2).[1]

Figure 2: Total tokens deployed globally (billion)



Source: Visa (2025)

The benefits of tokenization

For MSMEs the benefits of using tokens are significant. Tokenization reduces fraud, increases sales, and has positive second-order effects like access to more financial products and helping MSMEs scale their business.

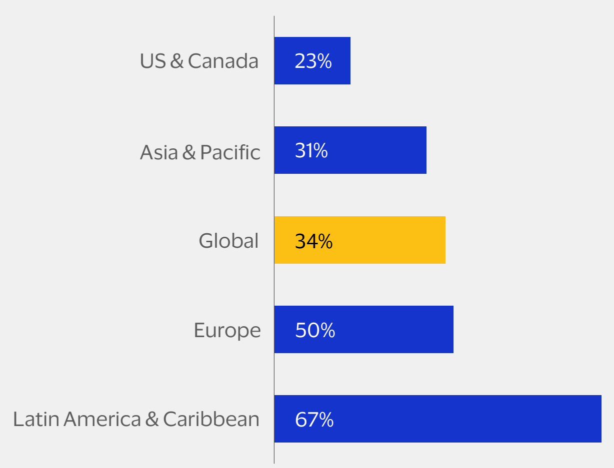
Reduced fraud: Global payment fraud losses are substantial and continue to grow each year. According to a report by Juniper Research, merchant loss from fraudulent card-not-present (CNP) transactions alone was over $40 billion in 2024 and is forecast to rise to more than $100 billion by 2029 (Juniper Research, 2024). This rise is driven by the increasing prevalence of online transactions and the sophistication of fraud tactics, including account takeovers, Fraud-as-a-Service, and the use of generative artificial intelligence (generative AI) for malicious e-commerce scams. MSMEs are more vulnerable to fraud due to their limited resources, making it harder for them to implement robust security measures and dedicate personnel to fraud prevention.

[1] This figure represents Visa-issued network tokens only.

Technology can help. The average reduction in e-commerce fraud rates for tokenized transactions versus PAN-based CNP transactions is 34 percent (Visa, 2025). In some regions like Europe and Latin America and the Caribbean (LAC), fraud reduction is as high as 50 or 67 percent (Figure 3). Reduced fraud has significant commercial benefits to MSMEs. A recent study of the quantitative benefits of tokenization (and contactless) technology, *The Social Value of Innovation in Payments*, finds that reduced fraud from tokenized transactions saved merchants $5.9 billion between 2019 and 2024 (Garcia-Swartz et al., 2024).[2]

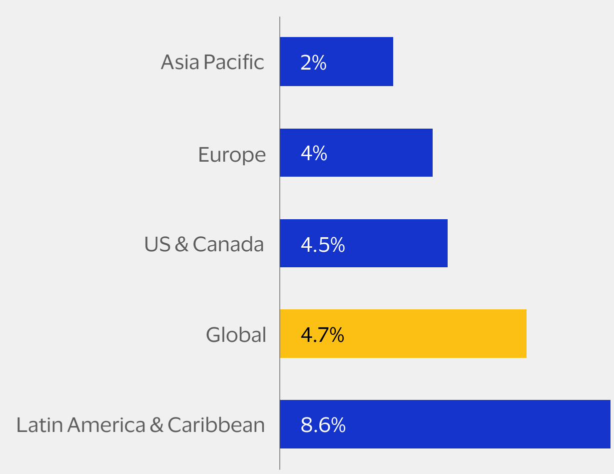
Increased sales: Tokenization helps MSMEs grow their business through increased sales. On average, a tokenized transaction increases the authorization rate–or uplift–for CNP transactions by 4.7 percent compared to a PAN transaction.[3] This is consistent across regions with uplift rates around four percent in Europe and North America, and almost double that in LAC (Figure 4).

Figure 3. Fraud reduction (2024, percent)



Source: Visa (2025)

Figure 4. Authorization uplift (2024, percent)



Source: Visa (2025)

[2] The figures are the author's own calculations using data from the study.

[3] This rate is the global average for Visa Token CNP credit and debit transactions vs. PAN-based CNP transactions.

The benefits to MSMEs from authorization uplift is significant. Research by Garcia-Swartz et al. (2024) finds that authorization lift from tokenization benefits merchants in several ways. The first is lower cart abandonment. When consumers fail to complete online transactions due to security concerns or complex checkout procedures, merchants experience a loss in sales. Tokenization provides a more secure and convenient checkout for the consumer as it allows them to store a card-on-file without having to disclose their actual card details. Increased trust, security, and convenience can help merchants convert carts into sales. From 2019 to 2024, these benefits were estimated at $57.8 billion. Additionally, avoiding re-engagement costs from declined transactions saved merchants about $2 billion during this period.

Second-order effects: The benefits of tokenized payments extend beyond fraud reduction and increased sales. First, tokenization can improve data management for MSMEs. Each transaction is assigned a unique token, which ensures that data is correctly matched and recorded. This reduces the likelihood of human errors that can occur during manual data entry, which improves financial reporting. Additionally, tokenized payments allow MSMEs to monitor transactions in real-time, providing instant insights into sales, expenses, and cash flow. Real-time monitoring and accurate record-keeping enable better cash flow management. When businesses have a clear and immediate view of their financial transactions, they can make more informed decisions about expenses, investments, and managing their working capital needs. This is especially important for MSMEs that often struggle with access to capital. The International Finance Corporation (2024) estimates that the current financing gap for MSMES is $5.7 trillion. Collectively these benefits can help facilitate MSMEs growth. For instance, the benefits of tokenized payments are notable in LAC (see Figures 3 and 4). The region also showed some of the highest rates of MSME growth between 2010 and 2017; 3.6 percent compared to the global average of three percent (SME Finance Forum, 2019).

Tokenized payments can also help MSMEs scale their business. One way is through facilitating e-commerce sales. Tokenization makes it easier for MSMEs to set up online sales and expand into new markets. Tokenization systems easily integrate with e-commerce platforms and payment gateways, enabling MSMEs to establish secure online payments without requiring technical expertise or resources. Tokenization can also help comply with mandatory industry standards like the Payment Card Industry Data Security Standards by reducing the amount of sensitive data they need to store. Tokenization also enables COF which helps MSMEs retain customers.

Bringing business online can have a significant impact on sales. One study of MSMEs in Brazil, Colombia, Malaysia, Philippines, and South Africa found that merchants that began selling online for the first time increased their sales by 20 to 30 percentage points more than their peers that did not shift to online sales (Visa Economic Empowerment Institute, 2021). Another study finds that online sales continued to be an important tool for sales growth, post COVID-19, even after in-person shopping returned suggesting that the shift to digital has positive impacts on payment volumes (Visa Business and Economic Insights, 2022). Selling online will become even more important for MSMEs. In 2023, global online retail sales were $5.82 trillion, accounting for almost 20 percent of total global retail sales (Capital One, 2024). By 2027, global online sales are expected to account for 41 percent of global retail sales.

Looking ahead

Payment innovation is crucial for MSMEs because it streamlines operations, enhances customer experience, and drives efficiency, ultimately leading to increased revenue and better financial management. To enable MSMEs to have increased access to innovative technology, there should be continued research and ongoing partnerships between public and private sectors. For example, research on the impact of digital payments on retail productivity and growth would help understand how innovation can increase efficiency and facilitate greater economic growth. For governments, this research could help design policies promoting financial inclusion and economic growth by leveraging digital tools. For the private sector, it could provide insights on where to invest in further innovation, and what markets, MSMEs segments or industries would benefit the most from technological innovations. Continued cooperation is critical to moving innovation forward and maximizing benefits.

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VEEI is a non-partisan center of excellence for research and public-private dialogue established by Visa.

VEEI's overarching mission is to promote public policies that empower individuals, small businesses, and economies. It produces research and insights that inform long-term policy within the global payments ecosystem. Visa established VEEI as the next step in its ongoing work to remove barriers to economic empowerment and to create more inclusive, equitable economic opportunities for everyone, everywhere.

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