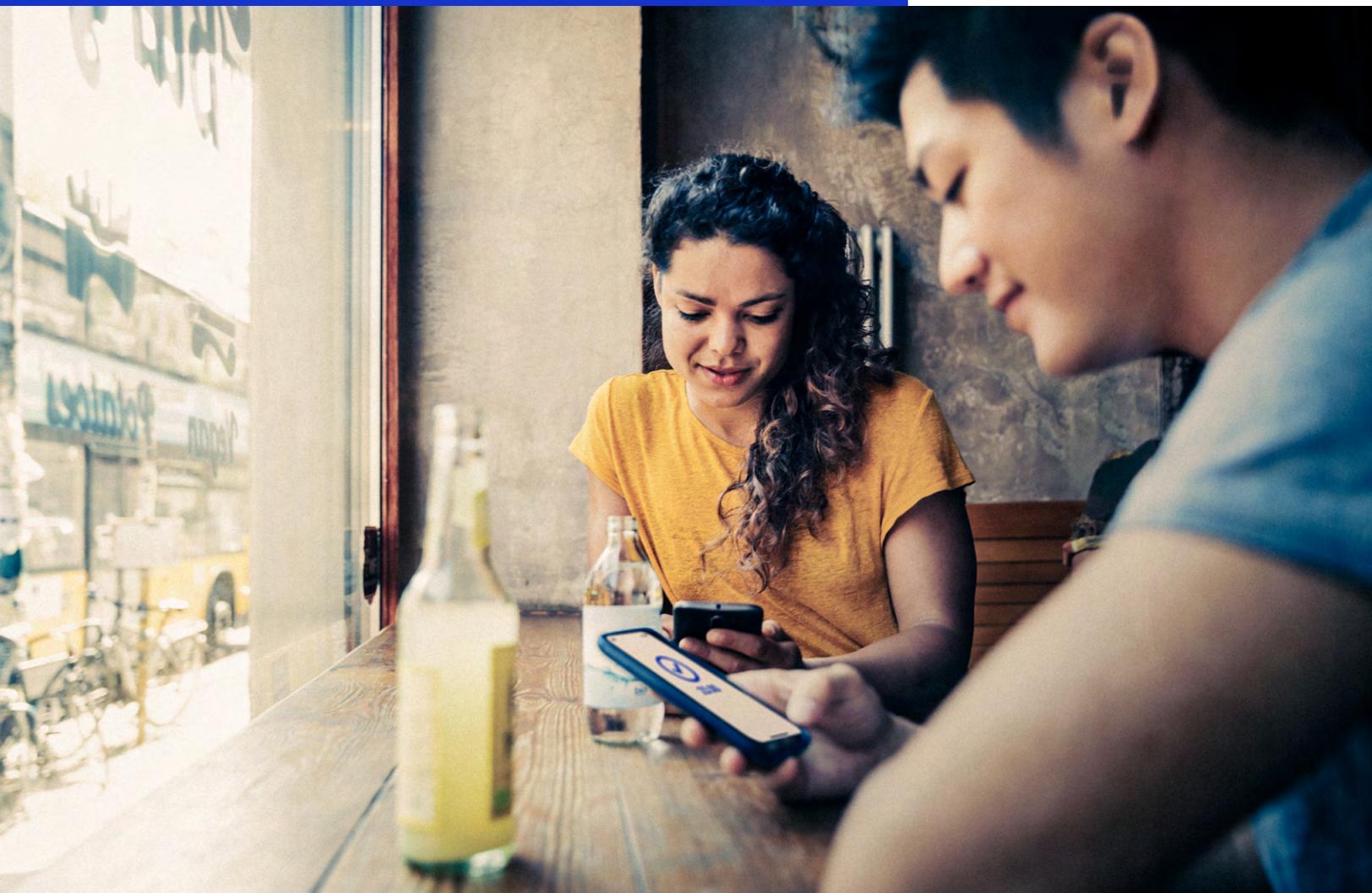




Visa Consulting & Analytics (VCA)

Digital payments: The global rise of cardless transactions



The rapid growth of alternative payment methods is transforming the global payments landscape, driven by digitalization, innovation, regulatory changes and changing consumer expectations. From account-to-account (A2A) payments, real-time payments (RTP), and open banking payments to digital wallets, Buy Now, Pay Later (BNPL), and cryptocurrencies, these emerging solutions are reshaping how people and businesses transact.



While these innovations offer greater speed, convenience, and cost-efficiency, they also introduce new challenges for the financial industry, including fraud risks, consumer protection gaps, regulatory complexities, and interoperability concerns.

In this article, Visa Consulting & Analytics (VCA) explores the implications of the rise of alternative payments, the opportunities they create, and the critical challenges that industry stakeholders must address to ensure a secure and seamless payments ecosystem.

A mix of growth drivers and market dynamics drives the emergence of alternative payment methods

Alternative payment methods are rapidly gaining ground worldwide, projected to account for 58 percent of ecommerce transactions by 2028.¹ A key area of growth is A2A transactions, supported by real-time payment networks that make traditional bank transfers a viable alternative. Initially, these A2A schemes focused on person-to-person (P2P) payments, despite historically being deprioritized due to monetization challenges. Now, the use of these payments has broadened to include ecommerce and physical point-of-sale (POS) transactions.

Depending on market conditions, A2A payments offer various benefits to consumers and merchants:



Convenience

Faster, more seamless checkouts despite inconsistent customer experience due to lack of interoperability



Accessibility

Easier access in emerging markets (e.g., M-Pesa, cryptocurrency schemes); similarly, some methods work internationally without currency exchanges



Speed

Real-time settlement for consumers and businesses (e.g., Faster Payments in the UK), avoiding any delays associated with traditional payment processing

Regulatory, structural, and market-specific dynamics significantly impact adoption rates of alternate payment methods. Successful national A2A schemes often have government and central bank support, as seen with India's Unified Payment System (UPI) and Brazil's Pix.

A2A networks thrive in emerging markets with underdeveloped financial infrastructure. Digital wallets and QR code payments offer alternatives to the unbanked and improve A2A payment experiences. QR code payments through digital wallets are also successful in China, where AliPay and WeChat Pay dominate the market.

In bank-centric regions like Europe, successful A2A schemes often involve consortium-led approaches among financial institutions (FIs) and regulation plays an important role supporting new use cases such as variable recurring payments through open banking. Meanwhile, in the U.S, delays and a lack of common standards have led consumers to prefer private digital wallets.



The global consumer A2A market is forecast to rise from 60 billion transactions in 2024, to over 185 billion by 2029, marking a 209% increase¹

A2A networks thrive in emerging markets with underdeveloped financial infrastructure.



1. 2024 Boku Global Ecommerce Report, 2024: <https://www.boku.com/boku-knows/2024-boku-global-ecommerce-report>

Four main categories of alternative payment methods

Cardless alternative payment methods are diverse and often overlap.

Here are four main types:



A2A payments

A2A payments directly transfer funds between bank accounts. They offer faster settlements and a simpler user experience for consumers. Popular use cases include P2P transfers, merchant payments, and direct A2A bank transfers for payroll disbursements in real time.



RTPs

RTP technology enables instant transaction settlements and provides immediate confirmation to payers and payees. Benefits include faster fund access, easier reconciliation, and increased business efficiency. Examples include UPI in India and Pix in Brazil.



Digital wallets

Digital wallets allow consumers to store funds, make transactions, and track payments. Adoption is driven by services like loyalty programs and personal financial management tools. By 2026, 60 percent of the global population is expected to use digital wallets. Examples include Alipay and WeChat Pay in China, and Apple Pay in the U.S.²



A2A facilitated by open banking

Open banking uses APIs to allow third-party access to banking data, driving innovation in A2A and RTP systems. Regulatory frameworks like PSD2 (Europe), and CDR (Australia) are driving adoption, and fintechs like Tink are enabling seamless integrations between banks, apps, and payment networks. Most frequent use cases include income verification for extending credit to underserved segments who may lack a formal credit history.

2. Juniper Research, Digital Wallet Users to Exceed 5.2 Billion Globally by 2026, 2022: <https://www.juniperresearch.com/press/digital-wallet-users-exceed-5bn-globally-2026/>

Rapid growth of alternative payment methods brings challenges around fraud prevention and regulation

As A2A payments gain traction as an alternative to traditional card-based transactions, consumers face new risks that require greater awareness and proactive education from banks and financial institutions.

Consumer protection and chargebacks

Unlike card payments, which benefit from built-in fraud protections, dispute mechanisms, and liability frameworks, A2A payments are often instant and irreversible, making them more vulnerable to authorized push payment (APP) fraud, phishing attacks, and social engineering scams. Fraudsters exploit these vulnerabilities by tricking consumers into sending funds directly to fraudulent accounts, with limited recourse for recovery.

Fraud and security

Additionally, account takeover risks increase as open banking APIs enable third-party access to consumer accounts, requiring strong authentication and security measures.

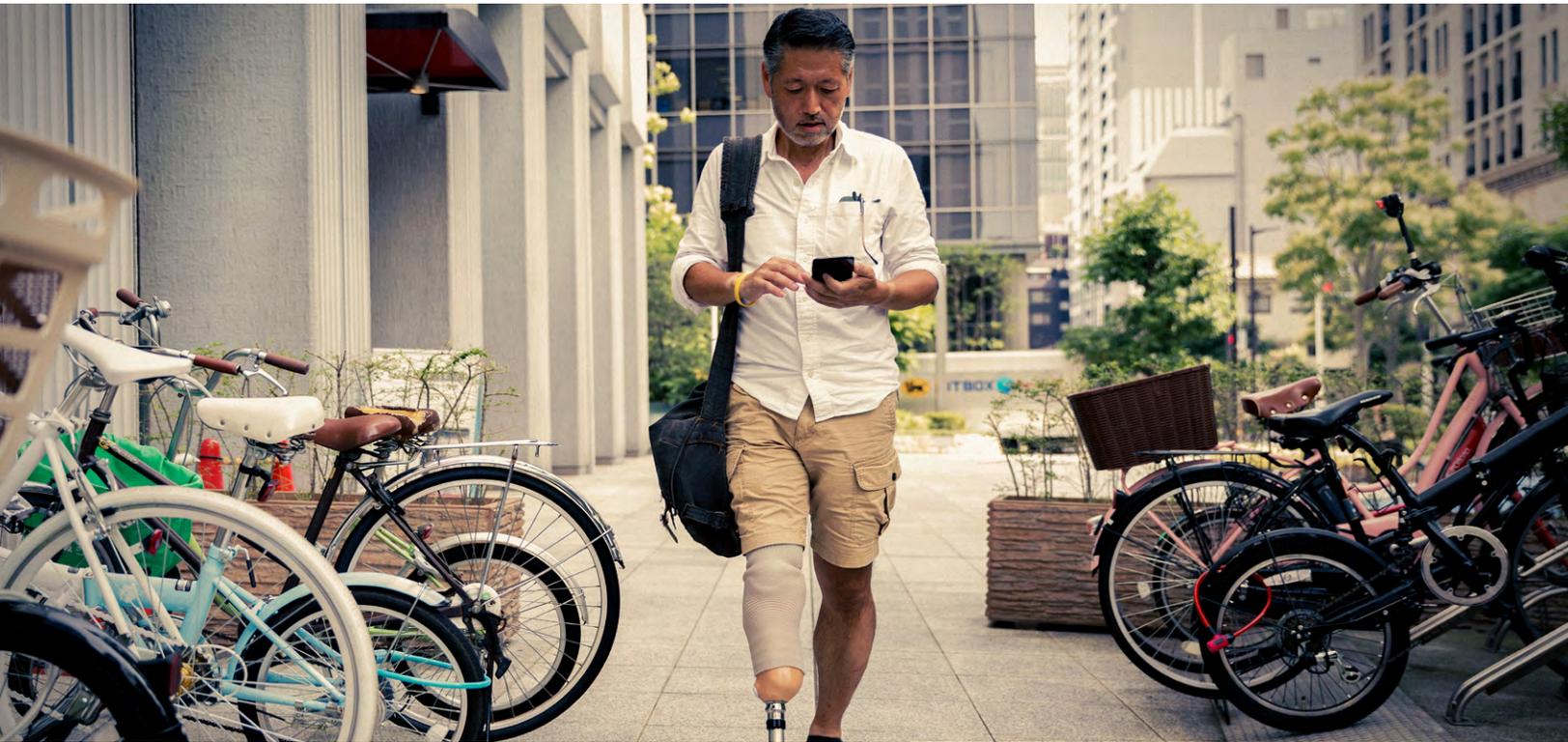
User experience

Lack of interoperability, and the need for multiple technical configurations and one-to-one bilateral agreements creates operational complexity and inconsistent user experiences for consumers, as well as for merchants.

To mitigate these risks, banks must play a central role in educating consumers about how to recognize fraud, verify transaction details before approving payments, and securely manage their banking credentials. Clear communication, real-time fraud detection alerts, and awareness campaigns on digital payment safety are critical to ensuring that consumers can confidently adopt A2A payments without exposing themselves to unnecessary financial risks. By taking a proactive approach to education and security, banks can build trust in A2A payments, enabling their safe and responsible growth in the broader financial ecosystem.

Interoperable frameworks and unified API standards are also needed to deliver smooth reliable experiences for consumers and merchants.





Case study example

Enhancing security and experience in A2A

Visa is proactively addressing fraud in the growing A2A payments sector while enhancing the consumer experience. In the United Kingdom, a pilot with Pay.UK analyzed billions of retail bank transactions and revealed that:

Visa's AI-enabled fraud detection could identify

54%

more fraud than existing systems

Potentially saving

GBP \$330m

(US \$410 million).³

Building on this, Visa A2A, launching in the UK in 2025, will offer consumers greater control over their payments.

What is Visa A2A?

Visa A2A includes a rulebook and messaging service for establishing mandates and initiating payments over existing RTP rails. It also offers a dispute resolution service for quick and easy resolution of transaction disputes.

In essence, Visa A2A allows consumers to pay businesses directly from their bank accounts.

Visa A2A does not process payments but rather provides messaging and instructions to initiate a payment; clearing and settlement occur over RTP rails like Faster Payments in the UK.

3. Visa's new AI tool for Faster Payments could help save UK over £330m a year on fraud and APP scams, May 30, 2024, <https://www.visa.co.uk/about-visa/newsroom/press-releases.3326480.html>

Four recommendations for FIs

As alternative payment methods gain momentum, banks must take a proactive role in ensuring their safe and responsible adoption. While A2A payments, RTP, open banking payments, digital wallets, and BNPL offer new opportunities for faster and more efficient transactions, they also introduce protection gaps that could leave consumers vulnerable. Unlike traditional card payments, many of these methods lack built-in safeguards such as chargebacks, standardized dispute resolution, and fraud liability protections, making it easier for bad actors to exploit consumers through authorized push payment fraud, phishing attacks, and account takeovers.

1

Participate strategically in local A2A networks

Utilize A2A instant payment schemes and digital wallets to digitize cash-heavy use cases, such as P2P transactions and bill splitting, as well as to improve traditional bank transfers, including payroll and business-to-business (B2B) transactions.

Consider partnering with card networks or implementing smart routing logic to minimize the impact on card-related revenue.

Use a multi-rail approach for domestic wallets to expand use cases and integrate cross-border payments.

2

Future-proof the bank to address alternative payments

Transition from a fragmented payment strategy to a payment hub strategy that supports various rails, including A2A, RTP, and crypto. This would enhance flexibility and adaptability to market changes and demands.

A hub strategy could also enhance scalability, reduce operational redundancies and allow for better data analytics, including AI-driven risk analytics.

This unified payment hub approach would equally support integration of emerging technologies such as tokenized assets, smart contract-based payments and others.

3

Invest in fraud prevention and security

As A2A and open banking payments become more widely used, banks need advanced fraud detection mechanisms that go beyond traditional transaction monitoring.

Investing in AI-driven fraud analytics, behavioral biometrics, and real-time risk scoring will help prevent unauthorized transactions before they occur.

Enhanced Strong Customer Authentication (SCA) and real-time transaction verification alerts can further protect consumers from financial losses.

4

Invest in consumer education and awareness

Many consumers are unaware that alternative payments do not always offer the same protections as cards. Banks must lead education initiatives to help users understand the risks, recognize fraud tactics, and make informed payment decisions. This includes embedding real-time fraud warnings into payment journeys, running awareness campaigns, and providing clear guidance on secure digital transactions.

How Visa can help you grow your business

Visa connects our strategy, digital, consumer marketing, and data science experts with your teams to optimize your approach with data-driven, customer-focused services. These include:

Strategic advisory

Understanding customers, identifying opportunities, benchmarking, developing payment strategies, and designing solutions.

Implementation support

Building alternative payment propositions via Visa Managed Services (VMS) for Advisory.

Access to Visa tools

Providing access, advice, and support for services like Visa Direct, Click-To-Pay, passkeys, Visa Protect for A2A, and Tink's open banking solutions.



About Visa Consulting & Analytics

VCA is a team of 1,500+ payments consultants, digital marketing specialists, data scientists, and economists across six continents.

The combination of our deep payments consulting expertise, our economic intelligence and our breadth of data allows us to identify actionable insights and recommendations that help drive better business decisions.

- ✔ Our consultants are experts in strategy, product, portfolio management, risk, digital and more with decades of experience in the payments industry.
- ✔ Our data scientists are experts in statistics, advanced analytics, and machine learning, with exclusive access to insights from VisaNet, one of the largest payment networks in the world.
- ✔ Our economists understand economic conditions impacting consumer spending and provide unique and timely insights into global spending trends.

To get started, contact the Advisory Services team or reach out to your Account Executive directly.

Learn more about the team, resources, and our data-backed insights on [Visa.com/VCA](https://www.visa.com/VCA), and follow the team on [LinkedIn](#).



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