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IT'S PRIME TIME FOR REAL-TIME®

2024

Real-time payments adoption and growth around the globe

ACI Worldwide®

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Introduction

Across the world, real-time payments are solving real-world challenges. Real-time payments are faster, cheaper, and more accessible and convenient — they reduce costs and improve liquidity for businesses and help banks achieve greater efficiency.

Governments and regulators in both mature and rapidly developing markets are now actively championing real-time payments as a proven catalyst for economic benefit, using them to drive financial inclusion and better transparency.

ACI's annual Prime Time for Real-Time® report, now in its fifth edition, provides valuable insight into real-time payments' progress in 51 countries. It provides an accurate benchmark that helps shape strategies, stimulate innovation and encourage stakeholders to raise their real-time game.

This year's findings reveal markets moving to maturity as 2023 reaches a record-breaking high
Real-time payments accounted for 266.2 billion transactions globally in 2023, a year-over-year growth of 42.2%. This shift toward more sustainable growth levels is as expected as countries move beyond early adoption — typified by extreme growth — to maturity.

This year's findings reveal:

- The power of collaboration between governments, regulators, banks and fintechs is finally bearing fruit, resulting in wider domestic reach and exciting new use cases.
- Merchants and consumers are now embracing real-time payments through apps, QR codes and mobile wallets.
- Countries with the most to gain — those with large populations, cash economies, low use of credit and poor inclusion — have led the way in establishing real-time payments for daily use.
- The next big real-time frontier will be seizing the opportunities created by international trade and migrations to build new real-time remittance and cross-border payment corridors.

Globally, financial institutions are using real-time to re-examine payments infrastructure
Institutional leaders concerned about how to modernize complex systems and processes that were built up over decades now see real-time payments as a route to more efficient and lower-cost transactions — delivering commercial advantages for business customers and better engaging consumers.

Banking strategies and mindsets have become more open and cooperative, and there is now a real hunger in the market to learn from the successes and experiences of other countries and to expand real-time ecosystems to fintechs and other commercial players.

Markets where real-time is mainstream have knowledge to share

In this year's report, for the first time, we have included deep-dive analyses into five of the world's most successful real-time payment markets — India, Brazil, Indonesia, Malaysia and the Netherlands — highlighting what it takes to build thriving end-to-end, real-time payment ecosystems.

The success of real-time brands like India's UPI and Brazil's PIX shows that consumers and merchants are ready to take advantage of real-time benefits — faster settlement, lower risk than cash and better liquidity than cards.

Closing the gap to real-time ubiquity

In every corner of the world, real-time payments are now in regular use — moving value at scale and at low cost. In 2023, just under one-fifth of all electronic payments globally were real-time, and by 2028, it will be more than one-quarter.

Widespread acceptance is paramount for individual real-time payment schemes and for the market to maintain its forward trajectory. Removing or reducing merchant discount rate fees and launching QR code-based and mobile use cases are among the most powerful adoption boosters.

Financial institutions will have to work more closely with fintechs and digital wallet providers to power the rich overlay services that fuel frequent use by enabling differentiated customer experiences across numerous payment channels.

For late entrants and slow adopters in vanguard markets, it's time to rethink where real-time payments sit in the customer journey and the end-to-end payments landscape.

Opportunities to evolve and grow

For financial institutions looking to monetize real-time payments, the next big opportunity will be connecting multiple real-time schemes to create new corridors. 2023 witnessed a host of bilateral agreements in Latin America and Asia as neighboring countries began to create real-time, cross-border rails for QR-code and P2P payments. G20 initiatives, EU Instant Payments mandates and the Nexus blueprint will help drive this in 2024 and beyond.

Real-time payments are destined to play a more prominent role in government economic growth initiatives by boosting access to and use of electronic payments — and freeing the billions of dollars globally that are locked in clearance daily. ACI will publish the second edition of its Economic Impact Report in collaboration with the Centre for Economics and Business Research later this year.

As part of real-time's evolution, the industry continues to make progress in the battle against payments fraud. Generative AI is changing the nature and scale of attacks, and real-time is rising to the challenge with consumer rights, education programs and government interventions, combined with new AI-based anti-fraud technology and processes. ACI plans to cover this topic in detail in a separate real-time fraud report in early 2025.

Real-time payments are now a real-world reality

This year's report confirms that real-time payments are now an integral part of the global payments mix, and as more markets go mainstream, they should now be acknowledged as a cornerstone for all strategies targeting financial inclusion and economic gain.

We hope this report provides the continued impetus needed for real-time modernization across the world, which will give financial institutions, corporations, merchants and consumers access to faster, cheaper and all-around better payments.

Debbie Guerra
Chief Product Officer
ACI Worldwide

Executive Summary

Real-time prevalence is the new reality

It's been a record-breaking year for real-time payments. With regulatory frameworks being established, and the demand for real-time payments increasing, collaborative ecosystems have emerged to drive powerful use cases that revolutionize businesses and enhance daily lives.

Adoption is being driven by pent-up demand for low-cost, convenient and accessible electronic payments, the need for more modern and efficient infrastructure, and a desire to boost economic performance. Mobile wallets and QR codes are providing fast entry points, connecting consumers to real-time payment rails domestically and internationally. Across the world, real-time has thrown open the door to economic, competitive and operational advantage, and stakeholders are ready to reap the rewards.

Success factors

In those countries that have developed thriving real-time payment ecosystems, five common drivers have emerged:

Active Collaboration

Whether by government mandate or industry consensus, real-time payment systems thrive through active collaboration. Financial institutions, payment service providers, central banks and government institutions, merchants and third-party stakeholders must work together to build and operate successful real-time payment ecosystems.

Open and Inclusive Payment Ecosystems

Fintechs and smaller banks play an increasingly significant role in the real-time payment ecosystems of the world's leading markets. Larger banks will need to reevaluate strategies and forge new partnerships with fintechs to remain competitive and to drive transaction volume and value at scale.

Strong Merchant Incentives

Merchant adoption and uptake are crucial for real-time payments growth and ubiquity. India's government, for example, removed merchant discount rates and issued all merchants QR codes for UPI acceptance, actively incentivizing merchants of all sizes to accept UPI payments.

Constant Flow of User-Friendly Use Cases

Real-time payments thrive in countries where innovative use cases have found mass adoption by consumers or businesses. Whether utility or tax bills, transport tickets or road tolls, subscription payments or the weekly grocery shop, consumers in successful markets are now paying in real time via QR codes, mobile apps or online accounts.

Cross-Border Ambition

Efforts to extend real-time to cross-border payments are finally paying off, and Asian countries are leading the way. Payments using India's popular UPI scheme can now be made in Malaysia, Indonesia, UAE and France, and users of Malaysia's DuitNow can now make QR-code real-time payments from Indonesia, Singapore, Thailand and China.

Key Findings at a Glance

In 2023, real-time payment transactions climbed to a new record high

Global real-time payment transactions in 2023

266.2B

YoY growth of 42.2%

Real-time payments growth shifts to a sustainable level as vanguard adopters reach maturity

Global real-time payment transactions forecast for 2028

575.1B 2023-2028

CAGR 16.7%

There is a strong correlation between real-time payments growth and mobile wallet adoption

Percentage of consumers that used mobile wallets in 2023

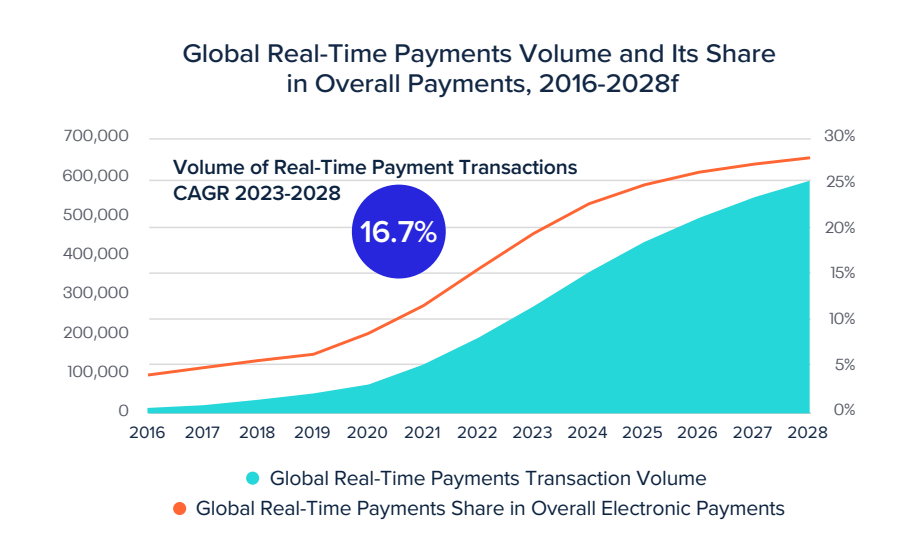
91% India

90% Indonesia

87% Malaysia

New use cases are fueling popularity and securing a larger share of transactions — by 2028, one in four transactions will be real-time

In 2023, real-time payments accounted for 19.1% of all electronic transactions globally. By 2028, this will rise to 27.1%



Markets Leading in Real-Time Payments Adoption

The Top Five Real-Time Markets by Volume

Rank	Country	Number of Real-Time Payment Transactions, 2023	Year-on-Year Growth (Volume of Real-Time Payments) 2022-2023
1	India	129.3B	44.6%
2	Brazil	37.4B	77.9%
3	Thailand	20.4B	37.5%
4	China	17.2B	3.8%
5	South Korea	9.1B	11.4%

India dominates the global real-time payments space

129.3B
real-time payment transactions in 2023

84% of all India's electronic transactions are real-time

PIX has taken Brazil's real-time payments from standstill to sky high

37.4B 2022-2023
real-time payment transactions in 2023
YoY growth rate of 77.9%

Countries at the start of their real-time journey typically show the highest growth forecast

Top six growth markets (by volume), CAGR 2023-2028

110.3% Ireland	**97.1%** Croatia	**94.9%** Egypt
65.5% Pakistan	**53.8%** Portugal	**52.1%** Peru

Regional Markets

Asia Pacific is the largest regional market, with four of the global top five real-time payment markets by volume

185.8B
transactions in 2023

Real-time payments represent
24% of all electronic payments

351.5B
real-time transactions by 2028
2023-2028 CAGR 13.6%

The Middle East is the fastest-growing real-time payments market globally

Transactions expected to rise from
855M to 3B
by 2028
2023-2028 CAGR 28.8%

In Europe, the new EU Instant Payments Regulation is expected to drive instant payments volume across the 27 EU member states

Instant payments are forecast to account for
13% of all electronic payments in Europe in 2028 — up from 8% in 2023

North America is a major growth market to watch — primarily due to the launch of the FedNow® Service in the U.S. in 2023

Projected 2023-2028 CAGR
27.1%

Africa had the highest real-time share of electronic payments in 2023 at 40%, with Nigeria as the real-time payments leader in the region

The region recorded
8.2B
real-time transactions in 2023

2028f real-time transactions
21.7B

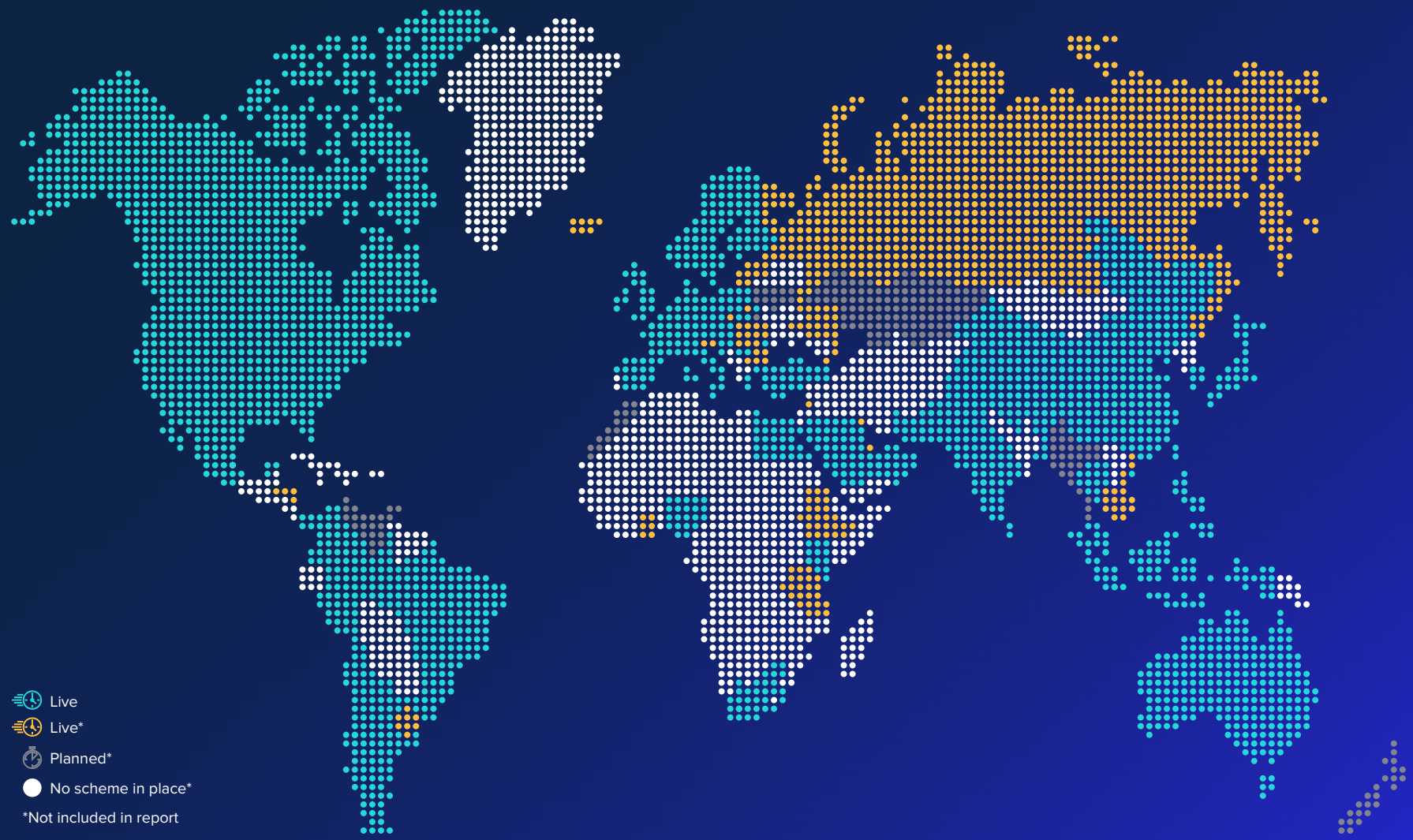
Latin American countries are pushing ahead with real-time payments modernization initiatives, looking to replicate Brazil's success

Peru and Colombia are predicted to have the highest 2023-2028 CAGRs in the region, with
51.2% and **42.6%**, respectively

The 2024 Prime Time for Real-Time report tracks real-time payment volumes and growth forecasts across 51 countries.

Modern economies and financial organizations are reaping the rewards now. Real-time payments are on track to become the dominant force in the global payments ecosystem.

Global Real-Time Payments Adoption



Africa

Country	Real-Time Payment Method	Status	Year
Egypt	IPN	Live	2022
Ethiopia	EATS	Live*	2011
Ghana	GhIPSS Instant Pay (GIP)	Live*	2007
Kenya	PesaLink	Live	2017
Morocco	No scheme in place	Planned*	-
Nigeria	NIP	Live	2011
South Africa	RTC	Live	2006
	PayShap	Live	2023
Tanzania	Tanzania Instant Payments System (TIPS)	Live*	2019

Asia Pacific

Country	Real-Time Payment Method	Status	Year
Australia	New Payments Platform (NPP)	Live	2018
Cambodia	Real-Time Fund Transfer (RFT)	Live*	2019
China	IBPS	Live	2010
Hong Kong (Special Administrative Region)	Faster Payment System (FPS)	Live	2018
India	IMPS	Live	2010
	UPI	Live	2016
Indonesia	BI-FAST	Live	2021
Japan	Zengin System	Live	1973
Kazakhstan	ISMT	Planned*	2025
Malaysia	DuitNow	Live	2018
	Interbank Funds Transfer (IBFT)	Live	2006
Myanmar	No scheme in place	Planned*	-
New Zealand	No scheme in place	Planned*	-
Pakistan	Raast	Live	2021
Philippines	InstaPay	Live	2018
Singapore	FAST	Live	2024
	PayNow	Live	2017
South Korea	CD/ATM	Live	1988
	Electronic Banking System (EBS)	Live	2001
Sri Lanka	CEFTS (LankPay)	Live	2015
Taiwan	Financial XML	Live	2003
	Interbank ATM funds transfer system	Live	1987
Thailand	PromptPay	Live	2016
Vietnam	NAPAS Quick Money Transfer Service	Live*	2016

Europe

Country	Real-Time Payment Method	Status	Year
Austria	SCT Inst	Live	2017
Azerbaijan	IPS	Live*	2020
Belgium	SCT Inst	Live	2019
Bulgaria	Borica Instant Payments	Live*	2021
Croatia	NKSInst	Live	2020
Czech Republic	CERTIS	Live	2018
Denmark	Straksclearing	Live	2014
Estonia	SCT Inst	Live*	2014
Finland	Siirto	Live	2017
	SCT Inst	Live	2018
France	SCT Inst	Live	2018
Germany	SCT Inst	Live	2017
Greece	IRIS	Live	2017
Hungary	Azonnali fizetési rendszer (AFR)	Live	2020
Iceland	CBI	Live*	2020
Ireland	SCT Inst (not formally launched)	Live	2020
Italy	SCT Inst	Live	2017
Latvia	EKS Zibmaksajums	Live*	2017
Lithuania	CENTROlink	Live*	2017
Luxembourg	BILnet	Live*	2020

Country	Real-Time Payment Method	Status	Year
Netherlands	SCT Inst	Live	2017
Norway	Straksbetalinger	Live	2011
	Vipps	Live	2015
Poland	Express Elixir	Live	2012
	BlueCash	Live	2012
Portugal	SCT Inst	Live	2018
Romania	Plati Instant	Live*	2005
Russia	FPS	Live*	2019
Serbia	IPS	Live*	2018
Slovakia	SCT Inst	Live*	2022
Slovenia	Flik	Live*	2020
Spain	SCT Inst	Live	2017
	Bizum	Live	2016
Sweden	BIR	Live	2012
Switzerland	TWINT	Live	2016
Turkey	Retail Payment System (RPS)	Live	2012
	FAST	Live	2021
U.K.	Faster Payments Service	Live	2008
Ukraine	TBD	Planned*	-

Latin America

Country	Real-Time Payment Method	Status	Year
Argentina	DEBIN	Live	2017
	PEI	Live	2016
	Transfers 3.0	Live	2020
Brazil	SITRAF	Live	2002
	PIX	Live	2020
Chile	TEF	Live	2008

Country	Real-Time Payment Method	Status	Year
Colombia	Transfiya	Live	2019
Honduras	SIP	Live*	2008
Mexico	SEPI	Live	2004
Peru	Immediate Interbank Transfers	Live	2016
Uraguay	ACH Transferencias Inmediatas	Live*	2021
Venezuela	LBTR	Planned*	-

Middle East

Country	Real-Time Payment Method	Status	Year
Bahrain	Fawri+	Live	2015
Iran	No scheme in place	-	-
Israel	No scheme in place	-	-
Kuwait	NBK Quick Pay	Live*	2018
Lebanon	Zaky	Live*	2020

Country	Real-Time Payment Method	Status	Year
Oman	MPCSS	Live	2017
Qatar	QMP	Live*	2020
Saudi Arabia	sarie	Live	2021
UAE	Immediate Payment Instructions (IPI)	Live	2019

North America

Country	Real-Time Payment Method	Status	Year
Canada	Interac e-Transfer	Live	2022
U.S.	RTP and Zelle	Live	2017
	FedNow® Service	Live	2023

Market Deep Dive

Brazil: Accelerating instant from zero to hero

In just three years, PIX has taken Brazil's real-time payments from standstill to sky high. Now the world's second largest real-time payments market after India, it owes much of its success to central bank regulation and a fintech-rich ecosystem which has seen no-fee P2P payments soar. With a constant flow of new merchant use cases, PIX is making headway in tackling real-time fraud, and its next steps are building a better UX to drive in-store use and migrating more services onto real-time rails.

Brazil makes up 75% of Latin America's real-time payments market and 14% of the global instant payments market by volume of transactions. Its primary real-time payments system PIX enables instant account-to-account payments, 24/7 — via an alias, banking account details or by scanning a QR code — and is supported by 800 licensed financial and payment institutions.

Fast-tracking financial digitization and inclusion

PIX was launched in November 2020 as part of the Banco Central do Brasil's (BCB) mission to drive financial inclusion by decentralizing financial services and increasing competition.

Today, PIX has more than 150 million[1] active users. Full integration into popular payment wallets and existing bank-based systems has made it the country's "go-to" payment method. In 2023, it expedited more than 37 billion transactions and now represents more than 36% of Brazil's electronic payments.

Through PIX, the BCB has fostered an open and collaborative ecosystem for banks and fintechs and a steady stream of well-structured and supported PIX use cases that have rapidly democratized real-time payments.

2023 Real-Time Transactions

37.4B

2022-2023 Real-Time Payments Growth

77.9%

2023 Real-Time Share of Electronic Payments

36.2%

2028f Real-Time Transactions

115.8B

2023-2028 CAGR

25.4%

Brazil's mobile-first consumers can now open bank accounts fully digitally, making PIX widely available for peer-to-peer (P2P), bill, retail and eCommerce payments. As a result, real-time transactions are projected to achieve a 25.4% CAGR from 2023 to 2028.

Ubiquity powered by a collaborative but controlled ecosystem

PIX is owned by the BCB, which maintains strong ecosystem governance and control. PIX is mandated for all financial institutions with more than 500,000 accounts and allows voluntary participation (with conditions) for all other payment service providers (PSP).

This has fostered a strong relationship between fintechs and banks. The BCB maintains standards, preventing risk and creating a healthy and robust ecosystem for instant payments and new use cases to flourish. Stakeholders can participate in PIX Business and Technical groups to actively shape PIX evolution and new use cases.

US$3.946 trillion annually now flows through PIX

No fees, instant availability of funds and easy access via mobile have made PIX more popular than card payments. Its transaction volumes are now more than twice that of credit and debit cards[2] (Q2 2023), and transaction values are two-and-a-half times higher (Q1 2023)[3].

The vast majority (92%) of Brazil's real-time value comes from P2P payments, which totaled US$3.630 trillion in 2023.

In-store spending accounts for just 7% of Brazil's total real-time transaction value. Uptake may be dampened by the PIX point-of-sale experience, which can't yet compete with the one-tap convenience of contactless cards. Plans to improve this with NFC, Bluetooth, RFID and facial recognition should remove this barrier.

Forecasts indicate in-store value will grow by 36.3% CAGR from US$283 billion in 2023 to US$1.331 trillion in 2028.

Real-Time Payments by Type, 2023/2028 Comparison

	2023 Real-Time Payments Transaction Value (USD)	2028 Real-Time Payments Transaction Value (USD)	CAGR (2023-2028)
Bill Payments	**9.1B**	**20.8B**	**18.1%**
In-Store Payments	**283.0B**	**1.3T**	**36.3%**
Online Payments	**23.0B**	**40.7B**	**11.5%**
Others (e.g., P2P)	**3.6T**	**9.3T**	**20.8%**
Total	**3.9T**	**10.7T**	**22.1%**

Popular use cases driving momentum

When it launched PIX, the BCB promised a steady flow of new use cases. Today, its diverse offerings touch every demographic, in every part of the country.

77% of the population uses PIX P2P, the debut offering which today still accounts for more than 50% of instant payments. While free for consumers, charges can be made for businesses. Even so, for small and micro-businesses like taxi drivers and street vendors, it is typically cheaper and more reliable than using wireless card machines.

64% of Brazilians with a smartphone now access PIX Billing (PIX Cobrança) for instant bill payment via embedded QR codes, and 1.3 million monthly cash withdrawals valued at approximately US$64.5 million (December 2023)[4] now flow through PIX Withdraw and PIX Change (PIX Saque and PIX Troco).

Plenty of scope for future growth

The launch of Automatic PIX (PIX Automático) in October 2024 will revolutionize recurring payments and enable Brazilians to use PIX for streaming services, bill pay, news portals and subscription clubs.

The BCB also plans to introduce PIX Guaranteed and PIX Credit to compete with buy now pay later (BNPL) and point-of-sale (POS) financing. Fostering more high-value applications for merchants — online and in-store — will allow financial institutions to earn comparable revenues to credit products while settling payments instantly.

With its ambitious roadmap, the BCB aims to move many more existing use cases to PIX, including smart contracts and PIX International for cross-border payments. Additionally, PIX will serve as a real-time payments rail for Brazil's planned digital currency Drex.

A collective commitment to tackling fraud

However, it's not all good news. As in other markets, instant payments have led to faster ways to commit fraud. Street robberies have been a particular challenge for Brazil.

The BCB is championing some strong responses. It has established a working group of banks, fintechs and other industry players to develop more stringent countermeasures. Initiatives like PIX velocity checks and a PIX Precautionary Block — which sends an alert and freezes transactions for 72 hours to enable investigation — are already live. Work is also underway on a process to speed up the return of payer funds upon confirmation of fraud or institutional failure.

Brazil's success demonstrates that scaling instant payments from inception to widespread adoption is achievable within a short timeframe. It highlights the importance of an actively engaged central bank prepared to champion open ecosystems and actively involves financial institutions and merchants in the evolution of customer experiences and use cases. While challenges like fraud persist, collective efforts ultimately lead to more effective solutions and faster results.

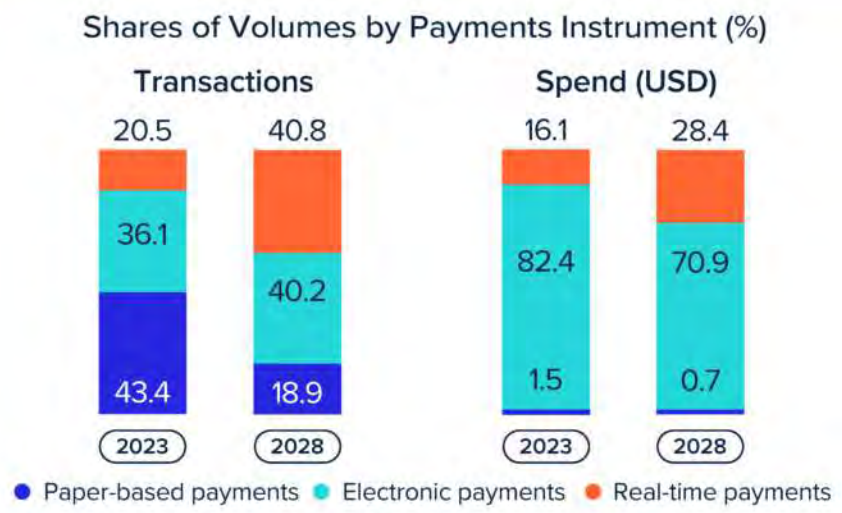
Key Takeaways

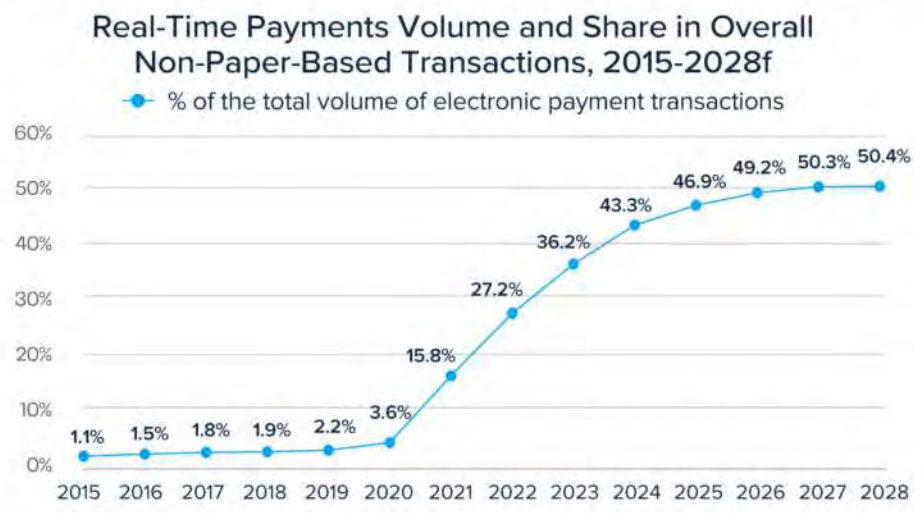
- **Brazil is the world's #2 largest instant payments market**
  Processing more than 37 billion instant transactions, it accounts for 14% of global and 75% of South and Central America's real-time volumes.

- **Real-time ubiquity in just three years**
  77% of Brazilians now use the PIX real-time platform, and more than a third (36%) of ePayments are instant. Success is a testament to the central bank's proactive approach in working with fintechs to power new customer experiences.

- **Five-year growth is steadying to 25.4% CAGR (2023-2028)**
  Instant payments growth has been boosted by evolving functionality (NFC, Bluetooth, RFID and facial recognition), new merchant use cases and the opening of cross-border rails. While challenges like fraud persist, collective efforts are ultimately leading to more effective solutions, and faster results.

Region: **Latin America**





Real-Time Payments Launch

2002

Real-Time Payment Schemes

2002 – SITRAF
2020 – PIX

Scheme Messaging

ISO 20022

Initiation/Authorization Methods

3

- Bank Account
- Mobile
- QR Code

Real-Time Acceptance

4

- Banks
- Merchants
- P2P
- Billers

Mobile Wallet Trends

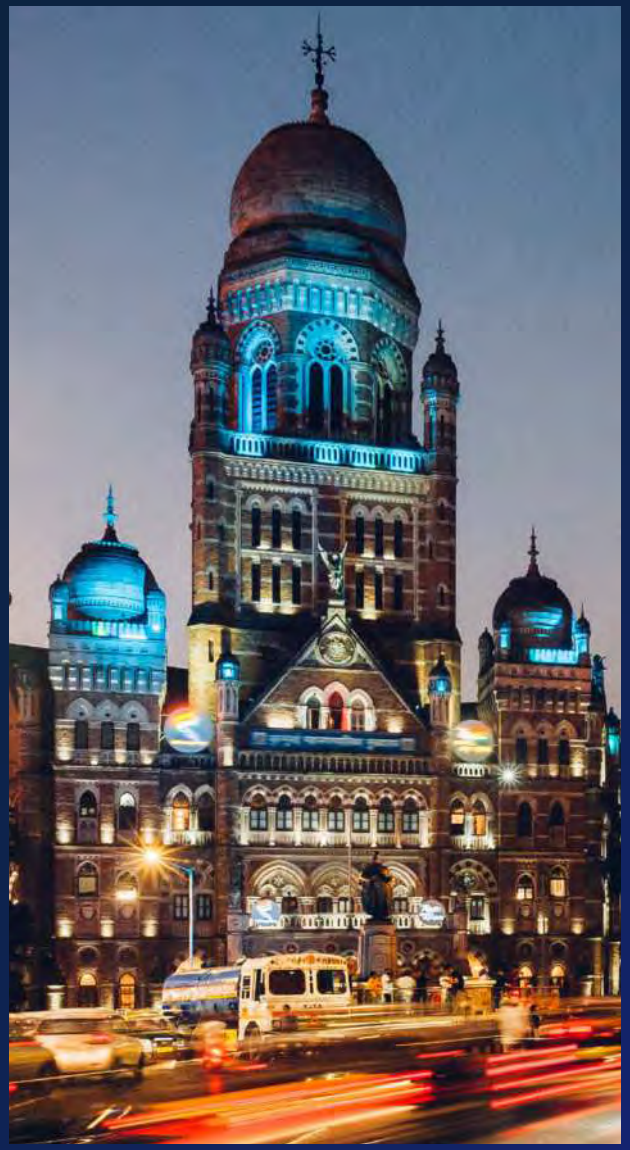
68.2%

% of adults who have a mobile wallet and have used it in the past year (2023)

[1] https://www.bcb.gov.br/en/financialstability/pixstatistics
[2] https://www.bcb.gov.br/estatisticas/spbadendos
[3] https://www.bcb.gov.br/estatisticas/spbadendos
[4] https://www.bcb.gov.br/en/financialstability/pixstatistics

India

Market Deep Dive
India: Taking a nation from cash to clicks



The world's largest real-time player, India has sought to empower merchants and consumers to reduce their reliance on cash. Initiatives from no-fee accounts and digital IDs to pervasive QR codes and mobile wallets have paved the way for UPI real-time payments and made them ubiquitous in daily life. The next steps will be helping banks and fintechs to monetize services and rolling out low-cost, real-time corridors for remittances to capture higher-value payments.

India dominates the global real-time payments space, with almost 130 billion real-time payments made in 2023. To put this in context, that's more than the rest of the world's top 10 real-time payment markets combined and 49% of total global real-time transactions.

UPI has made India the world's #1 real-time payments market

India's real-time journey began with the launch of Immediate Payment Service in 2010, but the game changer was the introduction of the Unified Payments Interface (UPI) in April 2016, which enabled real-time payments using QR codes, mobile numbers and virtual IDs.

UPI was developed by National Payments Corporation of India (NPCI) — established by the Reserve Bank of India (RBI) and the Indian Banks Association. Thanks to demonetization mandates and opening the system to non-bank players, it is now accessible across 500 banks.

UPI's ubiquitous reach has made it the first choice for Indian consumers and businesses for payments in all contexts in the country. Consequently, the volume of real-time payments jumped 44.6% from 2022 to 2023 and now constitutes 84% of India's electronic transactions.

2023 Real-Time Transactions
129.3B

2022-2023 Real-Time Payments Growth
44.6%

2023 Real-Time Share of Electronic Payments
84%

2028f Real-Time Transactions
248B

2023-2028 CAGR
13.9%

An end-to-end approach to real-time inclusion

India's remarkable UPI adoption levels reflect a wider concerted effort by the Indian government to transition the economy from cash-based transactions to electronic payments.

Central to this is the "JAM" trinity — Jan Dhan no-frills, zero-fee accounts, Aadhaar digital IDs and smart mobile phones — which laid the foundation for UPI by bringing direct beneficiary transfers and financial access to all citizens.

Today, UPI and real-time payments account for more than half (53.4%) of India's transactions. As consumers increasingly shift from cash- to mobile-based real-time payments, this is anticipated to reach 69% by 2028.

P2P achieved US$1.872 trillion in real-time transactions, but in-store is the one to watch

P2P payments garner the largest slice of India's transaction value (61%) — a large proportion of these are person-to-small merchant payments.

At 35% — equivalent to US$1.091 trillion — its in-store share is significantly higher than in all other markets. With a CAGR of 27.6% from 2023 to 2028, its growth will also outpace India's other real-time channels.

Success in both of these areas can be attributed to the government removing merchant discount rate (MDR) for UPI payments and issuing every merchant with a QR code for UPI acceptance. This has incentivized merchants of all sizes, down to even the smallest street vendors, to accept real-time payments.

While bill and online real-time payment values are substantially lower than P2P or in-store, the gap is likely to close as businesses and retailers become increasingly digitized. From 2023 to 2028, the CAGRs for bill payments (18.1%) and online (19.7%) are forecast to be double that of P2P (9.2%).

Real-Time Payments by Type, 2023/2028 Comparison

	2023 Real-Time Payments Transaction Value (USD)	2028 Real-Time Payments Transaction Value (USD)	CAGR (2023-2028)
Bill Payments	**104.6B**	**240.9B**	**18.1%**
In-Store Payments	**1.1T**	**3.7T**	**27.6%**
Online Payments	**18.7B**	**46.2B**	**19.7%**
Others (e.g., P2P)	**1.9T**	**2.9T**	**9.2%**
Total	**3.1T**	**6.9T**	**17.4%**

A fintech-rich ecosystem drives real-time overlay services, apps and digital wallets

By giving "payments bank" regulatory status to fintechs, India has made its ecosystem highly cooperative. With a high-volume, data-rich, digital payments environment and innovative solution providers like Mindgate Solutions, ACI's regional partner, India now produces a wide choice of real-time digital overlays.

In the past seven years, RBI has built out QR-code payments and Request to Pay at scale. Digital wallets and PSP services integrate UPI via APIs to create mobile-based P2P, P2B and B2P use cases for merchants, government (payouts and collections), transport, health and education.

Fintech apps now initiate more than 95% of UPI transactions, and 91% of Indians use a mobile wallet, giving them an easy way to access real-time payments. According to NPCI data, PhonePe accounts for 46% of UPI transaction volumes, Google Pay accounts for 36% and Paytm accounts for 13% (October 2023).

New use cases broaden UPI reach and extend merchant opportunity

Recognizing that not all Indians have a smart phone, UPI 123PAY now lets the country's 400 million feature phone users access real-time payments.

Real-time subscriptions can be set up using UPI Autopay for recurring payments up to INR 2,000. Credit cards can also link to UPI, enabling acceptance at merchants that do not have POS terminals (although MDR charges may apply).

To reduce pressure on banking infrastructure that has seen a tenfold increase in real-time transaction volumes in just two years, the NPCI introduced UPI Lite. Allowing offline processing for transactions below INR 200, it utilizes a refillable "on-device stored value" of up to INR 2,000. Consumers can even make UPI payments where there is no connectivity — in elevators, basements or on flights — using UPI-Lite X.

Setting UPI's sights on higher values and cross-border expansion

Although real-time payments account for 53.4% of India's electronic transaction volume, it only captures 10.3% of electronic transaction value. This shows that real-time payments in India are used for everyday transactions by a wide swathe of the population, instead of exclusively for large P2P transfers, bill payments or corporate transfers, as is the case in many other markets.

To address this, the RBI has raised the UPI transaction limit for hospitals and educational institutions from ₹1 lakh to ₹5 lakh and is proposing a four-hour window when users can cancel or amend first-time payments over INR 2,000 to new recipients.

Recently, India's popular RuPay card was enabled for UPI transactions, and the RBI is also working on UPI-ATMs to support cash withdrawals without a physical card using dynamically generated QR codes.

Cross-border payments are a major opportunity for value growth. Countries like France, UAE, Malaysia and Indonesia already accept UPI, with more countries rolling it out.

But even bigger than this is India's US$125 billion inbound remittance market. UPI-PayNow, launched in January 2024, has created a new remittance corridor with Singapore. There are many more such initiatives in the pipeline, covering North America, Asia and the Middle East.

State-backed UPI shows that public-private digital financial inclusion efforts can bear fruit when implemented as part of an end-to-end solution. With 1.5 billion people and the world's fifth largest economy, India has plenty of scope for growth. The challenges lie in the last mile and driving inclusion deeper — overcoming infrastructure, literacy and location issues — to make India a truly real-time nation.

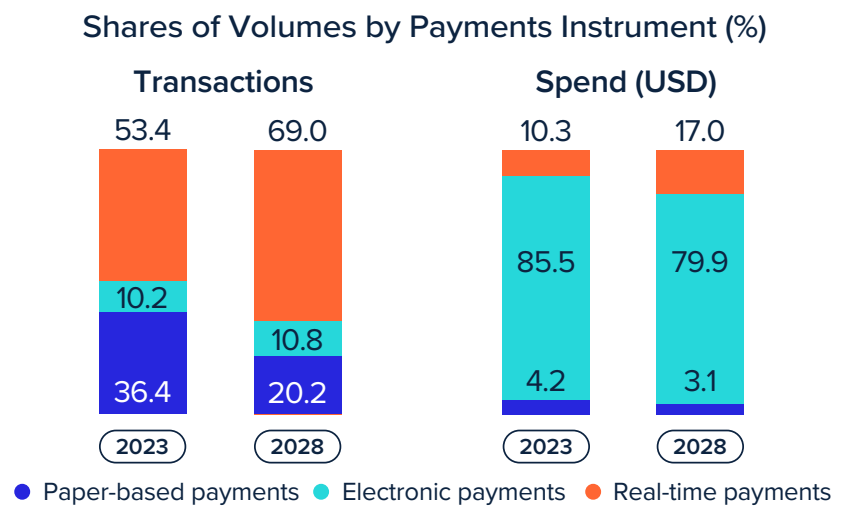
Key Takeaways

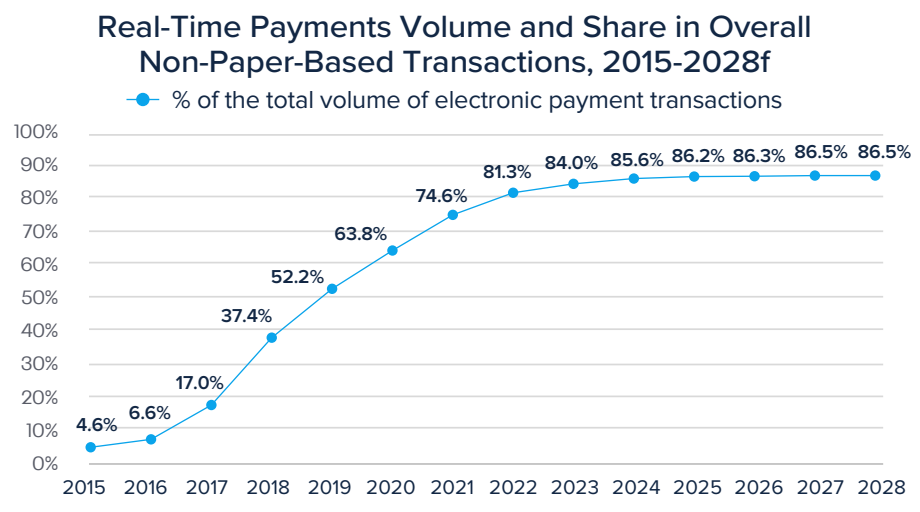
- **India dominates the global stage**
  With almost 130 billion real-time transactions, it represents 49% of the world's total volume, making it the undisputed #1 instant payments market.

- **Truly a real-time nation**
  State-backed UPI shows that public-private digital financial inclusion efforts bear fruit when end-to-end initiatives embrace merchants and consumers. 84% of all India's ePayments and 53.4% of its total transactions are now real-time.

- **Long-term growth is stabilizing at 13.9% CAGR (2023-2028)**
  With 1.5 billion people and the world's fifth largest economy, there's still scope for growth. The challenge lies in driving inclusion deeper — overcoming infrastructure, literacy and location issues.

Region: **Asia Pacific**





Real-Time Payments Launch

2010

Real-Time Payment Schemes

2010 – IMPS
2016 – UPI

Scheme Messaging

ISO 8583

Initiation/Authorization Methods

3

- Bank Account
- Mobile
- QR Code

Real-Time Acceptance

4

- Banks
- Merchants
- P2P
- Billers

Mobile Wallet Trends

90.8%

% of adults who have a mobile wallet and have used it in the past year (2023)

Market Deep Dive

Indonesia: Late bloomer now leapfrogging ahead

Indonesia's BI-FAST is one of the world's largest and most modernized real-time payment initiatives. It incorporates 135 banks, multi-tenant aggregators, non-bank participants. With no legacy burden to overcome, it has leapfrogged to ISO 20022, creating a diverse, universally reachable real-time ecosystem that accelerates widescale adoption.

Indonesia launched its first real-time payments system BI-FAST — owned and regulated by Bank Indonesia — in December 2021. As a late entrant, it learned from other countries' real-time journeys and, with ACI's support, was live in a record less than nine months.

Indonesia is now ranked as #8 in the world's top 10 fastest-growing real-time payment markets, with almost 2 billion real-time payment transactions in 2023 and a CAGR of 44.6% (2023-2028).

The country has also sprinted ahead of more mature neighbors to become #3 in Asia Pacific for real-time payments volume, share and growth. By 2028, it is expected that real-time payments will account for 13.1% of all transactions in Indonesia.

Indonesia's lack of legacy infrastructure proved an advantage in a predominantly cash economy

Indonesia has leapfrogged typical digital evolution paths and moved straight to ISO 20022, enabling it to provide innovative real-time payment services — including cross-border payments — at an early stage.

ISO 20022 messaging provides more efficient payment processing, supports real-time gross settlement, and offers opportunities for analytics to build better use cases and experiences. The result is

2023 Real-Time Transactions

1.9B

2022-2023 Real-Time Payments Growth

267%

2023 Real-Time Share of Electronic Payments

11%

2028f Real-Time Transactions

12.2B

2023-2028 CAGR

44.6%

universal real-time reachability and the fast-paced innovation that is propelling real-time payments' adoption.

Connecting 135 banks, BI-FAST now provides a harmonized national real-time payments platform that delivers infrastructure efficiency and use cases such as real-time bulk credit, direct debit and Request to Pay services.

A major engine for modernization

BI-FAST is an integral part of Indonesia's ongoing digital modernization initiative and central to the government's Payment System Blueprint called IPS 2025, which aims to transform the country's payments infrastructure and integrate its digital economy and finance sector.

BI-FAST also responds to public demands for a fast, easy, safe, affordable and reliable payments system. With BI-FAST, funds are immediately transferred from one bank to another using the recipient's account details, mobile number or email address.

Recent developments mean that Indonesians can now initiate cost-efficient, cross-border payments to and from Malaysia, Thailand, Singapore and India — with more on the horizon. Continued expansion of international payment corridors is a priority given Indonesia's role as the powerhouse of the Southeast Asian economy.

End-to-end benefits in a challenging environment

As an archipelago, Indonesia has many geographical challenges. The country is large and fragmented and has multiple ways consumers can pay for goods and services online and offline. Consolidation is already underway to unify disparate services onto the Bank Indonesia's BI-FAST infrastructure.

BI-FAST is also strengthening the resilience of the national retail payments system by offering enhanced fraud detection features. Merchants, participants and individuals (P2P) now have a secure path into real-time payments and can free themselves from the costs, fees and risks associated with handling cash.

Indonesia's drive towards digital payments aligns with regional trends. Most of Indonesia's real-time payments are credit transfers, proxy payments and online payments. The QR Code Indonesian Standard (QRIS), which provides a single QR code for retail and all eWallets, will soon be leveraged to accelerate the adoption of BI-FAST among consumers and businesses. BI-FAST and QRIS are expected to drive widespread acceptance and usage, making digital payments more accessible and convenient in Indonesia.

QR codes linked to mobile wallets are central to widening adoption. According to a 2023 consumer survey from GlobalData, 89.8% of Indonesians own a mobile wallet, and their use grew by 29.6% between 2022 and 2023. Looking ahead, this will increase at a CAGR of 12.5% from 2023 to 2028.

Real-time value is strong — and growing

In Indonesia, real-time payments are primarily used for P2P and P2B payments. The maximum value for BI-FAST transactions is IDR 250 million.

Real-Time Payments by Type, 2023/2028 Comparison

	2023 Real-Time Payments Transaction Value (USD)	2028 Real-Time Payments Transaction Value (USD)	CAGR (2023-2028)
Bill Payments	22.2B	108.6B	37.4%
In-Store Payments	13.4B	32.2B	19.2%
Online Payments	11.1B	19.9B	12.5%
Others (e.g., P2P)	308.4B	2.1T	46.4%
Total	355.0B	2.2T	44.4%

P2P and P2B payments represented 87% of Indonesia's real-time payments value in 2023 and are on track to achieve 46.4% CAGR in value over the next five years, rising from more than US$308 billion to US$2.070 trillion.

The second-largest value generator was bill payments, accounting for 4% of real-time payments transaction value. With a five-year CAGR of 37.4%, it is also the next big growth opportunity and is expected to increase from US$22 million in 2023 to more than US$108 million in 2028.

Real-time payments accounted for nearly one-third (30.2%) of all eCommerce value but represented only 3% of all real-time payments value.

Scaling up for wider inclusion and expansion

Although Indonesia is classed by the World Bank as an upper-middle-income country, 100 million Indonesians remain unbanked. Ongoing financial inclusion initiatives continue to center around BI-FAST, which offers citizens and merchants low-cost entry to digital and mobile payments.

Indonesia has a population of 270 million, making it the largest country in Southeast Asia. Meeting the real-time payments needs of so many consumers calls for huge processing capacity — to achieve this, the Bank Indonesia is expanding the ecosystem to include multi-tenant aggregators from leading national switches, such as Rintis Sejahtera, Artajasa and Alto Network. Their participation — and ability to connect banks and non-bank participants to the central infrastructure — will be vital to support growth at scale as the market matures.

As Indonesia gradually opens its real-time payments platform to fintechs, expect partnerships between banks and fintechs to accelerate real-time payment services and overlays, making real-time payments even more pervasive.

Just two years into its real-time journey and Indonesia proves that with the right technology, partners and central support, the benefits of real-time payments can make an impact in a short period. Bank Indonesia can support its rapidly growing economy and provide its citizens, small enterprises and larger businesses a platform for financial inclusion and innovation. The growing integration with neighboring economies will facilitate better trade flows and we believe in the near future we will see BI-FAST strengthening its offering to offer new products.

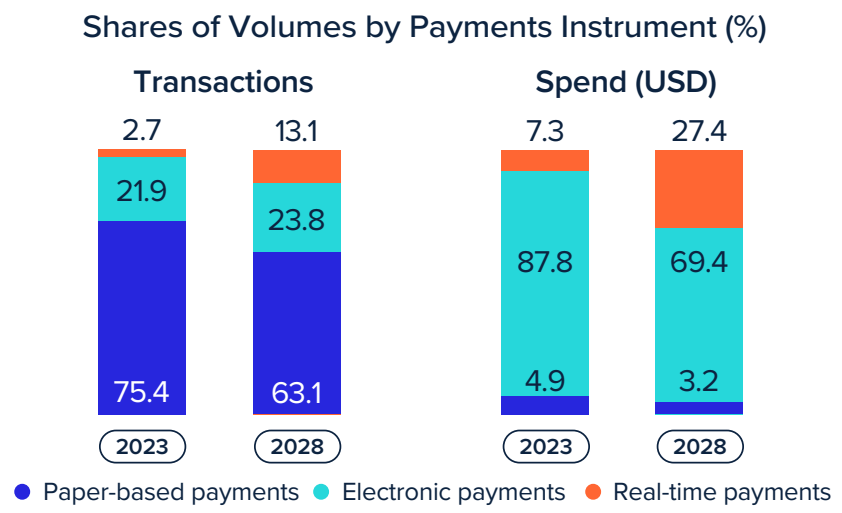
Key Takeaways

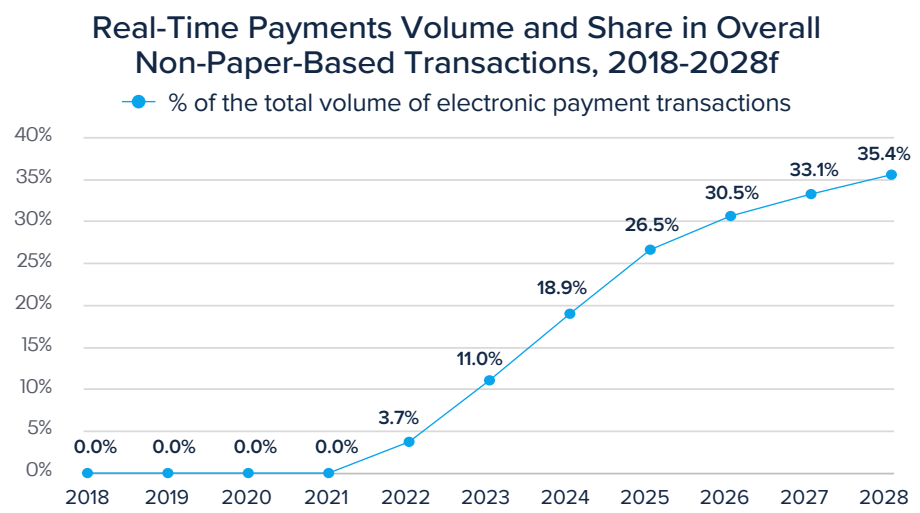
- **Indonesia ranks #8 globally for real-time payments volume and growth**
  Just two years into its real-time journey, and with a CAGR of 44.6% (2023-2028), it proves that the right technology, partners and central support accelerate adoption.

- **Fast-tracking a cash-based economy into the digital world**
  Indonesia's real-time platform BI-FAST processed almost 2 billion instant transactions in 2023 through the ISO 20022-based ecosystem that includes 135 banks and multi-tenant aggregators who will provide future processing at scale.

- **Ramping up cross-border use cases**
  Indonesia is already linked to Malaysia, Thailand, Singapore and India. Planned payment corridors will sustain Indonesia as the powerhouse of the Southeast Asian economy.

Region: **Asia Pacific**





Real-Time Payments Launch

2021

Real-Time Payments Scheme

2021 – BI-FAST

Scheme Messaging

ISO 20022

Initiation/Authorization Methods

2 Bank Account | Mobile

Real-Time Acceptance

2 Banks | P2P

Mobile Wallet Trends

89.8%

% of adults who have a mobile wallet and have used it in the past year (2023)

Market Deep Dive

Malaysia: Harmonization fosters a competitive ecosystem

A concerted effort by the government, central bank, national switch and industry has harmonized the nation's payments structure. The collaboration has helped ensure a seamless experience for all stakeholders, opening the ecosystem to fintechs and vertical businesses, paving the way for Malaysia's diverse use cases. As its national payments network and central infrastructure for Malaysia's financial markets Payments Network Malaysia (PayNet) continues to consolidate and unify services, Malaysia is leading the way in driving real-time payments expansion and enabling instant cross-border payments.

One of Southeast Asia's dynamic economies, Malaysia's government has long recognized that modern financial infrastructure is key to achieving economic growth and financial inclusion. Implemented by PayNet, Malaysia's Real-time Retail Payments Platform (RPP) and consumer facing DuitNow real-time transfer service are leading the country's real-time transformation.

By unifying different payment rails under one national regulatory standard and network, and making payments between them interoperable, RPP has rendered real-time payments a daily reality for the country's 33.7 million residents.

Using DuitNow, residents of Malaysia can now transfer money immediately between online banks, digital wallets, merchants and peers using a QR code, mobile number or identification number. In 2023, they made 1.872 billion real-time payments valued at more than US$517 billion. This saw the country surpass larger economies, in the pursuit of real-time volume and value.

2023 Real-Time Transactions

1.9B

2022-2023 Real-Time Payments Growth

26%

2023 Real-Time Share of Electronic Payments

21%

2028f Real-Time Transactions

4.1B

2023-2028 CAGR

16.9%

Accelerated time to revenue with modern architecture and standardized connectivity

From the outset, PayNet rallied banks to join the national real-time payments scheme and migrate to ISO 20022. In collaboration with ACI Worldwide as their strategic solution provider, all of Malaysia's 36 banks onboarded in just nine months. This exceptionally short timeframe accelerated time to revenue — a critical factor for banks and collaborators.

Now, a significant amount of member banks' digital transactions flow through the PayNet central infrastructure, facilitating seamless implementation, greater efficiency and easier compliance, making Malaysia's payments system among the region's most efficient.

Extending participation beyond fintechs and wallet providers

Today, industries such as insurance, billers and governments can link directly to the PayNet real-time payments scheme to better service merchants and consumers. This inclusive approach generates additional revenue opportunities for banks and fosters greater financial inclusion.

It also allows innovative ecosystem players — including Grab, a leading superapp that provides everyday services like deliveries, mobility and financial services; Fave, a payments, shopping and discount app; and Touch 'n Go, started as an electronic toll collection and public transport ticketing system and more — to connect to the real-time payments platform.

Together with the growing popularity of mobile payments — 86.9% of Malaysians own a digital wallet based on a consumer survey by GlobalData — this dynamic environment is accelerating real-time payments uptake, driving an expected CAGR of 16.9% from 2023 to 2028.

Malaysia's instant payments value will double in the next five years

Nearly one in four non-paper transactions in Malaysia are now real-time payments (21.1%), but there is still a long way to go. With its initial emphasis on capturing low-value P2P transactions, real-time payments represent only a 7.4% share of Malaysia's transaction value. Rising thresholds and cross-border payment linkages could change that. With the five-year forecast reporting an 18.6% CAGR, the value of real-time payments could double to US$1.211 trillion by 2028.

Real-Time Payments by Type, 2023/2028 Comparison

	2023 Real-Time Payments Transaction Value (USD)	2028 Real-Time Payments Transaction Value (USD)	CAGR (2023-2028)
Bill Payments	**17.8B**	**39.7B**	**17.4%**
In-Store Payments	**28.7B**	**82.7B**	**23.6%**
Online Payments	**2.5B**	**4.1B**	**10.3%**
Others (e.g., P2P)	**468.1B**	**1.1T**	**18.3%**
Total	**517.1B**	**1.2T**	**18.6%**

Currently, 91% of real-time payments value — equivalent to US$468 billion — is through account-to-account P2P or B2B transactions. This is expected to reach US$1.085 trillion by 2028.

In-store real-time payments, while making up only 6% of the market, will experience a CAGR of 23.6% — the highest growth of all Malaysia's use cases. By 2028, it will reach over US$82 billion — 20 times more than online payments. The next five years will also see the value gap widen between in-store and bill payments as merchant adoption continues apace due to the growing ubiquity of QR codes.

QR codes are emerging as a primary channel for retail transactions

PayNet has progressively introduced new, innovative payment services, allowing it to out-compete debit and credit card payments for day-to-day purchases.

Many of Malaysia's smaller merchants can't (or refuse to) accept card payments due to cost and complexity, but they can accept QR-code payments and are attracted by DuitNow's low costs — MDR fees remain waived for the present — and instant liquidity benefits.

The Malaysia national QR service allows consumers to leverage QR codes to make transactions in key merchant categories, including fintech bills and transportation, and with local and international digital wallets like Boost, WeChat Pay and Alipay.

Future fortunes rely on domestic and international growth

Regulators plan further consolidation, such as processing ACH batch payments on real-time payment rails, unlocking opportunities for banks to develop new cost models and revenue streams as customers seek real-time's faster settlement and liquidity advantages.

A concerted effort to extend real-time to cross-border payments is finally paying off. DuitNow users can now make QR code real-time payments from Indonesia, Singapore, Thailand and China.

More recently, a link enabling real-time P2P payments between Singapore's PayNow and DuitNow is live now. This marks an important milestone, aligning with the ASEAN Regional Payment Connectivity Initiative and the G20 Roadmap for Enhancing Cross-border Payments.

Malaysia is also part of the Nexus project to implement and test a universal standard for cross-border, placing it center stage in real-time's global evolution.

Malaysia's success in harmonizing the country's real-time payments ecosystem on ISO 20022 has ensured that technology is not a barrier to real-time payments adoption. It highlights the importance of standardized interfaces in making it easy for merchants, billers, fintechs or other intermediaries to access and leverage value from real-time payment platforms. Real-time payments adoption is growing steadily, but there is still much to do to migrate consumers from cash and build cross-regional real-time payment links.

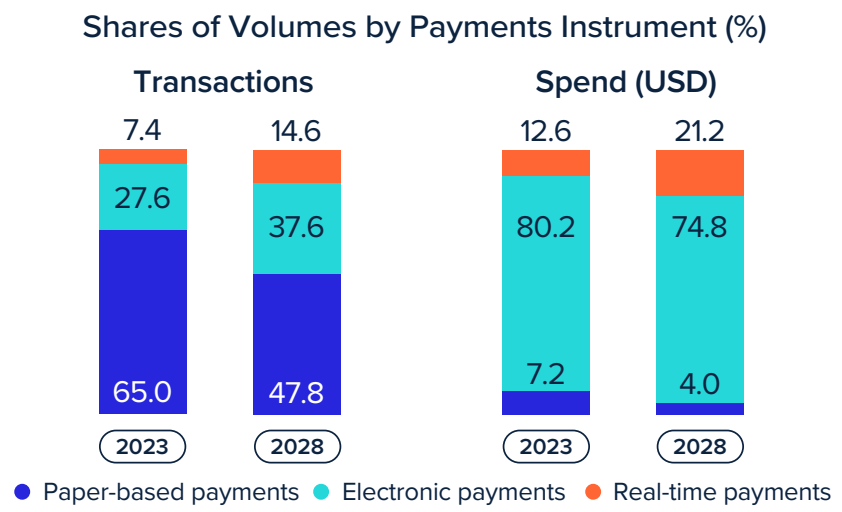
Key Takeaways

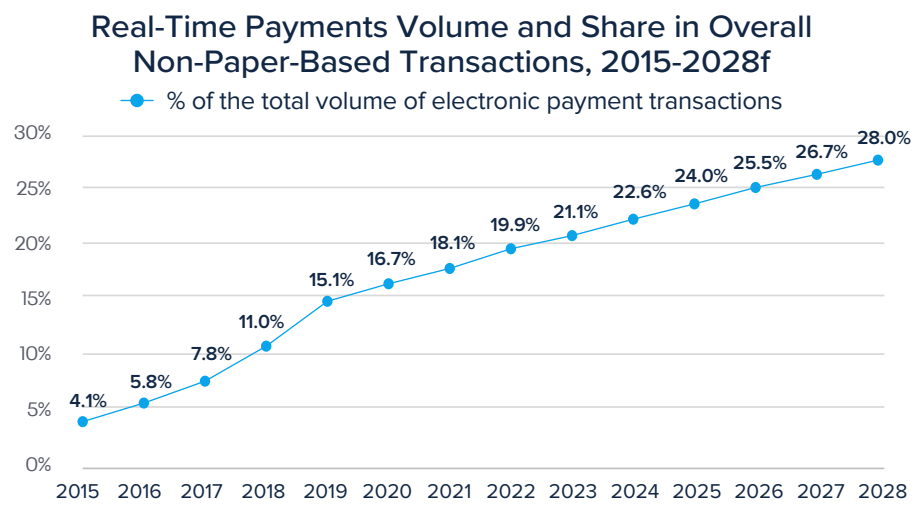
- **Real-time transactions surpass debit/credit card payments**
  Malaysia processed 1.8 billion real-time payments totaling more than US$517 billion in 2023. One in four electronic transactions are now instant (21.1%) with its instant scheme DuitNow, implemented by PayNet, increasingly popular for day-to-day purchases.

- **All Malaysia's banks are harmonized on ISO 20022**
  Standardized interfaces prevent technology from becoming a barrier to adoption and make it easy for merchants, billers, fintechs and other intermediaries to connect to and leverage value from real-time rails.

- **Value is set to double in the next five years**
  A CAGR of 16.9% (2023-2028) will take real-time value to US$1.211 tillion by 2028 as new use cases migrate more merchants and consumers away from cash. Malaysia is also set to benefit from future cross-regional corridors through Nexus and G20 initiatives.

Region: **Asia Pacific**





Real-Time Payments Launch

2006

Real-Time Payment Schemes

2006 – IBFT
2018 – DuitNow

Scheme Messaging

ISO 20022

Initiation/Authorization Methods

3

- Bank Account
- Mobile
- QR Code

Real-Time Acceptance

4

- Banks
- Merchants
- P2P
- Billers

Mobile Wallet Trends

86.9%

% of adults who have a mobile wallet and have used it in the past year (2023)

Market Deep Dive

Netherlands: Drive for efficiency takes instant from “niche” to norm

The Netherlands were a pioneer in instant payments, having been an early adopter of Single Euro Payments Area (SEPA) Instant Credit Transfer (SCT Inst) to meet evolving market dynamics — and opportunities embedded into the Netherlands’ most popular P2P and eCommerce use cases, making them the “new normal” for Dutch consumers. Almost all single credit transfers between Dutch banks are now instant. With the new Instant Payments Regulation coming into effect in 2024, the rest of the EU can learn from the Netherlands’ example.

Netherlands is the #4 country for instant payments transaction volume in Europe. In 2023, more than 1.3 billion instant payment transactions were made, worth a total of US$1.921 trillion. By 2028, this will grow to more than 4.1 billion transactions worth a total of US$10.109 trillion. Instant payments now make up 10.9% of total payments volume in the Netherlands, placing it ahead of paper-based payments, although still below the share of other electronic payments.

By 2028, instant payments transaction volume will almost triple to represent 28% of all transactions. As other non-instant electronic payments move over to instant payment rails, their share will shrink from 81.2% in 2023 to 66.8% by 2028.

2023 Real-Time Transactions

1.3B

2022-2023 Real-Time Payments Growth

32%

2023 Real-Time Share of Electronic Payments

11.8%

2028f Real-Time Transactions

4.2B

2023-2028 CAGR

25.8%

Netherlands' starting point was different from many other countries

The Dutch instant payments scheme, based on SCT Inst, went live in 2019 and is operated and regulated by the Dutch Payments Association.

Typically, new payment schemes are driven by governments and central banks seeking transformation and greater financial inclusion. In the Netherlands, it was the PSPs and banking community that collectively kicked off instant payments. The driver was a strategic one: efficiency.

Through early countrywide adoption of SCT Inst as the "default" payment method for all digitally initiated single transfers, the Netherlands achieved a smooth transition to low-cost and seamless instant payments. This has made the Netherlands the front-runner in European instant payments adoption and innovation, creating a roadmap for others and helping to shape EU payments legislation.

Instant payments are essential for the expansion of iDEAL

iDEAL is the Netherlands' dominant eCommerce payments mechanism. It offers beneficiaries an immediate guarantee of fund transfer on account-to-account payments and has a 72% share of all online transactions.

Currently, instant payments account for 28.9% of Dutch eCommerce value; bank transfers in general have been historically highly popular as eCommerce payment methods in the Netherlands. This should increase with the introduction of iDEAL 2.0 on instant payment rails, which will add more functionality and allow instant batch transactions.

Previously owned by Currence, iDEAL was acquired by the European Payments Initiative (EPI) in October 2023. Positioned as a common solution and innovation platform for the European payments ecosystem, EPI will use iDEAL as a core component of its pan-European retail payments strategy — once again putting Netherlands at the center of Europe's payments development.

Easy-to-use overlays are driving P2P as the dominant use case for Dutch consumers

Traditionally credit-averse Dutch consumers have been quick to switch from debit card payments to account-to-account-based payments, especially for P2P transactions, rapidly establishing instant payments as the new normal.

P2P payments now represent 99% of Dutch instant payments value — US$1.898 trillion — with an anticipated CAGR of 39.5% from 2023 to 2028, taking it up to US$10.038 trillion by 2028.

Growth is being fueled by the popularity of overlay services like Tikkie, Request to Pay and Share Payment (Share to Pay), which represent most of the country's P2P payments and are gradually shifting to SCT Inst rails.

Tikkie is an online payments app developed by ABN AMRO that lets users send payment requests via messaging apps like WhatsApp or through QR codes in five seconds. Processing 400 million B2B payments annually, it's popular with social media users and for small- or medium-sized enterprises sending Request to Pay. "I'll Tikkie you" is now a common Dutch expression.

Real-Time Payments by Type, 2023/2028 Comparison

	2023 Real-Time Payments Transaction Value (USD)	2028 Real-Time Payments Transaction Value (USD)	CAGR (2023-2028)
Bill Payments	12.4B	57.7B	36.0%
In-Store Payments	-	-	-
Online Payments	11.2B	14.4B	5.1%
Others (e.g., P2P)	1.9T	10.0T	39.5%
Total	1.9T	10.1T	39.4%

Billing is expanding, but in-store adoption is a long way off

In 2023, Dutch instant bill payments reached US$12.4 billion, and by 2028, they should exceed US$57.7 billion (CAGR 36%) as consumers gradually move bill payments to online or mobile banking.

Unlike other countries which have seen a high uptick in instant payments in-store, the Netherlands has yet to see in-store acceptance. This is unlikely to change in the next five years, with consumers continuing to rely on contactless debit cards when shopping in physical outlets.

Other use cases continue to emerge as financial institutions shift legacy systems to instant settlement. This includes Dutch direct debits, more iDEAL services, Request to Pay and QR-code payments.

Leading European instant payments harmonization

The new EU Instant Payments Regulation will make instant payments (specifically, payments settled in not more than 10 seconds) mandatory across Europe, first in the eurozone and then outside of the eurozone. Harmonizing Europe's instant payments will mean faster and lower-cost processing for B2B payments — and will also help businesses boost cash flow and working capital and streamline the reconciliation process.

Due to their experience implementing SCT Inst, Dutch banks will be the first to benefit from instant European cross-border payments when the new EU Regulation guaranteeing access to euro-denominated instant payments comes into effect at the end of 2024.

The Dutch banking community believes that, as other payment rails migrate to instant payments, transaction volumes will increase quickly, making instant payments the de facto standard. With its track record in mandating SCT Inst and its experience with iDEAL, the Netherlands is certain to remain a front-runner in eurozone payment transformations over the coming years.

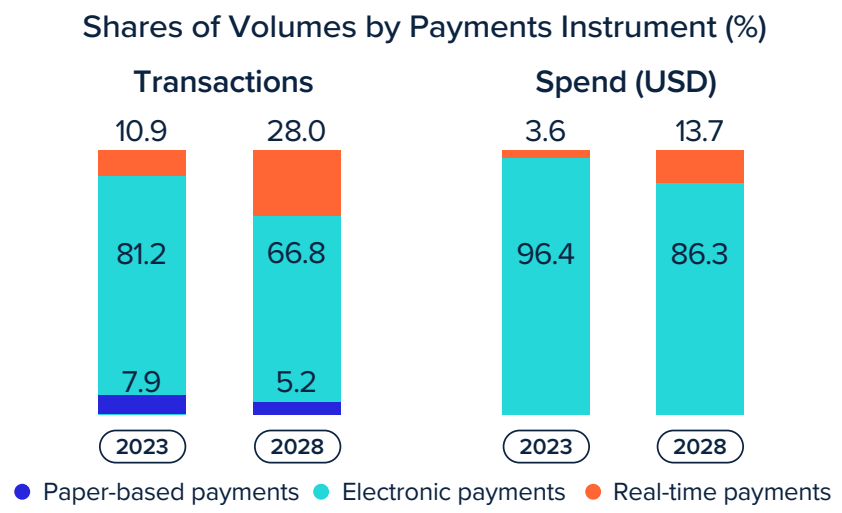
Key Takeaways

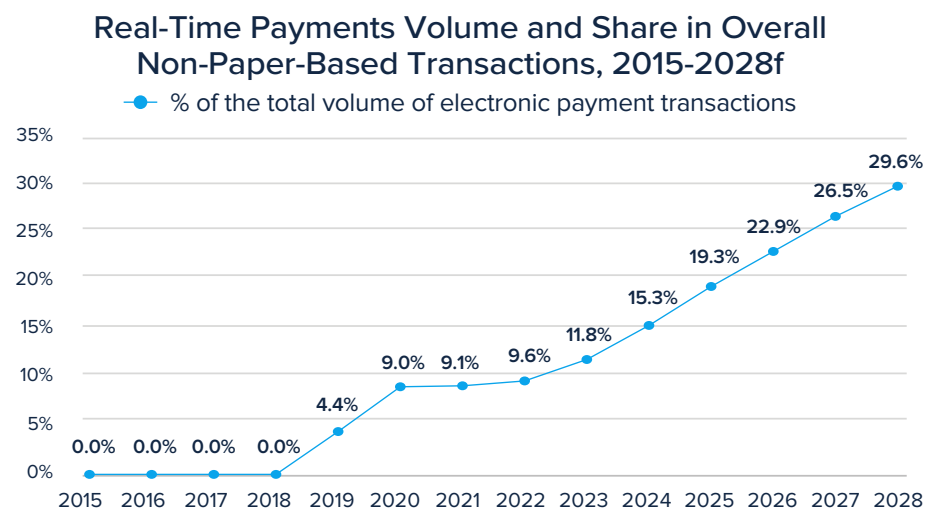
- **Leading Europe in mandating real-time payments**
  With its track record in mandating SCT Inst, and its experience with iDEAL, the Netherlands will be first to benefit from new EU regulations to harmonize instant cross-border payments.

- **SCT Inst and "social overlays" have made real-time de facto**
  The Netherlands is Europe's #4 largest real-time market, with 1.3 billion transactions valued at US$10.109 trillion. Almost all the country's digital single credit transfers are now instant, and "Tikkie" is the "go-to" for P2P payments.

- **Efficiency-hungry PSPs lead the Dutch real-time revolution**
  Instant payments represent 10.9% of the country's payments volume, and 28.9% of eCommerce value. By 2028, more than a quarter (28%) of all the Netherlands' payments will be on low-cost instant rails.

Region: **Europe**





Real-Time Payments Launch

2017

Real-Time Payments Scheme

2017 – SCT Inst

Scheme Messaging

ISO 20022

Initiation/Authorization Methods

3

- Bank Account
- Mobile
- QR Code

Real-Time Acceptance

4

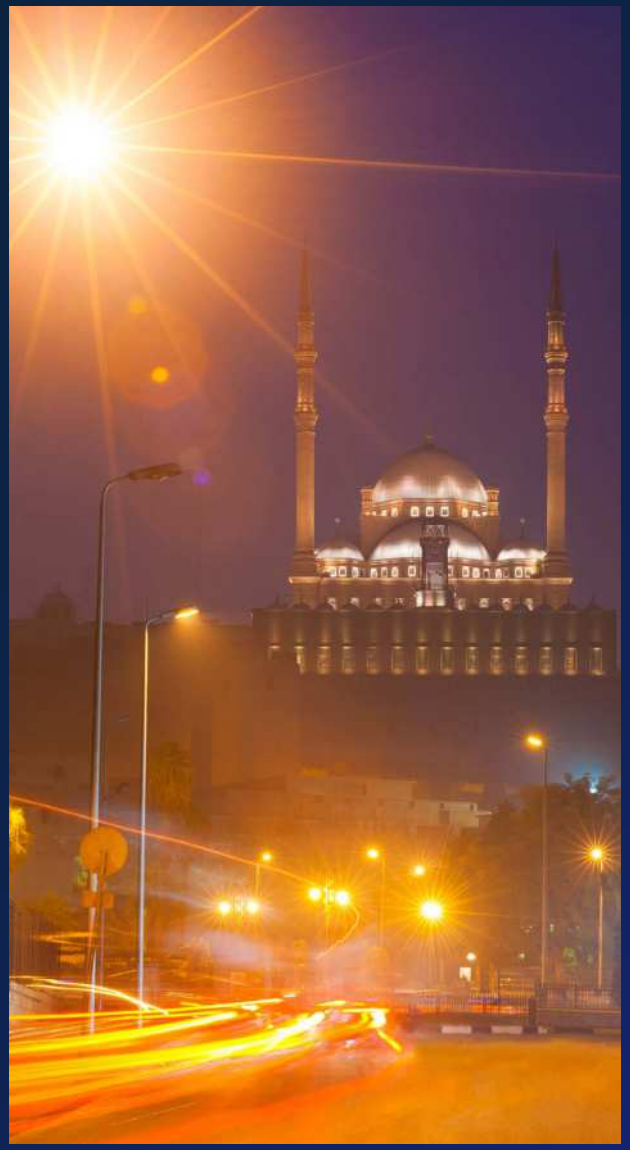
- Banks
- Merchants
- P2P
- Billers

Mobile Wallet Trends

39.9%

% of adults who have a mobile wallet and have used it in the past year (2023)

2024 Prime Time for Real-Time: Egypt



Real-Time Transactions

2023
39M

2028f
1.1B

2023-2028 CAGR
94.9%

Egypt is one of the most recent entrants to instant payments, having launched its Instant Payment Network (IPN) and the InstPay mobile overlay service in March 2022. IPN is available 24 hours a day, seven days a week, 365 days a year and is able to settle transactions within a few seconds. It supports transfers using a mobile phone number or a real-time payments address, and is available for both banks and non-bank financial service providers. Currently, real-time payments are in a very early growth phase in Egypt, accounting for a 1.4% share of overall payments by volume, but this is expected to change rapidly. By 2028, real-time payments are predicted to account for more than one-third of payments in the country.

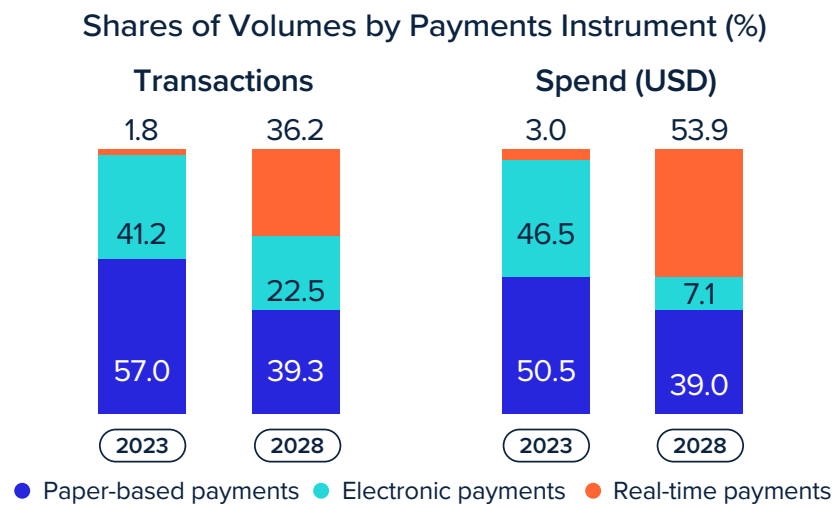
Real-Time Payments Launch

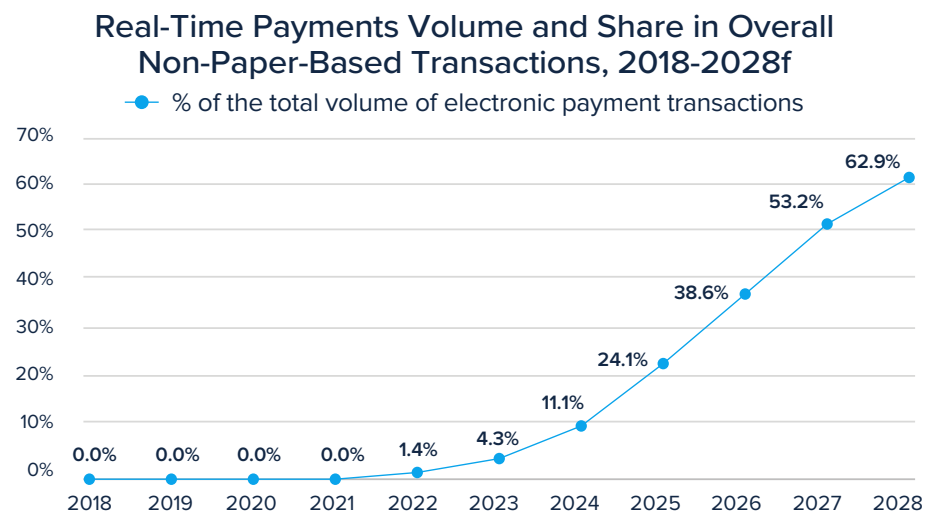
2022

Real-Time Payments Scheme

2022
IPN

Region: **Africa**





Initiation/Authorization Methods

2 Bank Account · Mobile

Real-Time Acceptance

3 Merchants · P2P · Billers

Scheme Messaging

Proprietary

2024 Prime Time for Real-Time: Kenya

Real-Time Transactions

2023
20M

2028f
74M

2023-2028 CAGR
29.9%

Kenya launched its real-time payments system PesaLink in 2017. PesaLink enables consumers to instantly transfer funds between bank accounts (notable in a market with such a strong mobile money presence) and handles multiple currencies, including Kenyan shillings, euro, U.S. dollar and British pound. The Kenyan economy is very dependent on paper-based transactions, which represented 83.8% of the total payments volume in 2023, while real-time payments were only 0.1%. Other electronic payments represented 16.1% of the total payments volume. Mobile money services (M-PESA foremost among them) currently have a strong hold on the electronic payments market in Kenya, but they will need to be integrated with other digital payment services in order for real-time payments to make any real headway. Relatively few Kenyan consumers have access to bank accounts, and mobile money has largely taken the place of formal financial services providers for the majority of Kenyans. The current state of real-time payments in Kenya is likely to persist despite a strong forecast CAGR of almost 30% from 2023 to 2028. By that time, real-time payments will still only account for 0.5% of all transactions in the market. The Kenyan Banking Association is currently working toward upgrading PesaLink with ISO 20022 to further drive adoption through value-added services.

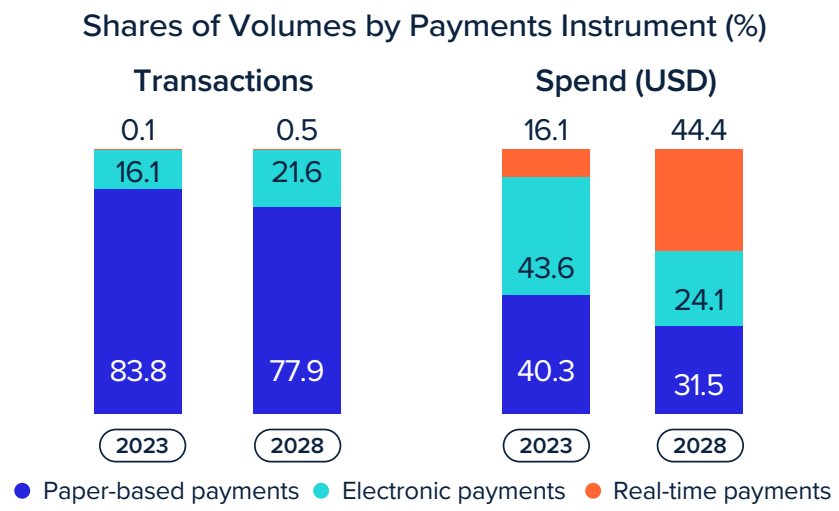
Real-Time Payments Launch

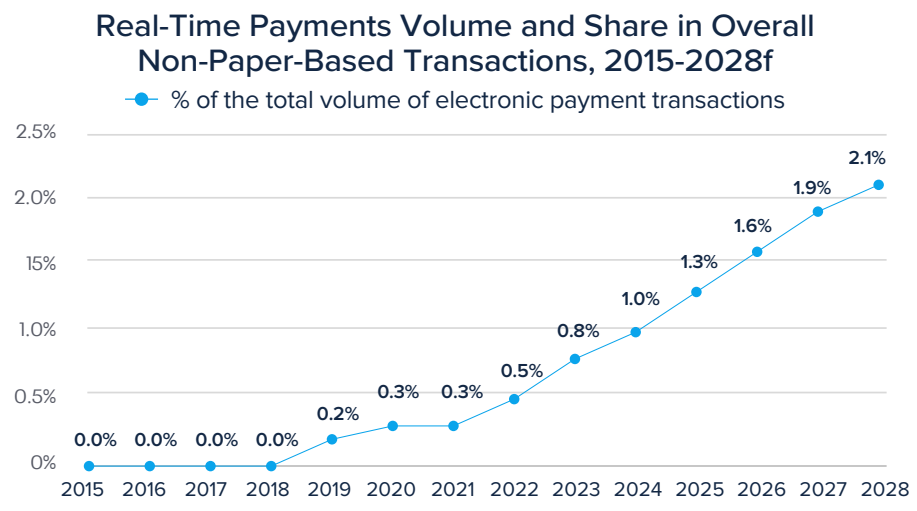
2017

Real-Time Payments Scheme

2017
PesaLink

Region: **Africa**





Initiation/Authorization Methods

2 Bank Account Mobile

Scheme Messaging

ISO 20022

2024 Prime Time for Real-Time: Nigeria

Real-Time Transactions

2023
7.9B

2028f
19.7B

2023-2028 CAGR
20%

Nigeria remains the undisputed leader in Africa in terms of real-time payment volume and growth forecasts. The Nigeria Inter-Bank Settlement System (NIBSS) launched NIBSS Instant Payments (NIP) in July 2011, which has transformed the way Nigerians pay and conduct their financial affairs. NIBSS is supported by all commercial banks, micro-finance banks and mobile money operators and can be used via different modalities, including internet and mobile banking, bank branches, kiosks, mobile USSD, point-of-sale terminals and ATMs, which helped NIP to achieve high adoption and usage rates. The COVID-19 pandemic also encouraged Nigerian consumers to shift from cash to electronic payment methods, which further supported real-time payments growth. NIBSS launched NQR, an interoperable national QR-code standard, in March 2021 to facilitate instant P2B and P2P payments by scanning QR codes. These changes have had a significant impact — in 2023, 27.7% of transactions in the country were made using real-time payments and this is expected to increase to 50.1% by 2028. In Nigeria, real-time payments are quickly becoming a viable alternative to cash, historically the dominant choice for payments in the country.

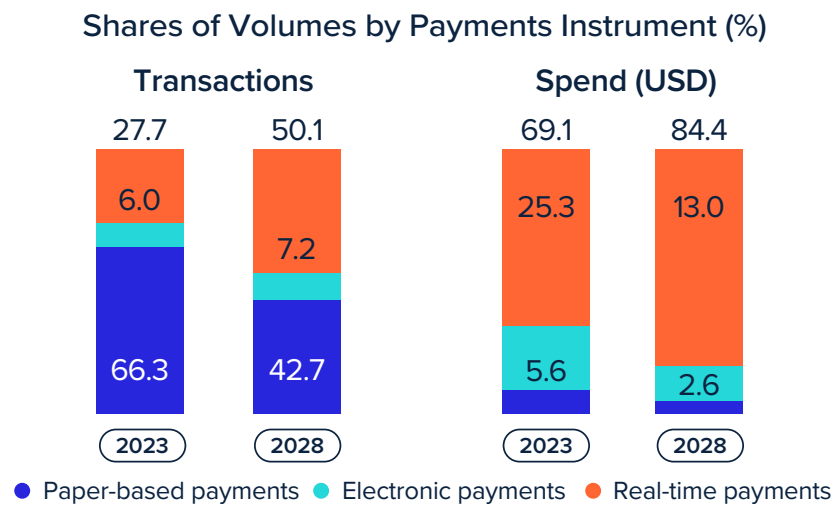
Real-Time Payments Launch

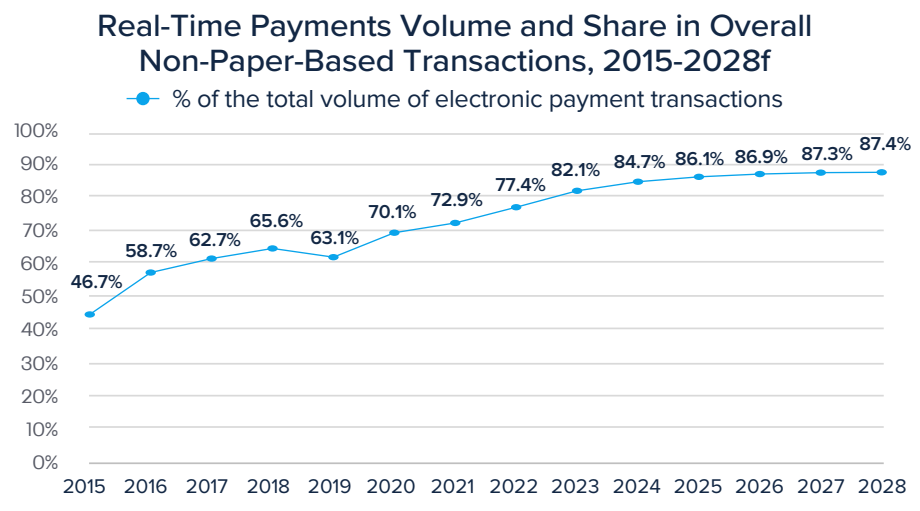
2011

Real-Time Payments Scheme

2011
NIP

Region: **Africa**





Mobile Wallet Trends

71.9%

% of adults who have a mobile wallet and have used it in the past year (2023)

Initiation/Authorization Methods

2

- Bank Account
- QR Code

Real-Time Acceptance

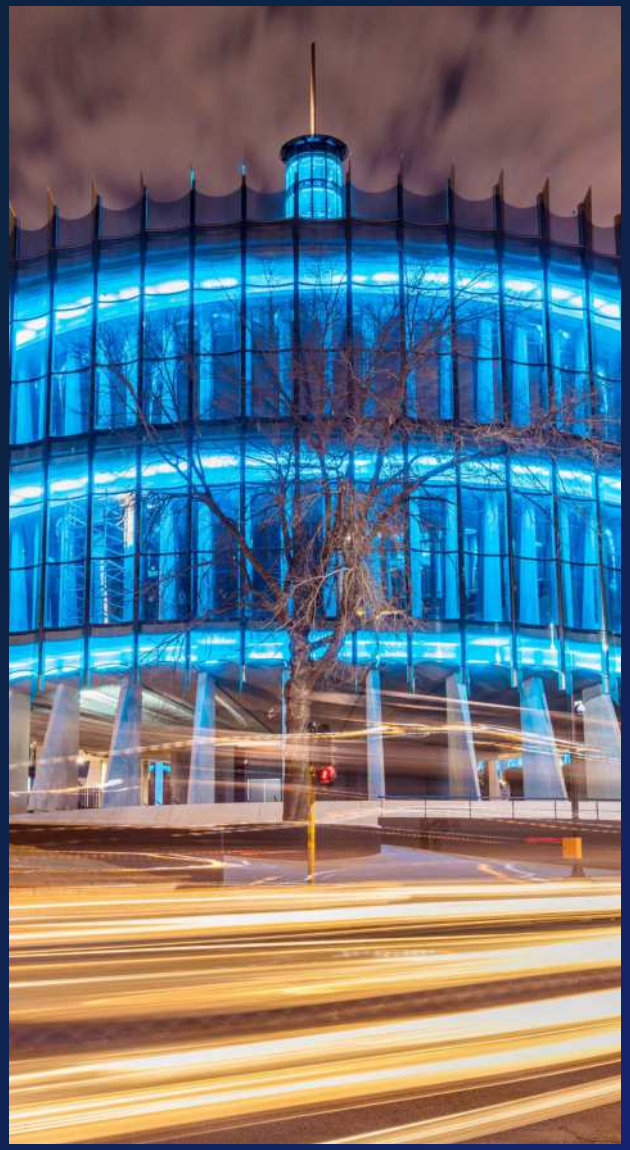
4

- Banks
- Merchants
- P2P
- Billers

Scheme Messaging

ISO 8583

2024 Prime Time for Real-Time: South Africa



Real-Time Transactions

2023
284M

2028f
755M

2023-2028 CAGR
21.6%

South Africa is among the global early adopters of real-time payments, having launched its interbank instant payments system Real-Time Clearing (RTC) in 2006. Despite being available for 17 years, real-time payments have not gained significant prominence due to several factors, including limited customer awareness, limited participation and high fees charged by banks on RTC transfers. Consequently, real-time payments still account for only a 1.7% share of payments by volume in 2023. However, South Africa launched a new instant payments system, PayShap, in 2023. This new mobile-friendly instant payments system claims to offer a cost-effective, real-time payments service for bank-to-bank transfers, a proxy service to allow transfers based on mobile numbers or bank-generated ID numbers, a Request to Pay service and implementation with common retail payment services. PayShap is anticipated to provide the much-needed push for real-time payments growth in South Africa, but its impact has not yet been measured.

Real-Time Payments Launch

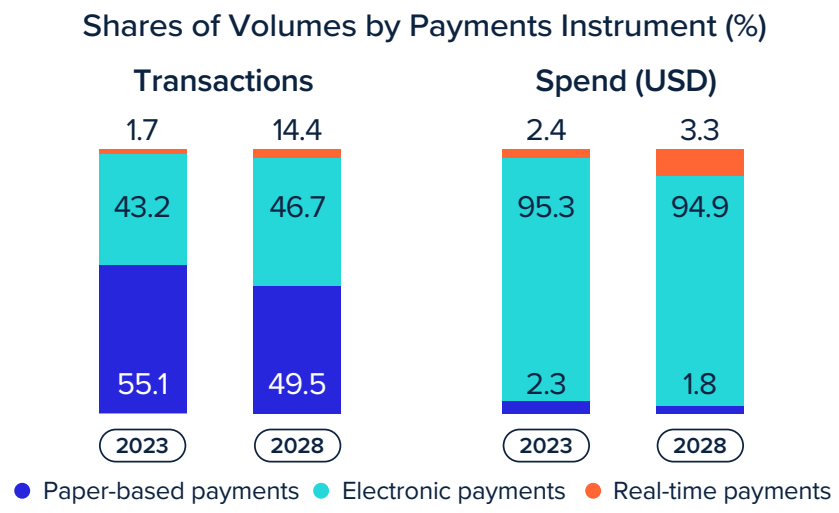
2006

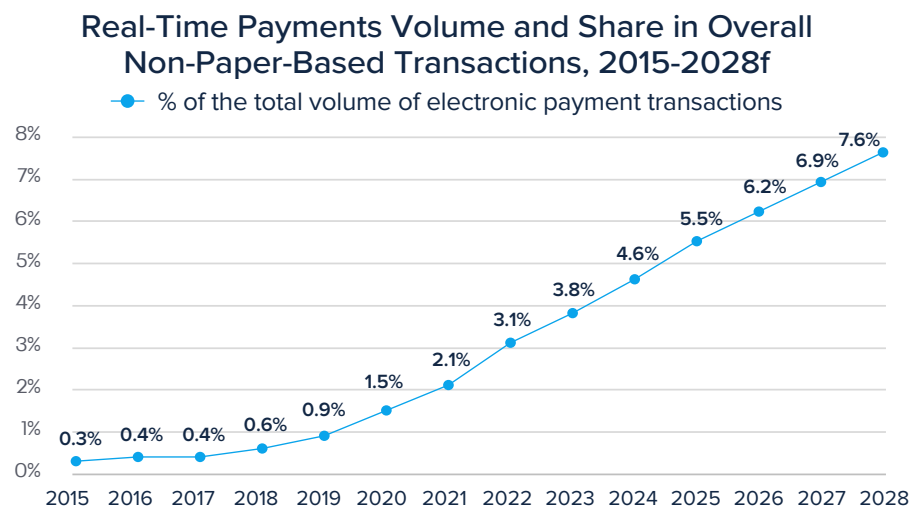
Real-Time Payment Schemes

2006
RTC

2023
PayShap

Region: **Africa**





Mobile Wallet Trends

45%

% of adults who have a mobile wallet and have used it in the past year (2023)

Initiation/Authorization Methods

2

- Bank Account
- Mobile

Real-Time Acceptance

3

- Banks
- Merchants
- P2P

Scheme Messaging

ISO 8583

2024 Prime Time for Real-Time: Australia

Real-Time Transactions

2023
1.4B

2028f
2.8B

2023-2028 CAGR
14.5%

The Reserve Bank of Australia and its Payments System Board (PSB) launched the New Payments Platform (NPP) in 2018. As of Q3 2023, 110 banks, credit unions, building societies and fintech companies participate in the NPP system, but despite this wide coverage, real-time payments account for only 6.1% of the total payments volume of transactions in 2023. The high preference for payment cards and limited use cases for NPP remained key obstacles hindering the overall growth of real-time payments in the country. NPP is trying to improve the situation by launching new use cases such as PayTo, a digital payments solution developed by AP+, a joint venture between eftpos, New Payments Platform Australia and BPAY. The PSB recently refreshed its strategic priorities to advance payments reform, promote accessible digital payments and enhance cross-border payments. By 2028, real-time payments are expected to account for 9.5% of overall transactions by volume. However, the announcement from Australian Payments Plus to migrate the bulk electronic clearing system to NPP and the government's push for payments reform are expected to ramp up the real-time payments volume.

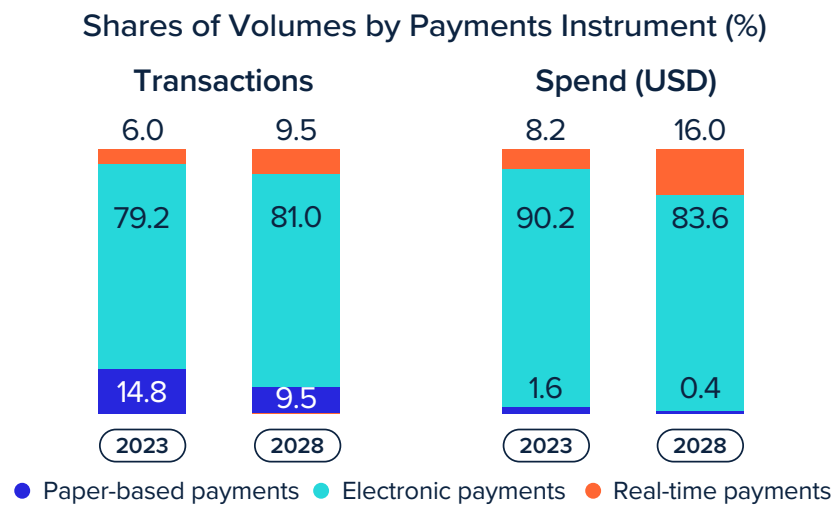
Real-Time Payments Launch

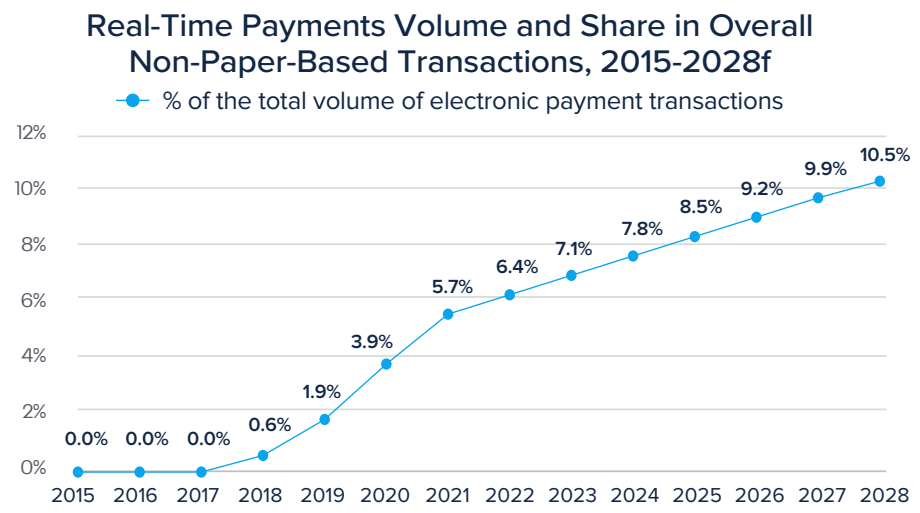
2018

Real-Time Payments Scheme

2018
NPP

Region: **Asia Pacific**





Mobile Wallet Trends

49.7%

% of adults who have a mobile wallet and have used it in the past year (2023)

Initiation/Authorization Methods

3

- Bank Account
- Mobile
- QR Code

Real-Time Acceptance

4

- Banks
- Merchants
- P2P
- Billers

Scheme Messaging

ISO 20022

2024 Prime Time for Real-Time: China

Real-Time Transactions

2023
17.2B

2028f
29.7B

2023-2028 CAGR
11.6%

China launched its real-time payments scheme, Internet Banking Payment System (IBPS), in 2010 with the aim to strengthen its banking infrastructure and boost non-cash payments. In 2023, China was the fourth-largest real-time payments market globally in terms of volume of transactions. This is primarily due to the sheer size of the Chinese market; in terms of development, it still lags far behind the global leader, India, and many smaller markets. In 2023, real-time payments represented only a 3.1% share of total payments volume, expected to grow to only 3.9% by 2028. China has a very high mobile payments penetration of around 90%, though real-time payments aren't integrated with the massively popular wallets. However, due to high levels of mobile wallet adoption, the outlook and the opportunities for real-time payments growth in China are positive.

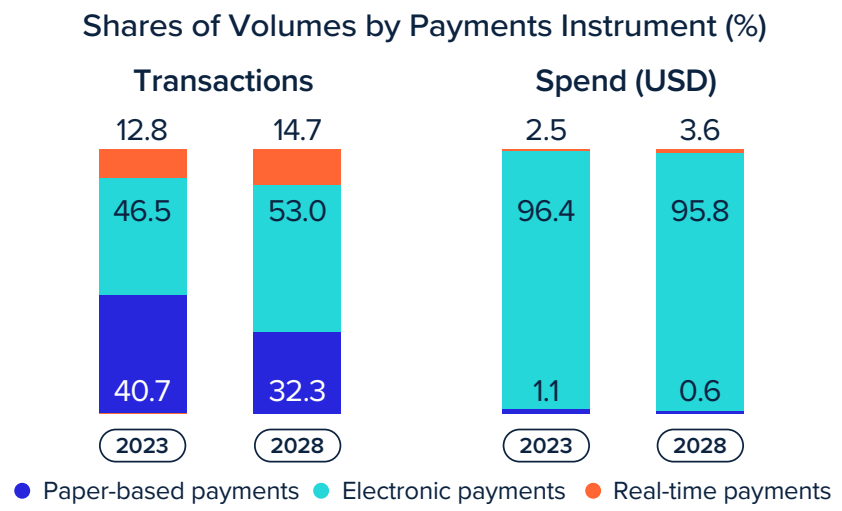
Real-Time Payments Launch

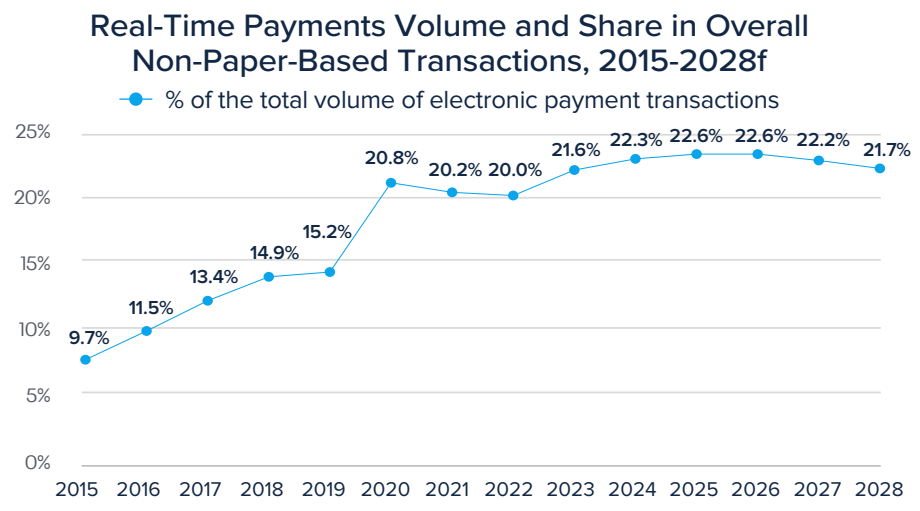
2010

Real-Time Payments Scheme

2010
IBPS

Region: **Asia Pacific**





Mobile Wallet Trends

84.4%

% of adults who have a mobile wallet and have used it in the past year (2023)

Initiation/Authorization Methods

3

- Bank Account
- Mobile
- QR Code

Real-Time Acceptance

4

- Banks
- Merchants
- P2P
- Billers

Scheme Messaging

ISO 20022

2024 Prime Time for Real-Time: Hong Kong

Real-Time Transactions

2023
535M

2028f
1.3B

2023-2028 CAGR
20.1%

Hong Kong launched its instant payments system, Faster Payment System (FPS), in September 2018. Unlike several other instant payment systems, FPS connects both banks and payment service providers, allowing interoperable transfers between bank accounts and mobile wallets. The increasing preference for mobile payment solutions — coupled with the adoption of a nationwide common QR-code standard and the growing acceptance of electronic payments in the wake of the COVID-19 pandemic — have supported adoption and growth of real-time payments in the country. While real-time payments accounted for only 14.1% of total payments volume in 2023, they represented a 35.1% share in terms of value. This signifies that real-time payments in Hong Kong are mainly used for low-volume, high-value transfers. However, with consumers increasingly shifting from cash to mobile-based payments for their day-to-day purchases, that gap will significantly reduce, with real-time payments projected to see a 20.1% CAGR in terms of payments volume and 14.5% in terms of value from 2023 to 2028. Similar to other Asia Pacific countries, Hong Kong is actively pursuing cross-border initiatives. In December 2023, the Hong Kong Monetary Authority and the Bank of Thailand launched a new cross-border QR payments link enabling travelers from Thailand and Hong Kong to make retail payments through their mobile payment apps. The Hong Kong Association of Banks is also looking at phasing out cheques in their embrace of digital payments.

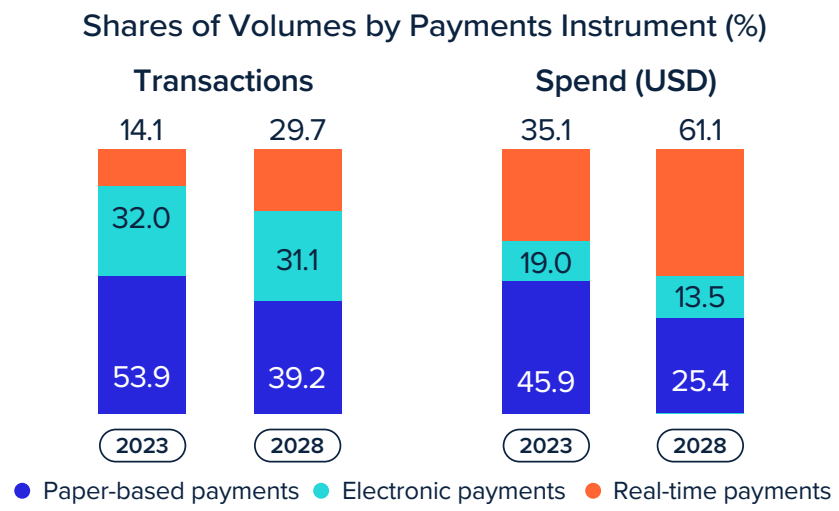
Real-Time Payments Launch

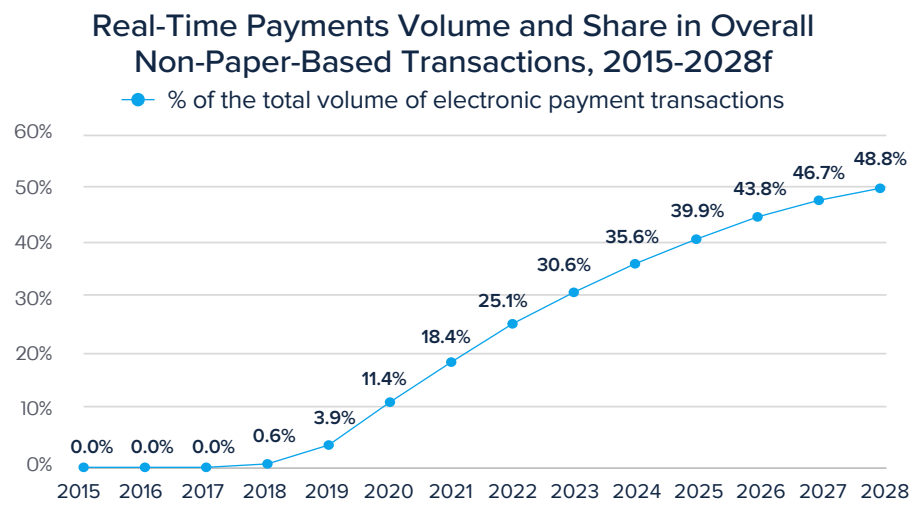
2018

Real-Time Payments Scheme

2018
FPS

Region: **Asia Pacific**





Mobile Wallet Trends

87.9%

% of adults who have a mobile wallet and have used it in the past year (2023)

Initiation/Authorization Methods

3

- Bank Account
- Mobile
- QR Code

Real-Time Acceptance

4

- Banks
- Merchants
- P2P
- Billers

Scheme Messaging

ISO 20022

2024 Prime Time for Real-Time: Japan

Real-Time Transactions

2023	2028f	2023-2028 CAGR
2B	2.4B	3.5%

Launched in 1973, Japan's Zengin System is the world's oldest real-time payments system. However, it is not one of the most developed. In 2023, real-time payments represented only a 3.7% share of total payments volume in Japan, and this share is not expected to change significantly by 2028. In terms of payments volume, Japanese consumers still overwhelmingly prefer paper-based payments — largely cash, with its market share representing 62% of total payments volume in 2023. By 2028, paper-based payments are expected to decline to 54.6% of total transactions, but this decrease will primarily benefit card-based payments. For the past several decades, the Japanese market has proven to be very resistant to change from its entrenched cultural preference for cash (and to a lesser extent, cards). However, the Japanese government is gradually pushing to transition from a cash-dominated society to a digital economy. In April 2023, the Japanese government lifted a ban on digital salary payments. This allows companies in Japan to pay salaries digitally — transferring salaries directly to their employees' smartphone payment applications instead of moving funds into their bank accounts — a step in the Japanese government's strategy to move the nation toward a cashless society.

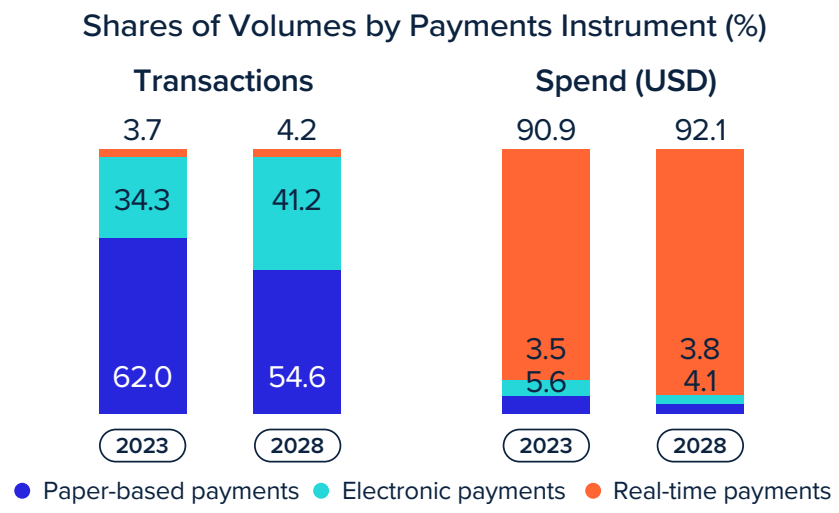
Real-Time Payments Launch

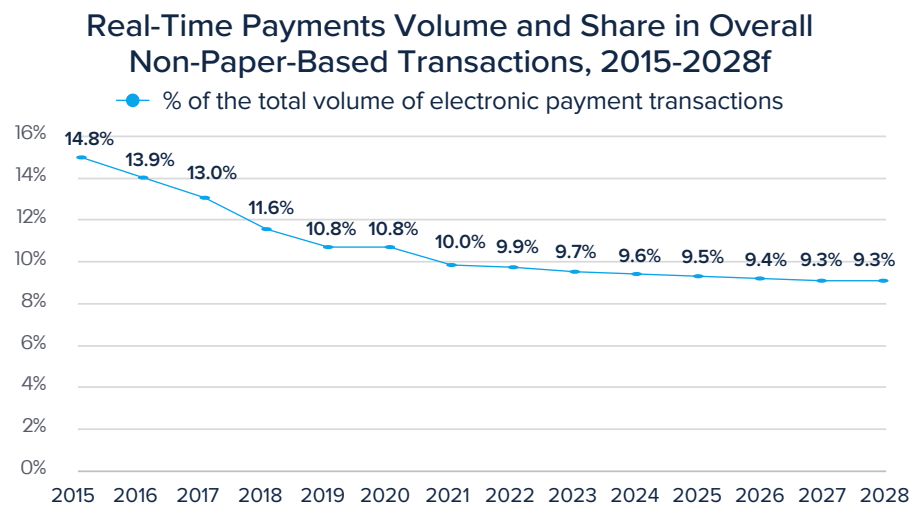
1973

Real-Time Payments Scheme

1973
Zengin System

Region: **Asia Pacific**





Mobile Wallet Trends

48.5%

% of adults who have a mobile wallet and have used it in the past year (2023)

Initiation/Authorization Method

1 Bank Account

Real-Time Acceptance

3 Banks, Merchants, P2P

Scheme Messaging

ISO 20022

2024 Prime Time for Real-Time: Pakistan

Real-Time Transactions

2023
138M

2028f
1.7B

2023-2028 CAGR
65.5%

Pakistan is one of the most recent real-time payment markets, with the launch of its Raast system in January 2021. Raast is being rolled out in phases — initially, it supported only bulk transfers, such as salaries and dividend payments, and government welfare disbursements. P2P payments were launched in February 2022. In December 2023, Raast launched a new feature allowing users to pay merchants using the real-time payments system via QR codes, remote transfers using bank account numbers or mobile numbers, or its Request to Pay service. Currently, Pakistan's real-time payments market size is very low, but it is expected to grow rapidly in the forecast period — faster than any other market in the region, at a CAGR of 65.5% in terms of transaction volume from 2023 to 2028 — due to the continued rollout of new features. It was reported recently that the State Bank of Pakistan and the Arab Monetary Fund are engaged in talks to integrate their payment systems and facilitate cross-border remittances between the Middle East and Pakistan. This move is expected to increase export opportunities for Pakistani goods and services in the region.

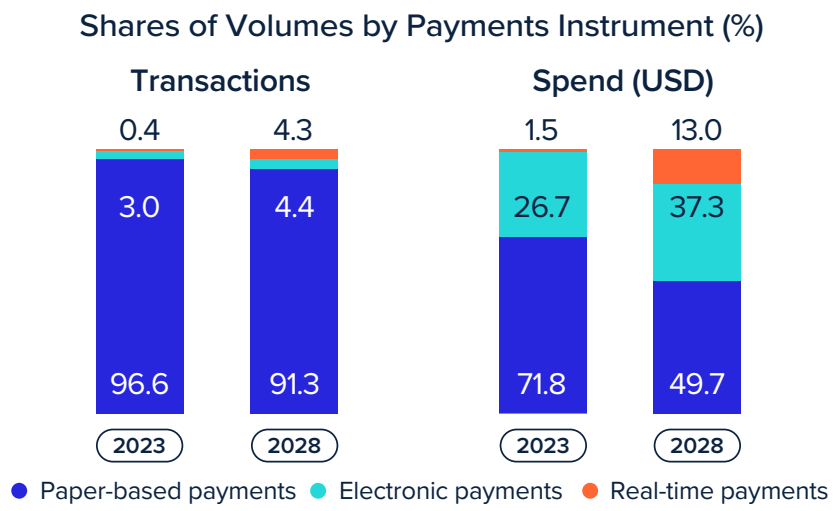
Real-Time Payments Launch

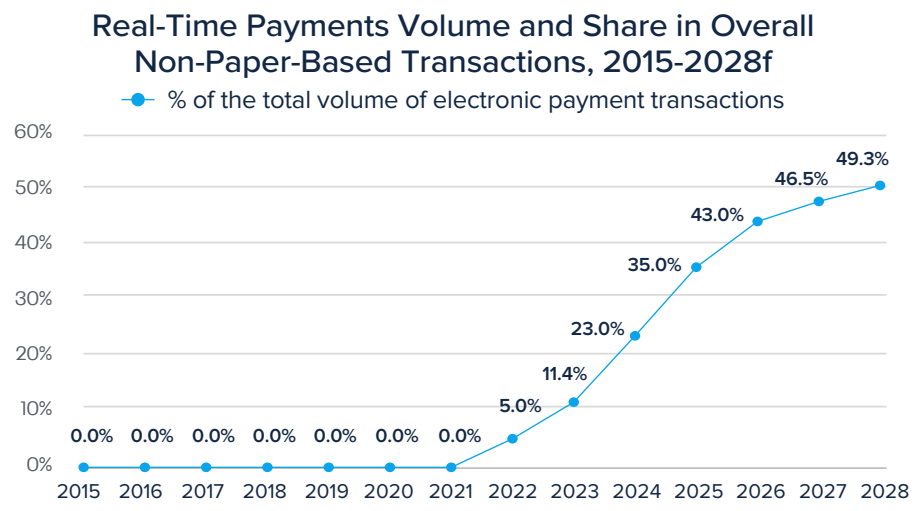
2021

Real-Time Payments Scheme

2021
Raast

Region: **Asia Pacific**





Initiation/Authorization Methods

2 Bank Account | QR Code

Real-Time Acceptance

2 Banks | P2P

Scheme Messaging

ISO 20022

2024 Prime Time for Real-Time: Philippines

Real-Time Transactions

2023
777M

2028f
1.5B

2023-2028 CAGR
14.6%

The Philippines introduced its real-time payments system InstaPay, an interbank fund transfer service launched by Bangko Sentral ng Pilipinas, in 2018. The Philippines' economy is still heavily fragmented (due to its geography) and reliant on paper-based transactions. That same geographic separation, however, provides a lot of potential for real-time payments (and electronic payments in general) to enable quick transfers between different communities in the market. In 2023, paper-based transactions represented a 98.1% share of payments volume, while for the same period, real-time payments only represented 0.9% of payments volume. Real-time payments are expected to reach 1.9% by 2028, growing at a CAGR of 14.6% between 2023 and 2028. However, when looking at real-time payments as a percentage of overall electronic payments (i.e., excluding cash), the story is much more positive. Real-time payments accounted for 47.2% of all electronic payments in 2023, projected to grow to 58.7% by 2028. The Philippines, together with Brunei and Vietnam, have confirmed that they will join the Regional Payment Connectivity initiative linking all Association of Southeast Asian Nations (ASEAN) countries under a single QR code-based cross-border payments system. With a total of seven ASEAN central banks committed to the new system, this will streamline cross-border payments settlement and promote the use of local currencies in cross-border transactions.

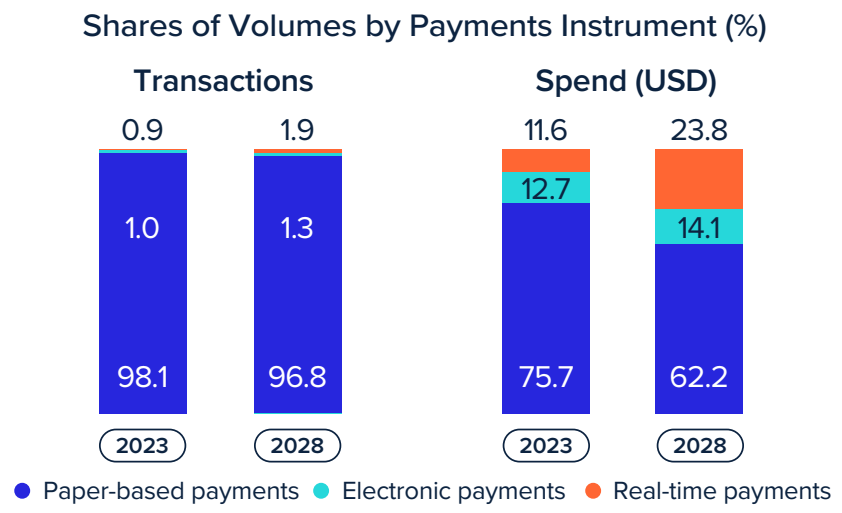
Real-Time Payments Launch

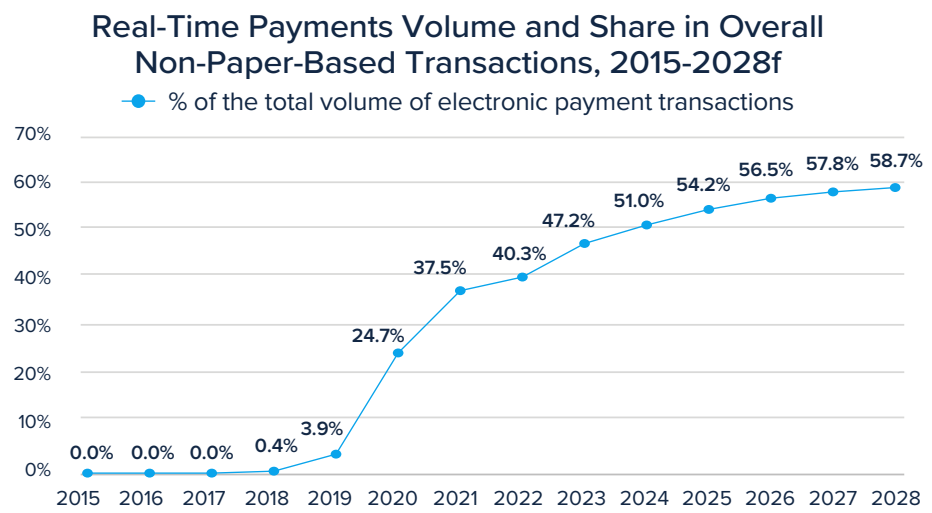
2018

Real-Time Payments Scheme

2018
InstaPay

Region: **Asia Pacific**





Mobile Wallet Trends

87.8%

% of adults who have a mobile wallet and have used it in the past year (2023)

Initiation/Authorization Methods

3

- Bank Account
- Mobile
- QR Code

Real-Time Acceptance

4

- Banks
- Merchants
- P2P
- Billers

Scheme Messaging

ISO 20022

2024 Prime Time for Real-Time: Singapore

Real-Time Transactions

2023
388M

2028f
717M

2023-2028 CAGR
13.1%

Singapore has two well-developed real-time payment systems: FAST, an interbank fund transfer service that enables customers of participating banks to transfer funds from one bank to another (launched in 2014); and PayNow, an overlay service launched in 2017 to build on the existing FAST infrastructure. In 2023, real-time payments represented an 11.8% share of total payments volume. While real-time payment volumes remain third behind non-real-time electronic payment and paper-based payment volumes, real-time payments spending is expected to overtake both non-real-time electronic payments and paper-based payments by 2028. The Monetary Authority of Singapore (MAS) has been actively expanding the reach of PayNow by linking it to other real-time payment platforms in the region. In 2021, it connected PayNow to Thailand's PromptPay, which enabled cross-border transactions between both countries. MAS and the Reserve Bank of India enabled the linkage of PayNow and India's UPI in February 2023, allowing for financial institutions in Singapore and India to send and receive funds between eWallets and bank accounts in real time. In November 2023, MAS set up new cross-border payment links with the central banks of Malaysia and Indonesia, marking another milestone for Singapore's expansion of cross-border payments with key regional economies.

Real-Time Payments Launch

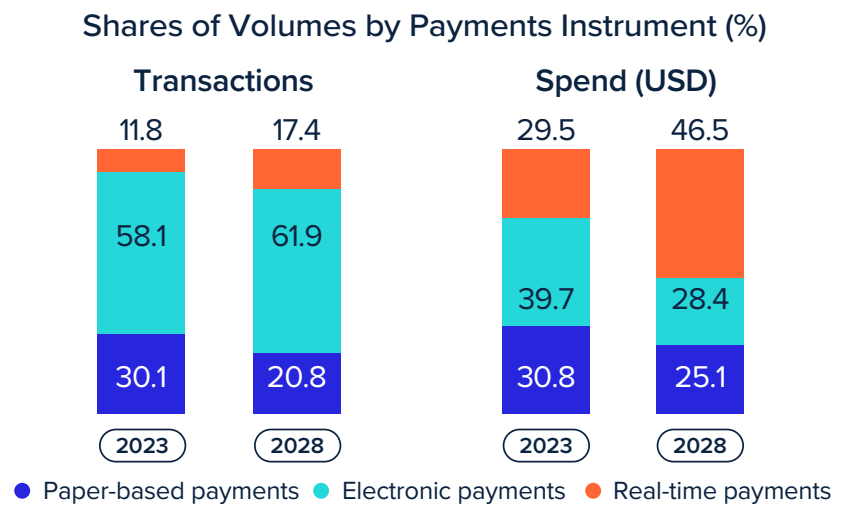
2014

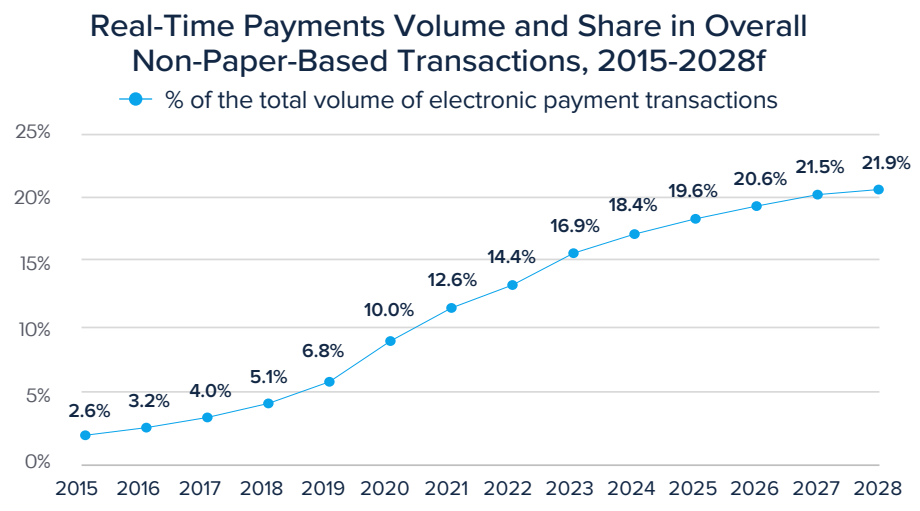
Real-Time Payment Schemes

2014
FAST

2017
PayNow

Region: **Asia Pacific**





Mobile Wallet Trends

79.7%

% of adults who have a mobile wallet and have used it in the past year (2023)

Initiation/Authorization Methods

3

- Bank Account
- Mobile
- QR Code

Real-Time Acceptance

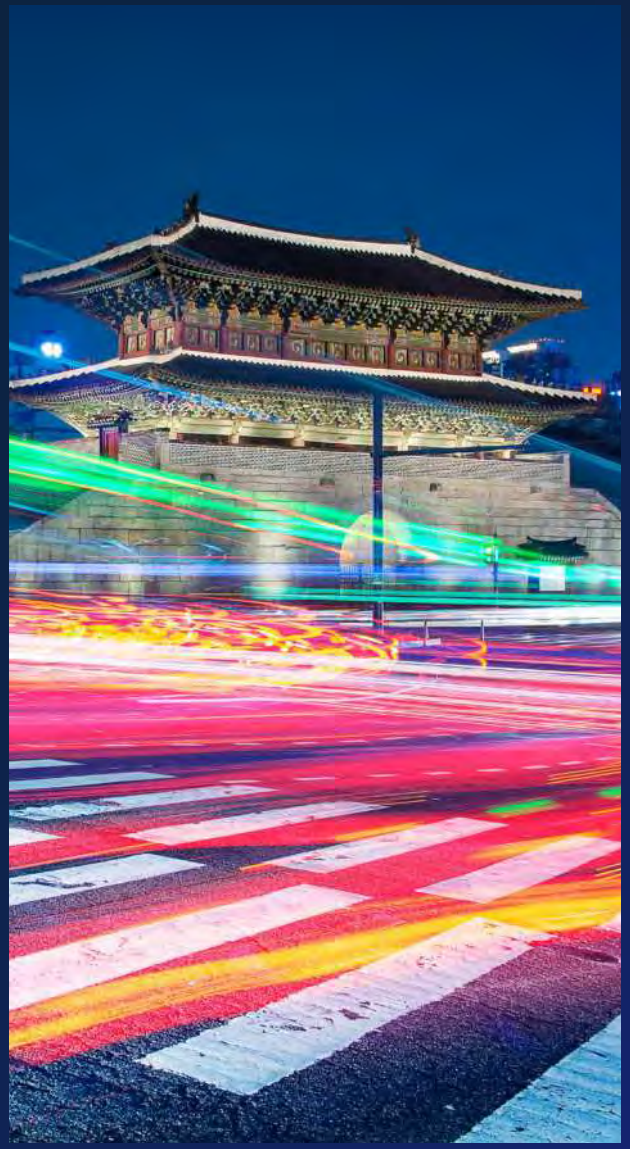
4

- Banks
- Merchants
- P2P
- Billers

Scheme Messaging

ISO 20022

2024 Prime Time for Real-Time: South Korea



Real-Time Transactions

2023
9.1B

2028f
12.5B

2023-2028 CAGR
6.6%

South Korea's real-time payments system — EBS, also known as HOFINET — is the second-oldest globally after Japan's Zengin System. EBS processed more than nine billion transactions in 2023, making South Korea the fifth-largest real-time payments market worldwide. Real-time payments represented a 19% share of total payments volume in 2023, second to non-real-time electronic payments but ahead of paper-based payments. Despite the long-standing presence of real-time payments in South Korea, cards remain the dominant force in the country's payments market for day-to-day transactions. Real-time payments volume are forecast to grow at a CAGR of 6.6% from 2023 to 2028, reaching a 20.4% share of transaction volume by 2028. However, real-time payments have a dominant 80.9% share of transaction value in South Korea, showing that they are mainly being used for more expensive transactions than for daily expenditures. The average real-time payment in South Korea in 2023 was more than USD 2,700 in value, compared to an average transaction value of USD 83 for other types of electronic payments. This trend is not expected to change in the longer term, as real-time payments' share of transaction value is set to increase in the forecast period.

Real-Time Payments Launch

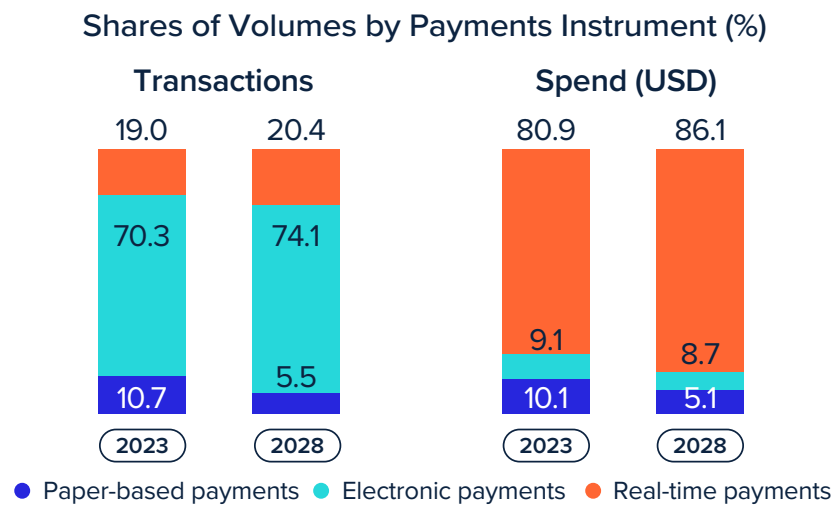
1988

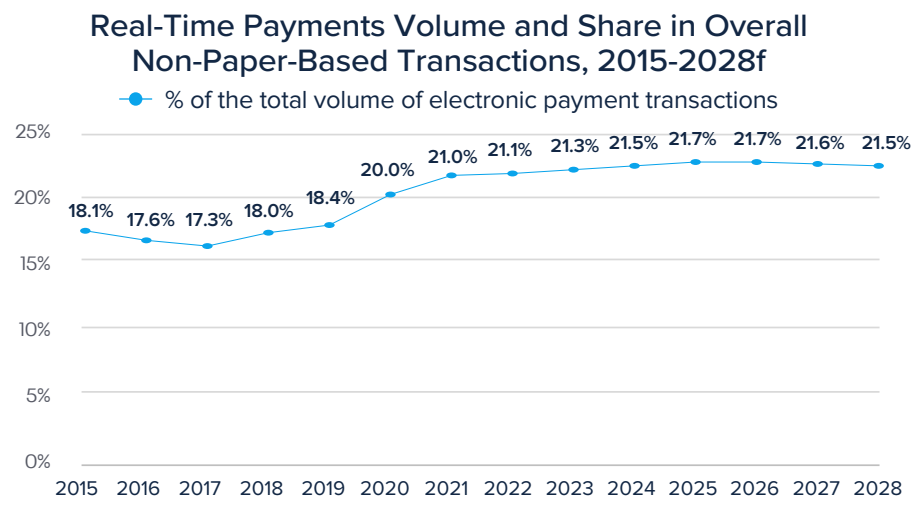
Real-Time Payment Schemes

1988
CD/ATM

2001
EBS

Region: **Asia Pacific**





Mobile Wallet Trends

67.4%

% of adults who have a mobile wallet and have used it in the past year (2023)

Initiation/Authorization Method

1 Bank Account

Real-Time Acceptance

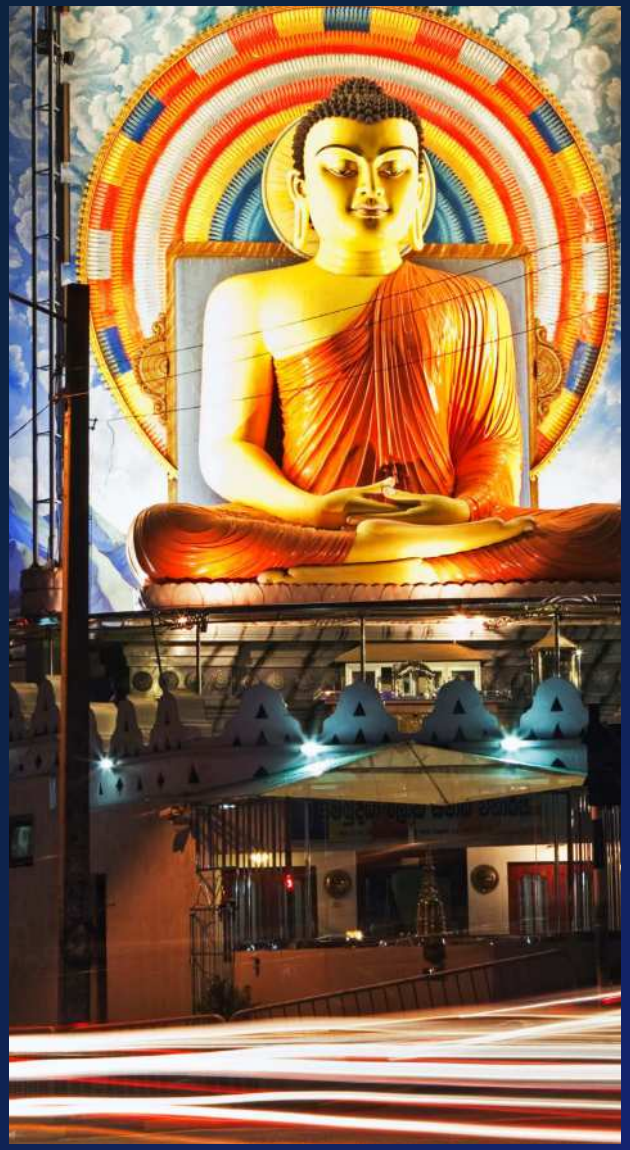
4

- Banks
- Merchants
- P2P
- Billers

Scheme Messaging

Proprietary

2024 Prime Time for Real-Time: Sri Lanka



Real-Time Transactions

2023
156M

2028f
304M

2023-2028 CAGR
14.3%

Sri Lanka's real-time payments system Common Electronic Fund Transfer Switch (CEFTS) launched in August 2015. Although adoption and usage of real-time payments were initially low, the market has gained significant traction in recent years with the extension of CEFTS to support interbank QR-code payments and the increasing popularity of mobile wallet solutions during the COVID-19 pandemic. Incorporated in 2002, LankaPay is Sri Lanka's national payments network. With a multitude of digital payment solutions, LankaPay facilitates domestic interbank payments and settlements under the guidance of the Central Bank of Sri Lanka. In a move to expand its regional footprint, LankaPay signed a memorandum of understanding with Fonepay, Nepal's largest payments network, to enable Sri Lankan citizens traveling to Nepal (and vice versa) to make mobile-based QR-code payments at merchants connected to the respective networks. Sri Lanka's real-time payments transaction volume is projected to see a CAGR of 14.3% from 2023 to 2028, with real-time payments and other forms of electronic payments slowly beginning to displace cash. Consequently, real-time payments' share of the total payments volume is set to rise to 14.4% by 2028 from 7.9% in 2023. Sri Lanka is also making strides toward enabling cross-border payments with linkage to India's UPI in February 2024, marking a significant milestone in fostering digital connectivity and facilitating faster, seamless transactions between the two nations.

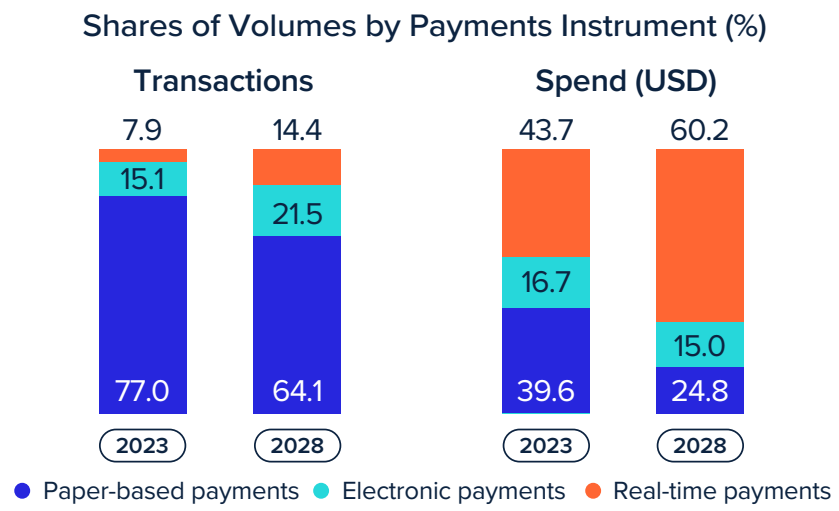
Real-Time Payments Launch

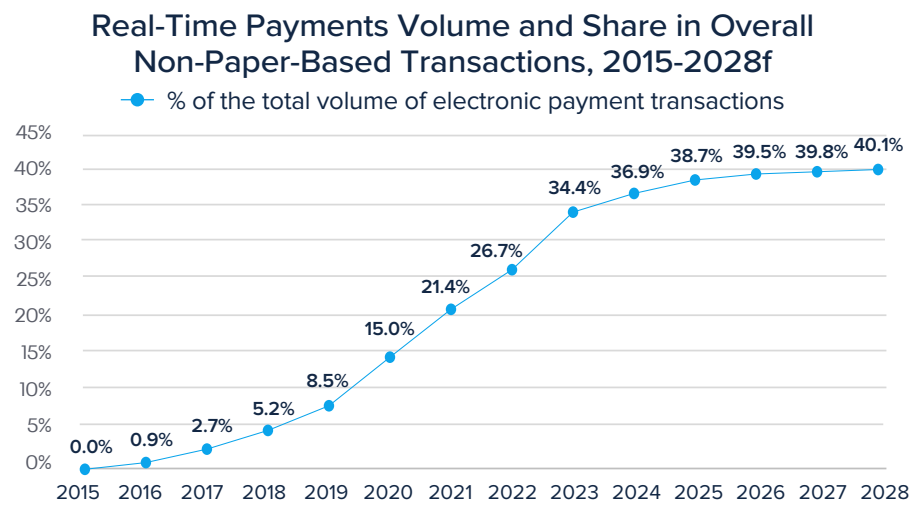
2015

Real-Time Payments Scheme

2015
CEFTS

Region: **Asia Pacific**





Initiation/Authorization Methods

3

- Bank Account
- Mobile
- QR Code

Real-Time Acceptance

4

- Banks
- Merchants
- P2P
- Billers

2024 Prime Time for Real-Time: Taiwan

Real-Time Transactions

2023
671M

2028f
1.1B

2023-2028 CAGR
11.1%

Currently, there are two instant payment schemes operating in Taiwan under the umbrella of the Financial Information Service Company, a multipurpose fund transfer system that processes a range of electronic fund transfers through several sub-systems. While the Interbank ATM Funds Transfer System allows customers to conduct various transactions including fund transfers and payments in real time at ATMs and via online banking channels, Financial XML facilitates interbank fund transfers between businesses in real time. Despite the availability of real-time payments in Taiwan since 1987, they still only account for a 7.9% share of the total payments volume of transactions in 2023, a small increase from its 2022 share. This can be attributed to limited real-time payment use cases and increasing popularity for payment cards and especially mobile wallets. Real-time payments volume share is expected to reach 10.3% by 2028, as the use cases for real-time payments in the country continue to focus on high-value, low-volume payments such as P2P and bill payments. Recently, the Taiwanese QR code mobile payments service TWQR was launched in South Korea. The integration of TWQR into the Korean payments system is expected to further encourage tourism and spending from Taiwan.

Real-Time Payments Launch

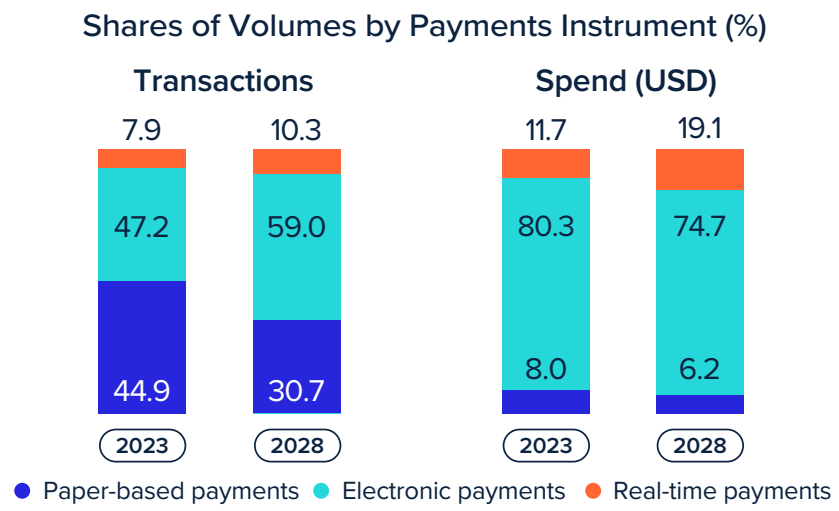
1987

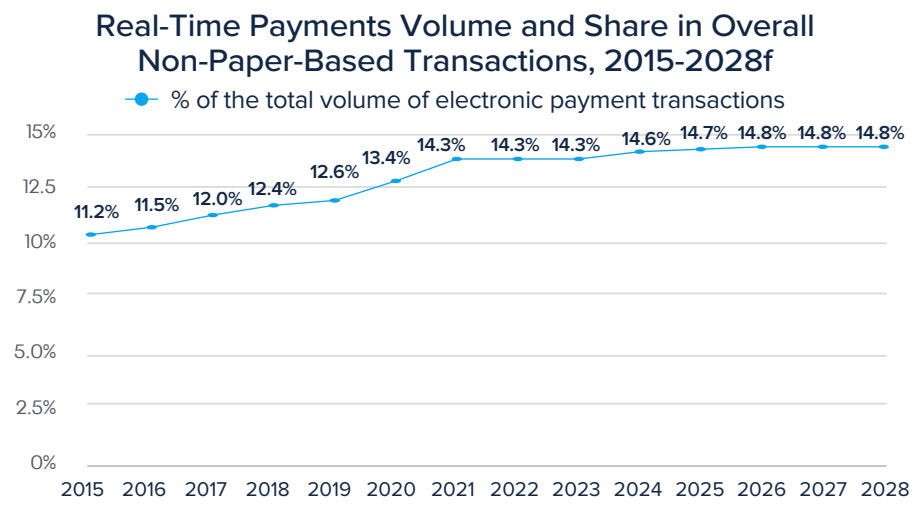
Real-Time Payment Schemes

1987
Interbank ATM Funds Transfer System

2003
Financial XML

Region: **Asia Pacific**





Mobile Wallet Trends

74.3%

% of adults who have a mobile wallet and have used it in the past year (2023)

Initiation/Authorization Methods

3

- Bank Account
- Mobile
- QR Code

Real-Time Acceptance

3

- Banks
- Merchants
- P2P

Scheme Messaging

Proprietary

2024 Prime Time for Real-Time: Thailand

Real-Time Transactions

2023
20.4B

2028f
32.8B

2023-2028 CAGR
10%

With 20.4 billion transactions in 2023, Thailand is the world's third-largest real-time payments market, behind India and Brazil. Thailand's real-time payments system PromptPay launched in 2016 with the aim of bolstering financial inclusion in the country. In 2023, real-time payments accounted for a 43.2% share of total payments volume, making it the most popular payments tool in Thailand, outstripping paper-based payments for the first year on record. The share of real-time payments volume is expected to continue to grow at a CAGR of 10% between 2023 and 2028, making it a below-average growth market in a global context due to its maturity. By 2028, real-time payments are expected to exceed a 50% share of total payments. As of December 2023, Thailand has established cross-border linkages with seven countries: Japan, Cambodia, Vietnam, Malaysia, Indonesia, Singapore and Hong Kong. As cash continues to decline and regional real-time payment linkages continue to develop, we expect strong real-time payments growth in Thailand to continue.

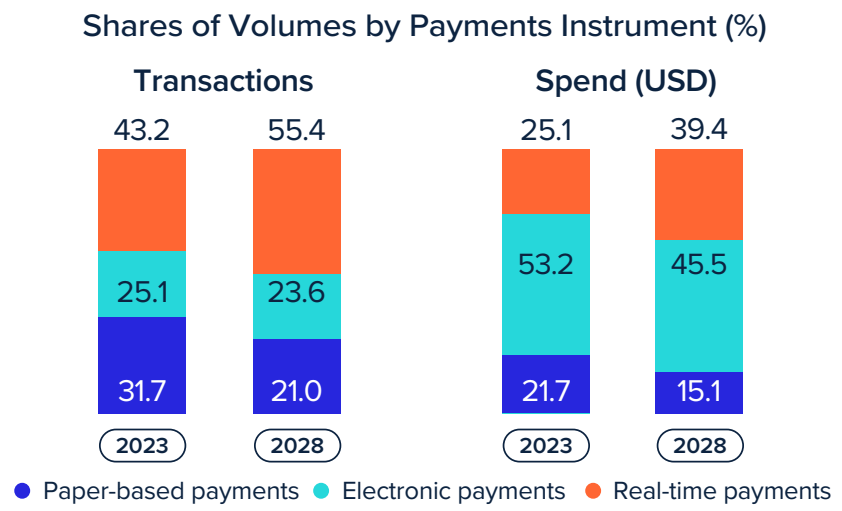
Real-Time Payments Launch

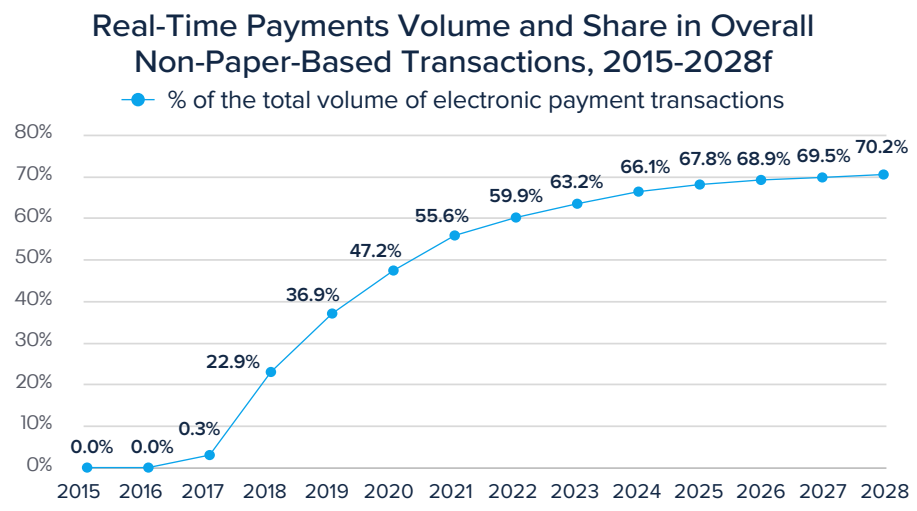
2016

Real-Time Payments Scheme

2016
PromptPay

Region: **Asia Pacific**





Mobile Wallet Trends

89%

% of adults who have a mobile wallet and have used it in the past year (2023)

Initiation/Authorization Methods

3

- Bank Account
- Mobile
- QR Code

Real-Time Acceptance

4

- Banks
- Merchants
- P2P
- Billers

Scheme Messaging

ISO 20022

2024 Prime Time for Real-Time: Austria

Real-Time Transactions

2023
338M

2028f
881M

2023-2028 CAGR
21.1%

Austria was among the first countries to adopt the pan-European SCT Inst scheme in November 2017. However, instant payments still account for only a 4.5% share of the total payments transaction volume in 2023, compared to the 50.7% share held by other electronic payments. Austrians continue to prefer payment cards, particularly contactless, with their usage having grown continually. Nevertheless, Austria is one of the stronger instant payment growth markets in Europe, with volumes expected to see a CAGR of 21.1% from 2023 to 2028.

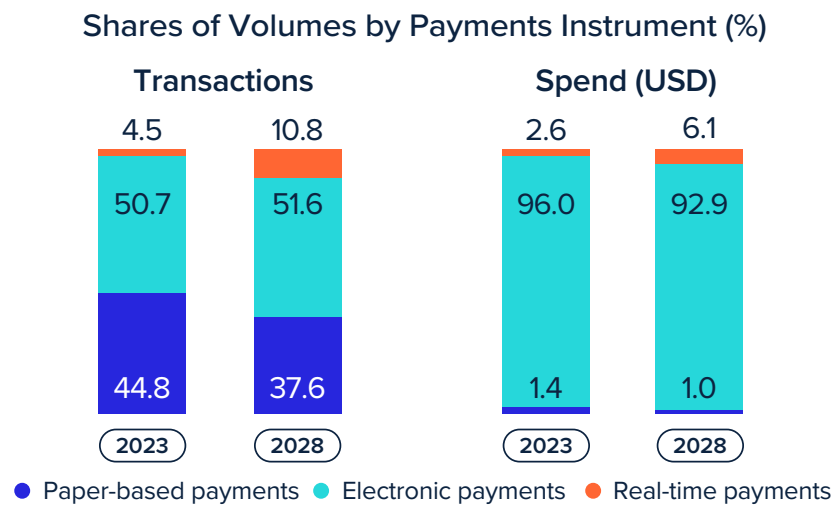
Real-Time Payments Launch

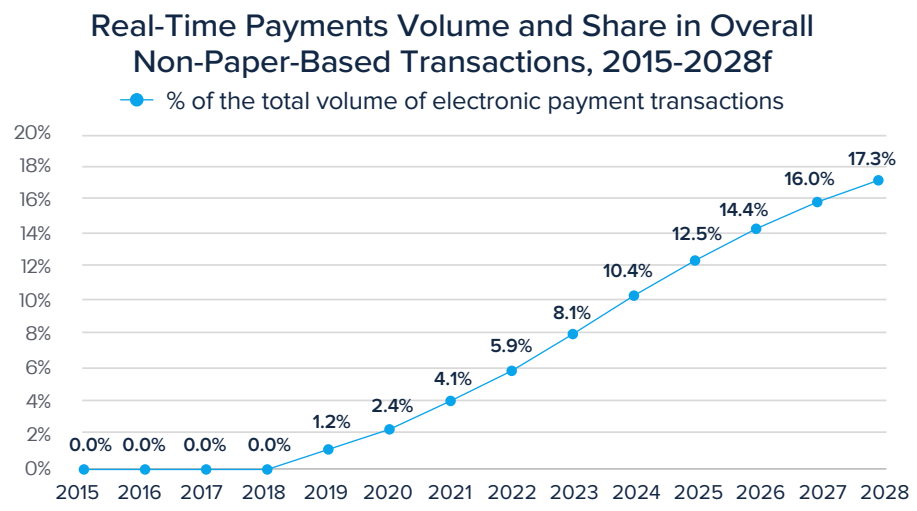
2017

Real-Time Payments Scheme

2017
SCT Inst

Region: **Europe**





Initiation/Authorization Methods

3

- Bank Account
- Mobile
- QR Code

Real-Time Acceptance

4

- Banks
- Merchants
- P2P
- Billers

Scheme Messaging

ISO 20022

2024 Prime Time for Real-Time: Belgium

Real-Time Transactions

2023
171M

2028f
801M

2023-2028 CAGR
36.2%

Belgium enabled instant payments with the adoption of the pan-European SCT Inst scheme in March 2019. Therefore, it may expect to see a boost in adoption as access to instant payments becomes more universal in the near term, when the new law making instant payments mandatory in the EU comes into force. Currently, the use of instant payments is still at a nascent stage, accounting for only 2.1% of the total payments volume in 2023, a lower share than in 2022. However, instant payments are expected to grow significantly in the forecast period (2023-2028), with an expected CAGR of 36.2%, reaching an 8.5% share of overall transaction volume by 2028.

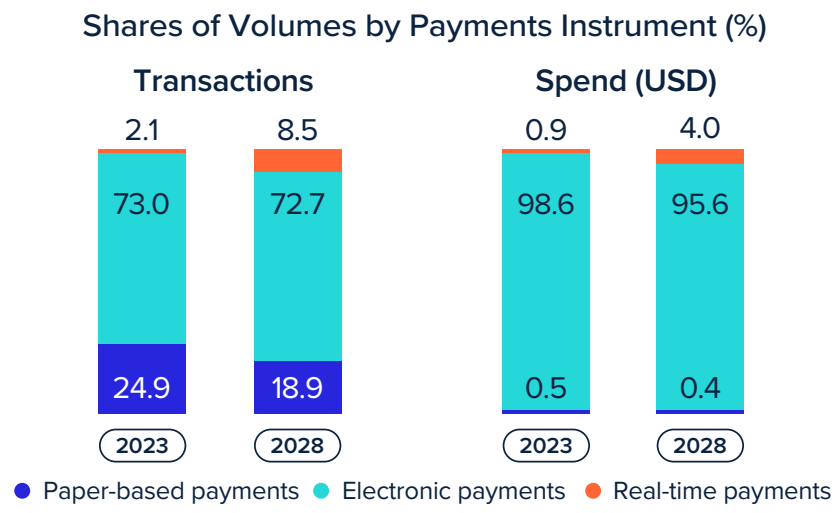
Real-Time Payments Launch

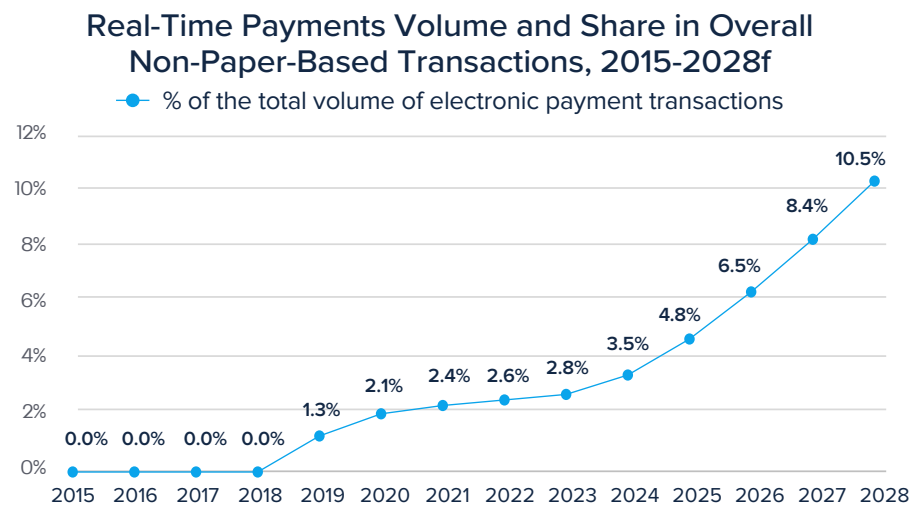
2019

Real-Time Payments Scheme

2019
SCT Inst

Region: **Europe**





Mobile Wallet Trends

34.6%

% of adults who have a mobile wallet and have used it in the past year (2023)

Initiation/Authorization Methods

3

- Bank Account
- Mobile
- QR Code

Real-Time Acceptance

4

- Banks
- Merchants
- P2P
- Billers

Scheme Messaging

ISO 20022

2024 Prime Time for Real-Time: Croatia

Real-Time Transactions

2023
2.5M

2028f
74M

2023-2028 CAGR
97.1%

Croatia is among the most recent entrants to the instant payments space in Europe, having launched NKSInst in October 2020. Continuous developments, such as the launch of a proxy lookup service in March 2021, will support the growth of instant payments over the next few years, though participation among banks remains low, with only seven institutions having signed up thus far. Due in part to its nascent state, Croatia is the second highest growth market in Europe (after Ireland). Over the next five years, instant payment transactions are anticipated to grow at a CAGR of 97.1%, and by 2028, they are expected to amount to 2.2% of all payments (up from 0.1% currently).

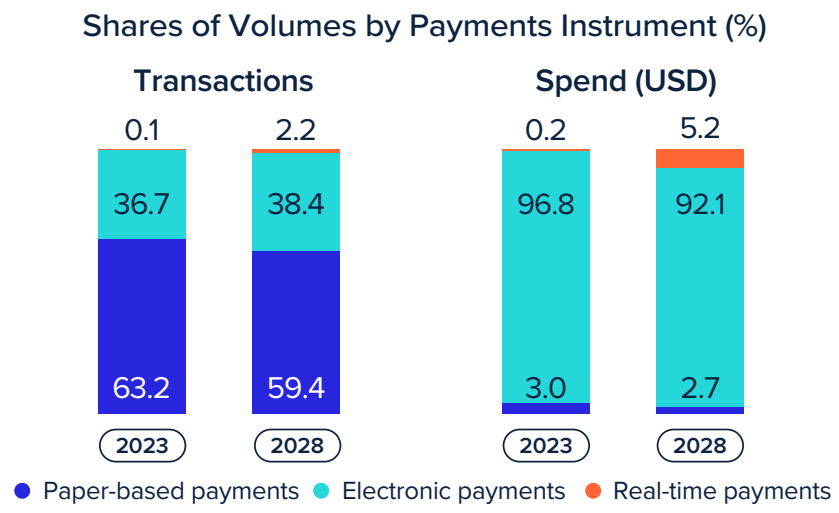
Real-Time Payments Launch

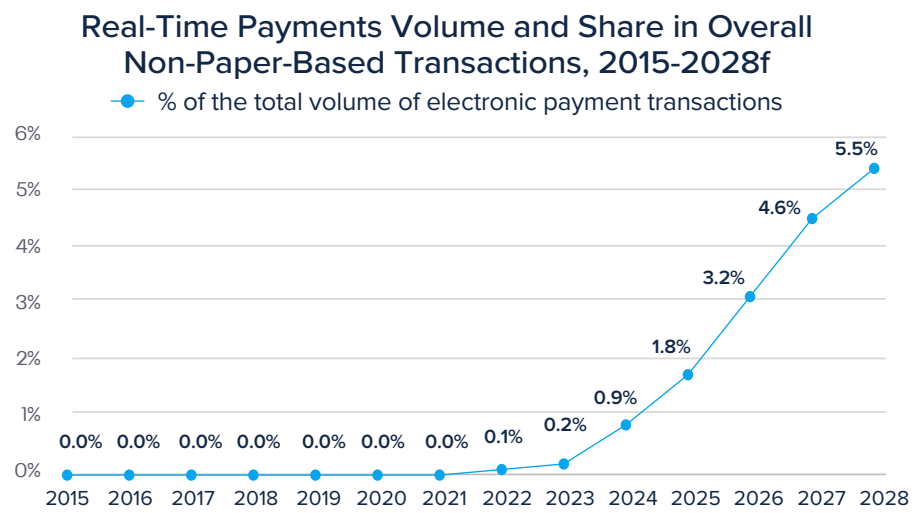
2020

Real-Time Payments Scheme

2020
NKSInst

Region: **Europe**





Initiation/Authorization Methods

2

- Bank Account
- Mobile

Real-Time Acceptance

4

- Banks
- Merchants
- P2P
- Billers

Scheme Messaging

ISO 20022

2024 Prime Time for Real-Time: Czech Republic

Real-Time Transactions

2023
239M

2028f
692M

2023-2028 CAGR
23.6%

Czech Republic enabled instant payments with the launch of a domestic instant payments service in November 2018, which is operated via Czech Express Real-Time Interbank Gross Settlement. Despite limited participation and use cases, instant payments (CERTIS) gradually gained traction in the country and accounted for a 3.9% share of the total volume of payment transactions in 2023. The prevalence of cash usage in the market, however, provides further growth prospects for instant payments, and the share of instant payments is expected to grow to 10% by 2028.

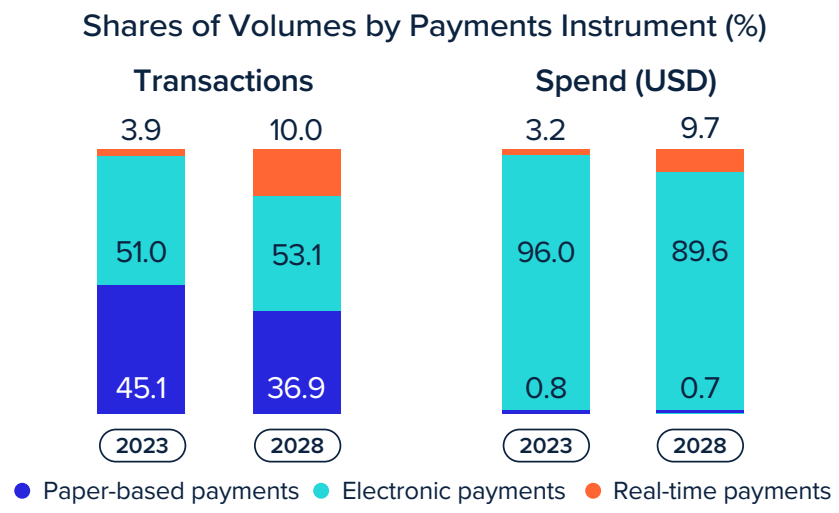
Real-Time Payments Launch

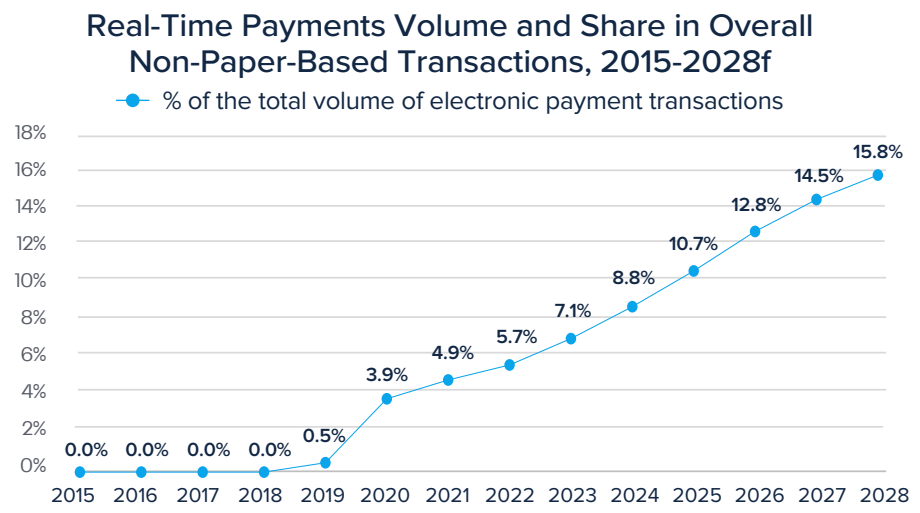
2018

Real-Time Payments Scheme

2018
CERTIS

Region: **Europe**





Initiation/Authorization Method

1 Bank Account

Real-Time Acceptance

3 Banks, Merchants, P2P

Scheme Messaging

Proprietary

2024 Prime Time for Real-Time: Denmark

Real-Time Transactions

2023
639M

2028f
963M

2023-2028 CAGR
8.6%

In 2023, instant payments represented a 13.7% share of payments volume, putting them ahead of paper-based payments at 12%, with non-instant electronic payments at 74.4%. Instant payments are predicted to grow at a CAGR of 8.6% between 2023 and 2028, below the average regional growth rate of 17.5%. This growth will come partially as a result of a decline in cash, but also a decline in the share of other types of electronic payments, showing that instant payments are set to benefit from the push toward a more digital economy in Denmark. In addition, Danske Bank-owned mobile application MobilePay — a platform for both instant P2P and B2P payments — has now merged with Norway's mobile payments app Vipps. Both projects will facilitate instant cross-border transactions with different parts of the Nordic region, thus increasing the volume of transactions. With the collapse of the P27 project, this private collaboration is the only way for Danish consumers to make cross-border real-time payments for the foreseeable future.

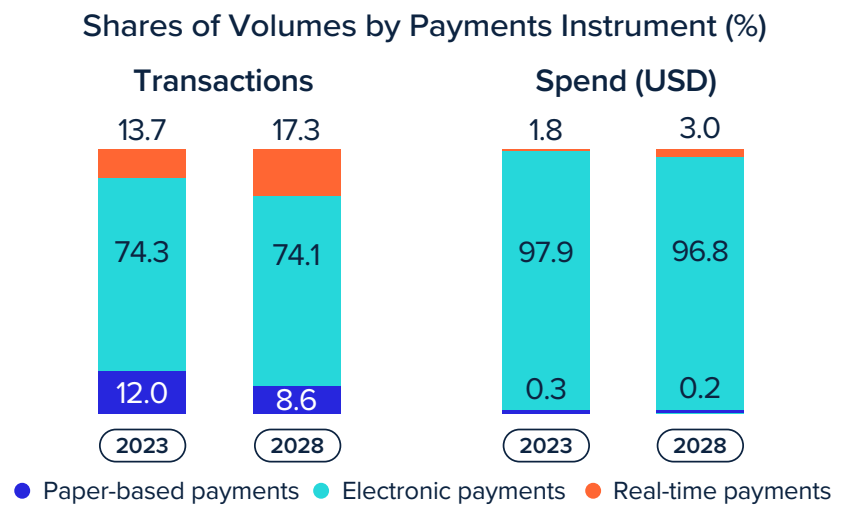
Real-Time Payments Launch

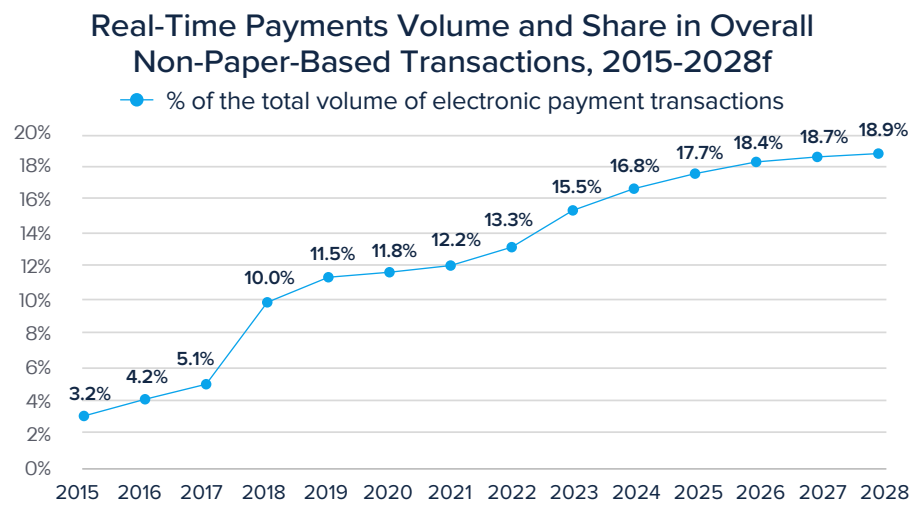
2014

Real-Time Payments Scheme

2014
Straksclearing

Region: **Europe**





Mobile Wallet Trends

48.6%

% of adults who have a mobile wallet and have used it in the past year (2023)

Initiation/Authorization Methods

3

- Bank Account
- Mobile
- QR Code

Real-Time Acceptance

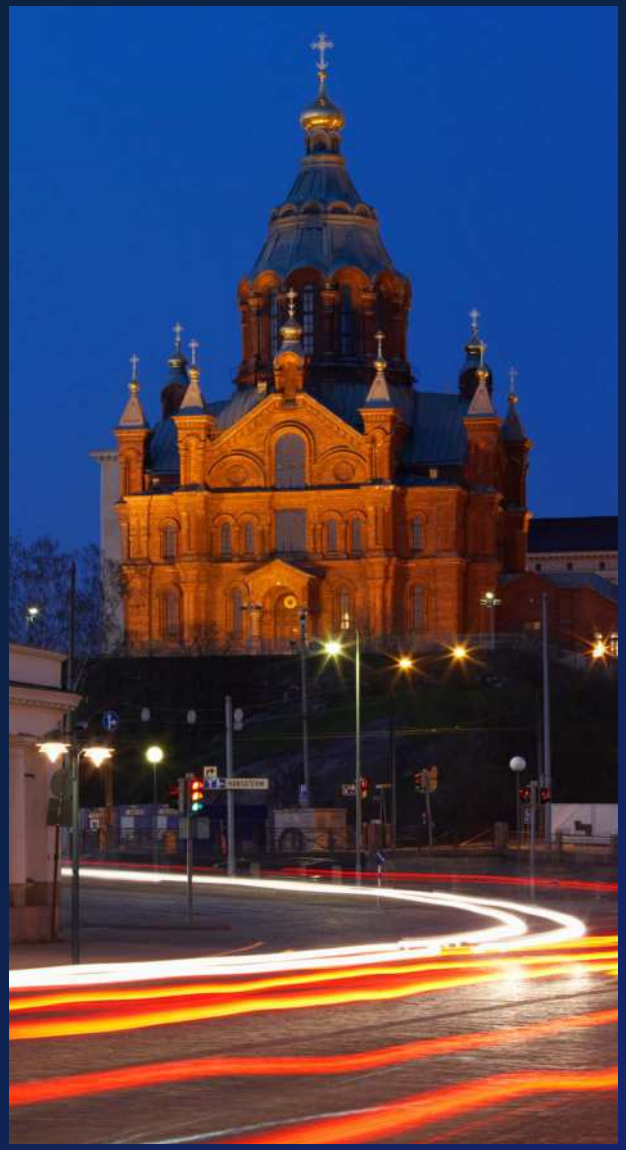
4

- Banks
- Merchants
- P2P
- Billers

Scheme Messaging

ISO 20022

2024 Prime Time for Real-Time: Finland



Real-Time Transactions

2023
147M

2028f
959M

2023-2028 CAGR
45.5%

Finland has two instant payment schemes in place. The first, Siirto, is a domestic instant payments system launched in March 2017. The second is the pan-European SCT Inst, which was adopted in June 2018. Finland's instant payments growth has been slower than anticipated due to limited adoption. However, it is expected to accelerate during the forecast period, with an expected CAGR of 45.5% for instant payments volume, mainly due to the anticipated bolstering effect of a new law mandating instant payments across the EU. Finland was also part of the now-defunct P27 pan-Nordic real-time payments initiative, but now Finnish cross-border real-time payments will be limited to the Eurozone via SCT Inst.

Real-Time Payments Launch

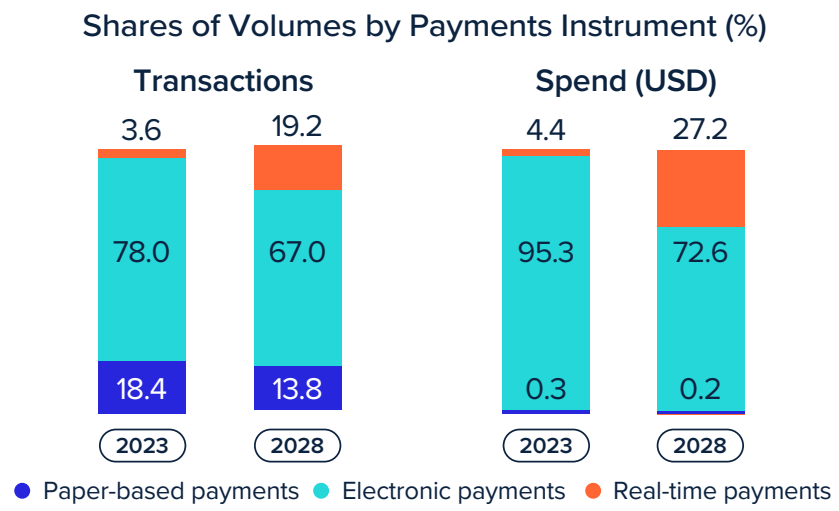
2017

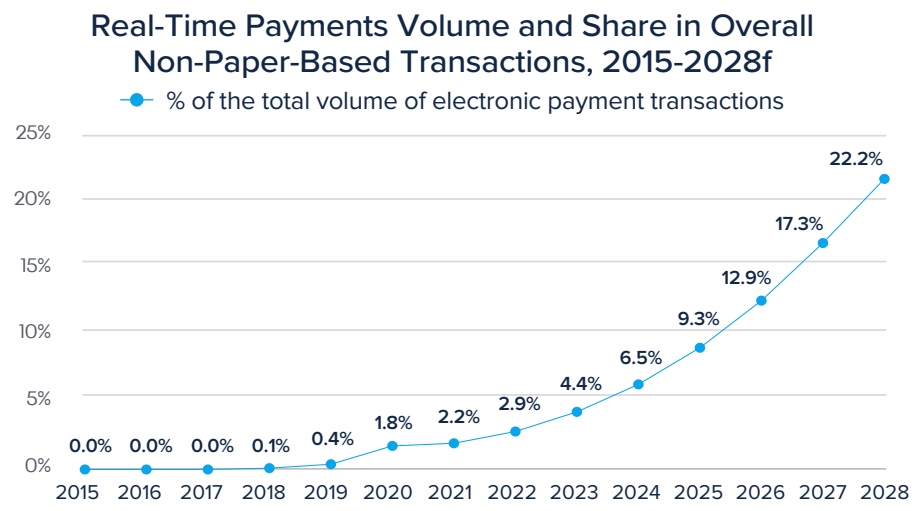
Real-Time Payment Schemes

2017
Siirto

2018
SCT Inst

Region: **Europe**





Mobile Wallet Trends

35.1%

% of adults who have a mobile wallet and have used it in the past year (2023)

Initiation/Authorization Methods

3

- Bank Account
- Mobile
- QR Code

Real-Time Acceptance

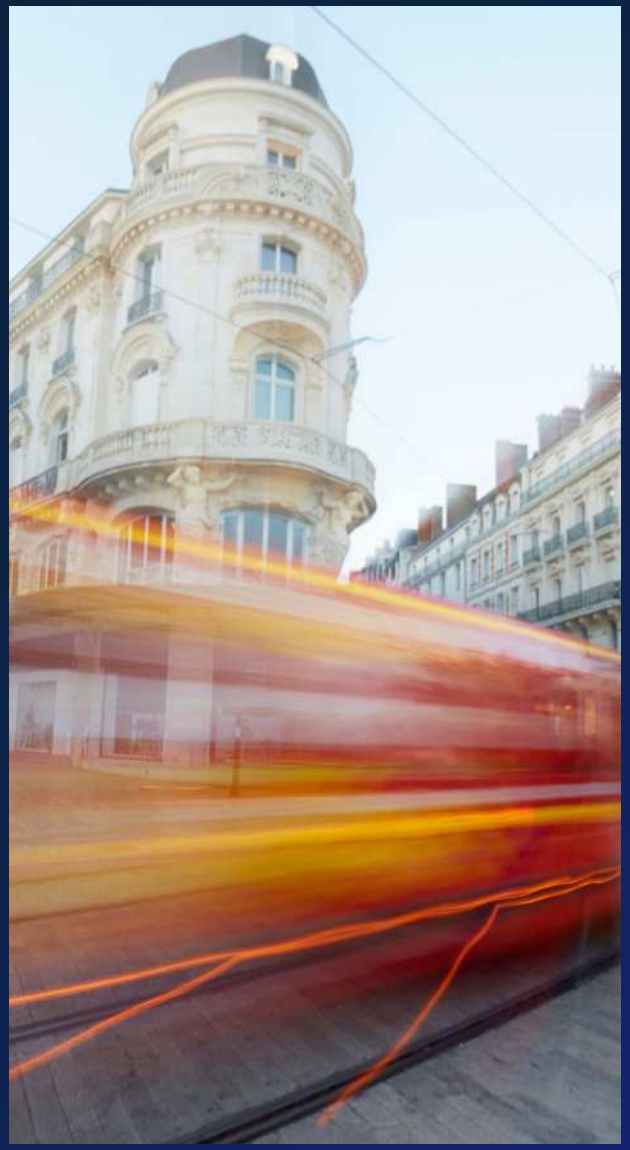
4

- Banks
- Merchants
- P2P
- Billers

Scheme Messaging

ISO 20022

2024 Prime Time for Real-Time: France



Real-Time Transactions

2023
335M

2028f
1.7B

2023-2028 CAGR
39.1%

Like all countries in the Eurozone, France has adopted the pan-European SCT Inst scheme for instant payments. SCT Inst was developed by the European Payments Council (EPC) with the aim of creating an instant payments network within Europe — specifically the SEPA region. So far, the adoption of SCT Inst among financial institutions has been very slow, but the European Commission (EC) is working on a new Regulation that would extend access to instant payments in euro, which has now received political agreement. Among other provisions, this Regulation would place an obligation on EU payment service providers to offer instant payments in euro if they already offer "slower," non-instant SEPA credit transfer means of euro transfer, making it cost-competitive with other bank transfer options. The ability to transfer funds instantly, not only within France but also to other European markets, is expected to bolster usage in the long term. In 2023, instant payments represented only a 0.7% share of the total payments volume, as the payments industry in France is dominated heavily by card and traditional batch transfer payments. Paper-based payments still represent a 37.7% share of total payments volume in the market. By 2028, the market share of instant payments in France by volume is expected to reach 3.1%, with the market growing at an impressive CAGR of 39.1%.

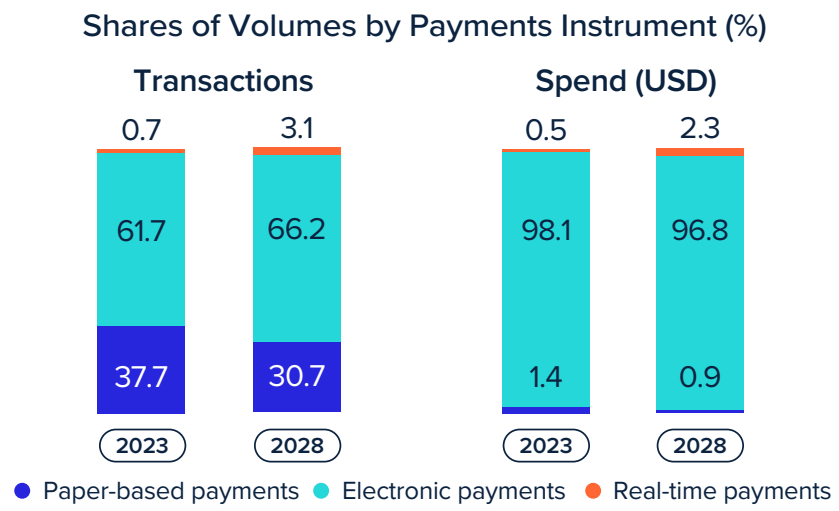
Real-Time Payments Launch

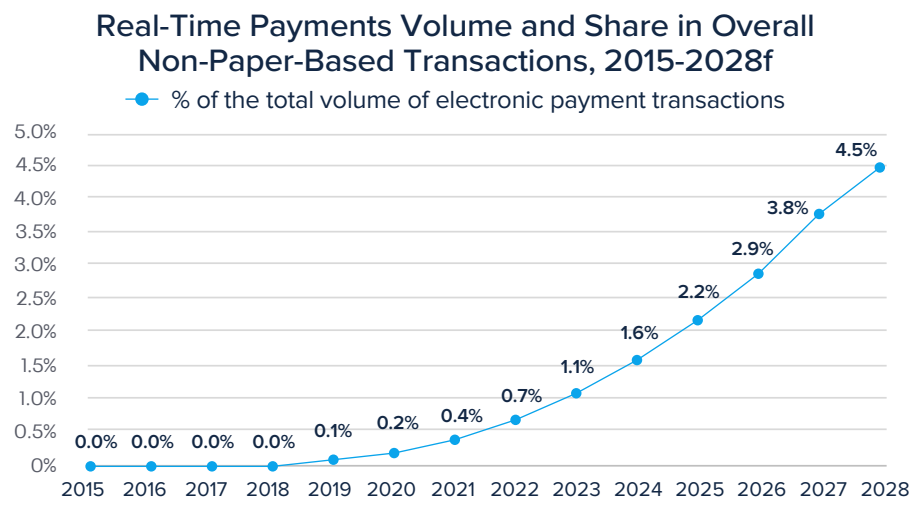
2018

Real-Time Payments Scheme

2018
SCT Inst

Region: **Europe**





Mobile Wallet Trends

28%

% of adults who have a mobile wallet and have used it in the past year (2023)

Initiation/Authorization Methods

3

- Bank Account
- Mobile
- QR Code

Real-Time Acceptance

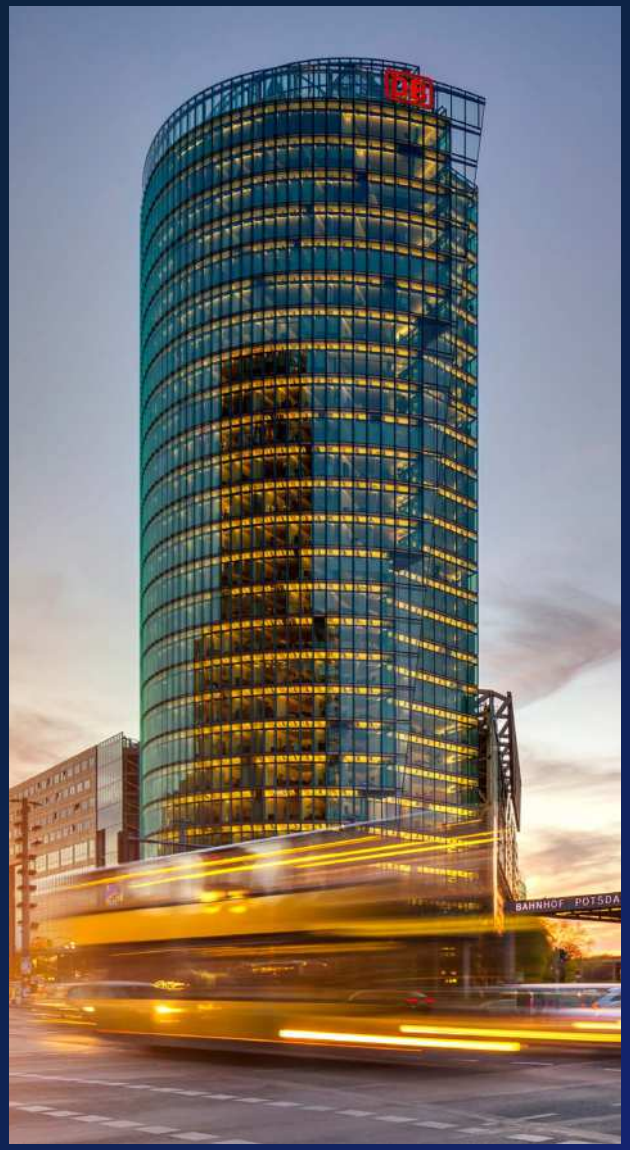
4

- Banks
- Merchants
- P2P
- Billers

Scheme Messaging

ISO 20022

2024 Prime Time for Real-Time: Germany



Real-Time Transactions

2023
1.5B

2028f
3.3B

2023-2028 CAGR
17.1%

Germany adopted SCT Inst in 2017, gaining access to an instant payments scheme that not only provides euro transfers among participating financial institutions in Germany but also with any participating financial institution in Europe. Despite this regional link being in place, instant payments represent only a small part of total payments volume and spending in Germany. In 2023, instant payments accounted for a 3.5% share of total payments volume, whereas other forms of electronic payments represented 66.6% and paper-based payments 29.9%. Over the next five years, the main trend in the market will be the growth of instant payments as cash slowly declines. With Germany being a cash-preferring market, the clear opportunity for instant payments in the market is to take advantage of the decline in cash usage. The new EC Mandate on instant payments is expected to accelerate adoption in the near term.

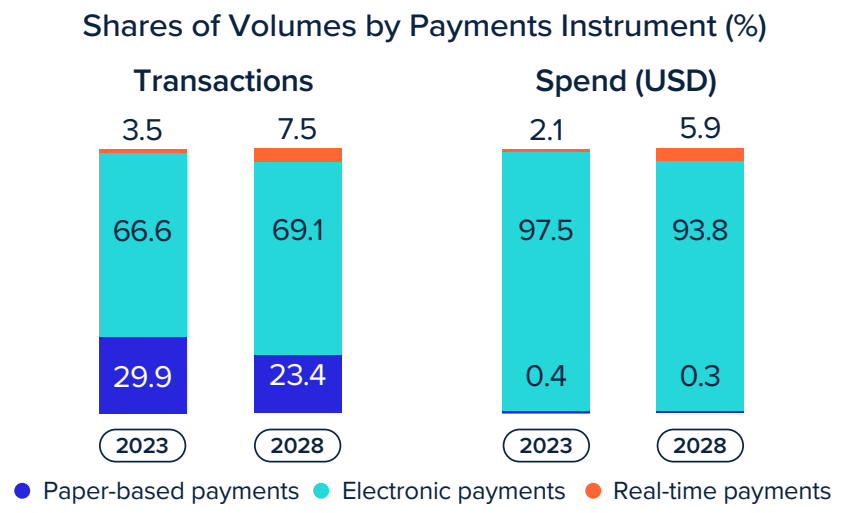
Real-Time Payments Launch

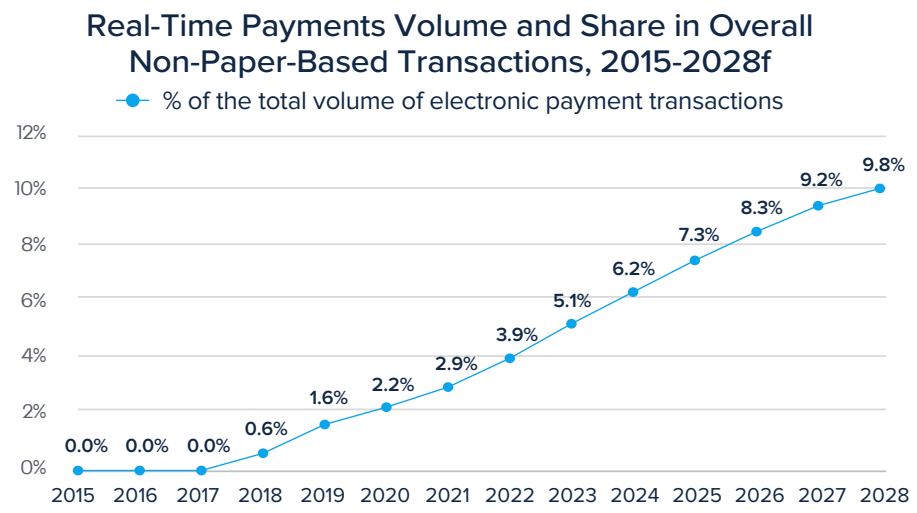
2017

Real-Time Payments Scheme

2017
SCT Inst

Region: **Europe**





Mobile Wallet Trends

30.1%

% of adults who have a mobile wallet and have used it in the past year (2023)

Initiation/Authorization Methods

3

- Bank Account
- Mobile
- QR Code

Real-Time Acceptance

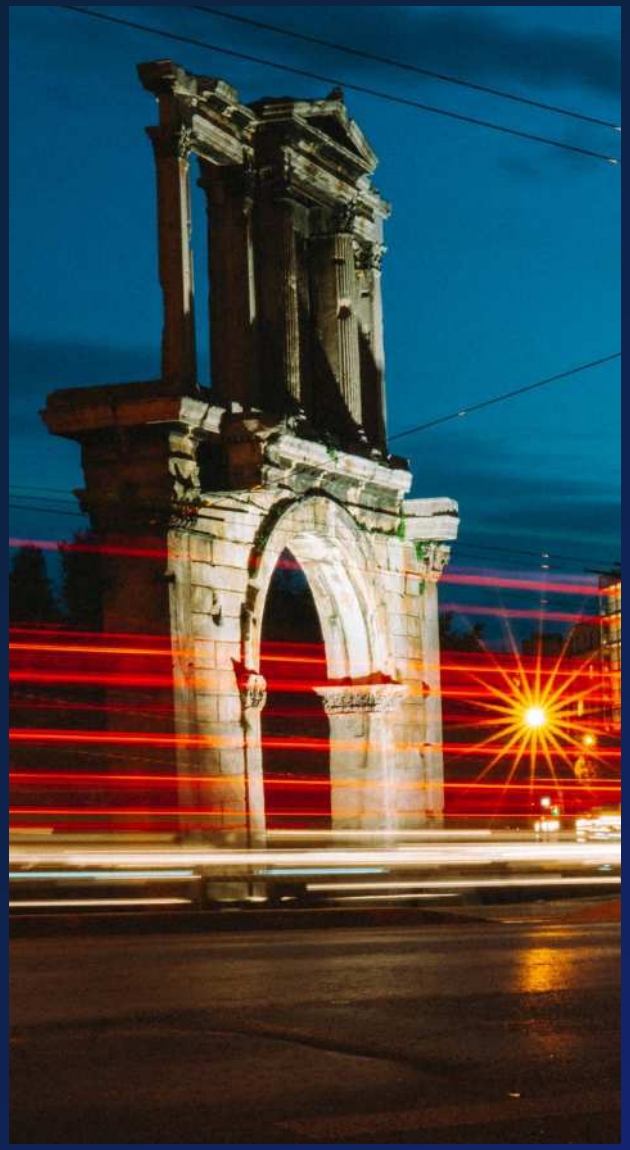
4

- Banks
- Merchants
- P2P
- Billers

Scheme Messaging

ISO 20022

2024 Prime Time for Real-Time: Greece



Real-Time Transactions

2023
45M

2028f
239M

2023-2028 CAGR
39.7%

Greece launched its instant payments system IRIS Online Payment in May 2017, which enabled instant payments through internet banking systems using account numbers or IBANs. In June 2017, it launched IRIS Mobile Payment, allowing instant payments through mobile banking channels using the recipient's email address, mobile phone number, company VAT number or QR code. It is expected that in the long term, mobile payments will see a steep growth in Greece, and instant payments are poised to benefit. Currently, growth in instant payments has been slow in Greece due to limited participation from banks. However, with paper-based transactions holding a 56.1% share of transactions by volume in 2023, Greece has huge potential for instant payments growth in the near-to-medium term.

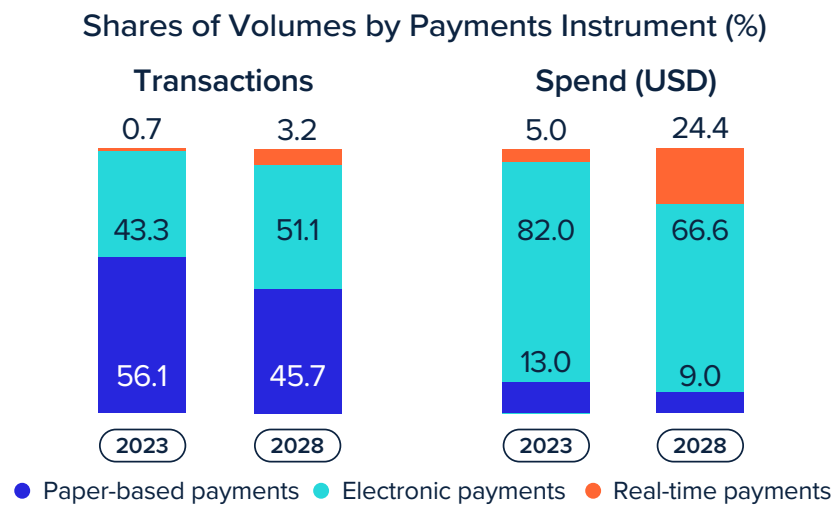
Real-Time Payments Launch

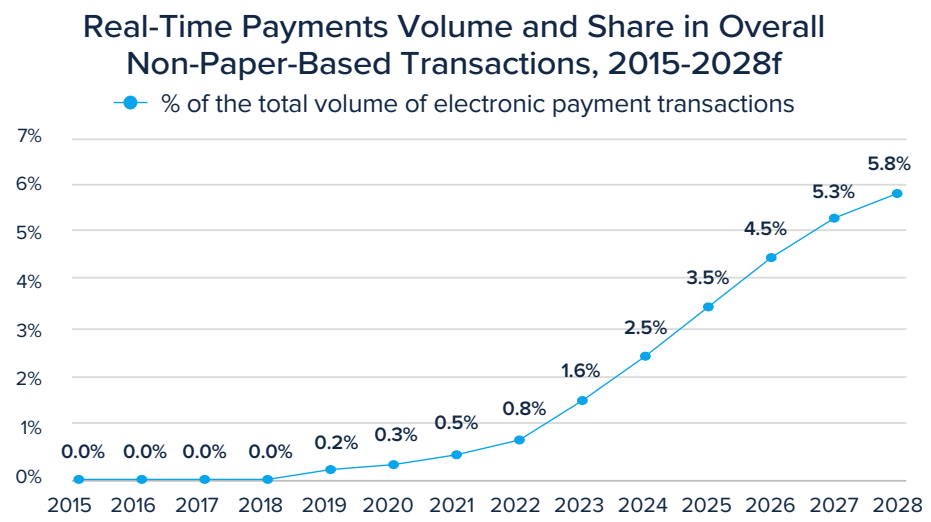
2017

Real-Time Payments Scheme

2017
IRIS

Region: **Europe**





Initiation/Authorization Methods

3

- Bank Account
- Mobile
- QR Code

Real-Time Acceptance

4

- Banks
- Merchants
- P2P
- Billers

Scheme Messaging

Proprietary

2024 Prime Time for Real-Time: Hungary

Real-Time Transactions

2023
209M

2028f
536M

2023-2028 CAGR
20.8%

Azonnali Fizetési Rendszer (AFR) is Hungary's domestic instant credit transfer scheme, launched in March 2020 in near compliance with SCT Inst standards. Despite instant payments being less than three years old in Hungary, they are already relatively established, with the share of instant payments by volume standing at 4.5% in 2023, ahead of more established regional peers. This can be attributed to AFR supporting different kinds of payments, including individual P2P, bulk and recurring payments, and providing the convenience of being able to pay using a mobile phone number, email address or tax identification number. The Hungarian Central Bank MNB requires all Hungarian banks to offer instant payments via AFR. Uniform payment initiation methods using QR codes and NFC will become mandatory in 2024. These measures are part of MNB's strategy to raise the share of electronic transfers to two-thirds of all transactions in 2030. The growth in instant payments volume is expected to continue during the forecast period at the expense of cash, with an expected CAGR of 20.8% from 2023 to 2028, which is above average for the region.

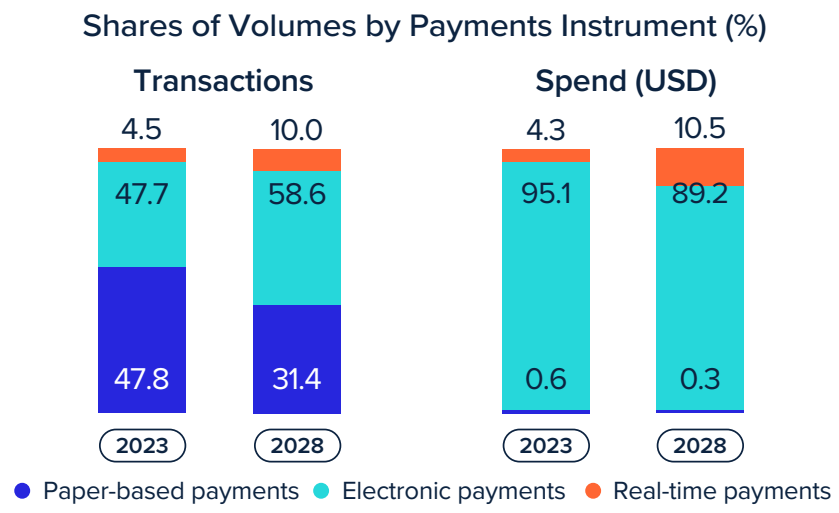
Real-Time Payments Launch

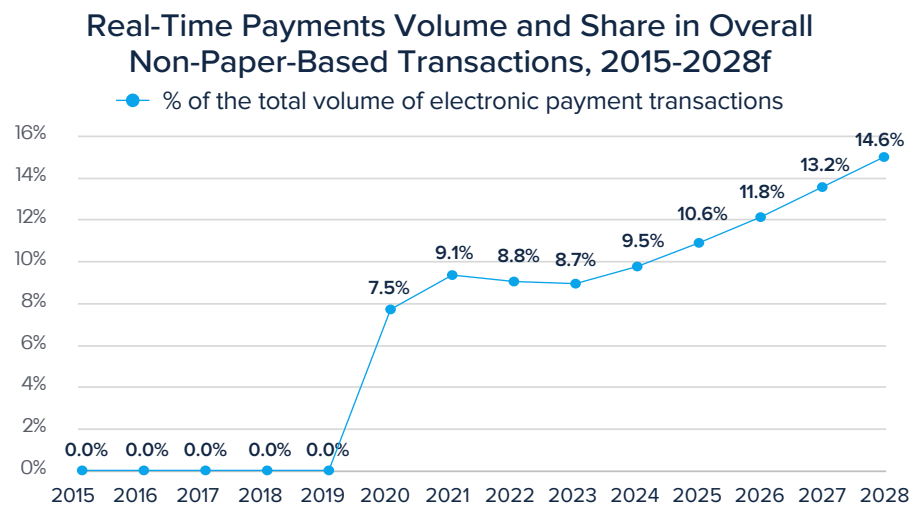
2020

Real-Time Payments Scheme

2020
AFR

Region: **Europe**





Initiation/Authorization Methods

2

- Bank Account
- Mobile

Real-Time Acceptance

4

- Banks
- Merchants
- P2P
- Billers

Scheme Messaging

ISO 20022

2024 Prime Time for Real-Time: Ireland

Real-Time Transactions

2023
1.9M

2028f
79.4M

2023-2028 CAGR
110.3%

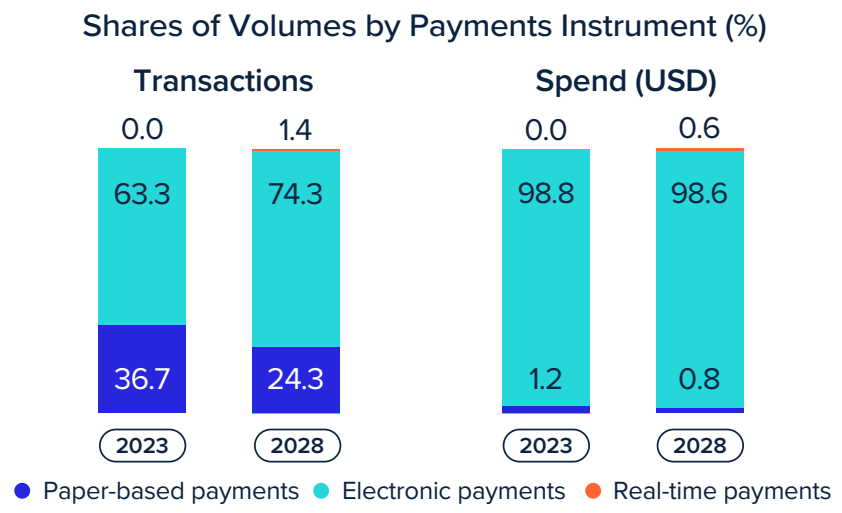
Instant payments have not been launched at a country level in Ireland, although a handful of banks offer this service via SCT Inst. As a result of this very early phase of adoption, the share of instant payments in overall payments by volume was negligible in 2023. Most consumers in Ireland opt for cards when making electronic payments, and this is not expected to change in the near term. Ireland is the fastest-growing instant payments market in Europe, with a CAGR of more than 100% in terms of instant payments transaction volume between 2023 and 2028, but this is largely due to a very low starting base. By 2028, instant payments will still only account for 1.4% of overall payments by volume in the country, even given this huge growth rate.

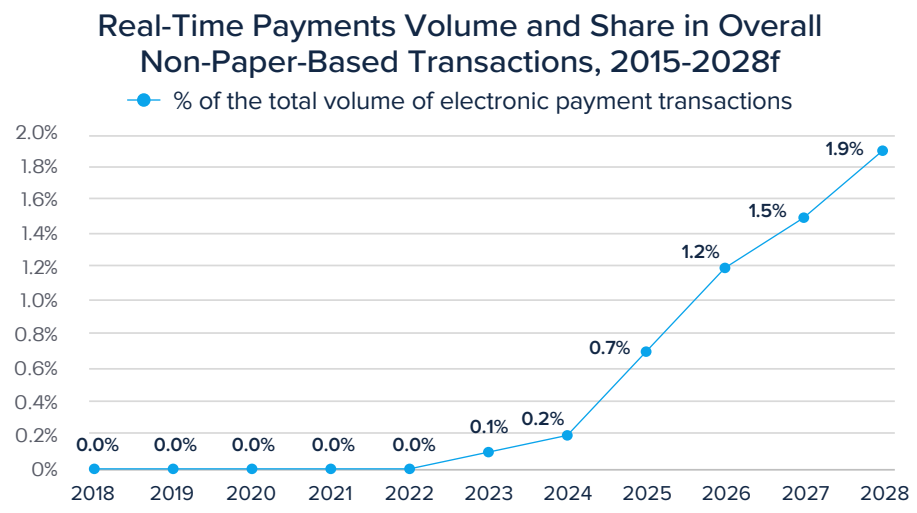
Real-Time Payments Launch
Not Formally Launched

Real-Time Payments Scheme

Not Formally Launched
SCT Inst

Region: **Europe**





Mobile Wallet Trends

53.6%

% of adults who have a mobile wallet and have used it in the past year (2023)

Initiation/Authorization Methods

3

- Bank Account
- Mobile
- QR Code

Real-Time Acceptance

4

- Banks
- Merchants
- P2P
- Billers

Scheme Messaging

ISO 20022

2024 Prime Time for Real-Time: Italy

Real-Time Transactions

2023
360M

2028f
954M

2023-2028 CAGR
21.5%

Italy adopted the pan-European SCT Inst scheme at an early stage, in November 2017. Despite the head start and wide participation from banks and payment service providers (292 participants as of November 2023), the growth in adoption and use of instant payments has been slow due to the high preference for cash. While instant payments account for just a 1.2% share of total payment volume transactions in 2023, paper-based transactions held a 66.7% share. The lingering effects of the COVID-19 pandemic and regulatory intervention on cash usage are beginning to take effect, however, and the share of cash is expected to decline to 57.4% by 2028 — but based on current projections, this will mostly be to the benefit of card-based payments.

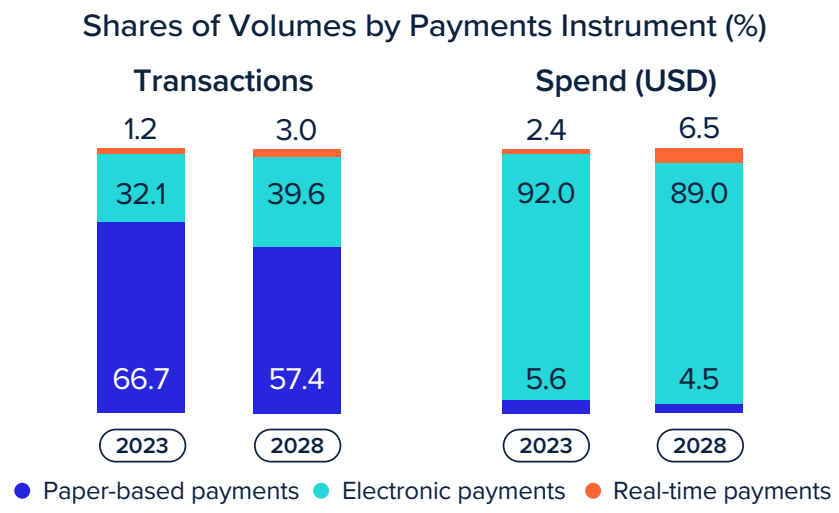
Real-Time Payments Launch

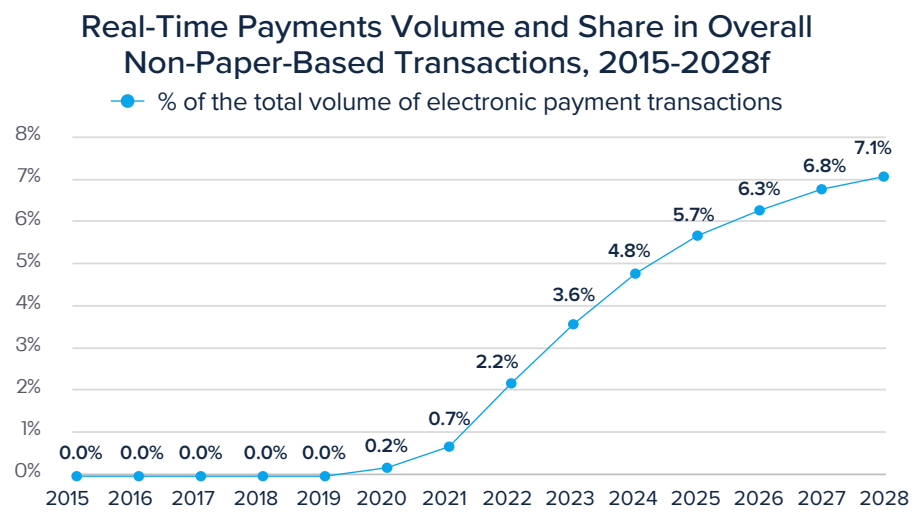
2017

Real-Time Payments Scheme

2017
SCT Inst

Region: **Europe**





Mobile Wallet Trends

53.7%

% of adults who have a mobile wallet and have used it in the past year (2023)

Initiation/Authorization Methods

3

- Bank Account
- Mobile
- QR Code

Real-Time Acceptance

4

- Banks
- Merchants
- P2P
- Billers

Scheme Messaging

ISO 20022

2024 Prime Time for Real-Time: Norway

Real-Time Transactions

2023
331M

2028f
819M

2023-2028 CAGR
19.9%

Norway is one of the closest markets in the world to being fully cashless, with only 2.3% of transaction volume in the market being paper based in 2023. Instant payments, however, represented only a 7.9% share of total payments volume in 2023, a distant second behind non-instant electronic payments, which were at 89.9%. Instant payments volume is forecast to grow steadily to reach a 14.6% share of overall payments volume by 2028, with a CAGR of 19.9% over the next five years — well above the regional average. This growth comes not only at the expense of cash's share of payments volume but also other forms of electronic payments, showing that consumers are actively moving away from card and "slow" transfers to instant payments in this market. Norway's largest payments application, Vipps, allows consumers and merchants to complete instant payment transactions between bank accounts in Norway via a mobile UX. Vipps also merged with Danske Bank's MobilePay in 2022 to create an ecosystem that enables instant payment cross-border transactions between Norway, Denmark and Finland.

Real-Time Payments Launch

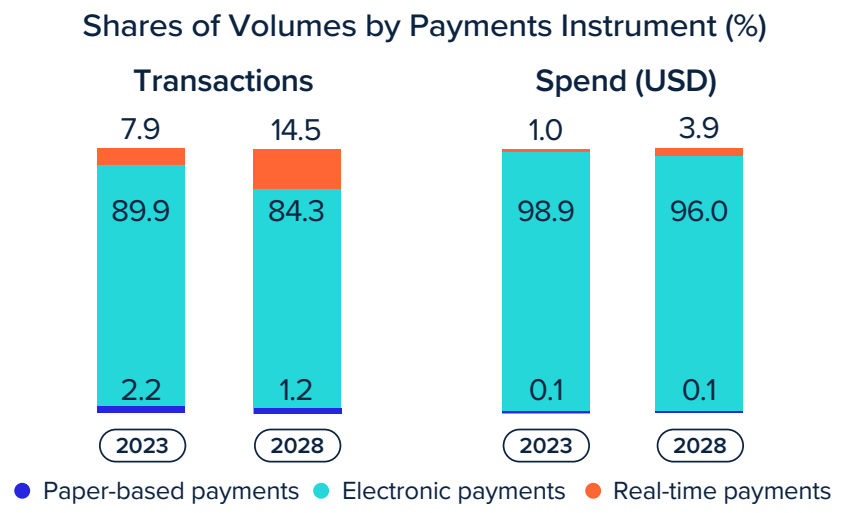
2011

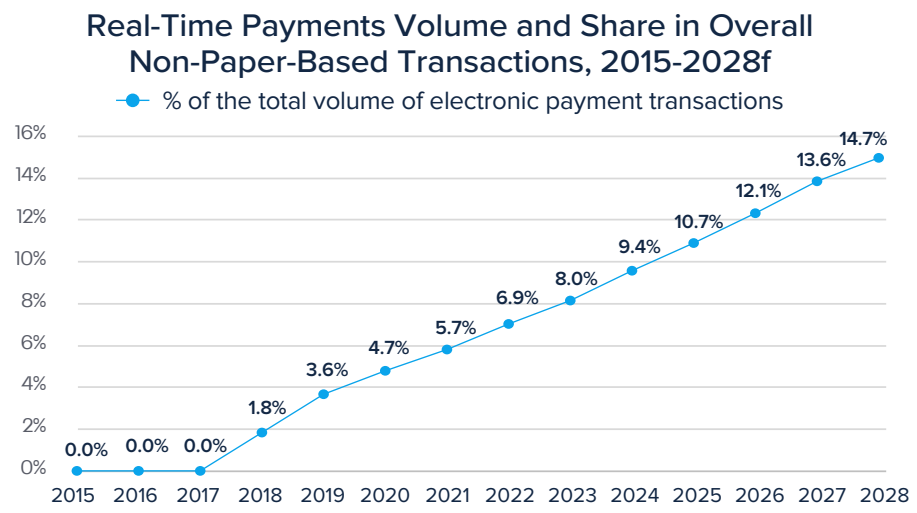
Real-Time Payment Schemes

2011
Straksbetalinger

2015
Vipps

Region: **Europe**





Mobile Wallet Trends

40.5%

% of adults who have a mobile wallet and have used it in the past year (2023)

Initiation/Authorization Methods

3

- Bank Account
- Mobile
- QR Code

Real-Time Acceptance

4

- Banks
- Merchants
- P2P
- Billers

Scheme Messaging

ISO 20022

2024 Prime Time for Real-Time: Poland

Real-Time Transactions

2023
409M

2028f
864M

2023-2028 CAGR
16.1%

Poland was one of the earliest adopters of instant payments in Europe and has two systems in place, both launched in 2012. The Express Elixir instant payments scheme was launched by Krajowa Izba Rozliczeniowa, Poland's payments clearing system. The second scheme, BlueCash, was launched by the Blue Media company. Both platforms enable instant payment transfers between bank accounts, operate 24/7/365, and are available to both individuals and businesses. The main difference between Express Elixir and BlueCash is that the former only allows transfers between accounts of participating banks, whereas with BlueCash, either the sender or the receiver must be a user of the BlueCash platform. However, Poland is not a regional leader in instant payments development; in 2023, instant payments represented a small 1.9% share of the total payments volume in the country. Future projections point to a gradual growth of instant payments, with volumes expected to reach 3.4% in 2028, growing at a CAGR of 16.1% from 2023 to 2028.

Real-Time Payments Launch

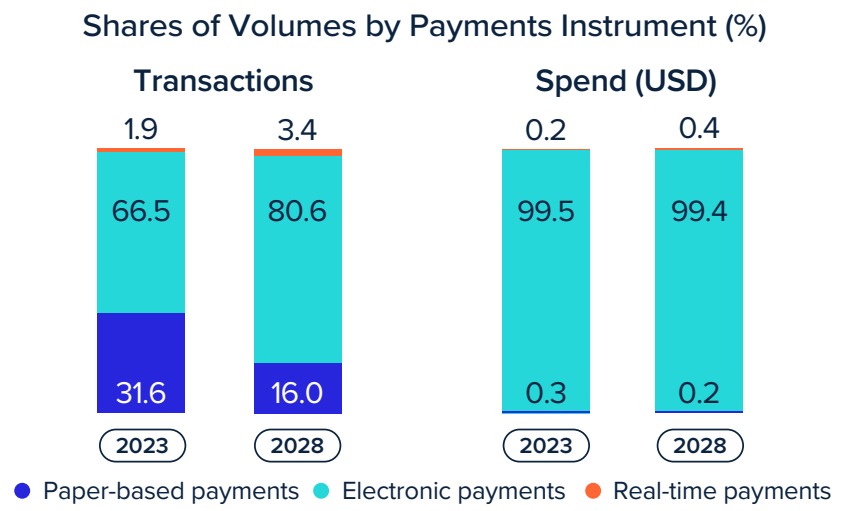
2012

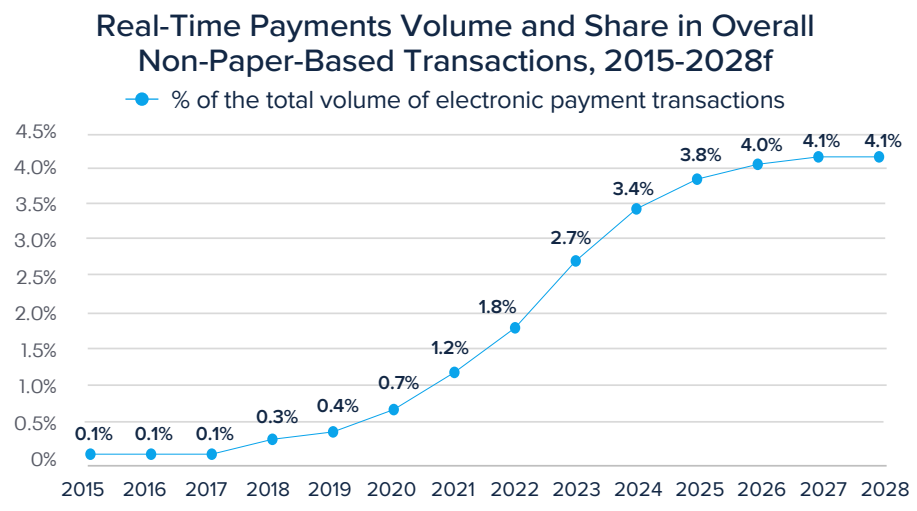
Real-Time Payment Schemes

2012
BlueCash

2012
Express Elixir

Region: **Europe**





Mobile Wallet Trends

50.6%

% of adults who have a mobile wallet and have used it in the past year (2023)

Initiation/Authorization Methods

2

- Bank Account
- Mobile

Real-Time Acceptance

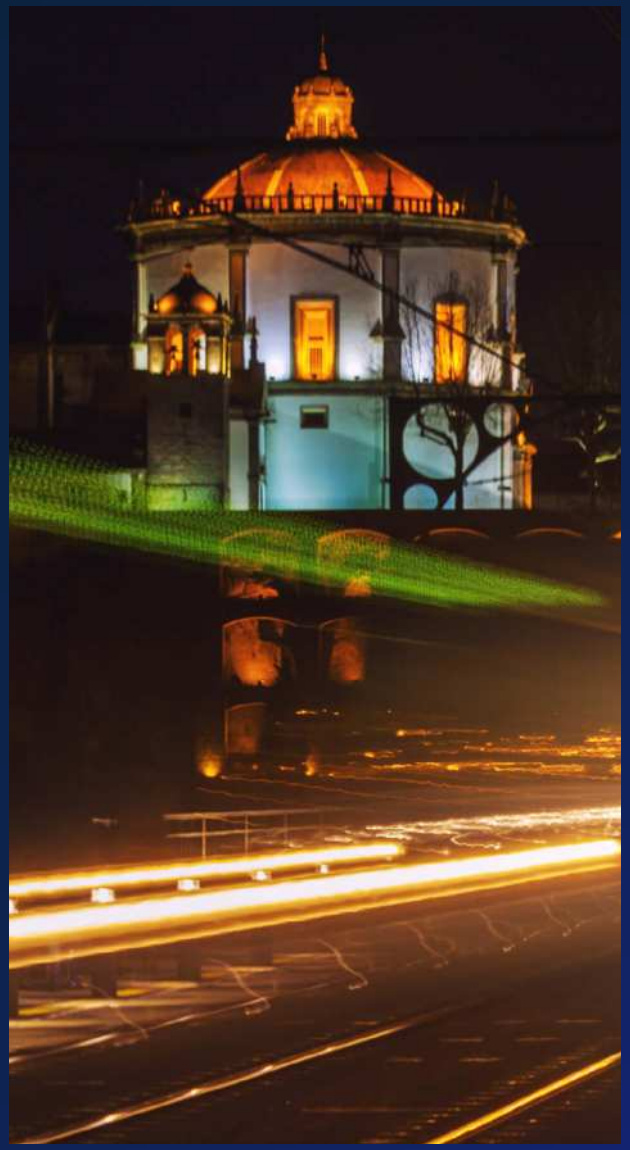
4

- Banks
- Merchants
- P2P
- Billers

Scheme Messaging

ISO 20022

2024 Prime Time for Real-Time: Portugal



Real-Time Transactions

2023
12.9M

2028f
111.4M

2023-2028 CAGR
53.8%

Portugal does not have a domestic instant payments scheme. The Portuguese interbank clearing system SICOI enabled SCT Inst transfers in Portugal in September 2018. Initially available for domestic transactions, Portuguese banks started offering cross-border transfers from October 2020. The instant payments market in the country is still in its nascent stage, with instant payments accounting for just a 0.2% share of the total payments transaction volume in 2023. However, with the preference for electronic payments being on the rise, prospects for instant payments look promising, with volumes anticipated to see a CAGR of 53.8% from 2023 to 2028.

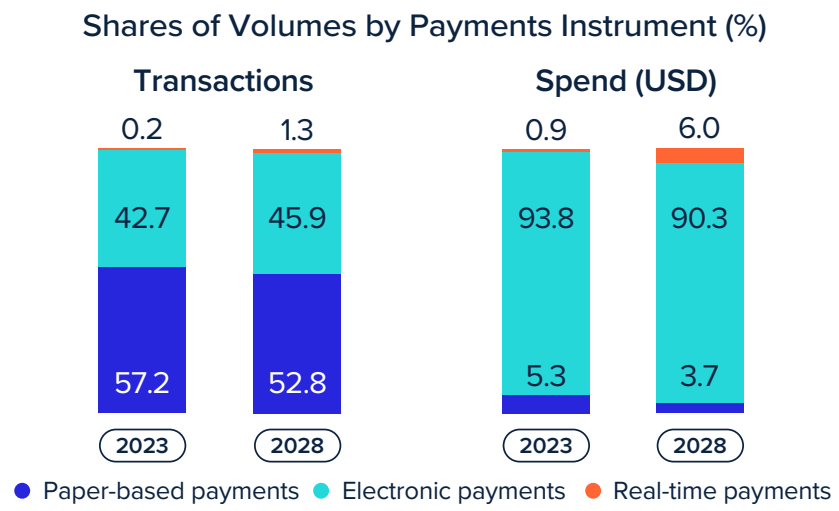
Real-Time Payments Launch

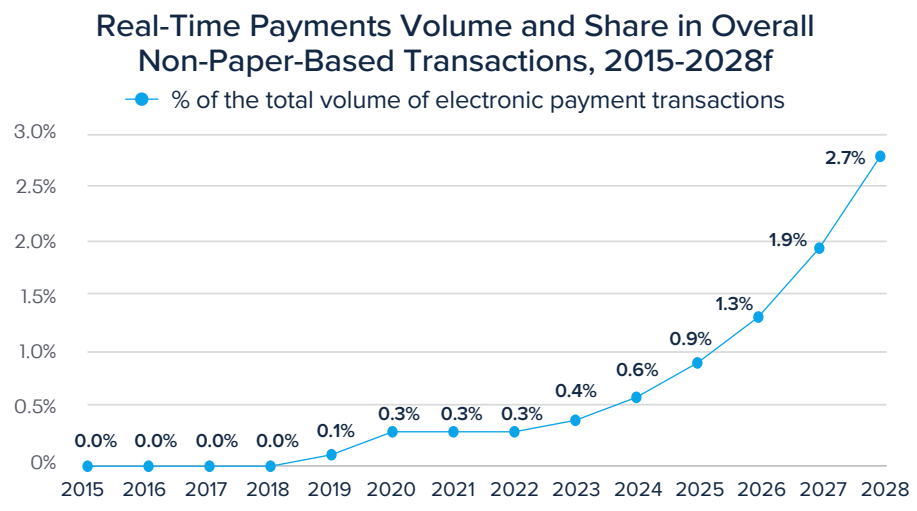
2018

Real-Time Payments Scheme

2018
SCT Inst

Region: **Europe**





Initiation/Authorization Methods

3

- Bank Account
- Mobile
- QR Code

Real-Time Acceptance

4

- Banks
- Merchants
- P2P
- Billers

Scheme Messaging

ISO 20022

2024 Prime Time for Real-Time: Spain

Real-Time Transactions

2023
763M

2028f
2.8B

2023-2028 CAGR
29.6%

Spain launched its domestic instant payments service Bizum in October 2016 and later adopted SCT Inst in November 2017. The adoption and use of instant payments in the country has been on a gradual rise, supported by increasing participation from banks and financial institutions. While Bizum has 37 participants, SCT Inst was adopted by more than 90 banks in Spain as of November 2023. Spain is still a card-dominated market, but strong growth is expected for instant payments in the near term, owing to a combination of the mobile-based Bizum service (largely used for P2P payments) and the new law mandating instant payments across the EU. In terms of volume, instant payments are set to see a CAGR of 29.6% from 2023 to 2028. Consequently, the share of instant payments of the total payments volume is expected to increase from 2.3% in 2023 to 7.7% by 2028.

Real-Time Payments Launch

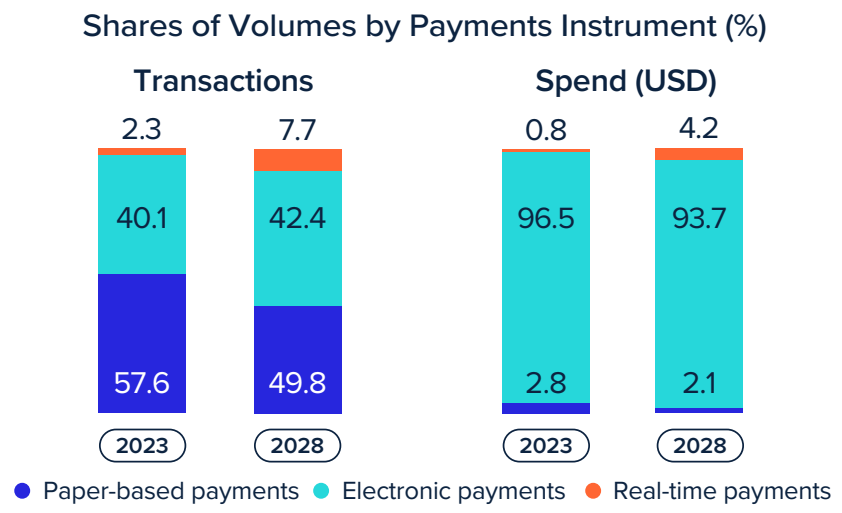
2016

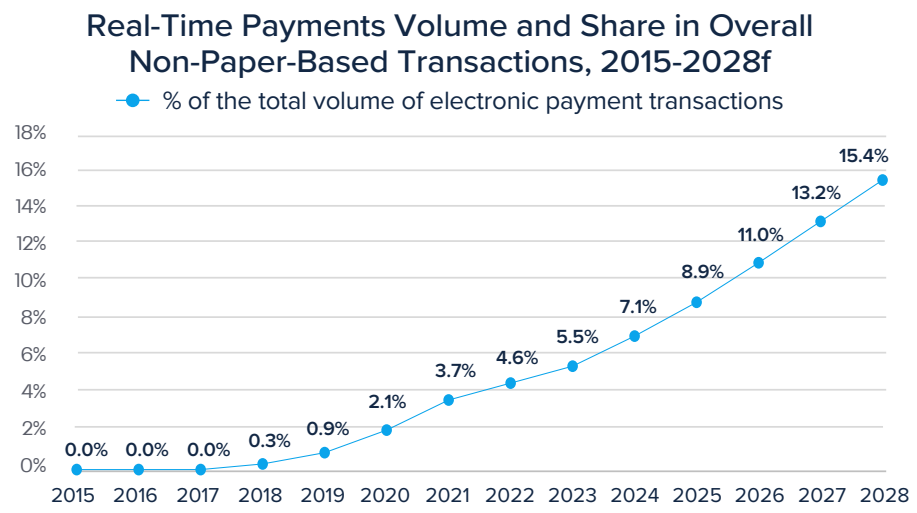
Real-Time Payment Schemes

2016
Bizum

2017
SCT Inst

Region: **Europe**





Mobile Wallet Trends

42.1%

% of adults who have a mobile wallet and have used it in the past year (2023)

Initiation/Authorization Methods

3

- Bank Account
- Mobile
- QR Code

Real-Time Acceptance

4

- Banks
- Merchants
- P2P
- Billers

Scheme Messaging

ISO 20022

2024 Prime Time for Real-Time: Sweden

Real-Time Transactions

2023
1.1B

2028f
2B

2023-2028 CAGR
12.4%

In 2023, instant payments accounted for a 14.8% share of total payments volume, placing it second to non-instant electronic payments, which held a 76.5% share of payments. However, looking at share of value of transactions, instant payments only represented 2% of total spending, while electronic payments (excluding instant payments) had a share of 97.4% and paper-based payments 0.6%. This suggests that instant payments are being used for everyday expenditures, likely via the Swish app, accessible to the majority of Swedish consumers. Sweden is slowly preparing to transition to a cashless economy within the next 10 years, so most of the growth predicted for the instant payments sector is expected to come as a result of a decline in paper-based payments. Instant payments volume is expected to grow at a CAGR of 12.4% from 2023 to 2028; by 2028, paper-based payments are expected to drop to 6.4% of the total payments volume. Sweden was also part of the (scrapped) P27 initiative, which aimed to create a real-time payments cross- border infrastructure between Sweden, Denmark and Finland. Now, it seems that cross-border real-time payments do not lie in the immediate future for Sweden.

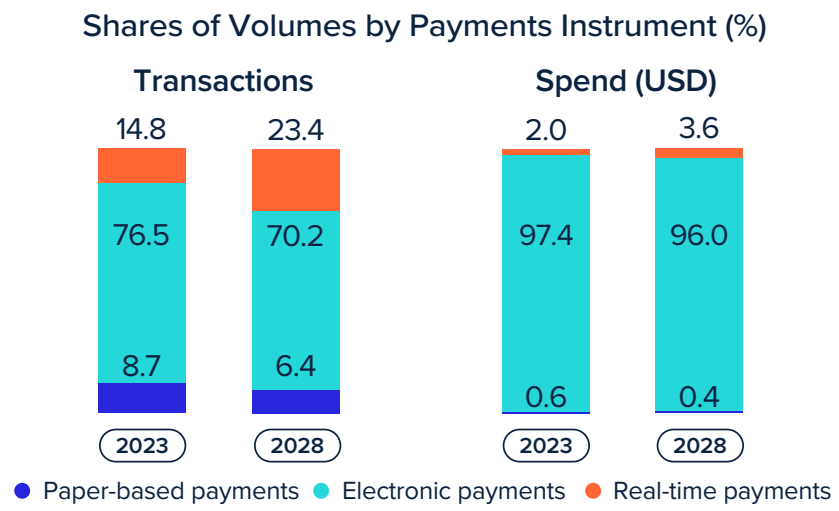
Real-Time Payments Launch

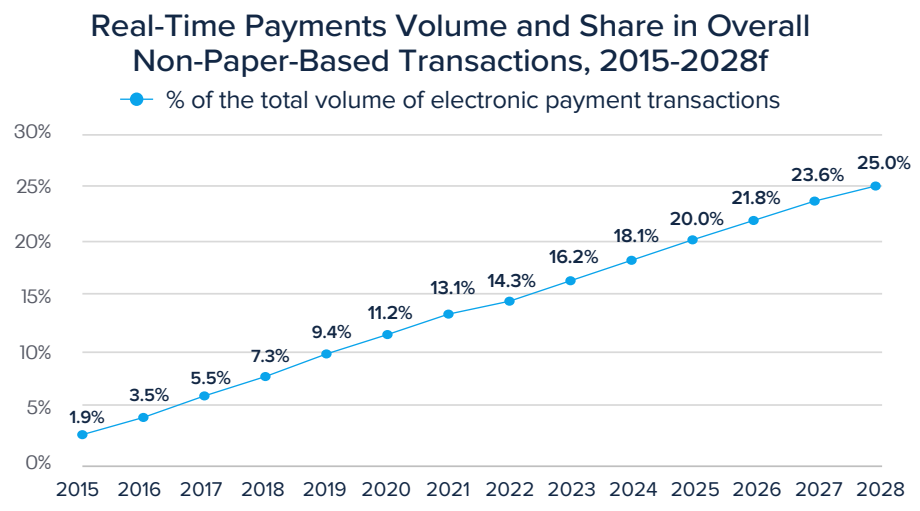
2012

Real-Time Payments Scheme

2012
BIR

Region: **Europe**





Mobile Wallet Trends

52.5%

% of adults who have a mobile wallet and have used it in the past year (2023)

Initiation/Authorization Methods

3

- Bank Account
- Mobile
- QR Code

Real-Time Acceptance

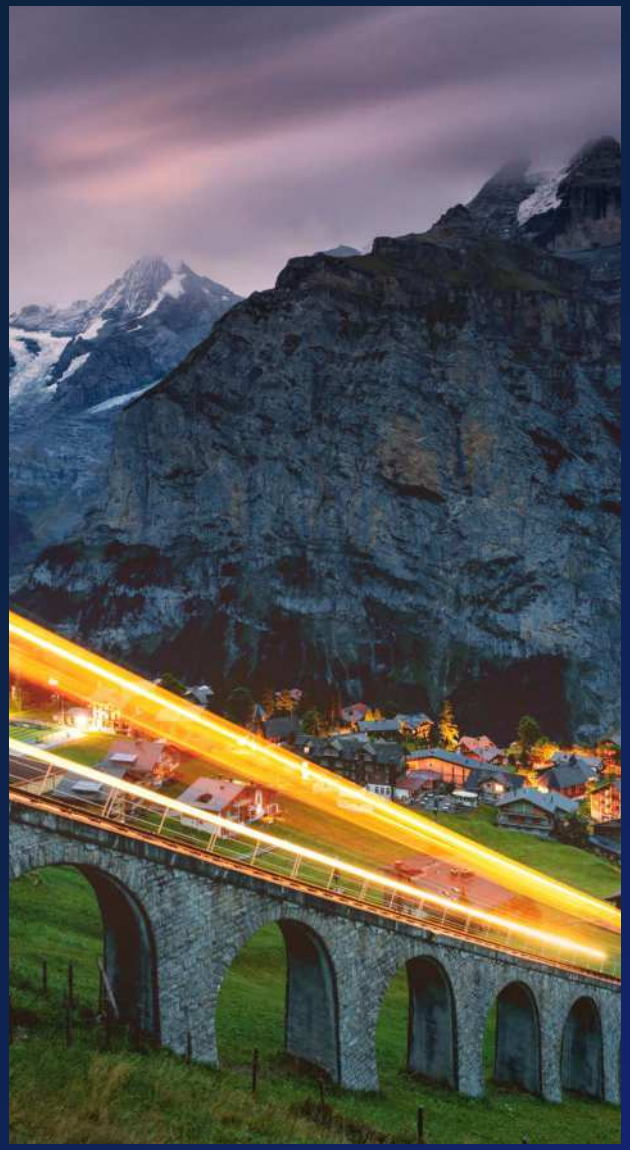
3

- Banks
- Merchants
- P2P

Scheme Messaging

ISO 20022

2024 Prime Time for Real-Time: Switzerland



Real-Time Transactions

2023
618M

2028f
1.5B

2023-2028 CAGR
19.2%

In 2023, instant payments represented a 9.3% share of the total payments volume, making them the smallest payments tool in the market after other electronic and paper-based payments. However, future projections for instant payments are positive — expected to reach 18.8% of the total payments volume by 2028 — with an above-regional average CAGR of 19.2% between 2023 and 2028. The expected growth is due to a number of developments. The TWINT mobile overlay service for the current instant payments scheme continues to be vastly popular. In 2023, TWINT reported more than five million users (out of a population of 8.7 million). Together with the Swiss National Bank, the Swiss Central Infrastructure provider SIX is developing a new instant payments scheme, SIC 5, expected to launch in late 2024 — by then, the large majority of banks will be able to receive instant payments and process them in seconds. Overall, Switzerland remains a relatively typical, if above-average, Western European payments market — that is, one dominated by card-based payments and, to a lesser extent, cash.

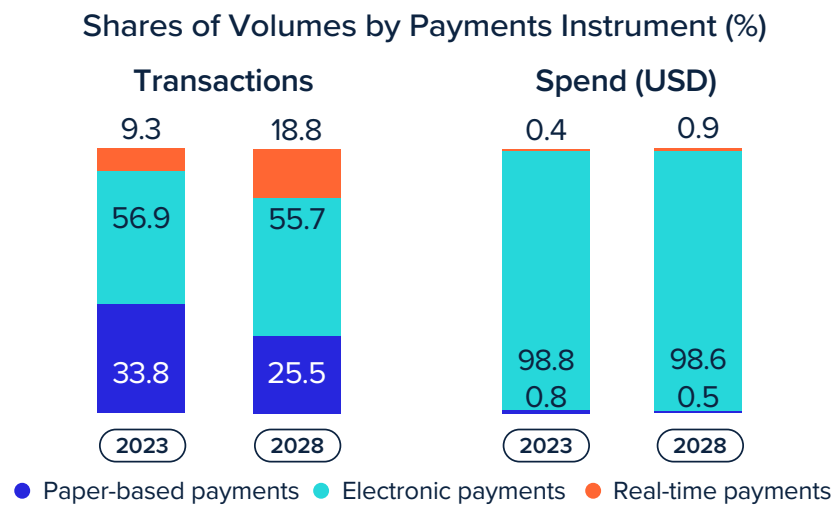
Real-Time Payments Launch

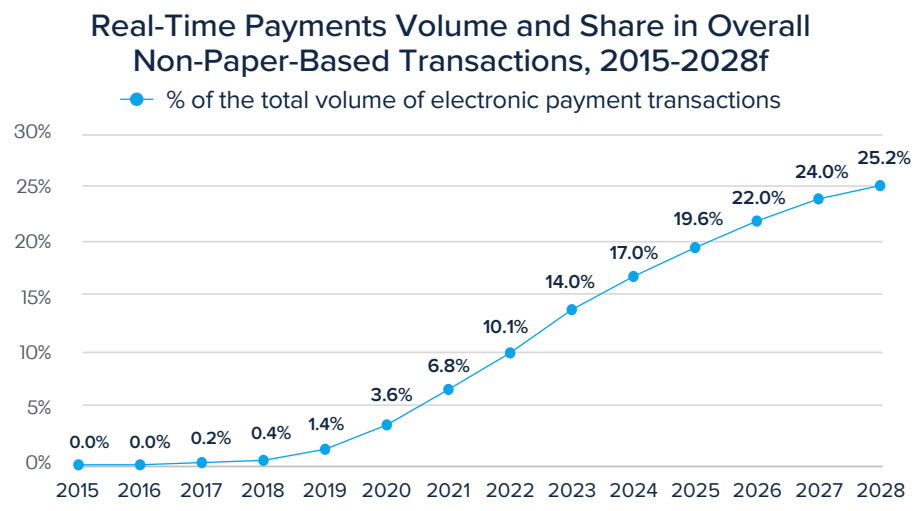
2016

Real-Time Payments Scheme

2016
TWINT

Region: **Europe**





Initiation/Authorization Methods

3

- Bank Account
- Mobile
- QR Code

Real-Time Acceptance

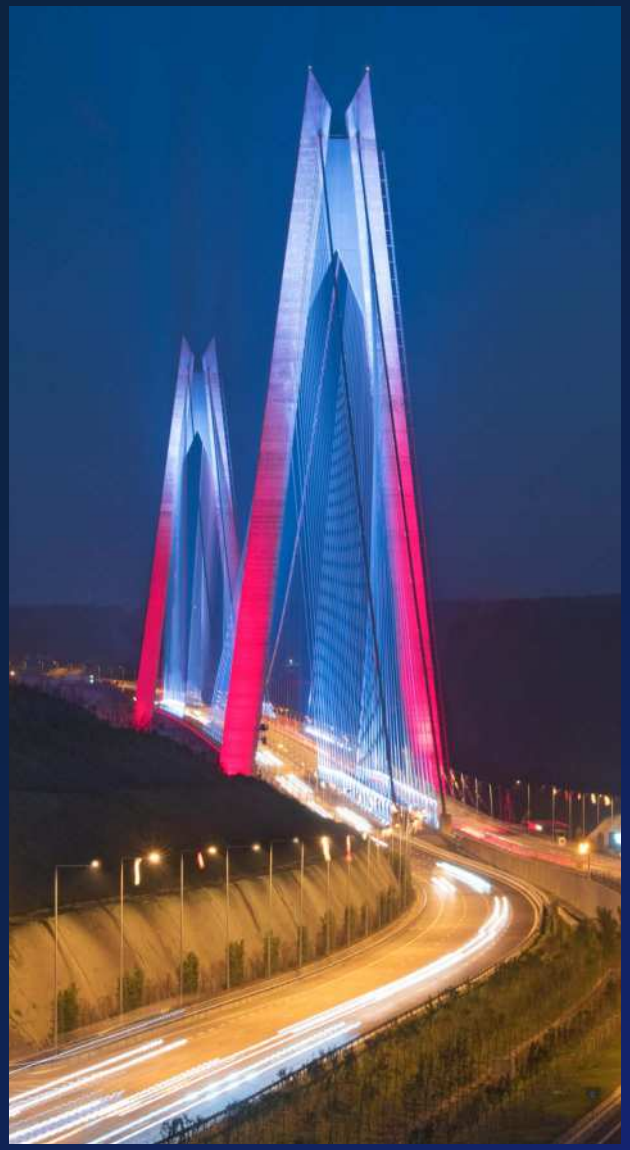
4

- Banks
- Merchants
- P2P
- Billers

Scheme Messaging

ISO 20022

2024 Prime Time for Real-Time: Turkey



Real-Time Transactions

2023
4.1B

2028f
8.8B

2023-2028 CAGR
16.6%

The Central Bank of the Republic of Turkey introduced instant payments in the country with the launch of Retail Payment System (RPS) in December 2012. The scheme supports individual P2P, C2B and B2B transfers as well as bulk transfers, such as salary payments. For many years, transfers through RPS were limited to business hours; this prompted the Central Bank to launch a new instant payments system called Instant and Continuous Transfer of Funds (FAST) in January 2021, making instant payments available 24/7. The new system supports payments using mobile phone number, ID number, or email address and payments using QR codes. Since the launch of FAST, the number of instant payments made in the market has more than doubled, and in 2023, instant payments accounted for 12.3% of all transactions in Turkey.

Real-Time Payments Launch

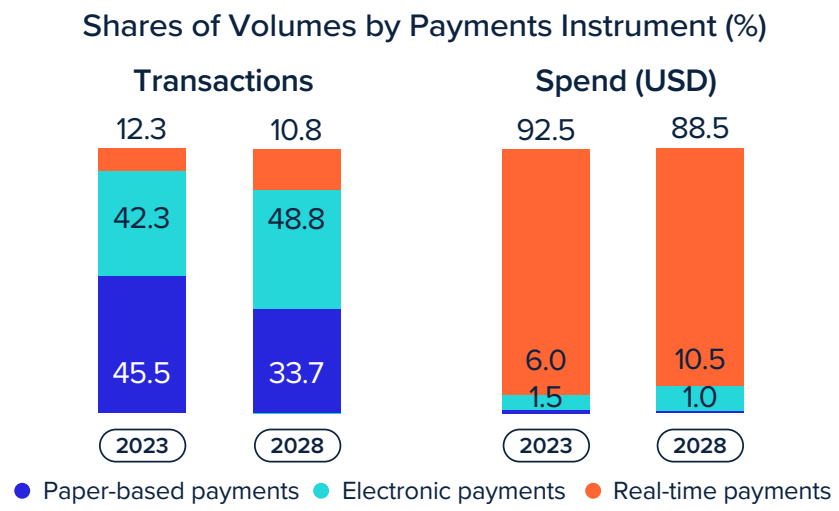
2012

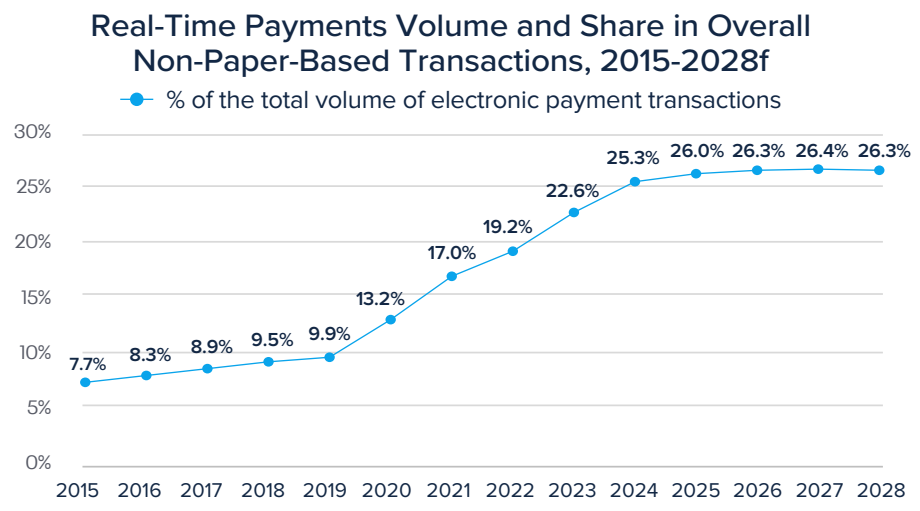
Real-Time Payment Schemes

2012
Retail Payment System

2021
FAST

Region: **Europe**





Mobile Wallet Trends

62.8%

% of adults who have a mobile wallet and have used it in the past year (2023)

Initiation/Authorization Methods

2

- Bank Account
- Mobile

Real-Time Acceptance

4

- Banks
- Merchants
- P2P
- Billers

Scheme Messaging

Proprietary

2024 Prime Time for Real-Time: United Kingdom

Real-Time Transactions

2023
4.6B

2028f
6.3B

2023-2028 CAGR
6.6%

The payments industry in the U.K. is still tied strongly to card payments infrastructure. Real-time payments in the U.K. represented a 9.2% share of total payments volume in 2023, which is above the regional average of 7.8%. However, considering the U.K.'s Faster Payments Service (FPS), launched in 2008, was a regional pioneer, its position in the region is not as strong as might be expected. Although the volume of real-time payments grew 16% year over year from 2022 to 2023, the share of real-time payments in the overall payments mix has declined in the U.K. since 2022. Other means of electronic payments — most notably cards and card-based mobile payments — are outstripping real-time payments in the U.K. By 2028, real-time payments will have overtaken paper-based transactions, reaching a 10.8% share of total payments volume, while electronic payments and paper-based payments will be at 80.9% and 8.3%, respectively. Despite ambitious plans to overhaul real-time payments in the U.K. in the form of the New Payments Architecture (NPA) proposed in December 2017, repeated delays and scope revisions to the NPA have left the status of this project unclear. Other U.K. payment schemes have already migrated to ISO 20022; however, Faster Payments remains on the ISO 8583 standard. Following the Future of Payments Review published in 2023, U.K. instant payments modernization, known currently as NPA, is uncertain, with progress subject to the U.K.'s National Payments Vision due later in 2024.

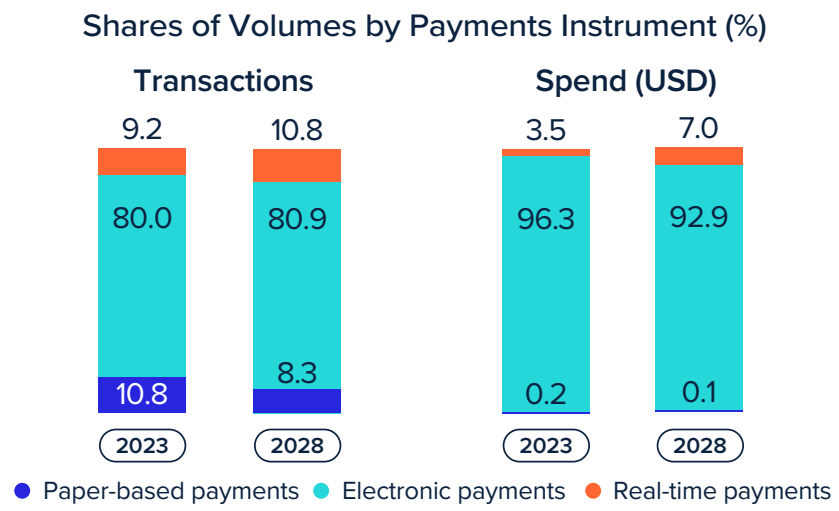
Real-Time Payments Launch

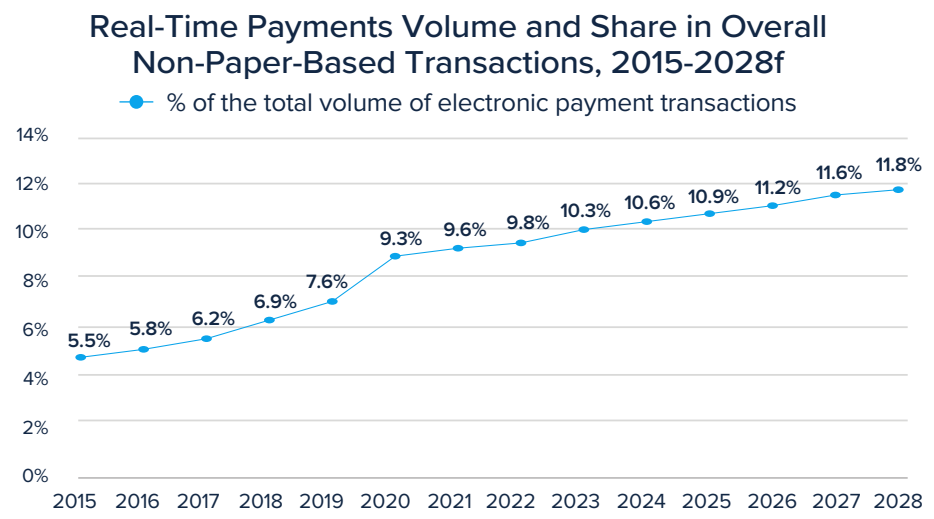
2008

Real-Time Payments Scheme

2008
Faster Payments Service

Region: **Europe**





Mobile Wallet Trends

45.8%

% of adults who have a mobile wallet and have used it in the past year (2023)

Initiation/Authorization Methods

2

- Bank Account
- Mobile

Real-Time Acceptance

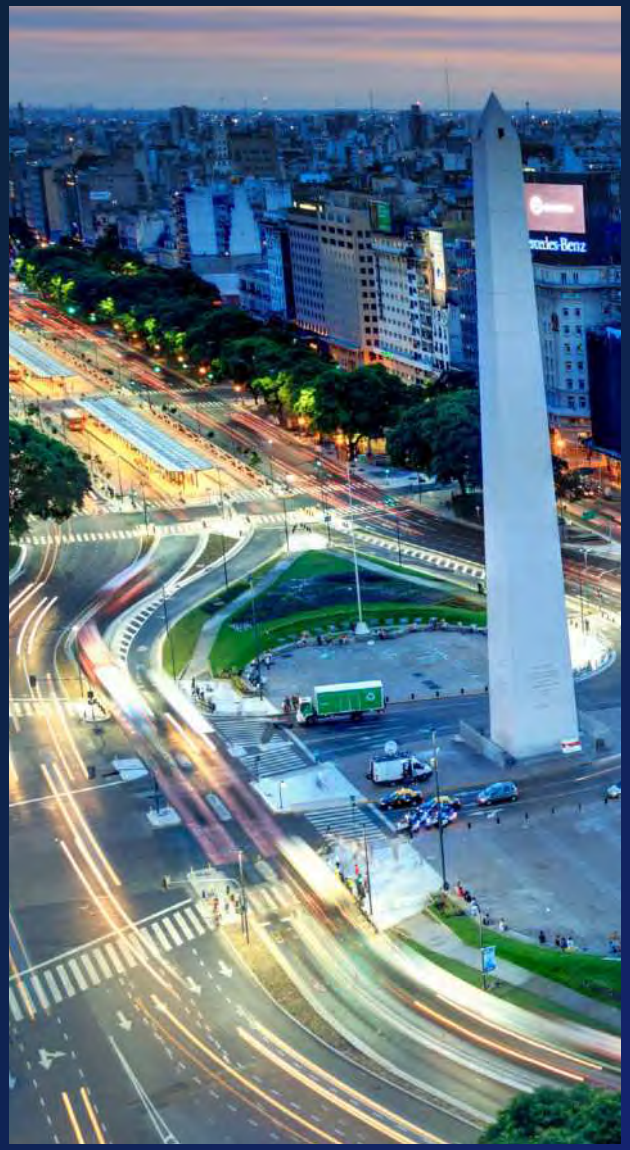
4

- Banks
- Merchants
- P2P
- Billers

Scheme Messaging

ISO 8583

2024 Prime Time for Real-Time: Argentina



Real-Time Transactions

2023
6.7B

2028f
19.9B

2023-2028 CAGR
24.4%

Argentina has three instant payment schemes. The first scheme, Pago Electrónico Inmediato (PEI), was launched in 2016. PEI facilitates P2P transfers between mobile wallets and supports real-time payments at mobile point-of-sale devices and on websites. DEBIN, the second scheme, is an instant direct debit system launched in September 2017. While these systems have been available for quite some time, their contribution to the growth of real-time payments in the country has remained low due to their limitations. In October 2020, the Central Bank of the Argentine Republic (BCRA) approved the Transfers 3.0 scheme to create an open and interoperable payments system. As part of the first stage of implementation of Transfers 3.0 in December 2020, a standardized QR-code payments interface was launched, allowing users to make payments by scanning any QR code with any mobile banking app or digital wallet solution. This change galvanized real-time payments in Argentina, similar to PIX in Brazil, showing the transformative power of mobile payment integrations for real-time payments, especially in historically cash-dependent markets. The system aims to eventually replace DEBIN and PEI. Real-time payments in Argentina already account for 36.6% of all payments — it is also growing at a similar pace as the regional leader Brazil with an anticipated CAGR of 24.4% in terms of transaction volume from 2023 to 2028.

Real-Time Payments Launch

2016

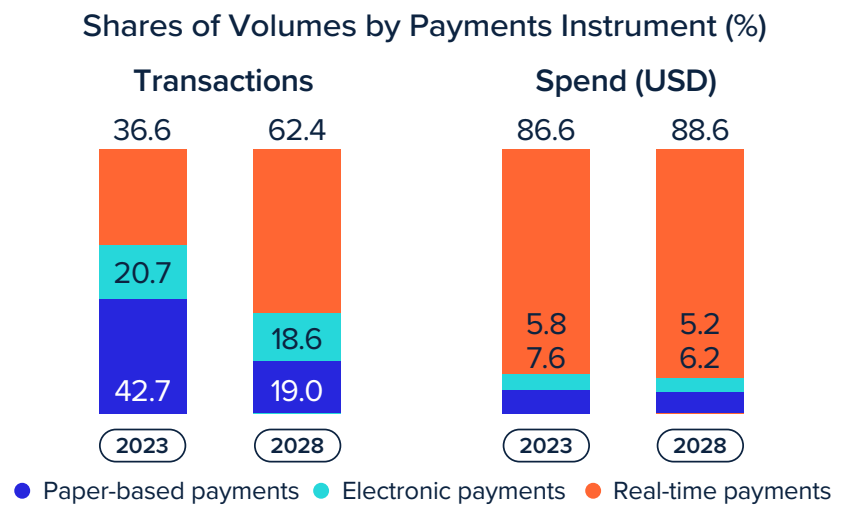
Real-Time Payment Schemes

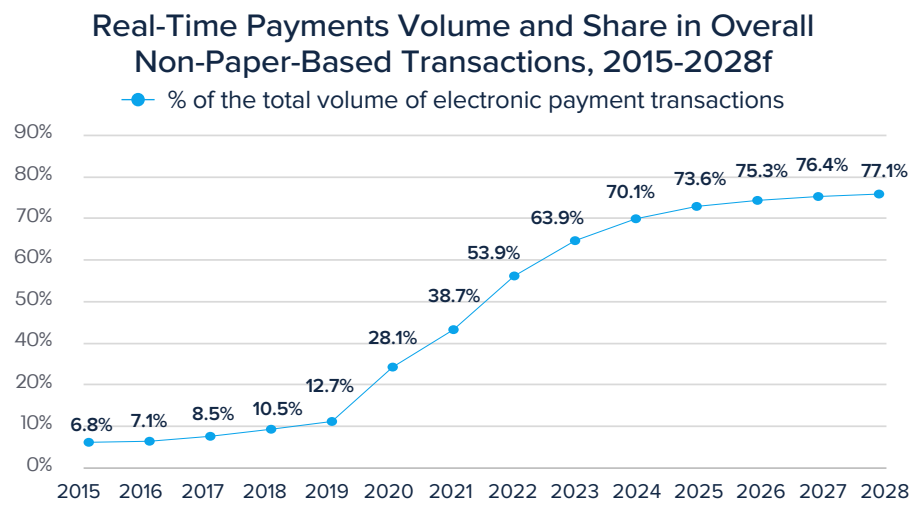
2016
PEI

2017
DEBIN

2020
Transfers 3.0

Region: **Latin America**





Mobile Wallet Trends

84.6%

% of adults who have a mobile wallet and have used it in the past year (2023)

Initiation/Authorization Methods

3

- Bank Account
- Mobile
- QR Code

Real-Time Acceptance

4

- Banks
- Merchants
- P2P
- Billers

Scheme Messaging

Proprietary

2024 Prime Time for Real-Time: Chile

Real-Time Transactions

2023
1.2B

2028f
1.8B

2023-2028 CAGR
8.1%

Real-time payments in Chile have been available since the launch of Transferencias en Línea (TEF) by Centro de Compensación Automatizado (CCA) in 2008. Although Chile remains a cash-dominated society, the country has made significant progress toward electronic payments, supported by government initiatives, raising the banked population and improving payments infrastructure.

In 2023, Chile published the “Fintech Law,” where the Comisión para el Mercado Financiero — Commission for the Financial Market (CMF) — assumes the supervisory role for financial service providers. The objective of the Fintech Law is to promote competition and improve financial inclusion. Open finance and new low-value compensation chambers are key initiatives to enhance the Chilean real-time scheme.

Chile is the fourth largest real-time payments market in South America, but it is also one of the slowest growing in the forecast period, with an expected CAGR of 8.1% from 2023 to 2028.

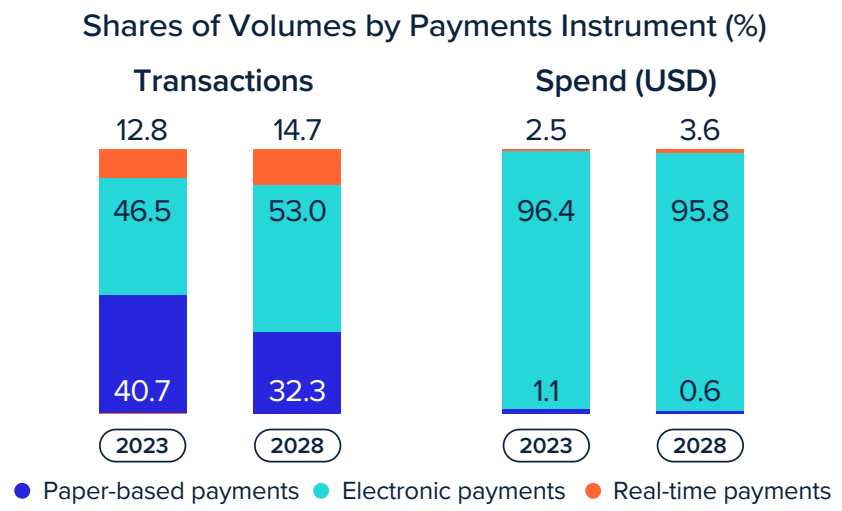
Real-Time Payments Launch

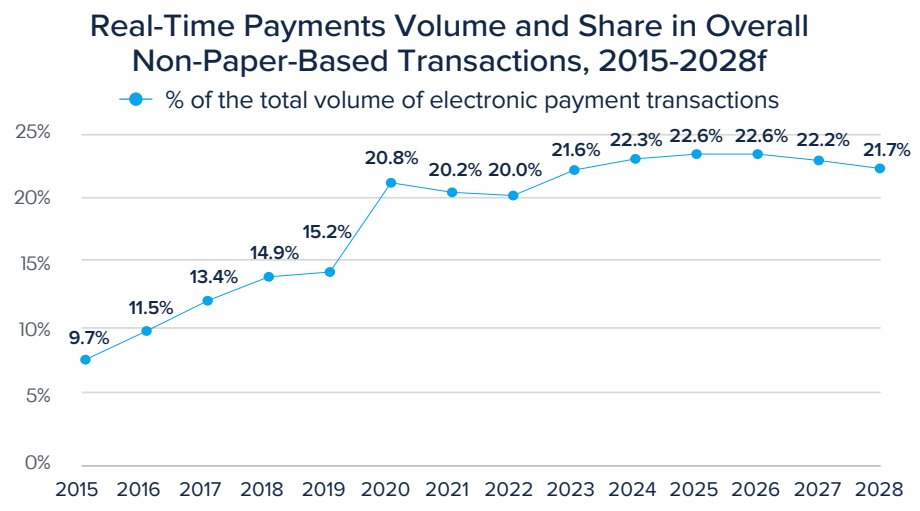
2008

Real-Time Payments Scheme

2008
TEF

Region: **Latin America**





Mobile Wallet Trends

57.7%

% of adults who have a mobile wallet and have used it in the past year (2023)

Initiation/Authorization Methods

3

- Bank Account
- Mobile
- QR Code

Real-Time Acceptance

4

- Banks
- Merchants
- P2P
- Billers

Scheme Messaging

ISO 8583

2024 Prime Time for Real-Time: Colombia

Real-Time Transactions

2023
70M

2028f
417M

2023-2028 CAGR
42.6%

Colombia made real-time payments available with the launch of Transfiya (also known as Transferencias YA) in September 2019. The real-time payments volume and value are relatively low compared to paper-based payments, accounting for 3.7% share in terms of volume, though this is only the second lowest share in the region, ahead of Mexico. Colombia has been continually enhancing Transfiya since its launch. Effective from September 2022, the daily transfer limit was increased to 2 million Colombian pesos (approximately 500 USD), and the number of transactions was increased to 15; B2B and QR code-based P2P payments functionality was added to the Transfiya system in 2023. In the forecast period of 2023 to 2028, Colombia is the second fastest growing in the region after Peru in terms of real-time payments volume, with an expected CAGR of 42.6%.

2023 also witnessed the beginning of a great disruption in terms of immediate payments for Colombia. The Central Bank of Colombia, also known as Banco de la República, has been working to define the new rules of the immediate payments system in the country. Analyzing Brazil's success with PIX, the Central Bank has been following in its footsteps and taking advantage of this experience to implement immediate payments 24x7 and interoperability throughout the financial ecosystem. In turn, they plan to launch a centralized directory of aliases, which will have a great impact on the innovation of new use cases and improve the user experience.

Colombia will become a regional reference for immediate payments, facilitating the entry of new participants (such as fintechs), improving financial inclusion and controlling real-time fraud. ACI Worldwide has been chosen as the main provider to enable real-time payments (with the ISO 20022 standard) in Colombia.

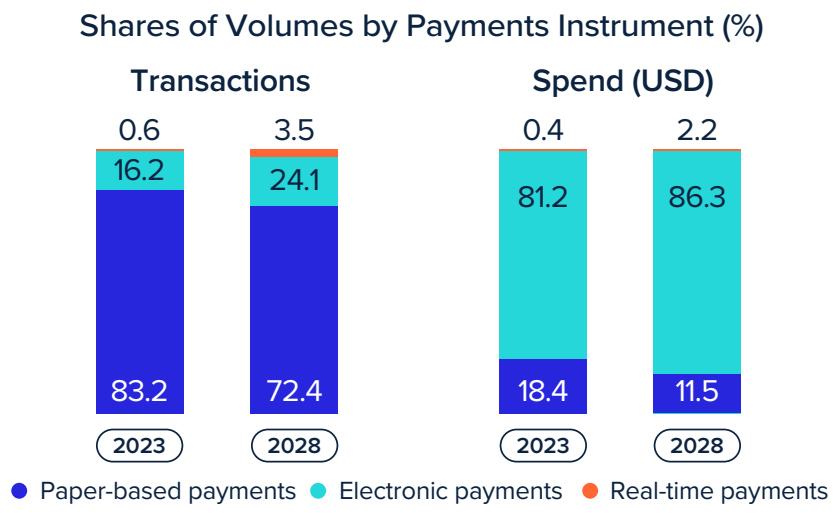
Real-Time Payments Launch

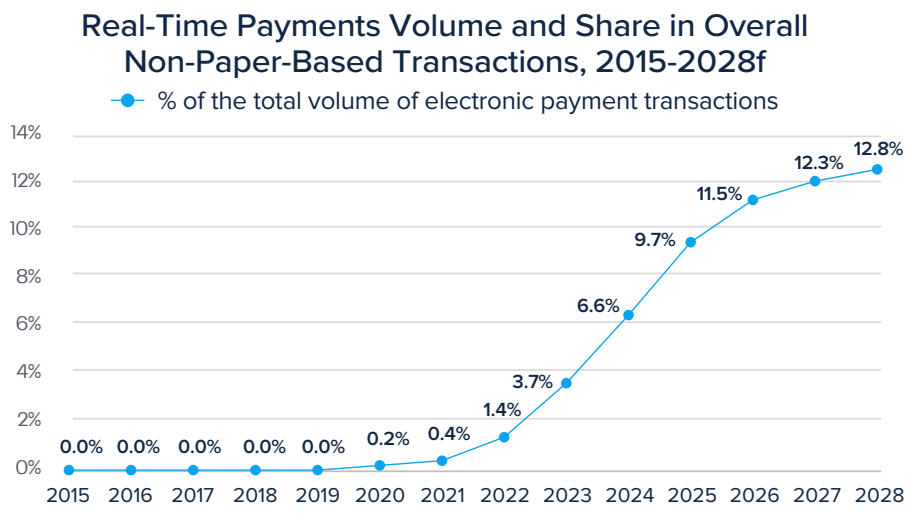
2019

Real-Time Payments Scheme

2019
Transfiya

Region: **Latin America**





Mobile Wallet Trends

69.1%

% of adults who have a mobile wallet and have used it in the past year (2023)

Initiation/Authorization Method

1 Mobile

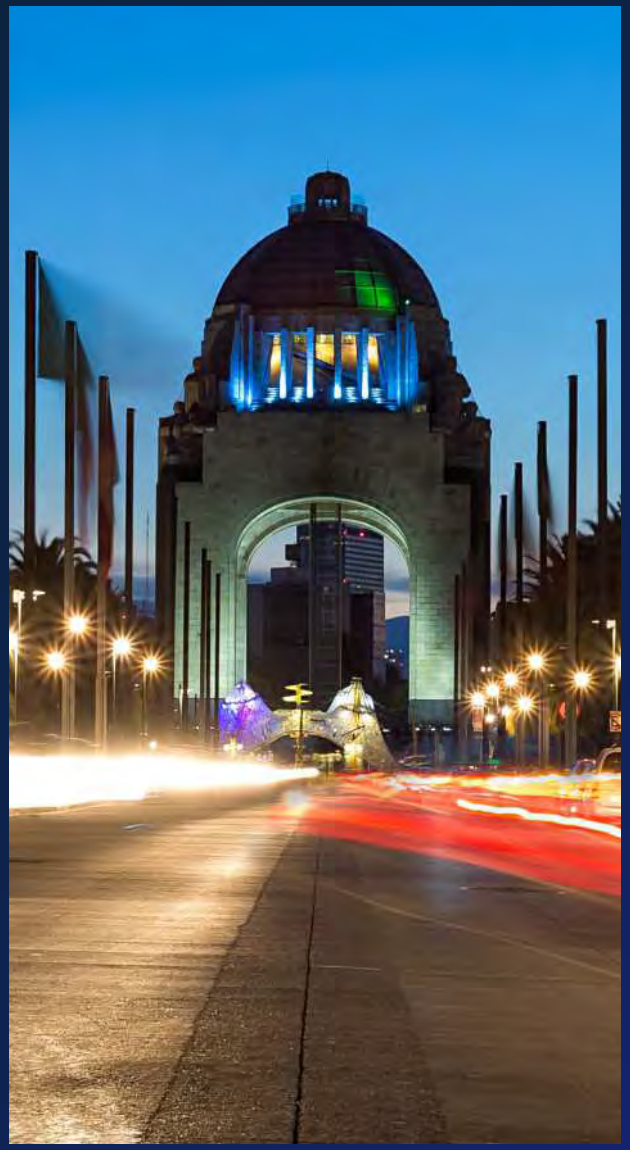
Real-Time Acceptance

3 Banks, Merchants, P2P

Scheme Messaging

Proprietary

2024 Prime Time for Real-Time: Mexico



Real-Time Transactions

2023
3.8B

2028f
5.6B

2023-2028 CAGR
7.9%

Mexico was an early adopter of real-time payments in Latin America, with its Sistema de Pagos Electrónicos Interbancarios (SPEI) system having been in place since 2004. Despite its head start in the region, adoption of real-time payments has been slow due to the country's high unbanked population and lack of awareness about electronic payments. However, the growth of real-time payments gained some traction in recent years, with the launch of Cobro Digital (CoDi) in September 2019, which extended the use of real-time payments to low-value, day-to-day payments through QR codes and NFC technology. Currently, real-time payments hold only an 8.3% share of overall payments in Mexico, far lower than paper-based payments, which dominate the market with a share of 80%. Mexico is, however, one of the slowest-growing markets in the region, with the lowest forecast CAGR in Latin America at 7.9% from 2023 to 2028.

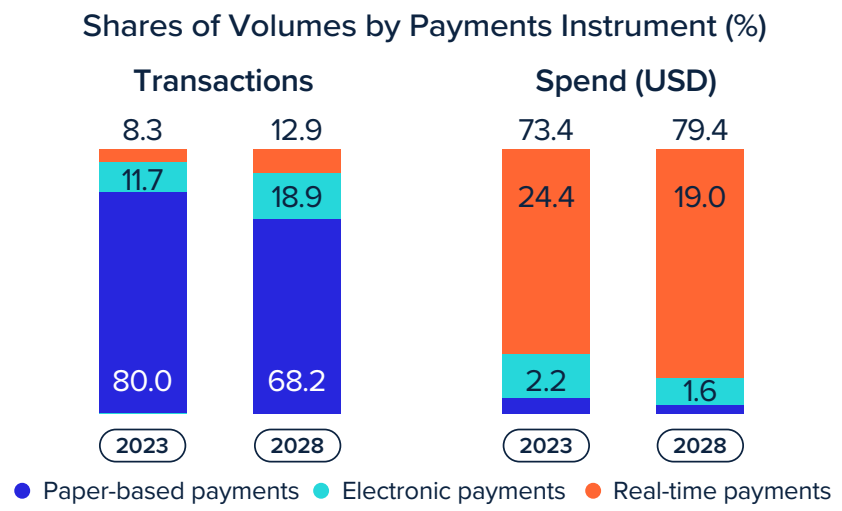
Real-Time Payments Launch

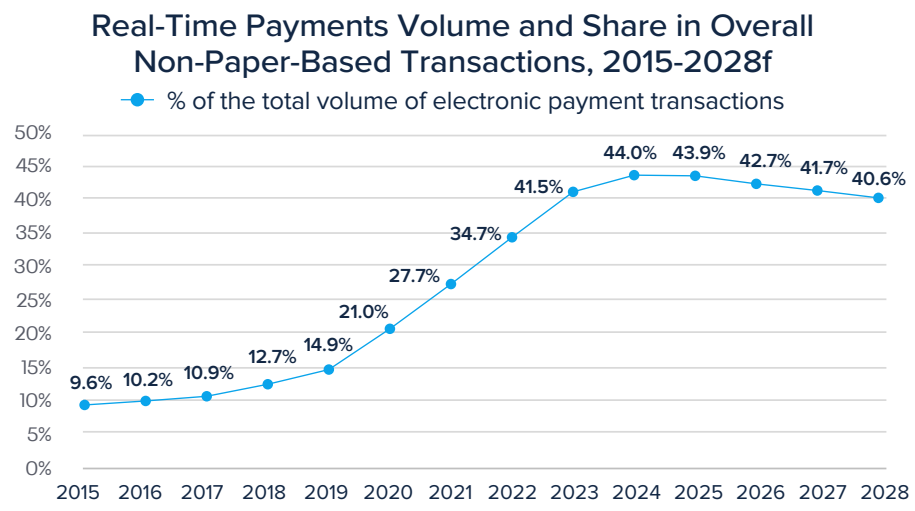
2004

Real-Time Payments Scheme

2004
SPEI

Region: **Latin America**





Mobile Wallet Trends

60.7%

% of adults who have a mobile wallet and have used it in the past year (2023)

Initiation/Authorization Methods

3

- Bank Account
- Mobile
- QR Code

Real-Time Acceptance

4

- Banks
- Merchants
- P2P
- Billers

Scheme Messaging

Proprietary

2024 Prime Time for Real-Time: Peru

Real-Time Transactions

2023
166M

2028f
1.3B

2023-2028 CAGR
51.2%

Real-time payments went live in Peru with the launch of Immediate Interbank Transfers by the Cámara de Compensación Electrónica (CCE) in 2016. Although real-time payments have been available for quite some time in Peru, their adoption and usage have not gained significant traction due to the country's high unbanked population, inadequate banking infrastructure, lack of awareness about electronic payments and preference for cash. Real-time payments accounted for just 0.4% of total payment volume transactions in Peru in 2023, and paper-based instruments, while declining from 2022 levels, held an 87.4% share. The CCE made the instant payments system available 24/7 starting December 7, 2020, and partnered with Mastercard and ACI Worldwide in February 2021 to enable real-time payments with the ISO 20022 standard, removing technological barriers. Along with other measures focused on modernizing the Peruvian system, this is beginning to pay dividends, and the country's real-time payments volume is set to record significant growth, with an expected 51.2% CAGR from 2023 to 2028. However, by 2028, real-time payments will still only account for 2.7% of all transactions in Peru.

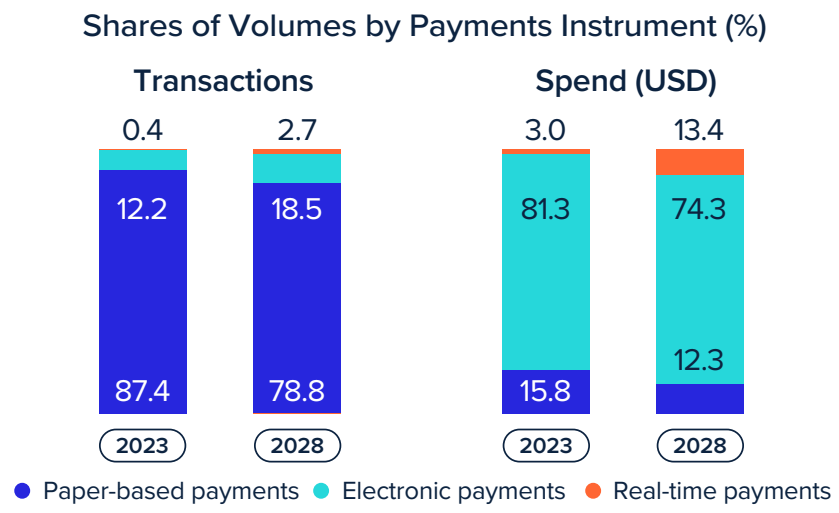
Real-Time Payments Launch

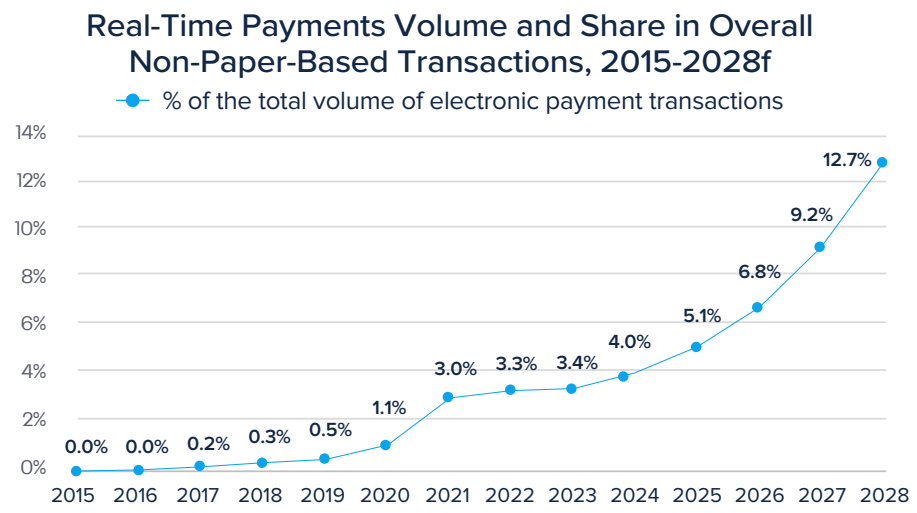
2016

Real-Time Payments Scheme

2016
Immediate Interbank Transfers

Region: **Latin America**





Mobile Wallet Trends

76.6%

% of adults who have a mobile wallet and have used it in the past year (2023)

Initiation/Authorization Method

1 Bank Account

Real-Time Acceptance

4 Banks, Merchants, P2P, Billers

Scheme Messaging

ISO 20022

2024 Prime Time for Real-Time: Bahrain

Real-Time Transactions

2023
352M

2028f
1.5B

2023-2028 CAGR
34.2%

Bahrain is one of the most developed payment markets in the Middle East. Following a major upswing in usage in 2020, real-time payments are a major component of the overall market, accounting for nearly 50% of total payments volume in the country and the majority of all electronic payments. Previously, Bahrain was a cash-dominated market — the COVID-19 pandemic was a pivotal moment in its transition to the widespread use of digital payments, and this trend has continued into the post-pandemic years. The share of overall payments volume accounted for by real-time payment services is expected to reach 77% of all transactions in the market by 2028. While Bahrain is a small market by volume, it is a leader in the Middle East, where it is the clear front-runner in terms of real-time payments development and the adoption of use cases.

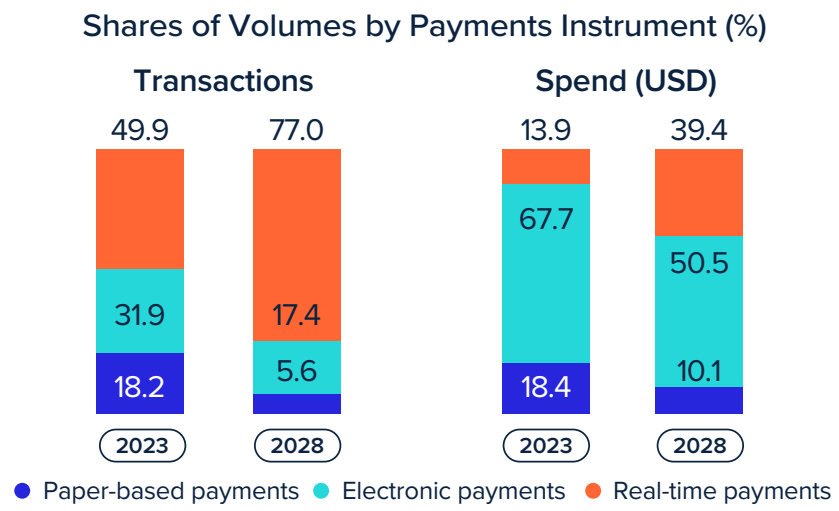
Real-Time Payments Launch

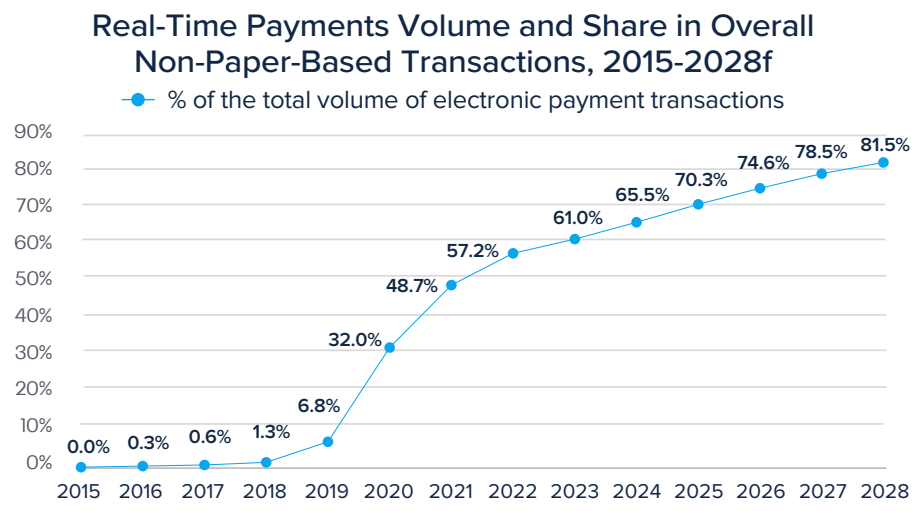
2015

Real-Time Payments Scheme

2015
Fawri+

Region: **Middle East**





Initiation/Authorization Methods

3

- Bank Account
- Mobile
- QR Code

Real-Time Acceptance

4

- Banks
- Merchants
- P2P
- Billers

Scheme Messaging

Proprietary

2024 Prime Time for Real-Time: Oman

Real-Time Transactions

2023
16M

2028f
43M

2023-2028 CAGR
22.7%

Oman launched its mobile-based instant payments system — Mobile Payments Clearing & Settlement System (MPCSS, also known as MPClear) — in July 2017. Although all banks and payment service providers in Oman support the system, it has limitations — it is mobile-only and has low transaction limits. However, in June 2023, a new real-time gross settlement system was launched in Oman, which will soon address the issue of transaction limits and potentially drive adoption for high-value use cases, such as business payments. For low-value payments, however, real-time payments have yet to make a strong case for displacing cash. In 2023, real-time payments accounted for only 2.2% of transactions in the market, while paper-based instruments accounted for 58.2% of transactions. Oman's real-time payments market is expected to grow at a CAGR of 22.7% from 2023 to 2028, which is above the global average, but below all of its regional peers.

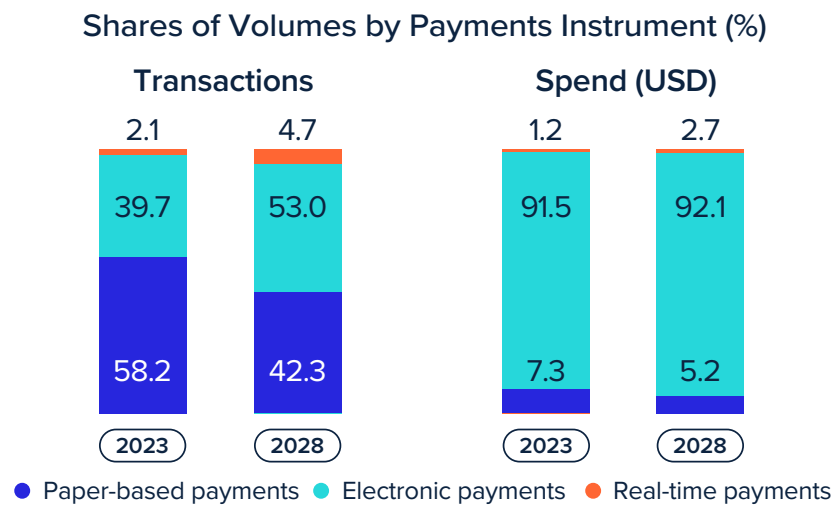
Real-Time Payments Launch

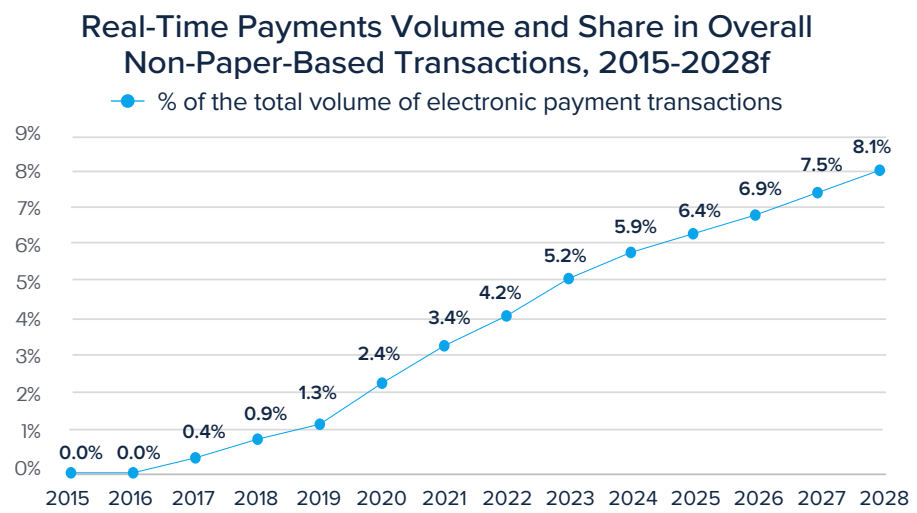
2017

Real-Time Payments Scheme

2017
MPCSS

Region: **Middle East**





Initiation/Authorization Methods

3

- Bank Account
- Mobile
- QR Code

Real-Time Acceptance

3

- Banks
- Merchants
- P2P

Scheme Messaging

ISO 20022

2024 Prime Time for Real-Time: Saudi Arabia

Real-Time Transactions

2023
430M

2028f
1.3B

2023-2028 CAGR
24.6%

Saudi Arabia is one of the latest entrants to the real-time payments space, having launched its sarie system in April 2021. The scheme is supported by all banks operating in Saudi Arabia and enables instant fund transfers between domestic bank accounts through internet banking or mobile banking apps using the recipient's IBAN, mobile phone number, email address, national ID or residency number. Still at a nascent stage, the outlook for real-time payments in Saudi Arabia looks promising, with volumes expected to record a CAGR of 24.6% from 2023 to 2028. The Saudi government's initiatives to modernize the country's payments infrastructure and the accelerated shift toward cashless payments will promote adoption of real-time payments. However, the reduction in cash usage in this market currently benefits other forms of electronic payments more than real-time payments; the share of other electronic payments is expected to increase from 58.1% in 2023 to 67% in 2028.

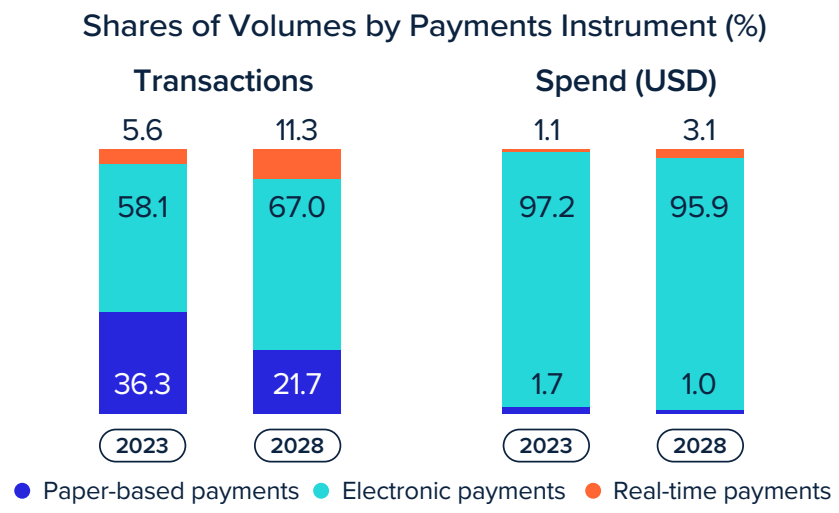
Real-Time Payments Launch

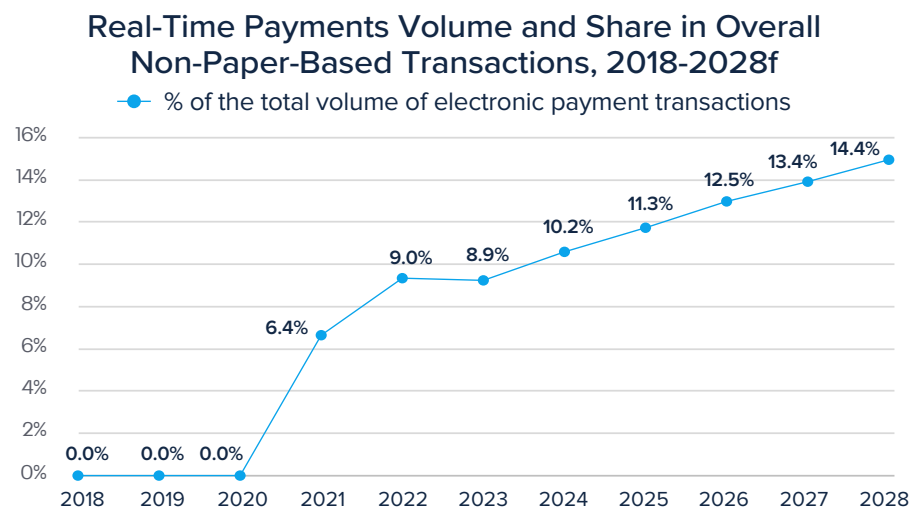
2021

Real-Time Payments Scheme

2021
sarie

Region: **Middle East**





Mobile Wallet Trends

83.9%

% of adults who have a mobile wallet and have used it in the past year (2023)

Initiation/Authorization Methods

2 Bank Account | Mobile

Real-Time Acceptance

2 Banks | P2P

Scheme Messaging

ISO 20022

2024 Prime Time for Real-Time: United Arab Emirates

Real-Time Transactions

2023
58M

2028f
161M

2023-2028 CAGR
23%

The UAE introduced its instant payments system Immediate Payment Instruction (IPI) in mid-2019, focusing mostly on domestic volume. Despite being supported by more than 70 institutions, its usage has not gained significant traction due to limited use cases and traditional preference toward paper-based payment instruments. However, in October 2023, the Central Bank of the UAE launched Aani, a new instant payments platform intended to bolster usage of real-time payments in the country via new features, such as Request to Pay, payments to mobile numbers and QR-code compatibility for payments at the physical point of sale. Currently, real-time payments account for only a 1.5% share of total payments transaction volume, but this is expected to increase to 3.6% by 2028. The impact Aani will have in the market remains to be seen, but mobile-based payments have proven popular in the region, so this service has long-term potential.

Real-Time Payments Launch

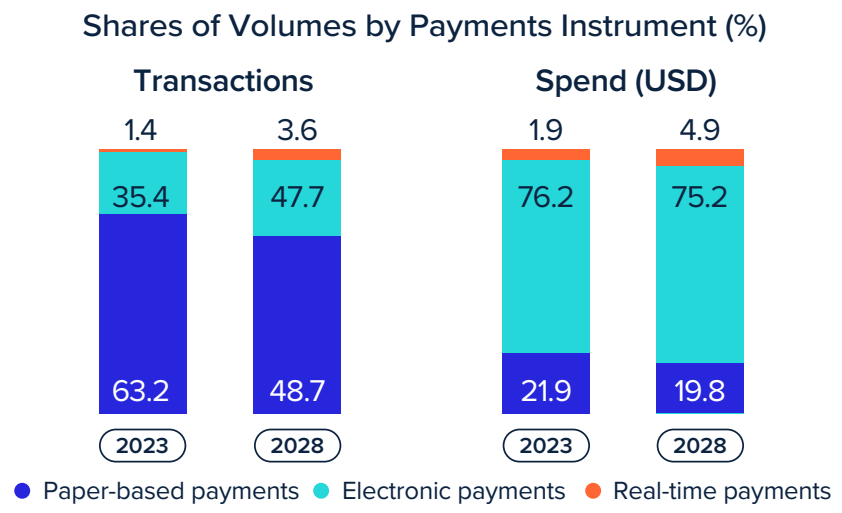
2019

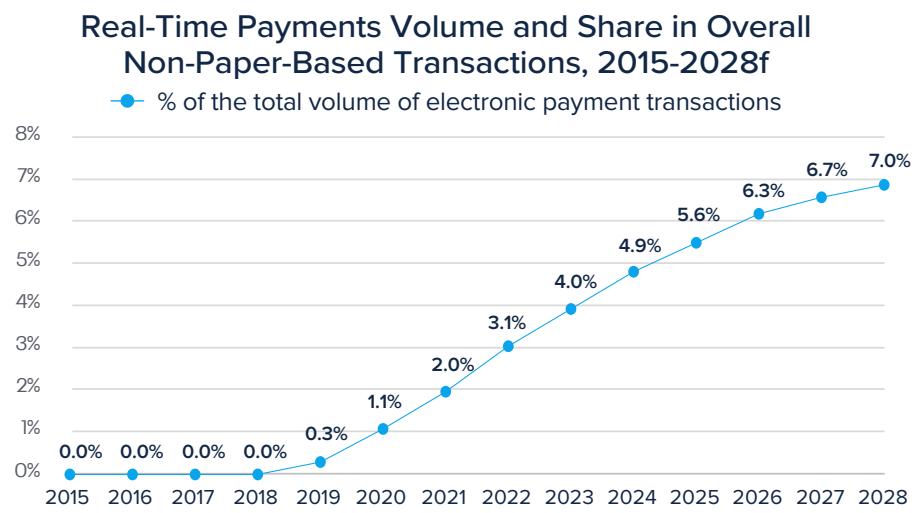
Real-Time Payments Scheme

2019
IPI

2023
Aani

Region: **Middle East**





Mobile Wallet Trends

76.2%

% of adults who have a mobile wallet and have used it in the past year (2023)

Initiation/Authorization Method

1 Bank Account

Real-Time Acceptance

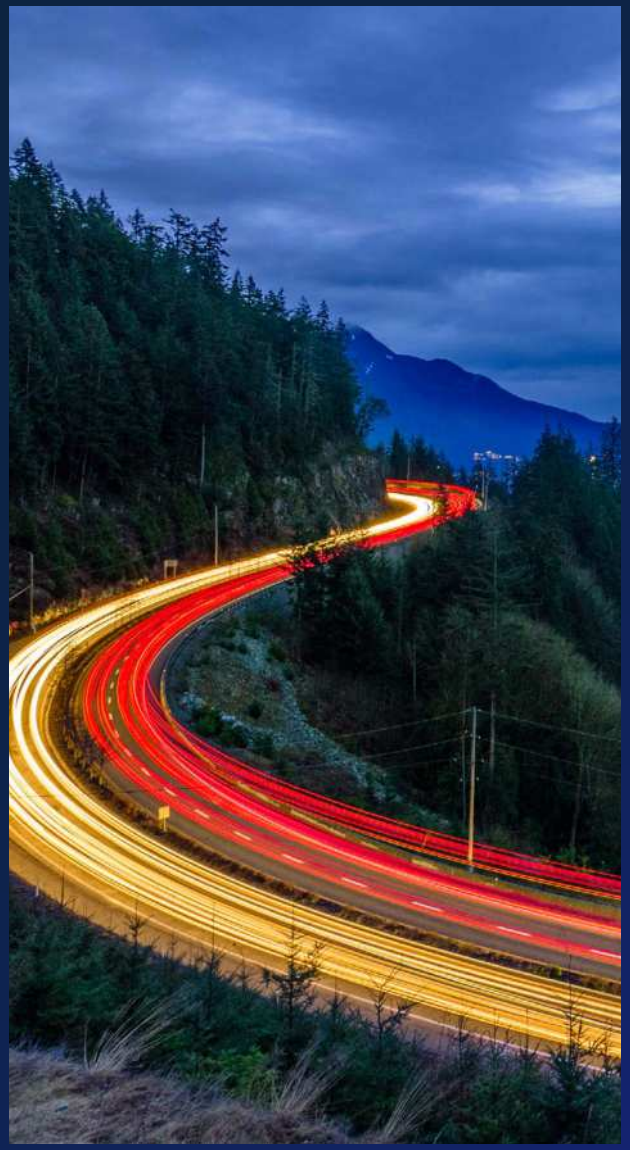
4

- Banks
- Merchants
- P2P
- Billers

Scheme Messaging

ISO 20022

2024 Prime Time for Real-Time: Canada



Real-Time Transactions

2023
1.2B

2028f
1.6B

2023-2028 CAGR
6.2%

Real-time payments have been available in Canada since the launch of Interac e-Transfer in 2002. Adoption and use of real-time payments have gained traction steadily over the last few years, thanks to the wider participation by more than 280 financial institutions as of January 2024 and continued preference for electronic payments among consumers. However, real-time payments still account for a small share of transaction volumes — 5.9% in 2023 — compared to other electronic payments, which have an 83.7% share. This is due to the high adoption and usage of payment cards in Canada, especially contactless cards. The increased contactless payments limit in 2020 has further pushed their usage for day-to-day, low-value transactions, occupying the space that real-time payments otherwise could at the point of sale. Meanwhile, Payments Canada is developing a new and more advanced real-time payments system known as Real-Time Rail, which was expected to go live in June 2023 but has now been delayed pending a second review of the system.

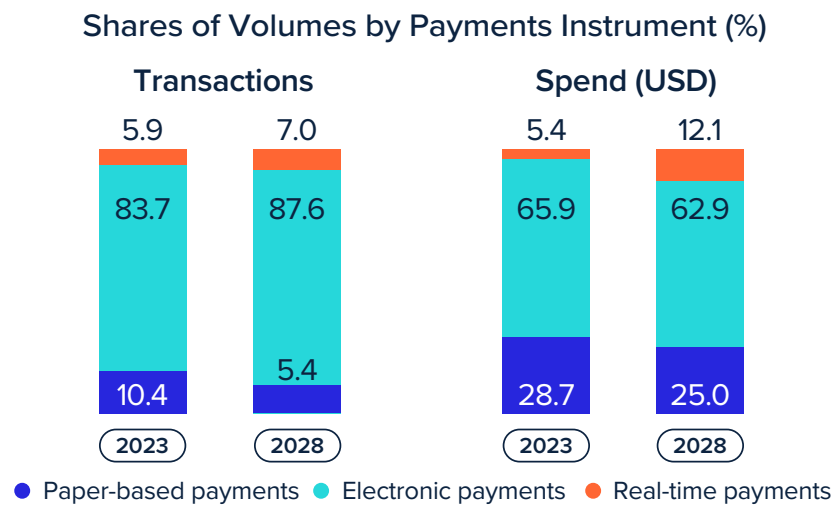
Real-Time Payments Launch

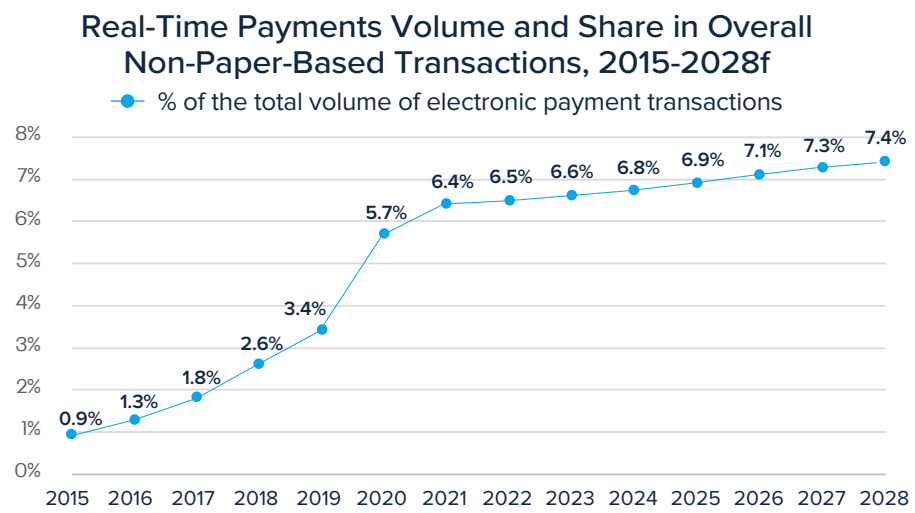
2002

Real-Time Payments Scheme

2002
Interac e-Transfer

Region: **North America**





Mobile Wallet Trends

35.7%

% of adults who have a mobile wallet and have used it in the past year (2023)

Initiation/Authorization Method

1 Mobile

Real-Time Acceptance

4 Banks, Merchants, P2P, Billers

Scheme Messaging

ISO 20022

2024 Prime Time for Real-Time: United States

Real-Time Transactions

2023
3.5B

2028f
13.9B

2023-2028 CAGR
31.7%

Real-time payments are still in their infancy in the U.S., accounting for only a 1.5% share of the total payments volume in 2023. Instant payments in the U.S. are negligible compared to paper-based payments and non-real-time electronic payments, at 18% and 80.5% of all transactions, respectively. The growth of real-time payments is expected to ramp up, largely due to the launch of the FedNow® Service, a fully centralized instant payments infrastructure, and The Clearing House's RTP Network. As the FedNow Service embraces merchant retail use cases as well as B2B and B2C use cases, they will fuel adoption across both instant payment rails. Real-time payments are expected to grow at a CAGR of 31.7% (by volume of transactions) between 2023 and 2028. The growth of real-time payments in the U.S. will benefit from the gradual overall decline in cash usage, with faster digital payment options that will settle payments over instant payment rails becoming more mainstream. Growth will come more quickly in the coming years, but there is still a long way to go to reach levels of usage seen in some European markets. However, the U.S. is such a significant market overall that in 2023, it was the twelfth largest real-time payments market by number of transactions.

Real-Time Payments Launch

2017

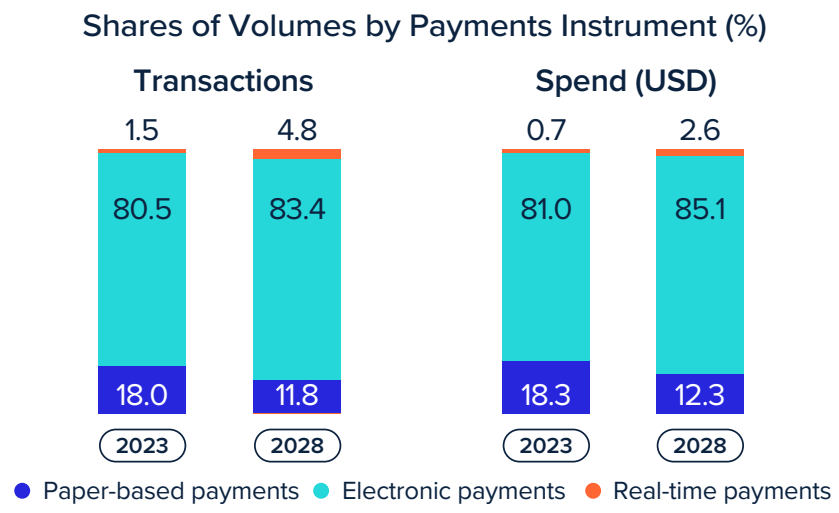
Real-Time Payment Schemes

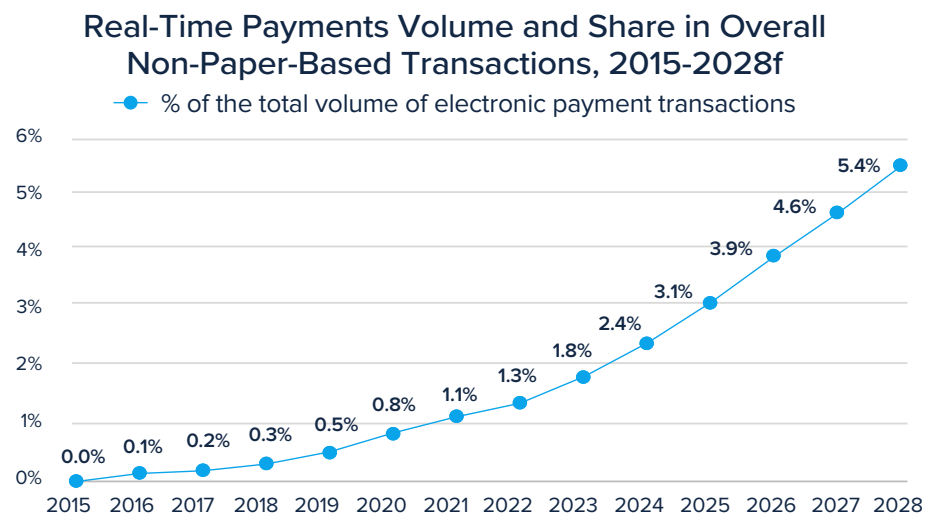
2017
Real-Time Payments

2017
Zelle

2023
FedNow® Service

Region: **North America**





Mobile Wallet Trends

46.7%

% of adults who have a mobile wallet and have used it in the past year (2023)

Initiation/Authorization Methods

2

- Bank Account
- Mobile

Real-Time Acceptance

4

- Banks
- Merchants
- P2P
- Billers

Scheme Messaging

ISO 20022

About GlobalData

GlobalData is a leading provider of data, insights and analysis for the world's largest industries, covering 17 industry verticals including banking and payments. GlobalData's industry-leading data rests on a foundation of "Gold Standard" data derived from trusted central sources and a team of expert analysts in each sector.

This report leverages GlobalData's instant payments market sizing data as well as insights on adoption of mobile wallets, use of online payment tools and consumer experiences of fraud from GlobalData's Financial Services Consumer Survey.

The instant payments market sizing data is a custom-built dataset developed specifically for the Prime Time for Real-Time report series, based on a core methodology of secondary research into any publicly available data on the development of real-time payment systems available from the entities that run those systems, or from central banks. These numbers are then cross-checked against GlobalData's in-house datasets covering overall payments by type, standardized and adjusted where necessary based on analyst input. To the historic and current-year data derived from this methodology, we apply our proprietary forecasting model based on tested correlations of the target variables against multiple macro-economic variables and then it is reviewed by our team of expert analysts. Forecasts are provided five years into the future under this model, from the base year (2023 in this report).

GlobalData's annual Financial Services Consumer Survey is a key source of unique information, complementing GlobalData's deep market-level and alternative datasets to provide a complete picture of the financial services industry. The most recent survey, the 2023 Financial Services Consumer Survey, was conducted online in Q1-Q2 2023 among 49,751 consumers in 51 markets globally. The survey explores global consumer behaviors, purchasing preferences and attitudes across the most important banking products. Every year, respondents are recruited via an online panel. Quotas are set to ensure samples are nationally representative. The number of respondents to any particular question depends on individuals' characteristics, their financial product holding and their interest in that area. Our questionnaire has been developed over a decade of iteration and client input, leading to a focused script that covers a wide range of financial services topics. Questions are designed with an emphasis on being closed-ended questions with a natural language used throughout. Our questionnaire aims to strike a balance between providing useable time-series data from questions that remain consistent over time and questions that address emerging themes in financial services.

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Source: Prime Time for Real-Time, The Global Real-Time Payments Report by ACI Worldwide and GlobalData, 2024