

IT'S  
PRIME TIME  
FOR  
**REAL-TIME**  
2023

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# Introduction

## *The Next Phase of Real-Time Payments Growth Is Here*

Real-time payments are at the heart of the rapidly evolving payments ecosystem. Today, most major markets either already have real-time payment schemes in place or in development as governments seek to unlock the economic benefits of more efficient payments, and the growth of real-time payments is accelerating across the globe.

The numbers speak for themselves. Overall real-time transaction volumes around the world grew 63.2% in 2022 to reach a new high of 195.0B<sup>i</sup> transactions and are forecasted to reach 511.7B by 2027, representing a compound annual growth rate of 21.3%. By 2027, real-time payments are expected to account for 27.8% of all electronic payments globally, up from 18% in 2022.

Real-time payments are the backbone of modern economies. Those who have implemented real-time payments have profoundly changed the way consumers, businesses and governments make and receive payments and conduct their financial affairs. Governments that facilitate and drive real-time adoption show the highest growth rates of real-time payments — as well as their economies.

ACI Worldwide is pleased to present the fourth edition of our Prime Time for Real-Time report, the definitive view of real-time payments. In partnership with GlobalData, we are proud to provide critical insights into the factors that continue to drive adoption of real-time payments in 52 countries and the significant benefits that real-time payments bring to global economies.

### **New real-time payment players are leading the charge**

Previous installments of ACI's annual Prime Time for Real-Time report tracked the proliferation of real-time payments around the world by measuring transaction volumes across key global markets. Last year, the report explored the economic impact of real-time payments, revealing for the first time how real-time payments boost economic growth, prosperity and financial inclusion. As real-time payments enter a new phase of growth in 2023, we're taking a closer look at consumer adoption in

the markets that have found the right formula to drive widespread consumer, merchant and corporate adoption by combining strong government mandates or industry-level collaboration with compelling use cases, from in-store and online QR-code payments to Request to Pay and bill payments.

By 2027, Bahrain — a country of just 1.5 million people — is forecasted to have the highest level of real-time payments consumer adoption, with 83.3 real-time transactions per head per month (TPHM) compared to 23 in 2022, taking the top spot from Thailand and keeping Brazil in second place — both significantly larger economies.

The larger Western economies included in this year's report have seen lower levels of consumer adoption, both globally and within their regions. The U.K., Canada, Germany, the U.S., Italy and France — all top 10 global economies by GDP<sup>ii</sup> — placed 9th, 19th, 29th, 33rd, 36th and 41st, respectively, for TPHM in 2022. In our Global Top 10: Consumer Adoption of Real-Time, we instead find smaller European nations (Sweden, Denmark and the Netherlands) and four markets in Asia (Thailand, the Republic of Korea, India and Malaysia).

The world's major economies have rarely extended the use of real-time payments beyond peer-to-peer credit transfers. The good news for these major economies: the TPHM achieved by our global top 10 illustrates the scale of potential growth they can still unlock.

### **Diverse factors are driving consumer adoption**

Consumers and businesses around the world are hungry for cheaper, faster and more efficient ways to pay. Payments are increasingly becoming embedded, with today's customers looking for a hyper-connected, frictionless customer experience. As more consumers around the world expect to make and receive payments far more safely and at minimal cost, governments, banks and merchants aim to maximize adoption by launching or fine-tuning sophisticated value-added use cases on top of real-time payment rails.

This year's Prime Time for Real-Time report uncovered three primary drivers for consumer adoption:

- **A strong brand identity** around real-time payments and compelling use cases targeted at overcoming the ingrained payment habits of the general population.
- **Merchant acceptance.** Merchants have many incentives to accept real-time payments, from greater liquidity to substantial cost savings to reduced risk of fraud.
- **Government implementation is key.** In countries where governments make and accept real-time payments — such as when disbursing benefits or collecting taxes — we see much higher volumes and accelerated consumer adoption.

#### **Government interventions are on the rise**

Banks, governments and regulators aim to maximize adoption by launching or fine-tuning sophisticated value-added use cases to run on real-time payment rails.

In markets where consumer adoption is lower, governments and regulators are learning from real-time payment success stories like Brazil, where the government mandated banks to participate in the PIX real-time payments scheme. These governments and regulators see the economic dynamism that a modern payments ecosystem brings and are looking to spark adoption in their countries through equivalent interventions.

At the time of writing, the EU Commission has proposed new legislation mandating banks in member states to offer instant payments at the same or lower cost than standard credit transfers. Such a law could be highly disruptive in a market where charges of up to EUR 1.50 are common for instant payments and could help drive more use cases for customers to use instant payments.

In the U.S., a market where regulators strongly favor non-intervention, the Federal Reserve is launching its highly anticipated FedNow system in July 2023 to expand real-time access in the U.S. — a highly significant milestone for real-time. Throughout the Middle East and Asia, governments are also rolling out new mandates and regulations to boost the adoption of real-time.

#### **What banks can do next**

Banks in markets that still have a strong opportunity for real-time payments growth should use this report to better understand the role of real-time payments in modern economies, today and in the future.

Forecasts indicate continued growth in card transactions in the long-term, and in several years' time, they will still make up the vast majority of electronic payments in most countries.<sup>iii</sup> While they understand the staying power of credit cards, governments appear more committed than ever to making real-time payments the heart of their future economic strategies.



**Debbie Guerra**  
Chief Product Officer  
ACI Worldwide

<sup>i</sup> GlobalData

<sup>ii</sup> [https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?most\\_recent\\_value\\_desc=true](https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?most_recent_value_desc=true)

<sup>iii</sup> GlobalData

# Executive Summary

## The Next Phase of Real-Time Payments Growth Is Here

Government intervention and value-added use cases driving adoption worldwide

**1** Real-time payments are entering a new phase of growth. Consumer adoption is on the rise, as many countries have launched successful overlay or Request to Pay services, driving real-time volume growth to record highs, with India, Brazil and Bahrain taking the lead. Successful real-time services are reaching ubiquity and have profoundly changed the way consumers, businesses and governments make and receive payments and conduct their financial affairs.

**2** Other countries are taking notice of these success stories. There is likely to be continued pressure from governments and regulators to adopt real-time payments — in many markets and regions, they are taking steps to drive greater adoption of real-time payments, because they see them as a path to drive economic growth. Our report shows that government mandates and incentives are key for successful real-time transformation of payment ecosystems.

**3** Targeted use cases drive consumer adoption, with consumers and businesses around the world hungry for cheaper, faster and more efficient ways to pay. Merchant adoption and acceptance of real-time payments is on the rise, as more merchants realize that real-time payments create significant efficiencies.

**4** Real-time payments are part of the digital proposition of modern financial institutions — they secure competitiveness and increase customer stickiness. That means banks need to make the most efficient use of their real-time rails to avoid falling behind any competitors that do adopt real-time payments and subsequently reap the benefits.

### Global Real-Time Payment Transactions

**195.0<sup>2022</sup>B** transactions  
YoY growth of **63.2%**

### Global Forecast 2027

**511.7<sup>2027</sup>B**  
CAGR of **21.3%** between 2022 and 2027

By 2027, Real-Time Payments Will Account for **27.8%** of all **electronic payments globally**



### Top Five Real-Time Payment Markets Globally

#### India

**89.5<sup>2022</sup>B**  
Real-Time Payment Transactions

**76.8<sup>2021-2022</sup>%**  
YoY growth



#### Brazil

**29.2<sup>2022</sup>B**  
Real-Time Payment Transactions

**228.9<sup>2021-2022</sup>%**  
YoY growth



#### China

**17.6<sup>2022</sup>B**  
Real-Time Payment Transactions

**0.9<sup>2021-2022</sup>%**  
YoY growth



#### Thailand

**16.5<sup>2022</sup>B**  
Real-Time Payment Transactions

**63.4<sup>2021-2022</sup>%**  
YoY growth



#### South Korea

**8.0<sup>2022</sup>B**  
Real-Time Payment Transactions

**9.6<sup>2021-2022</sup>%**  
YoY growth



# India and Brazil Are the Undisputed Real-Time Payment Leaders

## India

accounted for



**46%** <sup>2022</sup> of all **real-time transactions worldwide** in 2022

## Brazil

accounted for



**15%** <sup>2022</sup> of all **real-time transactions globally** in 2022

## Brazil

was the third fastest growing real-time payments market in 2022, with a **YoY growth of**

**228.9%**

## Regional Comparison, 2022-2027

Middle East, Africa and South Asia is the top region for real-time payments volume and share of electronic payments due to India specifically. Latin America is the top growth market owing to Brazil, plus countries like Peru, Argentina and Colombia that are among the top 10 growth markets globally.

REGION	2022		2027		CAGR (2022-2027)
	Real-Time Payments Volume (billions)	Real-Time Payments Share of Electronic Payments Total (%)	Real-Time Payments Volume (billions)	Real-Time Payments Share of Electronic Payments Total (%)	
Middle East, Africa and South Asia	95.7	72.2%	249.8	79.3%	21.2%
Asia Pacific	49.2	11%	327.8	12%	14.1%
Latin America	33.0	33%	119.5	56%	29.3%
Europe	13.2	7%	34.2	13%	21%
North America	3.9	2%	13.0	5%	27.3%

## Global Top 10: Consumer Adoption of Real-Time

Rapid consumer adoption in countries like Bahrain, Brazil and Thailand illustrates the speed with which adoption can take off.

*Real-time payment transactions per month per head of population (age +15)*

Forecast 2027			
1	Bahrain		83.3
2	Brazil		51.8
3	Thailand		43.6
4	South Korea		21.9
5	Netherlands		21.7
6	Sweden		18.9
7	India		18.2
8	Denmark		15.5
9	Finland		15.2
10	Hong Kong		15.0

## Global Top 10: Mobile Wallet Adoption

Mobile wallets are particularly popular in Asia and the Middle East, as our league table shows.

*Mobile wallet users (% of survey sample)*



2022			
1	Thailand		92%
2	Vietnam		91%
3	India		90%
4	Hong Kong		89%
5	Philippines		88%
6	Malaysia		86%
7	China		84%
8	Indonesia		82%
9	Saudi Arabia		80%
10	Taiwan		78%

## Global Top 10: Fraud Incidence Rate

New types of fraud such as confidence tricks are on the rise, while identity theft and card details theft are declining.

*Confidence tricks: Global Average 26.9%*

*Identity theft: Global Average 11.6%*

*Card details theft: Global Average 26.3%*

2022			
1	India		44.6%
2	Nigeria		40.4%
3	Saudi Arabia		33.2%
4	U.S.		30.7%
5	Australia		28.1%
6	Thailand		25.7%
7	Singapore		25.3%
8	Canada		24.6%
9	New Zealand		24.4%
10	Ireland		24.3%

# Real-Time Payment Transactions per Month

*By head of population over 15 years old*

The league tables on the following pages highlight the level of consumer adoption of real-time payments globally and across different regions. Our Global Top 10 for 2022 and 2027 show the positive impact on real-time payments adoption of strong government mandates and concerted industry collaboration, widespread merchant adoption,

strong brand recognition for a scheme or related digital wallets, and mobile-first experiences. Many markets, such as Bahrain, Brazil and Thailand are relatively recent enablers of real-time payments, illustrating the speed with which adoption can become widespread when conditions are right.

## Global Top Ten: Real-Time Payment Transactions per Head per Month (TPHM)

Global Ranking 2022				Global Ranking 2027			
Global Ranking	Country	TPHM		Global Ranking	Country	TPHM	
1	Thailand	23.0		1	Bahrain	83.3	
2	Bahrain	19.1		2	Brazil	51.8	
3	South Korea	14.7		3	Thailand	43.6	
4	Brazil	14.2		4	South Korea	21.9	
5	Sweden	9.5		5	Netherlands	21.7	
6	Denmark	8.8		6	Sweden	18.9	
7	India	7.4		7	India	18.2	
8	Netherlands	6.2		8	Denmark	15.5	
9	U.K.	5.9		9	Finland	15.2	
10	Malaysia	5.3		10	Hong Kong	15.0	

### Methodology

Adult (age 15+) population data was taken from GlobalData's Macroeconomic Database. Transactions per head were calculated on an average basis, with total number of transactions being divided by the number of adults over 15 for each country to calculate average real-time payment transactions per year, then divided by 12 to get the monthly average data.

# Real-Time Payment Transactions per Month

*By head of population over 15 years old*

## Asia Pacific: Real-Time Payment Transactions per Head per Month

2022				2027			
Global Ranking	Country	TPHM	Regional Ranking	Global Ranking	Country	TPHM	Regional Ranking
1	Thailand	23.0	1	3	Thailand	43.6	1
3	South Korea	14.7	2	4	South Korea	21.9	2
10	Malaysia	5.3	3	10	Hong Kong	15.0	3
11	Hong Kong	5.2	4	13	Malaysia	12.3	4
13	Australia	5.0	5	15	Singapore	10.9	5
14	Singapore	4.9	6	16	Australia	9.9	6
22	Taiwan	2.3	7	25	Taiwan	4.3	7
27	Japan	1.4	8	30	Indonesia	3.5	8
30	China	1.3	9	36	China	2.0	9
34	Philippines	0.7	10	39	Japan	1.5	10
43	Indonesia	0.2	11	40	Philippines	1.4	11
52	New Zealand	-	12	52	New Zealand	-	12

### Analysis

Across the region's top five markets by TPHM, advanced user-friendly features are the norm for real-time payments, such as QR-code payments, mobile-native experiences and the ability to register using multiple aliases, including national ID, phone number or email. It is also common to find huge support for, and investment in, modern infrastructure from governments or central banks. These conditions add up to the fact that on top of being the de facto standard for P2P money transfers in these nations, real-time payments are also widely used by government, businesses and merchants. Several cross-border real-time payment integrations are live between the ASEAN nations and more are in development. India, the world's largest real-time payments scheme in terms of volume by some margin, is third by TPHM. This illustrates how much scale there is still to unlock in this already huge market.





# Real-Time Payment Transactions per Month

By head of population over 15 years old

## Europe: Real-Time Payment Transactions per Head per Month

2022				2027			
Global Ranking	Country	TPHM	Regional Ranking	Global Ranking	Country	TPHM	Regional Ranking
5	Sweden	9.5	1	5	Netherlands	21.7	1
6	Denmark	8.8	2	6	Sweden	19.0	2
8	Netherlands	6.2	3	8	Denmark	15.5	3
9	U.K.	5.9	4	9	Finland	15.2	4
15	Norway	4.5	5	11	Switzerland	14.4	5
16	Switzerland	4.2	6	12	Norway	12.6	6
18	Turkey	2.9	7	14	Belgium	11.2	7
20	Finland	2.7	8	17	U.K.	9.0	8
21	Austria	2.6	9	19	Austria	8.5	9
24	Hungary	2.2	10	20	Turkey	7.0	10
25	Czech Republic	1.8	11	21	Czech Republic	5.9	11
26	Belgium	1.5	12	22	Hungary	5.0	12
28	Spain	1.3	13	24	Spain	4.8	13
29	Germany	1.3	14	28	Croatia	3.9	14
32	Greece	1.1	15	29	Greece	3.8	15
35	Poland	0.7	16	34	Germany	3.0	16
36	Italy	0.6	17	35	France	2.0	17
41	France	0.3	18	37	Poland	2.0	18
45	Portugal	0.1	19	42	Italy	1.3	19
49	Croatia	0.01	20	44	Ireland	1.0	20
51	Ireland	-	21	49	Portugal	0.7	21

### Analysis

Unlike the rest of the eurozone where real-time payments are charged as a premium service for select customers, the Netherlands' banks make them universally available and free to use. As a result, market penetration is already high and expected to grow strongly in the forecasted period. The same is true in the Nordic countries, where, like in the Netherlands, merchant acceptance in-store and in eCommerce scenarios is widespread. Government mandates are rare in the region, but the European Commission's motivation for proposing to mandate cheaper, more secure and more accessible real-time payments is clear: the four largest economies in the EU — Germany, France, Italy and Spain — are not featured in the regional top 10 for real-time payments market penetration in 2022 or 2027.

# Real-Time Payment Transactions per Month

*By head of population over 15 years old*

## Middle East, Africa and South Asia: Real-Time Payment Transactions per Head per Month

2022					2027				
Global Ranking	Country	TPHM	Regional Ranking		Global Ranking	Country	TPHM	Regional Ranking	
2	Bahrain	19.1	1		1	Bahrain	83.3	1	
7	India	7.4	2		7	India	18.2	2	
17	Nigeria	3.3	3		23	Nigeria	5.0	3	
31	Saudi Arabia	1.1	4		33	Saudi Arabia	3.2	4	
37	Sri Lanka	0.5	5		38	U.A.E.	1.5	5	
38	U.A.E.	0.4	6		41	Sri Lanka	1.4	6	
39	South Africa	0.4	7		43	South Africa	1.1	7	
42	Oman	0.2	8		45	Egypt	1.0	8	
46	Pakistan	0.04	9		47	Pakistan	0.8	9	
48	Kenya	0.03	10		48	Oman	0.8	10	
50	Egypt	0.01	11		51	Kenya	0.1	11	

### Analysis

Bahrain is reaping the rewards of central bank mandates and the waiving of fees up to a certain threshold, which have contributed to a sudden uptake of the superapp-like BenefitPay, which supports cards and A2A real-time payments. Real-time payments have penetrated all levels of the economy, including salary payments, P2P, C2B, in-store and online merchant payments, bill payments and QR-code payments. Saudi Arabia is making a fast start thanks to similarly strong government mandates, and U.A.E. will join them in 2023 with the launch of a new national scheme. Both schemes are relatively advanced compared to others in the region and will underpin a new wave of payments modernization built around value-added services. Saudi Arabia's anticipated launch of open banking regulations in particular will be an exciting development for the market and will accelerate merchant adoption.

# Real-Time Payment Transactions per Month

*By head of population over 15 years old*

## Latin America: Real-Time Payment Transactions per Head per Month

2022				2022			
Global Ranking	Country	TPHM	Regional Ranking	Global Ranking	Country	TPHM	Regional Ranking
4	Brazil	14.2	1	2	Brazil	51.8	1
12	Chile	5.2	2	18	Chile	8.7	2
23	Mexico	2.3	3	27	Mexico	3.9	3
40	Peru	0.4	4	32	Peru	3.2	4
44	Argentina	0.1	5	46	Argentina	0.9	5
47	Colombia	0.03	6	50	Colombia	0.2	6

### Analysis

Brazil's rapid ascension to global real-time payments leader has come on the back of PIX's support for all transaction types (P2P, P2B, B2P, P2G, G2P, B2G and G2P) and multiple use cases. These include: merchant payments, scheduled future payments, Request to Pay, bill payments and government payments. Mexico, the LatAm region's earliest adopter of real-time payments, continues to post steady growth. While transactions are mandated to be free, banks and financial institutions are reluctant to promote the scheme and develop new use cases, which has impacted wider adoption. Meanwhile, Chile's central bank is taking an active role to drive interoperability between digital payment methods and is working on a "Fintech Law" to stimulate innovation and accelerate further adoption.

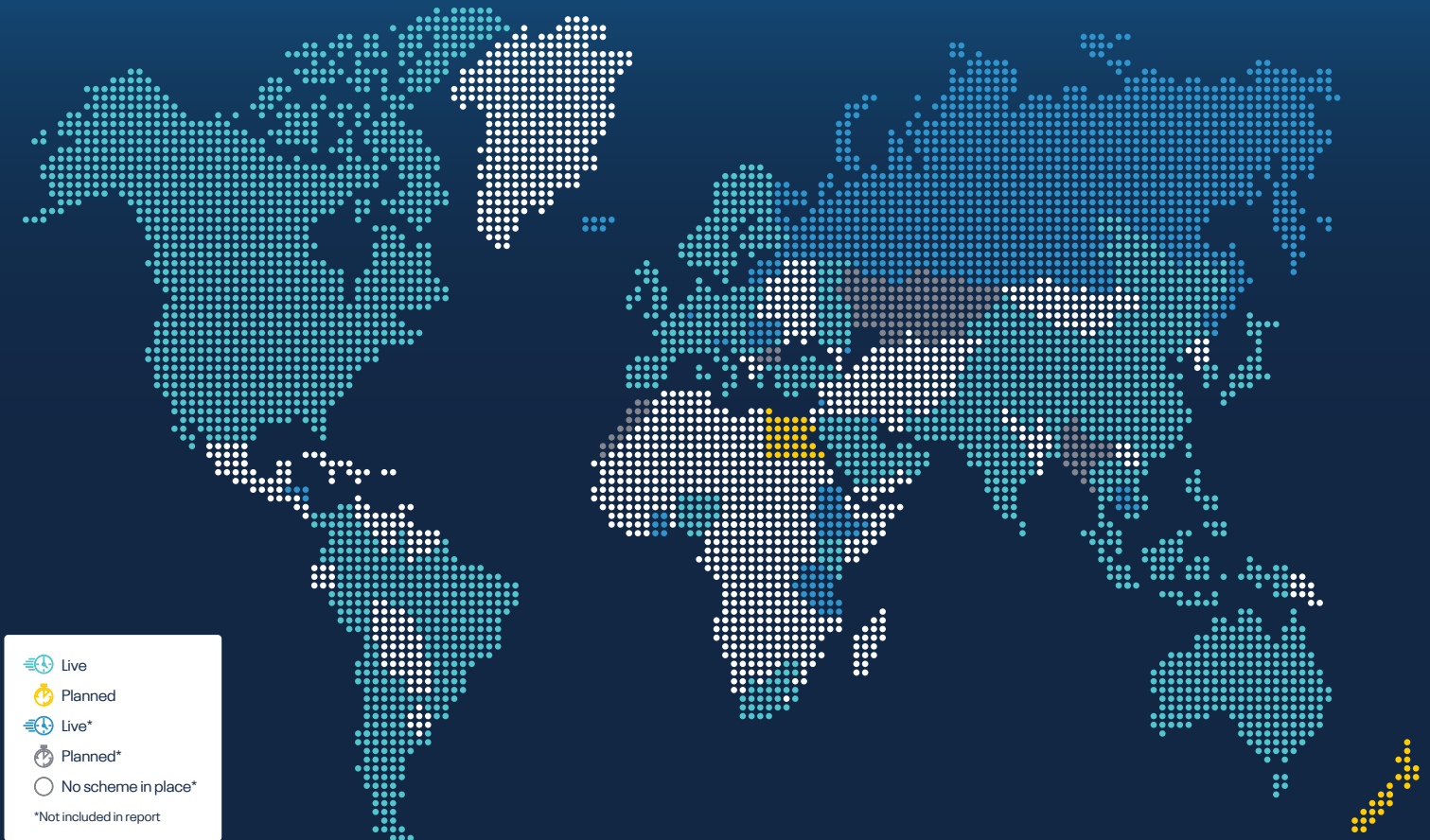
## North America: Real-Time Payment Transactions per Head per Month

2022				2027			
Global Ranking	Country	TPHM	Regional Ranking	Global Ranking	Country	TPHM	Regional Ranking
19	Canada	2.9	1	26	Canada	4.0	1
33	U.S.	0.9	2	31	U.S.	3.4	2

### Analysis

Canada's Interac eTransfer service — soon to be replaced by Interac Instant — is easily accessible via an alias system built around email address and mobile phone number, and there is near-100% participation from the market's financial institutions. It is well adopted among consumers as a result and acceptance among smaller merchants is common. In the U.S., the government will step into the instant payments space in 2023 with FedNow, which will also provide real-time payments access to smaller banks and is expected to solve for last mile connectivity that remains a challenge. It will feature new services such as Request for Pay from day one and has the potential to eventually make real-time payments as ubiquitous as cards. If the U.S. federal government begins using FedNow to issue payments and disbursements, then it should immediately generate substantial volumes for the new scheme and help to encourage adoption nationwide. That would move the needle in the U.S. overall.

# Global Real-Time Payments Adoption



Live  
 Planned  
 Live\*  
 Planned\*  
 No scheme in place\*  
\*Not included in report

## North America

Country	Real-Time Payments Method	Status	Year
<b>Canada</b>	Interac e-Transfer	Live	2002

Country	Real-Time Payments Method	Status	Year
<b>U.S.</b>	RTP and Zelle	Live	2017
	FedNow	Planned	2023

## Asia Pacific

Country	Real-Time Payments Method	Status	Year
<b>Australia</b>	New Payments Platform (NPP)	Live	2018
<b>Cambodia</b>	Real-Time Fund Transfer (RFT)	Live*	2019
<b>China</b>	IBPS	Live	2010
<b>Hong Kong</b> <small>(Special Administrative Region)</small>	Faster Payment System (FPS)	Live	2018
<b>Indonesia</b>	BI-FAST	Live	2021
<b>Japan</b>	Zengin System	Live	1973
<b>Kazakhstan</b>	ISMT	Planned*	2025
<b>Malaysia</b>	DuitNow	Live	2018
	Interbank Funds Transfer (IBFT)	Live	2006
<b>Myanmar</b>	No scheme in place	Planned*	TBD

Country	Real-Time Payments Method	Status	Year
<b>New Zealand</b>	No scheme in place	Planned	TBD
<b>Philippines</b>	InstaPay	Live	2018
<b>Singapore</b>	FAST	Live	2014
	PayNow	Live	2017
<b>South Korea</b>	CD/ATM	Live	1988
	Electronic Banking System (EBS)	Live	2001
<b>Taiwan</b>	Financial XML	Live	2003
	Interbank ATM funds transfer system	Live	1987
<b>Thailand</b>	PromptPay	Live	2016
<b>Vietnam</b>	NAPAS Quick Money Transfer Service	Live*	2016

## Europe

Country	Real-Time Payments 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	Instant Payment	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 (only few banks are offering)	Live	2020
Italy	SCT Inst	Live	2017
Latvia	EKS Zibmaksajums	Live*	2017
Lithuania	CENTROlink	Live*	2017
Luxembourg	BILnet	Live*	2020

Country	Real-Time Payments 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	No scheme in place	Planned*	TBD
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	Live	2008
Ukraine	In progress	Planned*	TBD

## Middle East, Africa and South Asia

Country	Real-Time Payments Method	Status	Year
Bahrain	Fawri+	Live	2015
Egypt	IPN	Live	2022
Ethiopia	EATS	Live*	2011
Ghana	GhIPSS Instant Pay (GIP)	Live*	2007
India	IMPS	Live	2010
	UPI	Live	2016
Iran	No scheme in place		TBD
Israel	No scheme in place		TBD
Kenya	PesaLink	Live	2017
Kuwait	NBK Quick Pay	Live*	2018
Lebanon	Zaky	Live*	2020

Country	Real-Time Payments Method	Status	Year
Morocco	No scheme in place	Planned*	TBD
Nigeria	NIP	Live	2011
Oman	MPCSS	Live	2017
Pakistan	Raast	Live	2021
Qatar	QMP	Live*	2020
Saudi Arabia	sarie	Live	2021
South Africa	RTC	Live	2006
Sri Lanka	CEFTS (LankPay)	Live	2015
Tanzania	Tanzania Instant Payments System (TIPS)	Live*	2019
U.A.E.	Immediate Payment Instructions (IPI)	Live	2019

## Latin America

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

\*Not included in report

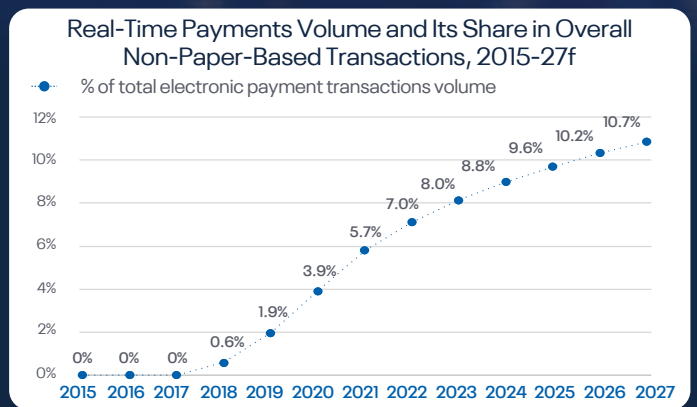
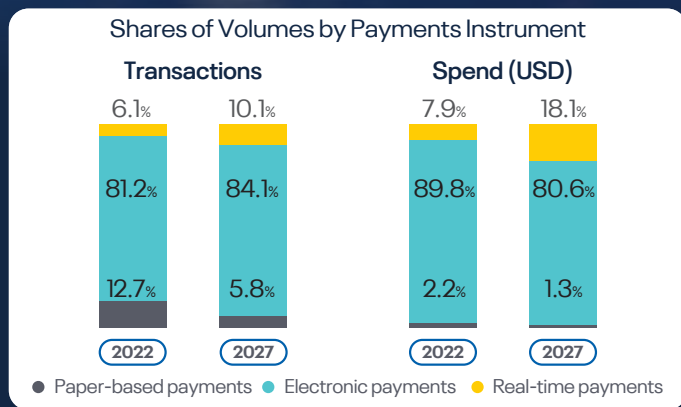
# 2023 Prime Time for Real-Time

## Australia

The New Payments Platform (NPP) is the national real-time payments infrastructure in Australia. It was developed by SWIFT in collaboration with 13 members of Australia's financial services industry including Reserve Bank of Australia, collectively represented by NPP Australia. It was launched for public use in February 2018 by NPP Australia and as of last year, the system has been made available to almost 90 million customer accounts, with more than 110 banks, credit unions, building societies and fintech companies now offering NPP-enabled services to their customers. Despite this wider coverage, real-time payments accounted for just 6.1% of the total payments volume of transactions in 2022. Key constraints continue to hinder the overall growth of real-time payments in the country. Australians continue to prefer payment cards, with contactless payments (from a card, phone or watch) being the norm, and there are limited use cases for NPP.

Real-Time Payments Launch  
**2018**  
Real-Time Payments Scheme  
**NPP 2018**

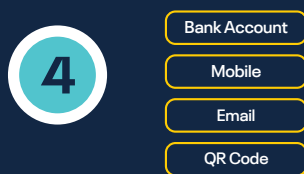
### Real-Time Transactions



#### Mobile Wallet Trends



#### Initiation/Authorization Methods



#### Scheme Messaging

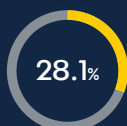
**ISO 20022**

#### Real-Time Acceptance



However, with NPP now expanding its use cases from not just PayID, but also with the launch of new overlay services such as PayTo, which is a digital way for merchants, businesses and corporates to initiate real-time payments from customers' bank accounts, the real-time volume is expected to gradually increase, recording a CAGR of 16.3% from 2022 to 2027. To help drive adoption of the service, we need big players to get on board like utilities, supermarkets and telcos. This will definitely help to accelerate the adoption of PayTo and thus, increase real-time transaction volumes. The retirement of Australia's direct entry batch processing system in the next five to six years might also help drive additional growth if and when the NPP participating members migrate their direct entry payments, typically submitted in bulk files today, over to the NPP. To enhance competition and create a more coordinated organization in the Australian payments space, in 2022, the three domestic payment providers, NPP Australia, eftpos and BPAY, merged to form Australian Payments Plus.

#### Payments Fraud Rate

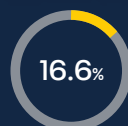


Population who reported being a victim of fraud in the last four years

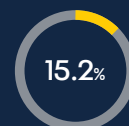
#### Top 3 Payment Fraud Types



Confidence trick



Card details stolen online



Card details stolen/skimmed in person



[Learn More About Global Real-Time Fraud Trends](#)

# 2023 Prime Time for Real-Time

## China

China launched its real-time payments system, called the Internet Banking Payment System (IBPS), in 2010 to strengthen its banking infrastructures and boost non-cash payments. In 2022, it was ranked as the third country in the world in terms of volume of real-time payment transactions, processing a 21.5 billion volume of transactions in 2022 — but this is solely due to the sheer size of the Chinese market; it is still far behind the market leader India which processed 166 billion in volume of transactions. In 2022, real-time payments represented only a 4.5% share of total payments volume, with a 7.2% share of total payments spend. 2027 projections are expecting real-time payments to barely grow its market share in volume of transactions, as it is expected to slightly increase to 4.6%, increasing at a CAGR of 10.5%.

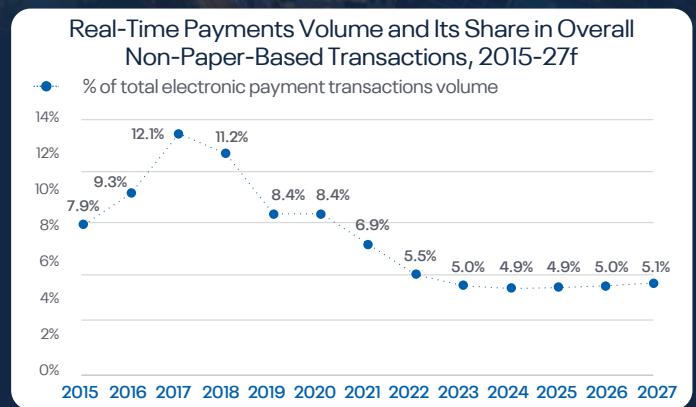
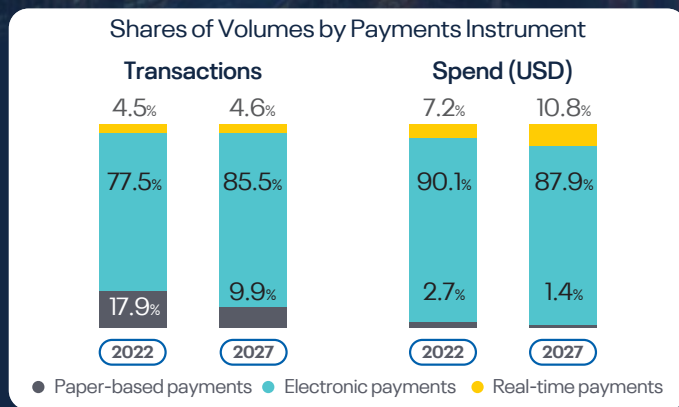
Real-Time Payments  
Launch

2010

Real-Time Payments  
Scheme

IBPS  
2010

### Real-Time Transactions



#### Mobile Wallet Trends



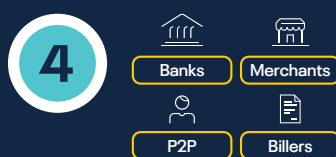
#### Initiation/Authorization Methods



#### Scheme Messaging

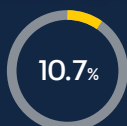
ISO  
20022

#### Real-Time Acceptance



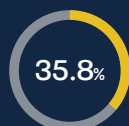
With the high mobile wallet adoption in China, there is a lot of room for real-time payments to grow — and growth in the Chinese market is a huge opportunity to drive up revenue due to the size of the overall Chinese payments market. This growth could be driven by the introduction of the central bank digital currency, the e-Yuan. The e-Yuan is still going through pilot tests, but it is already available in 23 cities across China through the e-Yuan app that was launched in 2022. Both Alipay and WeChat Pay reported accepting the e-Yuan as a payments option. However, so far real-time payments have not made much headway into the Chinese mobile payments market.

#### Payments Fraud Rate

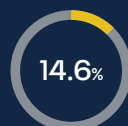


Population who reported being a victim of fraud in the last four years

#### Top 3 Payment Fraud Types



Confidence trick



Card details stolen/skimmed in person



Identity theft



[Learn More About Global Real-Time Fraud Trends](#)

# 2023 Prime Time for Real-Time

## Hong Kong

Hong Kong launched its instant payments system Faster Payment System (FPS) in September 2018. Unlike several other instant payment systems globally, 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, supported real-time payments growth in the country.

Real-Time Payments Launch

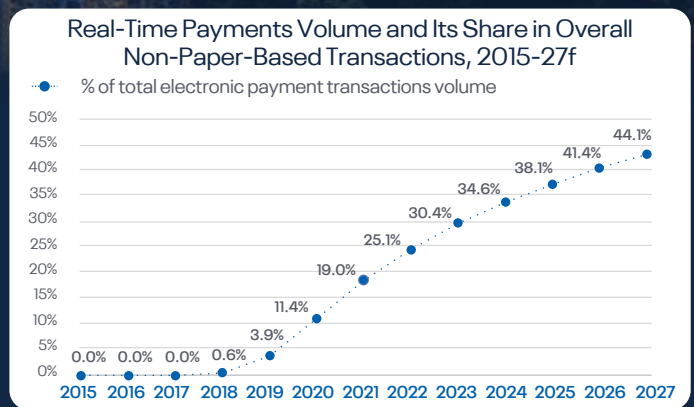
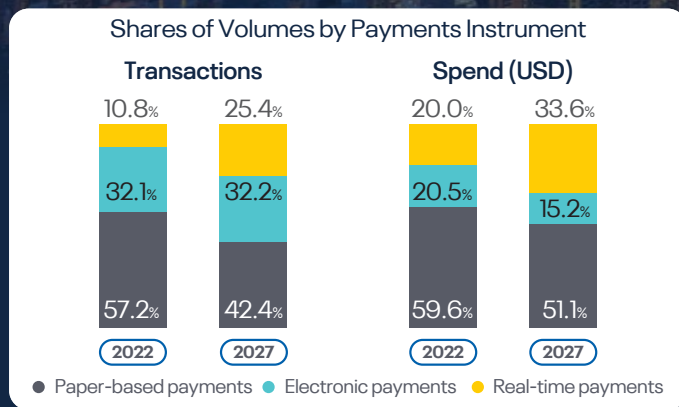
**2018**

Real-Time Payments Scheme

FPS  
**2018**

### Real-Time Transactions

**407M** <sup>2022</sup> | **1.2B** <sup>2027f</sup> | **24.2%** <sup>F5 Yr CAGR</sup>



#### Mobile Wallet Trends

**89.2%**  
% of adults who have a mobile wallet and have used it in the past year (2022)

#### Initiation/Authorization Methods

- Bank Account
- Mobile
- Email
- QR Code

#### Scheme Messaging

**ISO 20022**

#### Real-Time Acceptance

- Banks
- Merchants
- P2P
- Billers

The growing acceptance of electronic payments amid the COVID-19 pandemic has also increasingly supported the adoption and use of real-time payments. While real-time payments accounted for a 10.8% share of total payments volume in 2022, they accounted for a 20.0% share in terms of value. This signifies that the 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 to meet their day-to-day purchases, the gap will significantly reduce with instant payments volume set to record a 24.2% CAGR from 2022 to 2027, compared to 12.3% in terms of value.

#### Payments Fraud Rate

**16.2%**  
Population who reported being a victim of fraud in the last four years

#### Top 3 Payment Fraud Types

**23.8%**  
Confidence trick

**14.8%**  
Card details stolen online

**12.7%**  
Card details stolen/skimmed in person



[Learn More About Global Real-Time Fraud Trends](#)



# 2023 Prime Time for Real-Time Indonesia

Indonesia became the most recent entrant into the real-time payments space with the launch of BI-FAST instant payments system in December 2021. The system went live with 21 banks, starting with individual credit transfer services. Other functionalities such as bulk credit, direct debit and Request for Payment services are set to be added in a phased manner. As of August 2022, with four aggregators powered by ACI Worldwide, there were 106 participants in the BI-FAST system.

Real-Time Payments Launch

**2021**

Real-Time Payments Scheme

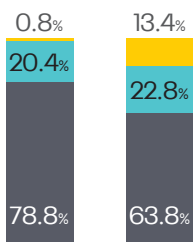
**BI-FAST  
2021**

## Real-Time Transactions

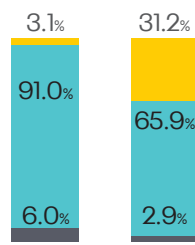
**470M** <sup>2022</sup> | **9.4B** <sup>2027f</sup> | **81.9%** <sup>F5 Yr CAGR</sup>

Shares of Volumes by Payments Instrument

Transactions

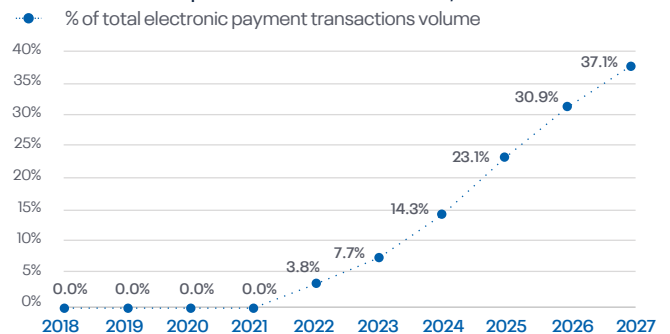


Spend (USD)



● Paper-based payments ● Electronic payments ● Real-time payments

Real-Time Payments Volume and Its Share in Overall Non-Paper-Based Transactions, 2015-27f



### Mobile Wallet Trends



### Initiation/Authorization Methods



### Scheme Messaging

**ISO  
20022**

### Real-Time Acceptance



Although cash has traditionally been the preferred payments instrument in Indonesia, electronic payments have been steadily gaining ground over the past few years, supported by government initiatives, a rise in the banked population and improvements in payments infrastructure. The COVID-19 pandemic also further accelerated the shift towards digital payments in the nation. All these factors provide favorable conditions for the success of real-time payments in the country.

### Payments Fraud Rate

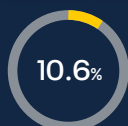


Population who reported being a victim of fraud in the last four years

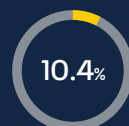
### Top 3 Payment Fraud Types



Confidence trick



My card was lost or stolen



Digital wallet account hacked



[Learn More About Global Real-Time Fraud Trends](#)

# 2023 Prime Time for Real-Time

## Japan

Japan's Zengin System is the world's oldest real-time payments system, having launched in 1973, but it is not one of the most developed, even in the Asia-Pacific region. In 2022, real-time payments represented only a 3.1% share of total payments volume, and this share is not expected to materially change by 2027. In terms of payments volume, Japanese consumers still overwhelmingly prefer paper-based payments, as their market share represented 67.1% of total payments volume in 2022.

Real-Time Payments Launch

**1973**

Real-Time Payments Scheme

Zengin System

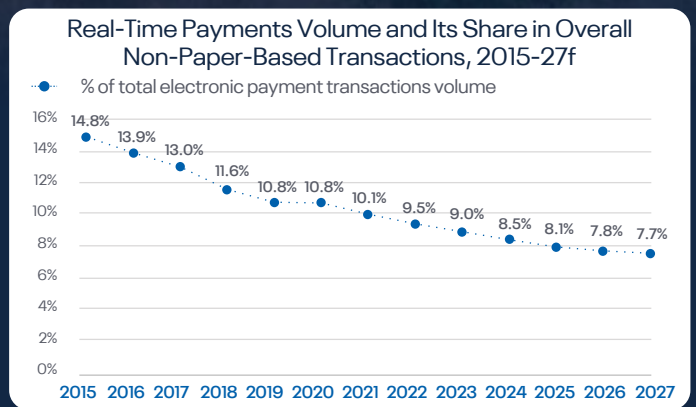
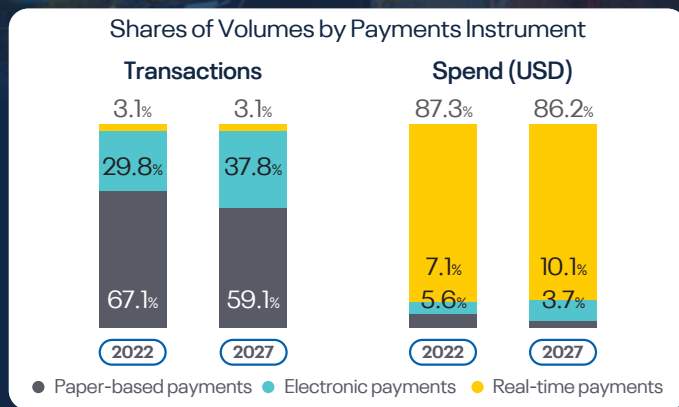
**1973**

### Real-Time Transactions

**1.8B** <sup>2022</sup>

**1.9B** <sup>2027f</sup>

**1.0%** <sup>F5 Yr CAGR</sup>



#### Mobile Wallet Trends

**39.6%**  
% of adults who have a mobile wallet and have used it in the past year (2022)

#### Initiation/Authorization Methods

**1** Bank Account

#### Scheme Messaging

**ISO 20022**

#### Real-Time Acceptance

**3** Banks Merchants P2P

By 2027, paper-based payments will see its payments volume market share decrease to 59.1%, but this decrease will benefit only non-real-time payment electronic payments, mostly card-based payments. For the past several decades, the Japanese market has consistently proven to be very slow to change from its entrenched cultural preference for cash (and to a lesser extent cards), and no major shifts appear to be on the horizon for this market at present — even the regional popularity of mobile-based payments has yet to penetrate the Japanese market, despite the strength of eCommerce in Japan.

#### Payments Fraud Rate

**3.3%**

Population who reported being a victim of fraud in the last four years

#### Top 3 Payment Fraud Types

**32.4%**

Confidence trick

**14.7%**

Card details stolen online

**11.8%**

My card was lost or stolen



[Learn More About Global Real-Time Fraud Trends](#)

# 2023 Prime Time for Real-Time

## Malaysia

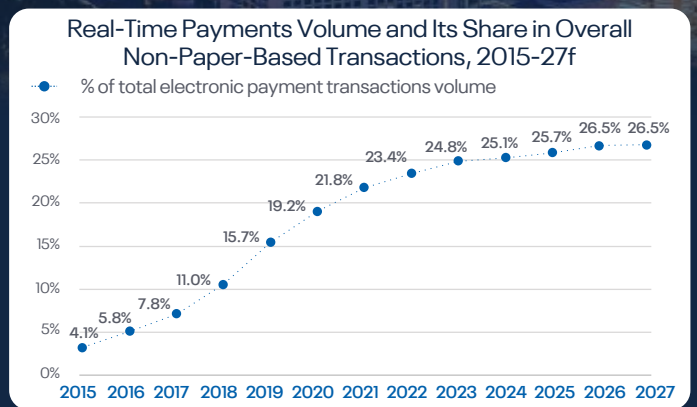
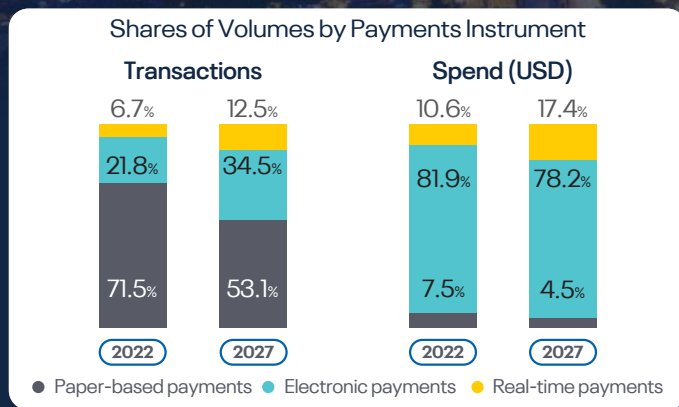
Real-time payments in Malaysia have been available for many years through Interbank Funds Transfer system. With the vision to create a modern payments system, a new instant payments system dubbed DuitNow was introduced by national payments network and central infrastructure provider PayNet, in collaboration with ACI Worldwide, in December 2018. DuitNow has become a major player in the electronic payments space in the country, having integrated a wide variety of new functions and consolidated legacy systems such as Jompay and FPX into itself. In addition to fund transfers, the system now supports online payments, QR code-based in-store payments, future-dated and recurring payments, as well as, more recently, Request to Pay, eMandates and QR code-based cross-border payments.

Real-Time Payments Launch  
**2018**

Real-Time Payment Schemes  
IBFT  
**2006**  
DuitNow  
**2018**

### Real-Time Transactions

**1.6B** <sup>2022</sup>      **3.9B** <sup>2027f</sup>      **19.7%** <sup>F5 Yr CAGR</sup>



#### Mobile Wallet Trends

**86%**  
% of adults who have a mobile wallet and have used it in the past year (2022)

#### Initiation/Authorization Methods

**3**  
Bank Account  
Mobile  
QR Code

#### Scheme Messaging

**ISO 20022**

#### Real-Time Acceptance

**4**  
Banks   Merchants  
P2P   Billers

Despite these developments, real-time payments accounted for only a 6.7% share of the total payments volume of transactions in 2022, due to the traditional preference for paper-based payment instruments, which accounted for a 71.5% share. However, the real-time payments volume will gradually increase at a CAGR of 19.7% from 2022 to 2027, supported by increasing consumer awareness, growing preference for mobile payments, increasing development of B2B use cases for DuitNow and the growing cross-border QR-code payment linkages forming between Malaysia-Thailand and Malaysia-Indonesia. The COVID-19 pandemic also accelerated the shift towards electronic payments, which will further drive the adoption and use of real-time payments in the nation.

#### Payments Fraud Rate

**20.9%**

Population who reported being a victim of fraud in the last four years

#### Top 3 Payment Fraud Types

**34.6%**

Confidence trick

**11.1%**

Identity theft

**9.4%**

Card details stolen online



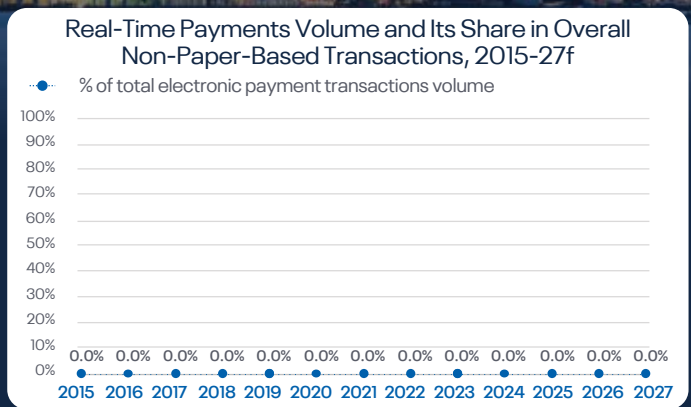
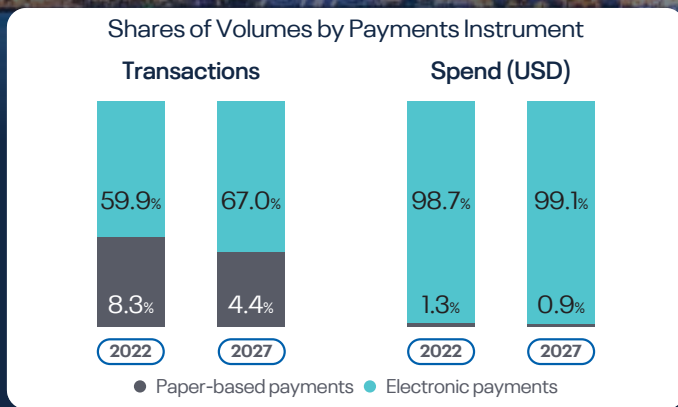
[Learn More About Global Real-Time Fraud Trends](#)

# 2023 Prime Time for Real-Time New Zealand

2023 is an exciting year for New Zealand's payments industry. While no real-time capability is currently in place, New Zealand's industry governance organization, Payments NZ, has recently embarked on delivering payment industry workshops designed to establish the foundational requirements for real-time capability for New Zealand; an exercise anticipated to span multiple years.

The expansion of payment forms and providers in New Zealand continues at pace. Last year saw the Dosh digital wallet launched for instant fund transfers and payments to merchants using mobile phone numbers or scanned QR codes. Since then we have seen the emergence of a new player in the digital wallet space from local web operator Immersve who has partnered with Mastercard to give consumers the ability to use cryptocurrency directly from their web wallet to make digital, physical or even metaverse purchases. Worldline New Zealand isn't far behind, with plans for a digital wallet in the works, too.

## Real-Time Transactions



### Mobile Wallet Trends

**36.1%**

% of adults who have a mobile wallet and have used it in the past year (2022)

The country's payments space is dominated by electronic payments, which occupy 59.9% of the total payments transaction volume in 2022, only a small increase from 2021 at 58.7%. However, the percentage of adults who have a mobile wallet and used it in the last year has increased from 26.0% to 36.1% in 2022, which is no surprise as contactless builds momentum in New Zealand with consumers' preference for a streamlined checkout process.

### Payments Fraud Rate



Population who reported being a victim of fraud in the last four years

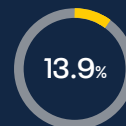
### Top 3 Payment Fraud Types



Confidence trick



Card details stolen online



Card details stolen/skimmed in person



[Learn More About Global Real-Time Fraud Trends](#)

# 2023 Prime Time for Real-Time

## Philippines

The Philippines introduced its real-time payments scheme InstaPay in 2018, which is an interbank fund transfer service launched by Bangko Sentral ng Pilipinas. The economy of the Philippines is still heavily fragmented (due to its geography) and reliant on paper-based transactions. That same geographic separation of communities by water, however, gives it a lot of potential for real-time payments (and electronic payments in general) to enable quick transfers between communities in the market, potential that has yet to be realized.

Real-Time Payments Launch

2018

Real-Time Payments Scheme

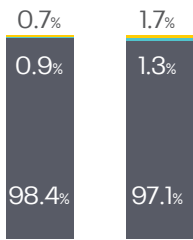
InstaPay  
2018

### Real-Time Transactions

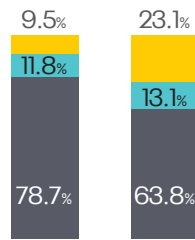
625M <sup>2022</sup> | 1.5B <sup>2027f</sup> | 18.7% <sup>F5 Yr CAGR</sup>

Shares of Volumes by Payments Instrument

Transactions

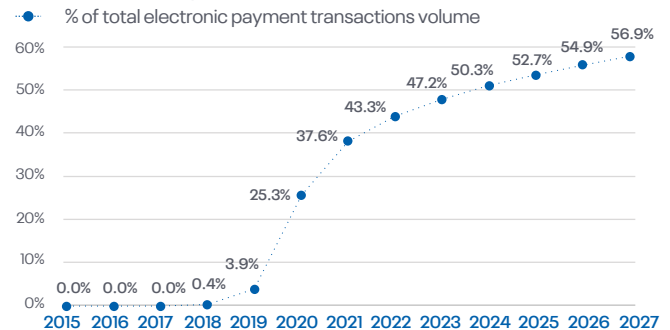


Spend (USD)



● Paper-based payments ● Electronic payments ● Real-time payments

Real-Time Payments Volume and Its Share in Overall Non-Paper-Based Transactions, 2015-27f



#### Mobile Wallet Trends

88.4%

% of adults who have a mobile wallet and have used it in the past year (2022)

#### Initiation/Authorization Methods

- 4
- Bank Account
- Mobile
- Email
- QR Code

#### Scheme Messaging

ISO  
20022

#### Real-Time Acceptance

- 4
- Banks
- Merchants
- P2P
- Billers

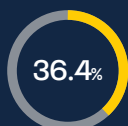
In 2022, paper-based transactions represented a 98.4% share of payments volume while for the same period, real-time payments only represented a 0.7% share of payments volume. Real-time payments are expected to reach 1.7% by 2027, growing at a CAGR of 18.7% between 2022 and 2027. This market has yet to see its inflection point and stands out in the Asia-Pacific region as a real-time payments laggard. However, changes are happening in this market — the launch of InstaPay 2.0 has moved the market to the ISO 20022 messaging standard, which will improve the speed and interoperability of the service. Further, the launch of a bill payment service at the end of 2022 will improve the functionality and appeal of real-time payments to consumers.

#### Payments Fraud Rate

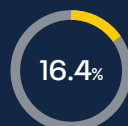


Population who reported being a victim of fraud in the last four years

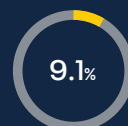
#### Top 3 Payment Fraud Types



Confidence trick



Digital wallet account hacked



Identity theft



[Learn More About Global Real-Time Fraud Trends](#)

# 2023 Prime Time for Real-Time

## Singapore

Singapore has two well-developed real-time payment systems. The first one is FAST, launched in 2014: an interbank fund transfer service that enables customers of participating banks to transfer funds from one bank to another. Its second service is PayNow, an overlay service launched in 2017 to build on the existing FAST infrastructure. Real-time payments volume of transactions represented an 8.6% share of total payments volume in 2022. Real-time payment systems volume of transactions is due to grow by a CAGR of 18.3% between 2022 and 2027, reaching a 15.2% share of total payments volume in 2027. While real-time payments volume remains third behind electronic payments (excluding real-time payments) and paper-based payment volumes, real-time payment systems spend will overtake both electronic payments (excluding real-time payments) and paper-based payments by 2027.

Real-Time Payments Launch

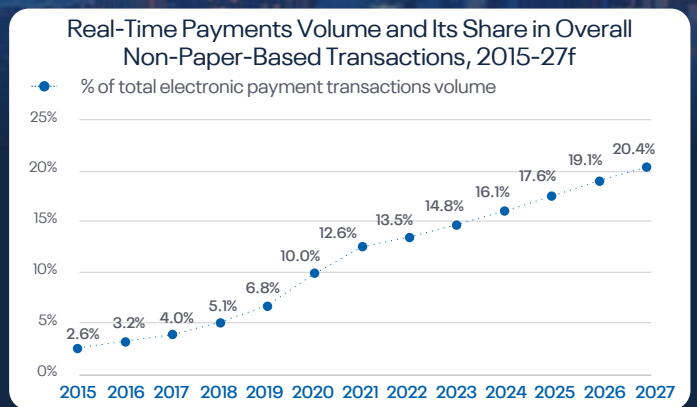
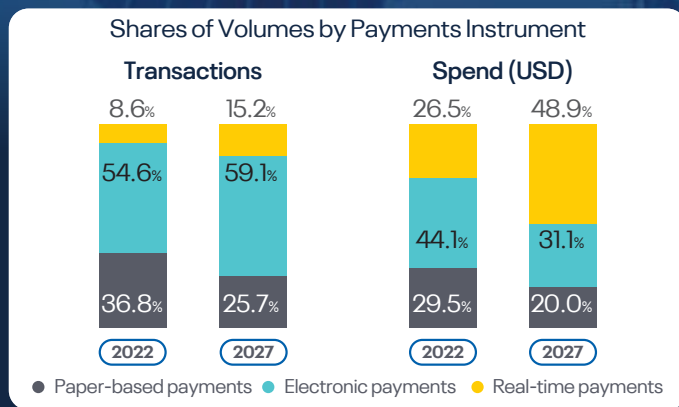
2014

Real-Time Payment Schemes

FAST  
2014

PayNow  
2017

## Real-Time Transactions



### Mobile Wallet Trends



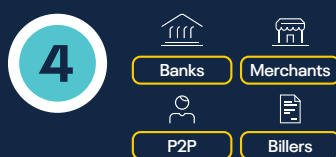
### Initiation/Authorization Methods



### Scheme Messaging

ISO  
20022

### Real-Time Acceptance



Real-time payments' share of total spending is expected to reach 48.9% by 2027, while electronic payments (excluding real-time payments) and paper-based payments will reach 31.1% and 20%, respectively. The Monetary Authority of Singapore (MAS) has been actively expanding the reach of PayNow by linking its platform to other real-time payment platforms in the region. In 2021, it linked PayNow to Thailand's PromptPay, which enabled cross-border transactions between both countries. In 2022, the MAS announced it started working on cross-border QR-code linkage with the Bank of Indonesia, with the linkage due to be launched in mid-2023. In February 2023, MAS went live with their linkage with India's UPI-based real-time payments scheme. These cross-border linkages will continue to increase the prominence of real-time payments in Singapore.

### Payments Fraud Rate

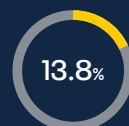


Population who reported being a victim of fraud in the last four years

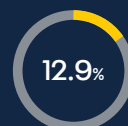
### Top 3 Payment Fraud Types



Confidence trick



Card details stolen/skimmed in person



Identity theft



[Learn More About Global Real-Time Fraud Trends](#)

# 2023 Prime Time for Real-Time South Korea

South Korea has the second oldest real-time payments system globally after Japan and ranked fifth globally in 2022 in terms of transaction volume of all real-time payment systems, as it processed a volume of transactions equal to 8.4 billion. South Korea's real-time payments represented an 18.3% share of total payments volume in 2022, second to electronic payments (excluding real-time payments), which represented 68.9%, but ahead of paper-based payments, which were at 12.9% in 2022.

Real-Time Payments Launch

1988

Real-Time Payment Schemes

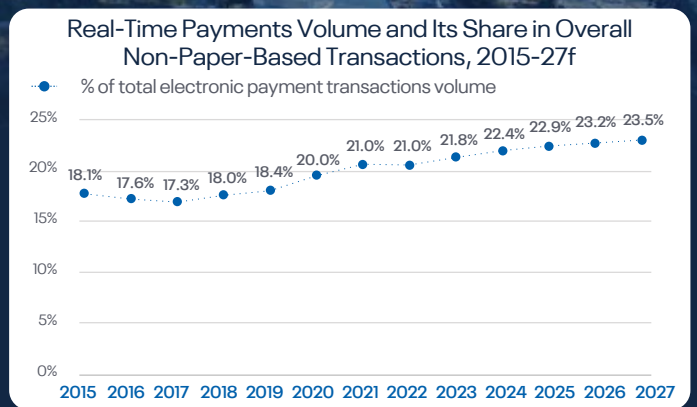
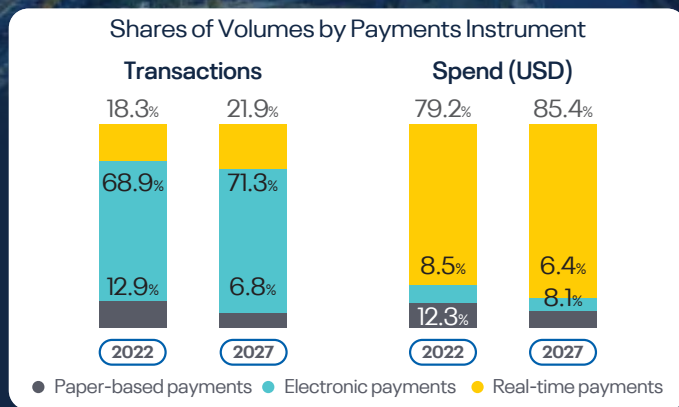
CD/ATM

1988

EBS

2001

## Real-Time Transactions



### Mobile Wallet Trends



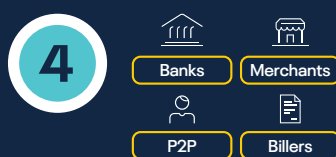
### Initiation/Authorization Methods



### Scheme Messaging

Proprietary

### Real-Time Acceptance



Real-time payments volume is forecasted to grow at a CAGR of 8.4% from 2022 to 2027, reaching a 21.9% share of transaction volume by 2027. Real-time payments are mainly being used for more expensive transactions than for daily expenditures, and this trend is not expected to change into the longer term, as real-time payments' share of value of transactions is only set to increase in the forecasted period.

### Payments Fraud Rate



Population who reported being a victim of fraud in the last four years

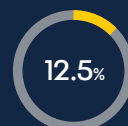
### Top 3 Payment Fraud Types



Confidence trick



My card was lost or stolen



Card details stolen online



[Learn More About Global Real-Time Fraud Trends](#)

# 2023 Prime Time for Real-Time Taiwan

Taiwan was one of the earliest to adopt real-time payments. Currently there are two instant payment schemes operating in the country under Financial Information Service Company (FISC) — 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.

Real-Time Payments Launch

1987

Real-Time Payment Schemes

Interbank ATM funds transfer system

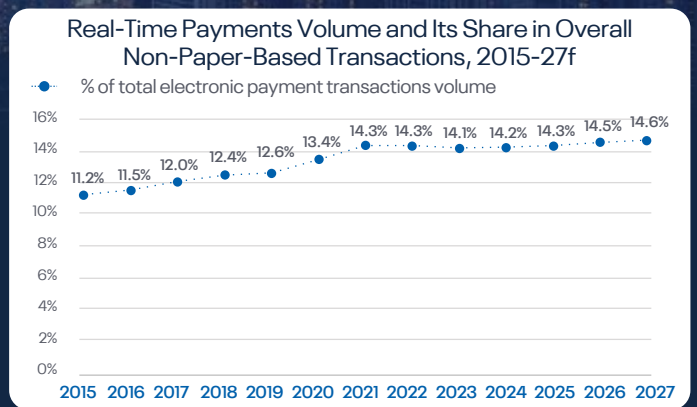
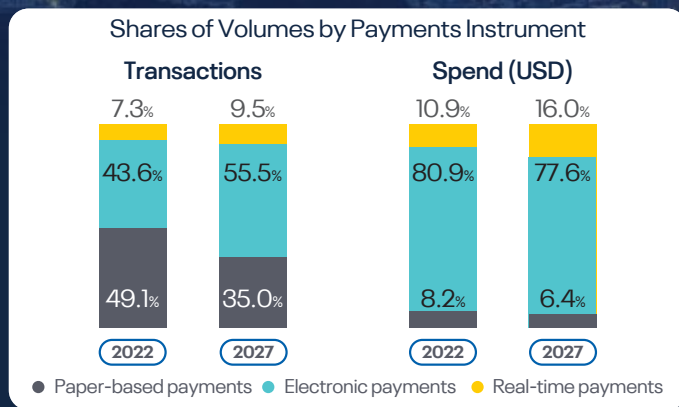
1987

Financial XML

2003

## Real-Time Transactions

570M <sup>2022</sup> | 1.1B <sup>2027f</sup> | 13.4% <sup>F5 Yr CAGR</sup>



### Mobile Wallet Trends



### Initiation/Authorization Methods



### Scheme Messaging

**Proprietary**

### Real-Time Acceptance



Despite the availability of real-time payments since 1987, they still only accounted for a 7.3% share of the total payments volume of transactions in 2022. This can be attributed to limited use cases of current real-time payments and increasing popularity for payment cards and mobile wallets. Future prospects for real-time payments look timid, with real-time volume share to reach 9.5% in 2027, as the use cases for real-time payments in the country are still not focused around low-volume everyday expenditures.

### Payments Fraud Rate

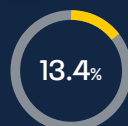


Population who reported being a victim of fraud in the last four years

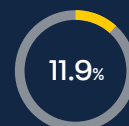
### Top 3 Payment Fraud Types



Confidence trick



Digital wallet account hacked



Other



[Learn More About Global Real-Time Fraud Trends](#)



# 2023 Prime Time for Real-Time

## Thailand

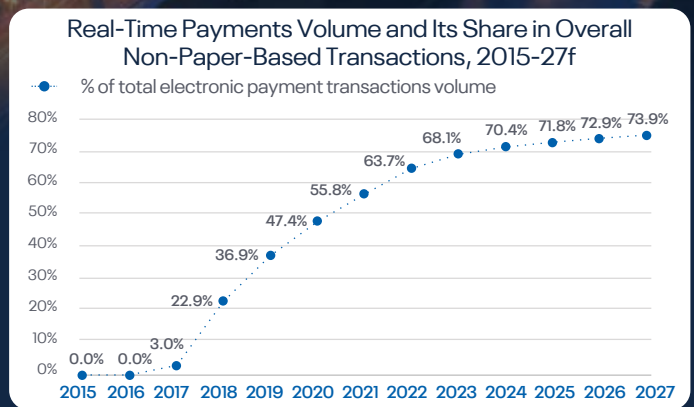
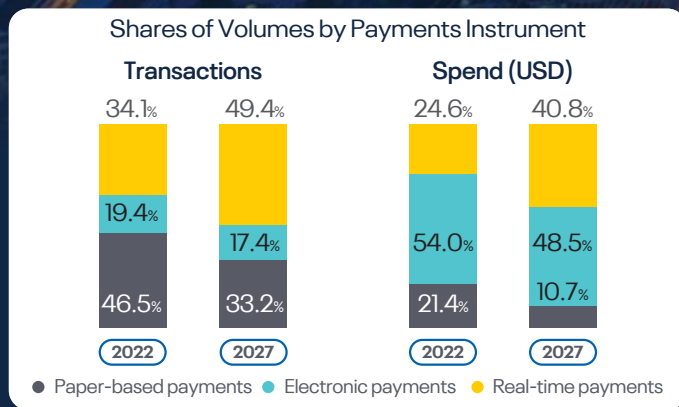
Thailand has a more mature real-time payments infrastructure compared to Western countries like the U.S. and the U.K. Thailand was the fourth leading country in the world in real-time payments volume of transactions in 2022, with 13.9 billion transactions on its real-time payments system PromptPay. In 2018, PromptPay was launched to promote financial inclusion in the country. In 2022, real-time payments accounted for a 34.1% share of total payments volume, making it the second most popular payments tool in Thailand after paper-based payments, which represented a 46.5% share of total payments volume.

Real-Time Payments Launch  
**2016**

Real-Time Payments Scheme

PromptPay  
**2016**

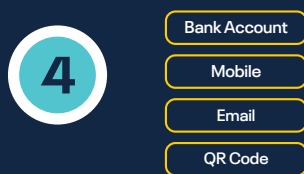
### Real-Time Transactions



#### Mobile Wallet Trends



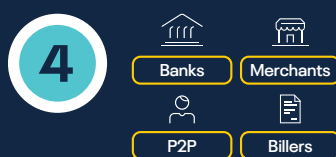
#### Initiation/Authorization Methods



#### Scheme Messaging

**ISO 20022**

#### Real-Time Acceptance



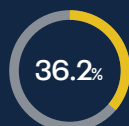
The share of real-time payments volume is expected to continue growing at a CAGR of 14.1% between 2022 and 2027, making it a high-growth market in a global context, even though it is also one of the most mature markets for real-time payments. By 2027, real-time payments are expected to reach a 49.4% share of total payments, which will make it the dominant payments tool in the country in terms of volume of transactions, overtaking paper-based payments, which will be at 33.2%. As cash continues to decline in Thailand — and as regional real-time payment linkages continue to develop — we should expect the real-time payments market in this country to grow rapidly.

#### Payments Fraud Rate

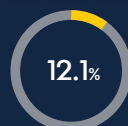


Population who reported being a victim of fraud in the last four years

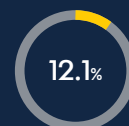
#### Top 3 Payment Fraud Types



Confidence trick



Digital wallet account hacked



Identity theft



[Learn More About Global Real-Time Fraud Trends](#)

# 2023 Prime Time for Real-Time

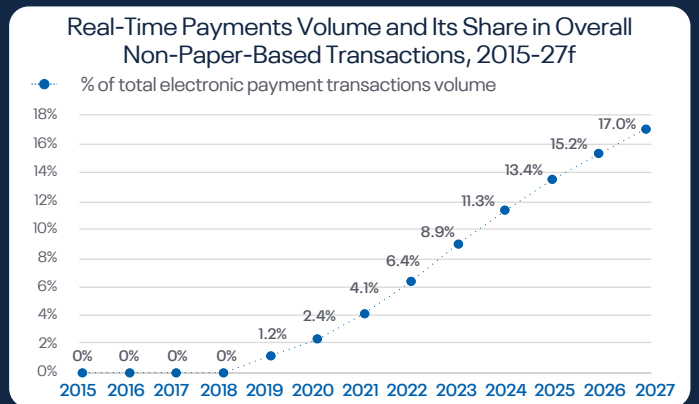
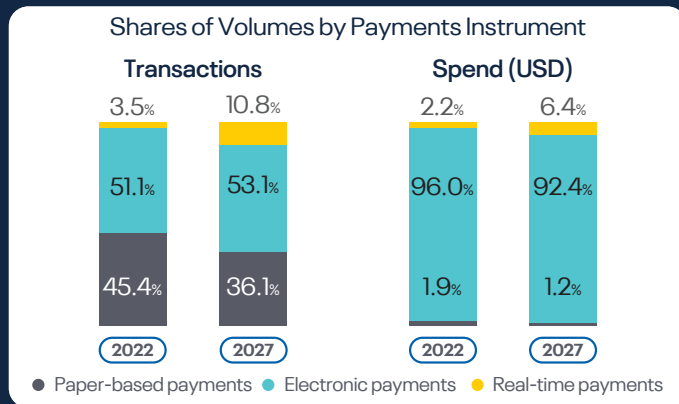
## Austria

Austria was among the first countries to adopt the pan-European SCT Inst scheme in November 2017. Although the adoption remained slow initially, Austria observed increased participation from banks and payment service providers over the years, to 401 participants by November 2022, the second-highest number in Europe only trailing after Germany. However, real-time payments still accounted for a 3.5% share of total payments transaction volume in 2022, compared to a 51.1% share held by other electronic payments. This is a result of increased preference for payment cards, particularly contactless, with their usage gaining further traction amid the COVID-19 pandemic. Nevertheless, instant payments will continue their uptrend, increasing at a CAGR of 27.2% in terms of volume from 2022 to 2027. This acceleration in adoption will likely be further increased by the proposed pan-European regulation requiring all PSPs to offer real-time payments to their customers at fixed, low prices.

Real-Time Payments Launch  
**2017**  
Real-Time Payments Scheme  
**SCT Inst 2017**

### Real-Time Transactions

**242M** <sup>2022</sup> | **805M** <sup>2027f</sup> | **27.2%** <sup>F5 Yr CAGR</sup>



#### Scheme Messaging

ISO  
20022

#### Initiation/Authorization Methods

- 4**
- Bank Account
  - Mobile
  - Email
  - QR Code

#### Real-Time Acceptance

- 4**
- Banks
  - Merchants
  - P2P
  - Billers



[Learn More About Global Real-Time Fraud Trends](#)

# 2023 Prime Time for Real-Time

## Belgium

Belgium enabled real-time payments in the country with the adoption of the pan-European instant payments scheme SCT Inst in March 2019, which was developed by the European Payments Council (EPC). The usage of real-time payments is still at a nascent stage, accounting for 2.3% of the total payments volume in 2022.

However, these payments are catching on fast in Belgium and are expected to grow at a CAGR of 49.8% from 2022 to 2027 in terms of volume. As with all SCT Inst markets, the proposed new pan-European regulation that would require PSPs to offer real-time payments to all consumers could result in even more rapid change here.

Real-Time Payments Launch  
**2019**

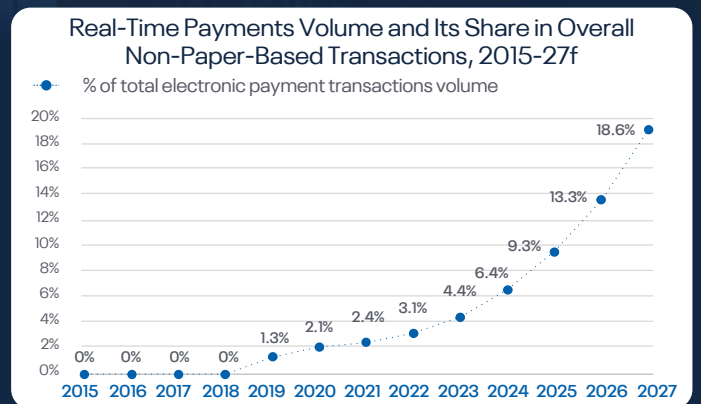
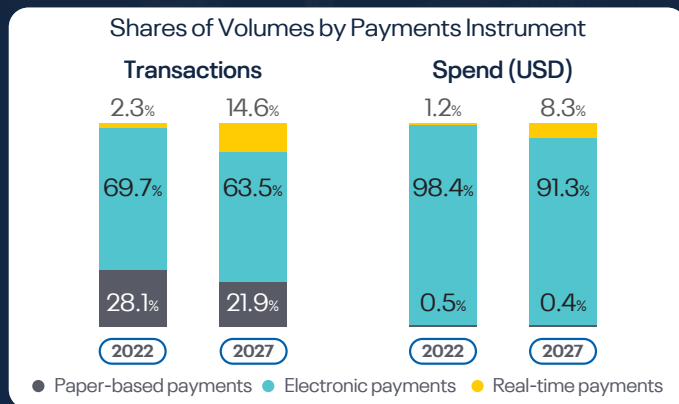
Real-Time Payments Scheme  
**SCT Inst 2019**

### Real-Time Transactions

**177M** <sup>2022</sup>

**1.3B** <sup>2027f</sup>

**49.8%** <sup>F5 Yr CAGR</sup>



#### Mobile Wallet Trends



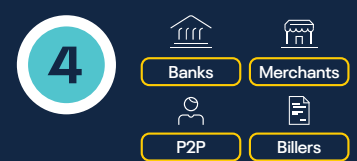
#### Scheme Messaging

**ISO 20022**

#### Initiation/Authorization Methods



#### Real-Time Acceptance



#### Payments Fraud Rate

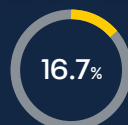


Population who reported being a victim of fraud in the last four years

#### Top 3 Payment Fraud Types



Confidence trick



Bank account hacked



Card details stolen online



[Learn More About Global Real-Time Fraud Trends](#)

# 2023 Prime Time for Real-Time

## Croatia

Croatia is among the recent entrants to the real-time payments space with the launch of NKSInst in October 2020. Continuous developments, such as the launch of a proxy lookup service in March 2021, and an increase in participation from banks, will support the growth of real-time payments over the next few years. Between 2022 and 2027, instant payment transactions are anticipated to grow at a CAGR of 210.9%, by which time they are expected to amount to 5.4% of all electronic payments. The accelerated shift towards electronic payments amid the COVID-19 pandemic will also contribute to the growth.

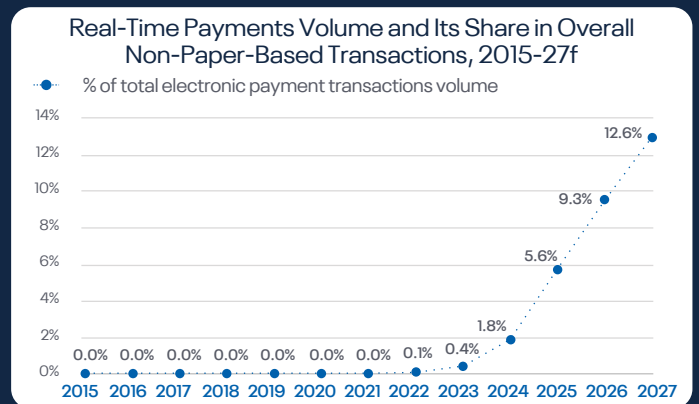
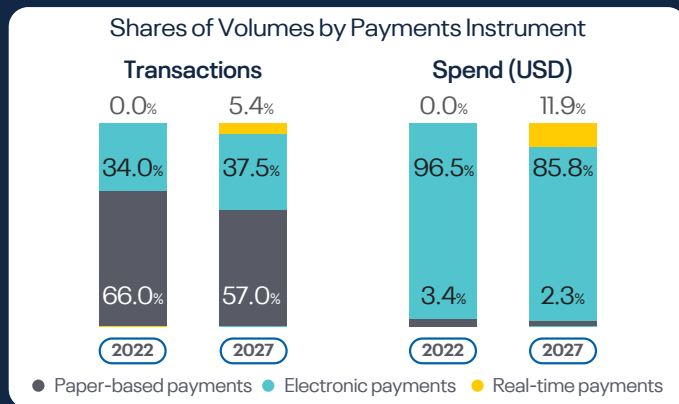
Real-Time Payments  
Launch

2020

Real-Time Payments  
Scheme

NKSInst  
2020

### Real-Time Transactions



#### Scheme Messaging

ISO  
20022

#### Initiation/Authorization Methods

3

- Bank Account
- Mobile
- Email

#### Real-Time Acceptance

4

- Banks
- Merchants
- P2P
- Billers



[Learn More About Global Real-Time Fraud Trends](#)

# 2023 Prime Time for Real-Time

## Czech Republic

Czech Republic enabled real-time payments in the country with the launch of a domestic instant payments service in November 2018, which is operated via the CERTIS (Czech Express Real-Time Interbank Gross Settlement) system. Despite the limited participation and use cases, instant payments gradually gained traction in the country and accounted for a 3.3% share of the total volume of payment transactions in 2022. The high levels of cash usage and moderate reliance on payment cards provide further growth prospects for real-time payments, helping it to increase both in terms of volume and value at respective CAGRs of 27.5% and 31.6% from 2022 to 2027.

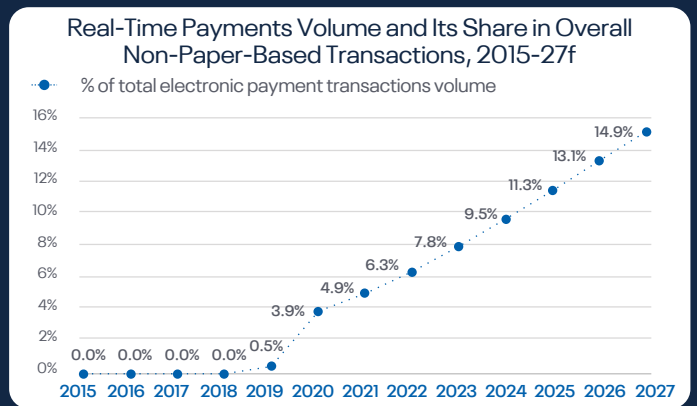
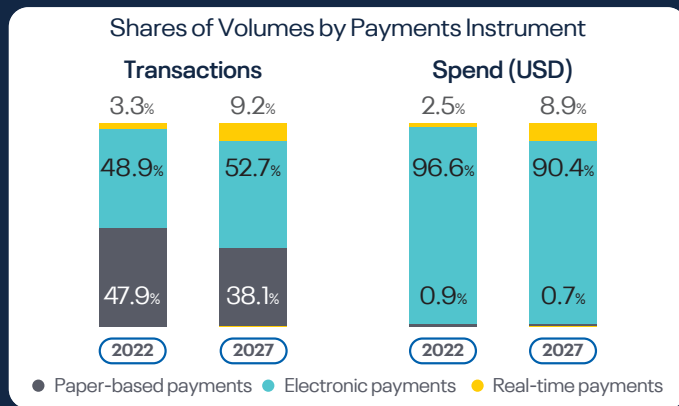
Real-Time Payments Launch

**2018**

Real-Time Payments Scheme

Instant Payment Scheme  
**2018**

### Real-Time Transactions



#### Scheme Messaging

Proprietary

#### Initiation/Authorization Methods



#### Real-Time Acceptance



[Learn More About Global Real-Time Fraud Trends](#)

# 2023 Prime Time for Real-Time

## Denmark

In 2022, real-time payments represented an 11.4% share of payments volume, putting it behind paper-based payments at 15.4% and non-real-time payments electronic payments at 73.2%. Real-time payments are predicted to continue growing as they will represent 17.1% of all payments in the market by 2027, growing at a CAGR of 12.5% between 2022 and 2027. This growth will partially come as a result of a decline in cash, but also a decline in the share of other types of electronic payments, showing that real-time payments are the main beneficiary to the push towards a more digital economy in Denmark.

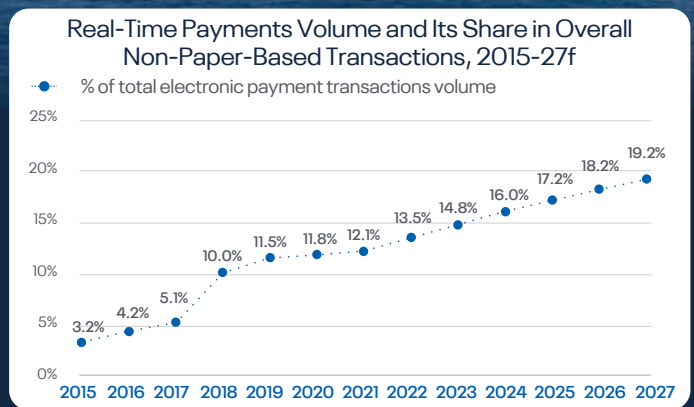
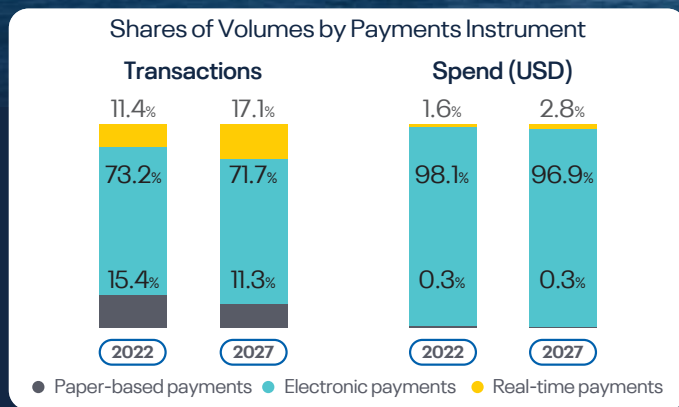
Real-Time Payments  
Launch

**2014**

Real-Time Payments  
Scheme

Straksclearing  
**2014**

### Real-Time Transactions



#### Mobile Wallet Trends



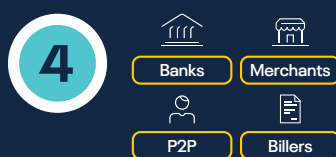
#### Initiation/Authorization Methods



#### Scheme Messaging

**ISO 20022**

#### Real-Time Acceptance



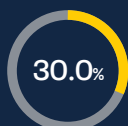
Real-time payments are also due to grow with the launch of the P27 initiative, which will create a real-time payments cross-border infrastructure between Denmark, Sweden and Finland. In addition, Danske Bank-owned mobile application MobilePay — itself a platform for real-time payments both between consumers and for purchases — is in the process of merging with Norway’s mobile payments Vipps. Both projects will facilitate real-time payments cross-border transactions and thus increase the volume of transactions.

#### Payments Fraud Rate

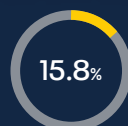


Population who reported being a victim of fraud in the last four years

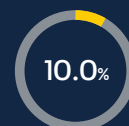
#### Top 3 Payment Fraud Types



Confidence trick



Card details stolen online



Card details stolen/skimmed in person



[Learn More About Global Real-Time Fraud Trends](#)

# 2023 Prime Time for Real-Time

## Finland

Finland has two instant payment schemes in place. The first one is Siirto, the domestic instant payments system launched in March 2017. The second is the pan-European SCT Inst, which was adopted in June 2018. Growth in real-time payments has been slower than anticipated due to limited adoption, with Siirto having two participants and SCT Inst with eight as of November 2022.

Real-Time Payments Launch

2017

Real-Time Payment Schemes

Siirto  
2017

SCT Inst  
2018

### Real-Time Transactions

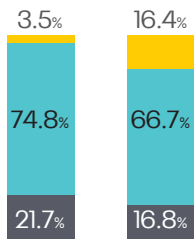
153M <sup>2022</sup>

877M <sup>2027f</sup>

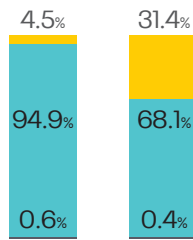
41.8% <sup>F5 Yr CAGR</sup>

Shares of Volumes by Payments Instrument

Transactions

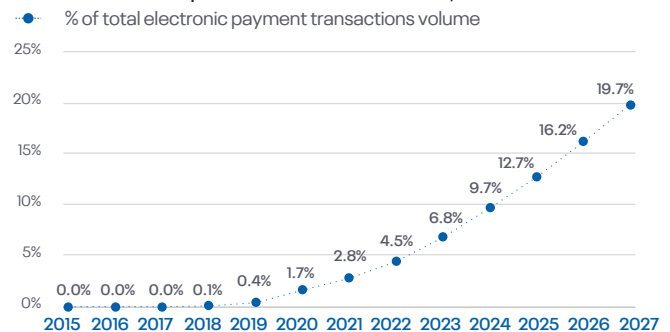


Spend (USD)



● Paper-based payments ● Electronic payments ● Real-time payments

Real-Time Payments Volume and Its Share in Overall Non-Paper-Based Transactions, 2015-27f



#### Mobile Wallet Trends

32.5%

% of adults who have a mobile wallet and have used it in the past year (2022)

#### Initiation/Authorization Methods

4

Bank Account

Mobile

Email

QR Code

#### Scheme Messaging

ISO  
20022

#### Real-Time Acceptance

4



Banks



Merchants



P2P



Billers

However growth is expected to accelerate over 2022 to 2027 both in terms of volume and value, registering CAGRs of 41.8% and 52.5%, respectively. Finland is also part of the P27 Nordic Payments Platform, which aims to provide cross-border real-time payments for individuals in the Nordic region. The platform is set to launch in 2023. The launch of P27 will boost the growth of real-time payments in the country.

#### Payments Fraud Rate

10.9%

Population who reported being a victim of fraud in the last four years

#### Top 3 Payment Fraud Types

43.9%

Confidence trick

12.3%

Card details stolen/skimmed in person

10.5%

Other



[Learn More About Global Real-Time Fraud Trends](#)

# 2023 Prime Time for Real-Time

## France

France adopted SCT Inst in 2018, implementing real-time payments into its domestic network. SCT Inst was developed by the EPC with the aim to create a real-time payments network within the eurozone — though so far, the development towards a truly pan-regional, real-time payments network within the EU has been very slow. Real-time payments have very small usage in France, representing a 0.5% share of total payments volume in 2022. There is, however, an EU regulation in the works that will require all payment service providers to make instant payments available to all their customers at standardized, low prices while ensuring security in the transactions. A top-down mandate of this type has proven effective in galvanizing real-time payments in markets such as Brazil and India. This move could rapidly change the real-time payments market in France, quickly scaling up the tiny share real-time payments held in total payments volume in 2022.

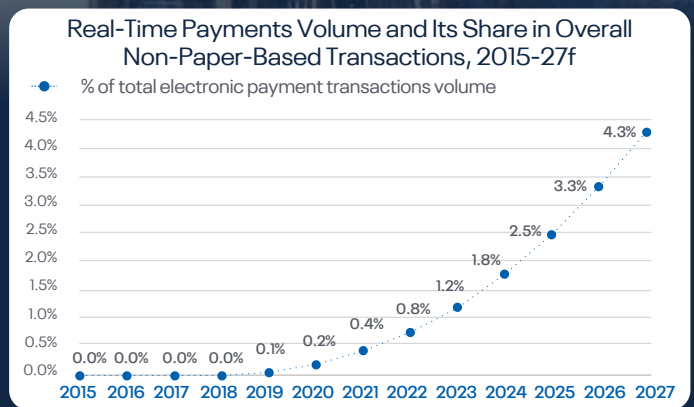
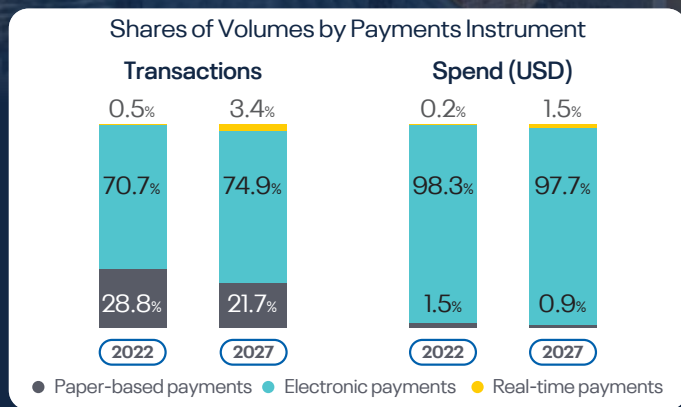
Real-Time Payments Launch

2018

Real-Time Payments Scheme

SCT Inst  
2018

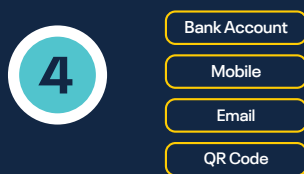
### Real-Time Transactions



#### Mobile Wallet Trends



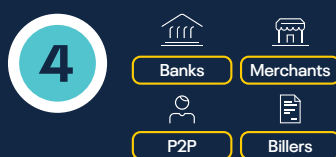
#### Initiation/Authorization Methods



#### Scheme Messaging

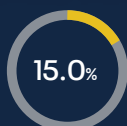
ISO  
20022

#### Real-Time Acceptance

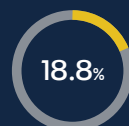
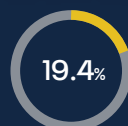


The payments industry in France is heavily dominated by card and “slow” transfer payments, but paper-based payments still represent an almost 30% share of total payments volume in the market. Under current market conditions, by 2027 it is projected that real-time payments volume market share in France will reach 3.4%, with the market growing at an impressive CAGR of 47.8%. This growth will be attributed to the new eInvoicing regulation and a decline in paper-based payments whose share is expected to decrease from 28.8% to 21.7% by 2027 — though card-based payments will be the biggest beneficiary of this drop.

#### Payments Fraud Rate



#### Top 3 Payment Fraud Types



[Learn More About Global Real-Time Fraud Trends](#)



# 2023 Prime Time for Real-Time

## Germany

Germany adopted the pan-European SCT Inst payments scheme in 2017. By integrating it, it gained access to the European instant payments scheme, today providing real-time transfers not only among participating financial institutions in Germany, but also with any participating financial institution in any other country in the eurozone.

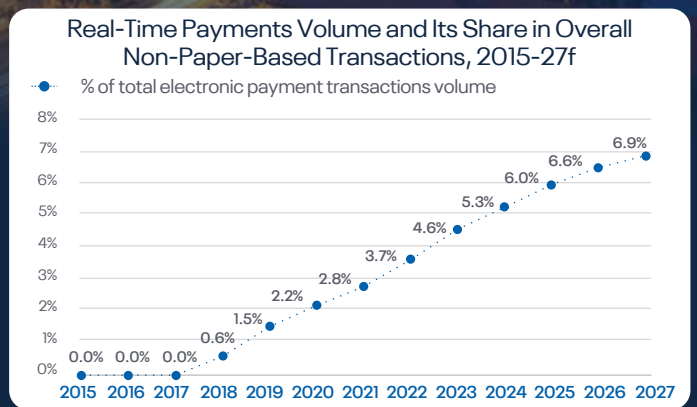
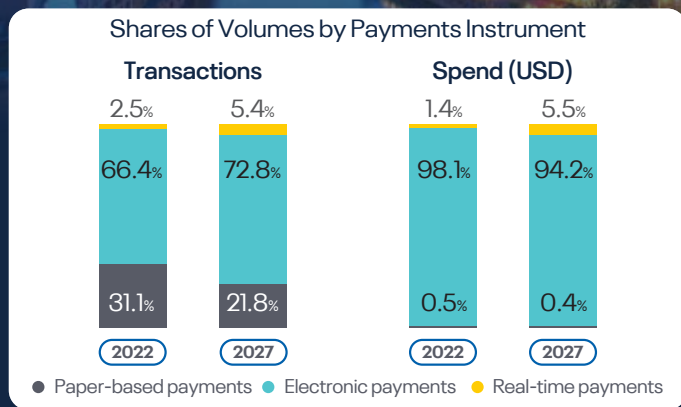
Despite this regional link being in place, real-time payments represent only a small part of total payments volume and spending in Germany. In 2022, real-time payments volume was 2.5% of total payments volume, whereas other forms of electronic payments represented 66.4% and paper-based payments represented 31.1%.

Real-Time Payments Launch  
**2017**

Real-Time Payments Scheme

SCT Inst  
**2017**

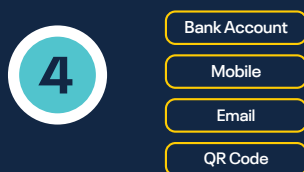
### Real-Time Transactions



#### Mobile Wallet Trends



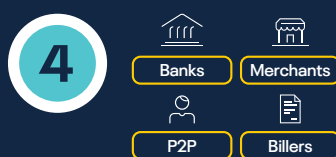
#### Initiation/Authorization Methods



#### Scheme Messaging

**ISO 20022**

#### Real-Time Acceptance



Real-time payment volumes are forecasted to reach 5.4% of total payments volume by 2027, growing at a CAGR of 18.9% between 2022 and 2027. However, the major shift in the German market will be the increase in non-real-time payment electronic payments as cash slowly declines in the forecasted period. With Germany being a cash-preferring market, the clear opportunity for real-time payments in the market is to exploit the fact that cash is expected to decline by 10 percentage points in terms of total market share from 2022 to 2027. As in all SCT Inst markets, the proposed pan-European regulation that would require PSPs to offer real-time payments to all consumers could kick-start a major change here.

#### Payments Fraud Rate



Population who reported being a victim of fraud in the last four years

#### Top 3 Payment Fraud Types



Confidence trick



Card details stolen/skimmed in person



Card details stolen online



[Learn More About Global Real-Time Fraud Trends](#)

# 2023 Prime Time for Real-Time

## Greece

Greece launched its instant payments system IRIS Online Payment system in May 2017, which enabled instant payments through internet banking systems using account numbers or IBANs. Later in June 2017, it launched IRIS Mobile Payment, allowing real-time payments through mobile banking channels using recipients' email addresses, mobile phone numbers, company VAT numbers or QR codes. The growth in real-time payments has been slow in Greece. However, with paper-based transaction volume amounting to a 61.9% share in 2022, Greece presents a huge potential for real-time payments growth. Instant payments volume is expected to increase at a CAGR of 27.8% from 2022 to 2027.

Real-Time Payments  
Launch

2017

Real-Time Payments  
Scheme

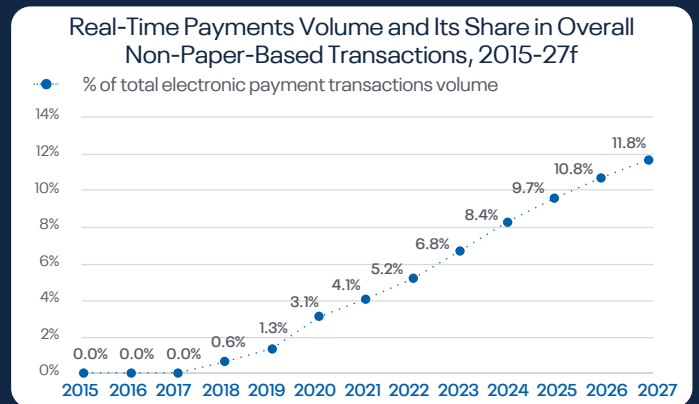
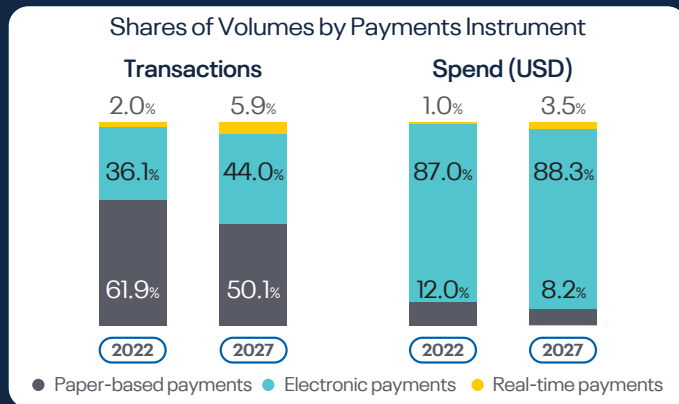
IRIS  
2017

## Real-Time Transactions

120M <sup>2022</sup>

410M <sup>2027f</sup>

27.8% <sup>F5 Yr CAGR</sup>



### Scheme Messaging

Proprietary

### Initiation/Authorization Methods

4

- Bank Account
- Mobile
- Email
- QR Code

### Real-Time Acceptance

4

- Banks
- Merchants
- P2P
- Billers



[Learn More About Global Real-Time Fraud Trends](#)

# 2023 Prime Time for Real-Time

## Hungary

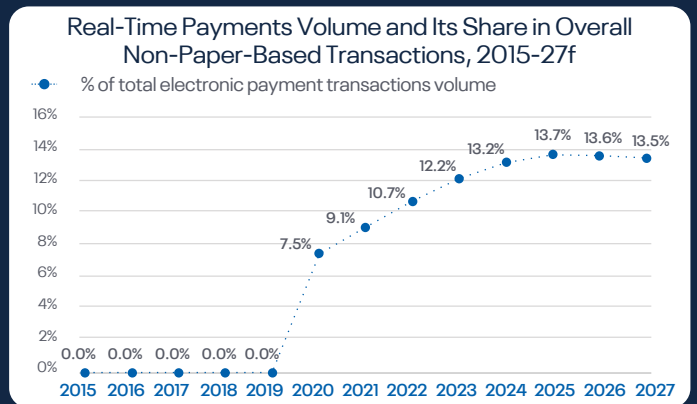
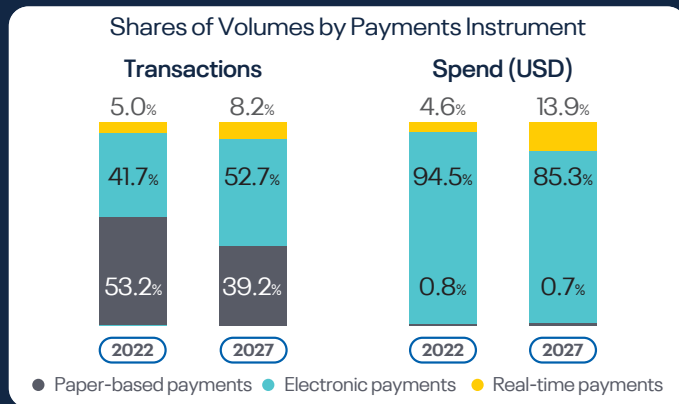
Azonnali fizetési rendszer (AFR) is Hungary's domestic instant credit transfer scheme launched in March 2020 in compliance with SCT Inst standards. Despite being less than two years old, the share of real-time payments of the total payments transaction volume stood at 5.0% in 2022. This can be attributed to AFR supporting different kinds of payments including individual P2P, bulk and recurring payments, and proving the convenience of making payments using mobile phone number, email address or tax identification number. The central bank requires all the Hungarian banks to offer real-time payments via AFR, which also supported the growth. The rally in both real-time payments volume and value will continue at the expense of cash, registering CAGRs of 17.8% and 28.6% respectively from 2022 to 2027. The increased preference for electronic payments amid COVID-19 will also support this trend.

Real-Time Payments Launch  
**2020**

Real-Time Payments Scheme  
**AFR 2020**

### Real-Time Transactions

**222M** <sup>2022</sup>      **504M** <sup>2027f</sup>      **17.8%** <sup>F5 Yr CAGR</sup>



#### Scheme Messaging

**ISO 20022**

#### Initiation/Authorization Methods

- 3**
- Bank Account
  - Mobile
  - Email

#### Real-Time Acceptance

- 4**
- Banks
  - Merchants
  - P2P
  - Billers



[Learn More About Global Real-Time Fraud Trends](#)

# 2023 Prime Time for Real-Time Ireland

A real-time payments domestic scheme has not been launched at a country level in Ireland, although a handful of banks offer this service via SCT Inst as well as offering future alternative P2P payment services through mobile propositions like Synchron. Electronic payments are widely used in the country, with their share accounting for 67.3% of the total payments transaction volume in 2022. The large banked population and high awareness of electronic payments will act as key contributing factors if an instant payments system is launched at the country level. It is possible that, as with other EU markets, the proposed pan-European regulation requiring PSPs to give consumers low-cost access to real-time payments will accelerate adoption in this market. Given the very slow pace of adoption in Ireland thus far, it is likely that this market will be the single biggest beneficiary of the proposed regulation among the EU markets.

Real-Time Payments Launch

**Not Formally Launched**

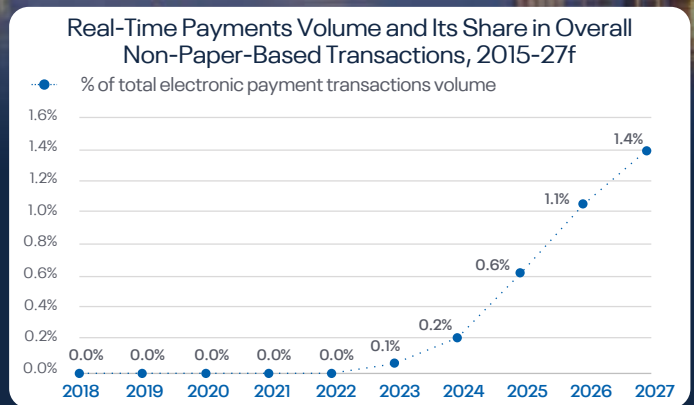
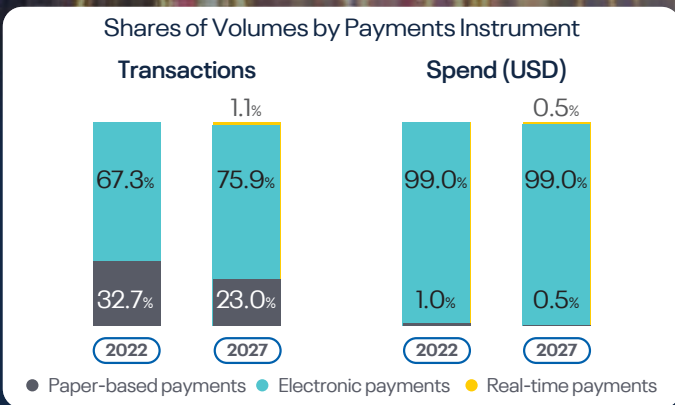
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Real-Time Payments Scheme

SCT Inst

**Not Formally Launched**

## Real-Time Transactions



### Mobile Wallet Trends



### Scheme Messaging

**ISO 20022**  
Expected

### Initiation/Authorization Methods



### Real-Time Acceptance

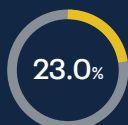


### Payments Fraud Rate

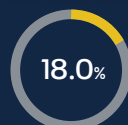


Population who reported being a victim of fraud in the last four years

### Top 3 Payment Fraud Types



Confidence trick



Card details stolen online



Bank account hacked



[Learn More About Global Real-Time Fraud Trends](#)

# 2023 Prime Time for Real-Time

## Italy

Italy is among the few nations which adopted the pan-European SCT Inst scheme in the early stage in November 2017. Despite the head start and wider participation from banks and payment service providers (287 participants as of November 2022), the growth in adoption and usage of real-time payments has been slow due to high preference for cash and the initially higher fees requested by financial institutions.

Real-Time Payments Launch

2017

Real-Time Payments Scheme

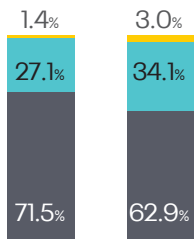
SCT Inst  
2017

### Real-Time Transactions

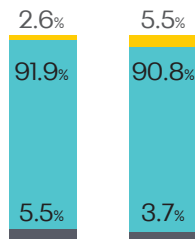
364M<sup>2022</sup> | 787M<sup>2027f</sup> | 16.7%<sup>F5 Yr CAGR</sup>

Shares of Volumes by Payments Instrument

Transactions

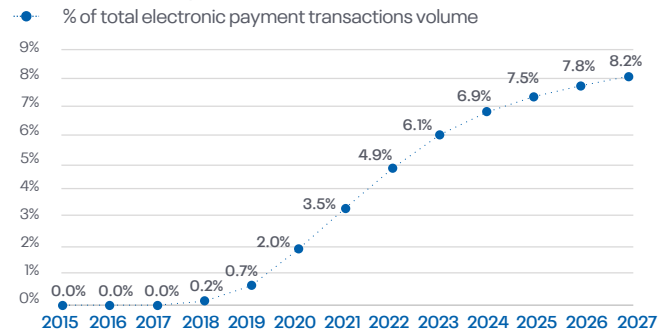


Spend (USD)



● Paper-based payments ● Electronic payments ● Real-time payments

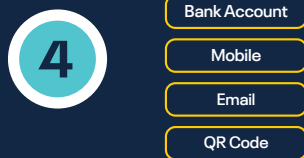
Real-Time Payments Volume and Its Share in Overall Non-Paper-Based Transactions, 2015-27f



Mobile Wallet Trends



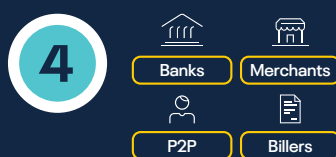
Initiation/Authorization Methods



Scheme Messaging

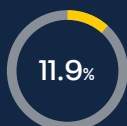
ISO  
20022

Real-Time Acceptance

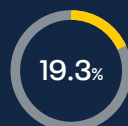
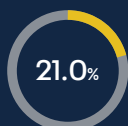


While real-time payments accounted for just a 1.4% share of total payments transaction volume in 2022, paper-based transactions occupied a 71.5% share. However, with the COVID-19 pandemic now accelerating the shift towards digital payments, real-time payments volume is set to grow at a CAGR of 16.7% from 2022 to 2027. This acceleration in adoption will likely be further increased by the proposed pan-European regulation requiring all PSPs to offer real-time payments to their customers at fixed, low prices.

Payments Fraud Rate



Top 3 Payment Fraud Types



[Learn More About Global Real-Time Fraud Trends](#)

# 2023 Prime Time for Real-Time Netherlands

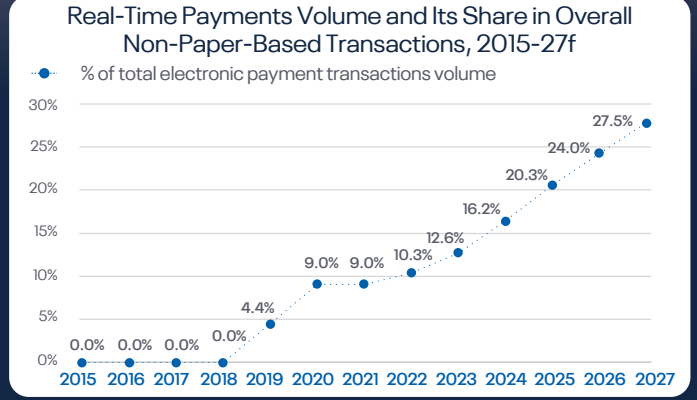
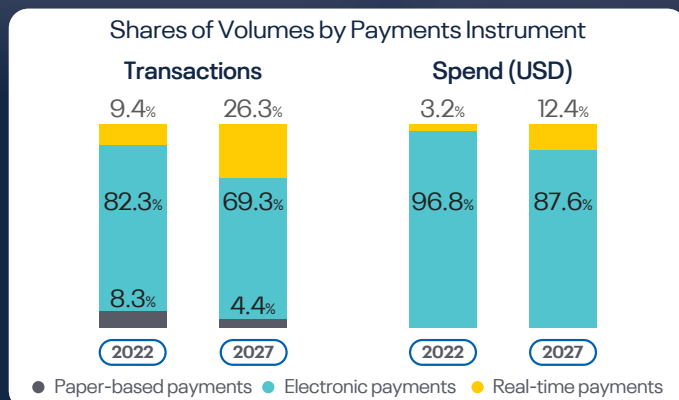
The Netherlands introduced a real-time payments infrastructure when banks adopted SCT Inst in 2017. SCT Inst is a pan-European real-time payments scheme that was developed by the European Payments Commission. It provides instant payment transfers within any countries that are part of the eurozone. In 2022, real-time payments market share of total payments volume reached 9.4%, overtaking paper-based transactions, which had an 8.3% share of total payments volume. However, this is still far from the share of non-real-time payment electronic payments, which had 82.3% share of total payments volume.

Real-Time Payments Launch  
**2017**

Real-Time Payments Scheme  
**SCT Inst 2017**

## Real-Time Transactions

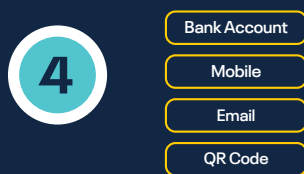
**1.1B** (2022) | **4.0B** (2027f) | **29.3%** (F5 Yr CAGR)



#### Mobile Wallet Trends



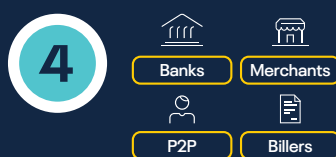
#### Initiation/Authorization Methods



#### Scheme Messaging

**ISO 20022**

#### Real-Time Acceptance



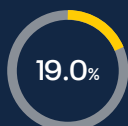
By 2027, real-time payments are expected to have a 26.3% share of total payments volume, growing at a CAGR of 29.3%, while both electronic payments (excluding real-time payments) and paper-based payments will respectively decline to 69.3% and 4.4% share of total payments volume. The Netherlands is thus a market to watch for the future and will become a European leader in real-time in the coming years — even independently of the boost real-time payments will likely gain from the proposed new pan-European regulation requiring PSPs to offer real-time payments to all consumers.

#### Payments Fraud Rate



Population who reported being a victim of fraud in the last four years

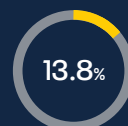
#### Top 3 Payment Fraud Types



Confidence trick



Card details stolen online



Identity theft



[Learn More About Global Real-Time Fraud Trends](#)

# 2023 Prime Time for Real-Time

## Norway

Norway is one of the closest markets to being fully electronic in the world, with only 2.5% of transaction volume in the market being paper based in 2022. Real-time payments represented a 6.5% share of total payments volume in 2022, a distant second behind non-real-time payments electronic payments, which was at 91%. Real-time payments volume is forecasted to grow at a CAGR of 23.9% from 2022 to 2027, reaching a 15.1% share of overall payments volume. This growth is unusual for the region, coming 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 real-time payments in this market.

Real-Time Payments  
Launch

2013

Real-Time Payment  
Schemes

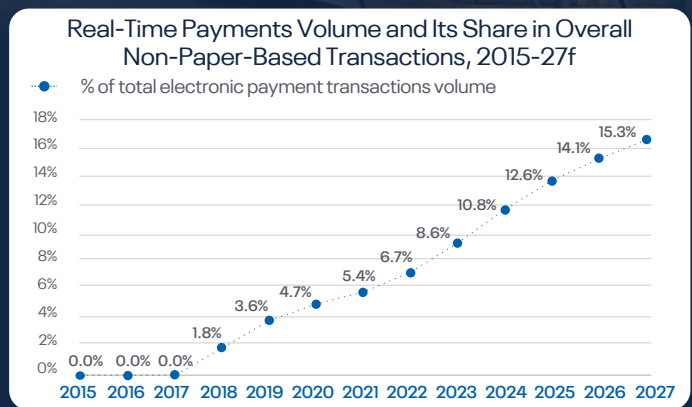
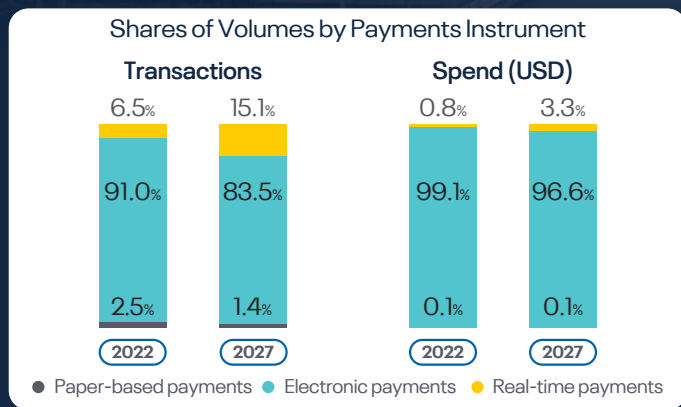
Straksbetalinger

2011

Vipps

2015

### Real-Time Transactions



#### Mobile Wallet Trends



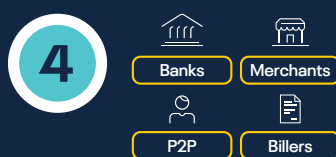
#### Initiation/Authorization Methods



#### Scheme Messaging

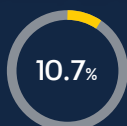
Proprietary

#### Real-Time Acceptance



Norway's largest payments application Vipps allows consumers and merchants to complete real-time payment transactions between bank accounts in Norway, based on a mobile UX. Vipps is in the process of merging with Danske Bank-owned MobilePay to create an ecosystem that would enable real-time payments cross-border transactions between Norway, Denmark and Finland. The merger received approval from the EU Commission in late 2022. Real-time payments volume and spends are expected to grow in Norway once this merger is completed.

#### Payments Fraud Rate

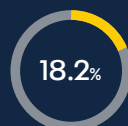


Population who reported being a victim of fraud in the last four years

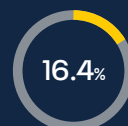
#### Top 3 Payment Fraud Types



Card details stolen online



Card details stolen/skimmed in person



Confidence trick



[Learn More About Global Real-Time Fraud Trends](#)

# 2023 Prime Time for Real-Time

## Poland

Poland was one of the earliest adopters of real-time payments in Europe and has two systems in place, both launched in 2012. The Express Elixir real-time payments scheme was launched by Krajowa Izba Rozliczeniowa, Poland's payments clearing system, and BlueCash was launched by the Blue Media company. Both platforms enable real-time 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 only must be a user of the BlueCash platform.

Real-Time Payments Launch

2012

Real-Time Payments Schemes

BlueCash  
2012

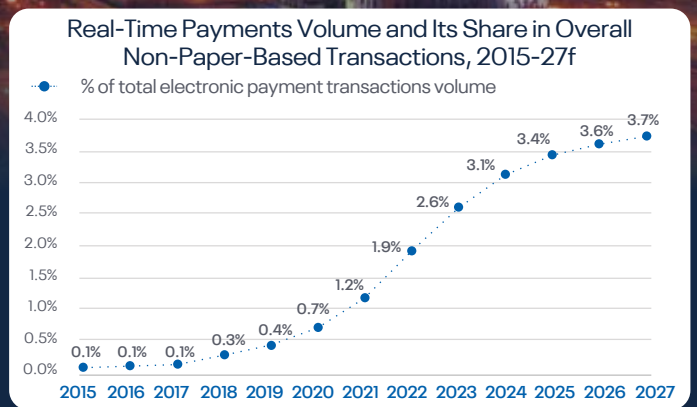
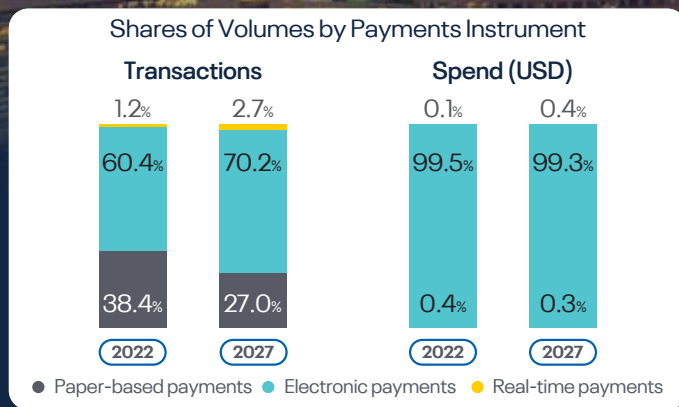
Express Elixir  
2012

## Real-Time Transactions

257M <sup>2022</sup>

794M <sup>2027f</sup>

25.3% <sup>F5 Yr CAGR</sup>



### Mobile Wallet Trends



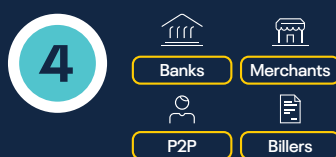
### Initiation/Authorization Methods



### Scheme Messaging

ISO  
20022

### Real-Time Acceptance



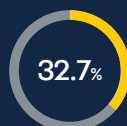
In 2022, real-time payments represented a 1.2% share of total payments volume, making up a very small share of payment tools compared to electronic payments (excluding real-time payments) which were at 60.4% and paper-based transactions which were at 38.4%. Future projections for real-time payments are pointing towards a general increase in activities. Real-time payments volume is expected to reach 2.7% in 2027 growing at a CAGR of 25.3% from 2022 to 2027 and real-time payments spending will grow at a similar CAGR of 30.1% over the same period. Even so, by 2027 Poland will still be a relatively underdeveloped real-time payments market.

### Payments Fraud Rate

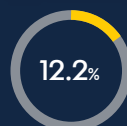


Population who reported being a victim of fraud in the last four years

### Top 3 Payment Fraud Types



Confidence trick



Card details stolen/skimmed in person



Card details stolen online



[Learn More About Global Real-Time Fraud Trends](#)



# 2023 Prime Time for Real-Time

## Portugal

Portugal does not have a domestic real-time payments scheme. The Portuguese interbank clearing system SICOI enabled SCT Inst transfers in Portugal in September 2018. With SCT Inst initially available for domestic transactions, Portuguese banks started offering cross-border transfers from October 2020. The real-time payments market in the country is still in its nascent stage, with real-time payments accounting for just a 0.2% share of the total payments transaction volume in 2022. However, with the preference for electronic payments on the rise, the further prospects of real-time payments look promising, with their volume anticipated to record a CAGR of 50.3% from 2022 to 2027. This acceleration in adoption will likely be further increased by the proposed pan-European regulation requiring all PSPs to offer real-time payments to their customers at fixed, low prices.

Real-Time Payments Launch

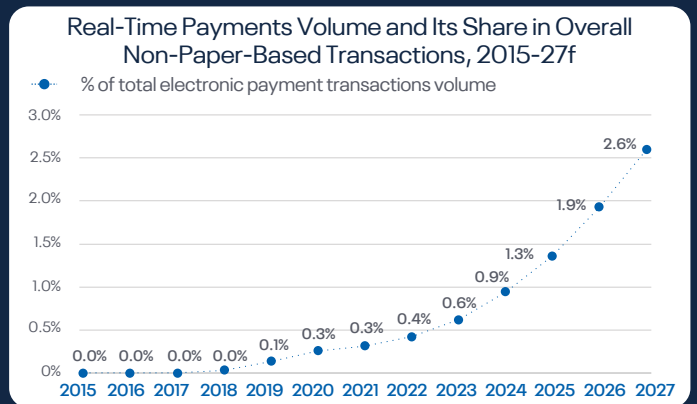
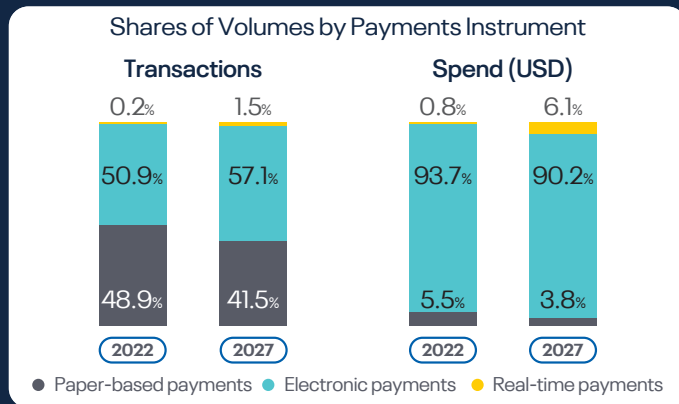
**2018**

Real-Time Payments Scheme

SCT Inst  
**2018**

### Real-Time Transactions

**10.2M** <sup>2022</sup> | **78.4M** <sup>2027f</sup> | **50.3%** <sup>F5 Yr CAGR</sup>



#### Scheme Messaging

ISO  
20022

#### Initiation/Authorization Methods

- 4**
- Bank Account
  - Mobile
  - Email
  - QR Code

#### Real-Time Acceptance

- 4**
- Banks
  - Merchants
  - P2P
  - Billers



[Learn More About Global Real-Time Fraud Trends](#)

# 2023 Prime Time for Real-Time

## Spain

Spain launched its domestic instant payments system Bizum in October 2016 and later adopted SCT Inst in November 2017. The adoption and use of real-time payments in the country has been on a gradual rise, supported by increasing participation from banks and financial institutions. While Bizum had 32 participants, SCT Inst was adopted by more than 90 banks in Spain as of November 2022.

Real-Time Payments Launch

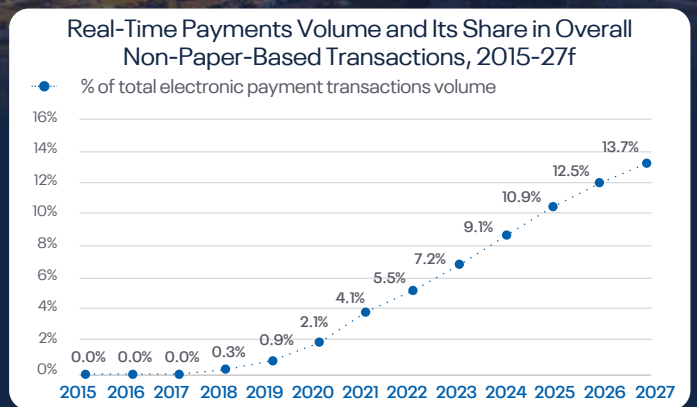
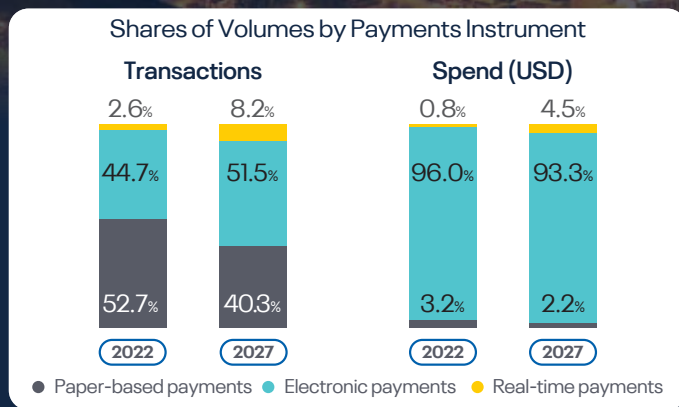
**2016**

Real-Time Payment Schemes

Bizum  
**2016**  
SCT Inst  
**2017**

## Real-Time Transactions

**643M** <sup>2022</sup> | **2.4B** <sup>2027f</sup> | **30.4%** <sup>F5 Yr CAGR</sup>



### Mobile Wallet Trends



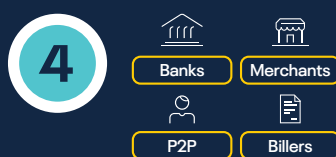
### Initiation/Authorization Methods



### Scheme Messaging

**ISO 20022**

### Real-Time Acceptance



The increasing demand for electronic payments amid COVID-19 has also supported the growth. The trend is likely to continue, with real-time payments set to record a CAGR of 30.4% from 2022 to 2027, in terms of volume. Consequently, the share of real-time payments of the total volume of electronic payments will increase to 8.2% in 2027 from 2.6% in 2022. This acceleration in adoption will likely be further increased by the proposed pan-European regulation requiring all PSPs to offer real-time payments to their customers at fixed, low prices.

### Payments Fraud Rate



Population who reported being a victim of fraud in the last four years

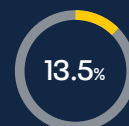
### Top 3 Payment Fraud Types



Card details stolen online



Confidence trick



Card details stolen/skimmed in person



[Learn More About Global Real-Time Fraud Trends](#)

# 2023 Prime Time for Real-Time Sweden

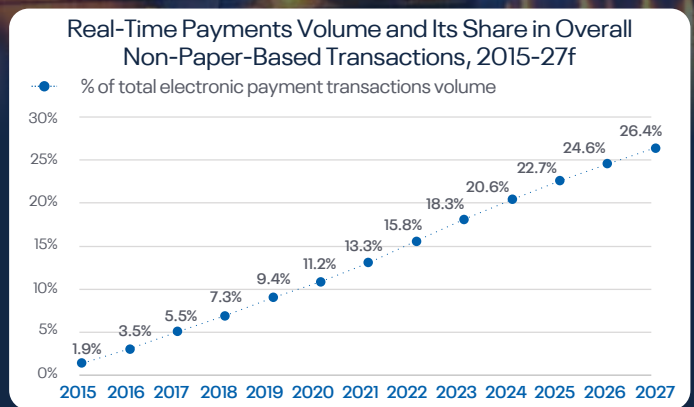
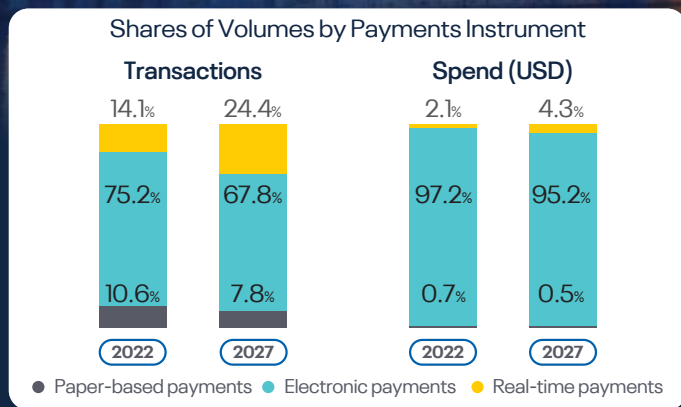
In 2022, real-time payments accounted for a 14.1% share of total payments volume, putting it ahead of paper-based payments, which was at 10.6%, but second to non-real-time payment electronic payments, which was 75.2%. But when looking at share of value of transactions, real-time payments only represented 2.1% of total payments spend while electronics payments (excluding real-time payments) were at 97.2% and paper-based payments at 0.7%. This suggests that real-time payments are being used for everyday expenditures and have been made accessible to Swedish consumers through the Swish payments service, which is tracking to transition to the new RIX-Inst payment rails shortly. From 2022 to 2027, real-time payments volume is expected to grow at a CAGR of 15.6%, while spending should grow further at a CAGR of 21.2% during the same period.

Real-Time Payments Launch  
**2012**

Real-Time Payments Scheme

BIR  
**2012**

## Real-Time Transactions



#### Mobile Wallet Trends



#### Initiation/Authorization Methods



#### Scheme Messaging

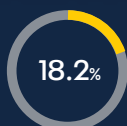
**ISO 20022**

#### Real-Time Acceptance

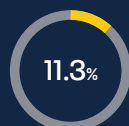
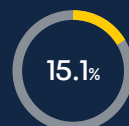


Paper-based payments are expected to gradually decline, with a market share of total payments volume dropping from 10.6% to 7.8% by 2027. Sweden is slowly preparing to transition to a cashless economy within the next 10 years. This would be an opportunity for real-time payments to gain more market share and replace paper-based payments. Sweden is also part of the P27 initiative which will create a real-time payments, cross-border infrastructure between Sweden, Denmark and Finland. P27 reported in June 2022 that 13 Swedish banks already connected to the P27 initiative, with this expected to impact usage of real-time payments into the longer term.

#### Payments Fraud Rate



#### Top 3 Payment Fraud Types



[Learn More About Global Real-Time Fraud Trends](#)

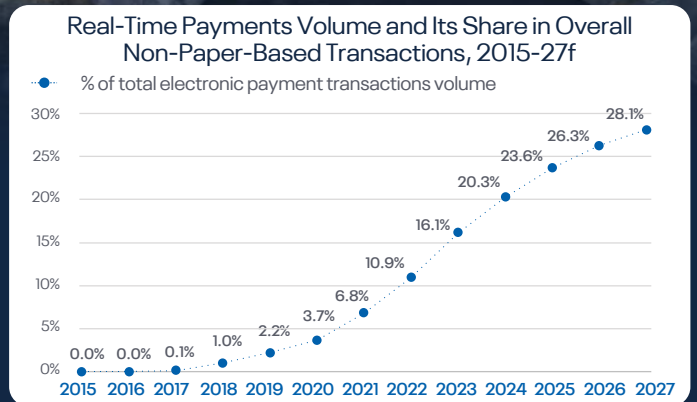
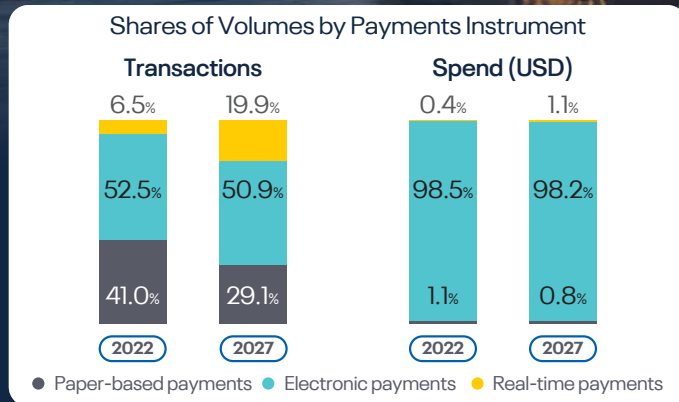
# 2023 Prime Time for Real-Time Switzerland

In 2022, real-time payments represented a 6.5% share of total payments volume, a smaller payments tool compared to electronic payments (excluding real-time payments), which own the largest market share at 52.5% of total payments volume, and paper-based payments owning a 41% share. With the upcoming launch of the new Swiss instant payments scheme SIC5 in 2024, future projections for real-time payments share are positive. It is expected to reach 19.9% of total payments volume by 2027 at a CAGR of 29.1% between 2022 and 2027 (potentially higher, when all other financial institutions are mandated to switch to SIC5 by 2026). SIC5 is expected to have a huge impact on the market, and the top five banks have already begun testing in preparation for its launch. Recent growth in the market is also due to a seismic shift to cloud infrastructure to deliver a broader spectrum of digital payment solutions. Many of the banks are leveraging the cloud to offer richer products to their customers while at the same time significantly reducing associated costs around payments technology.

Real-Time Payments Launch  
**2016**  
Real-Time Payments Scheme  
**TWINT 2016**

## Real-Time Transactions

**377M** <sup>2022</sup> | **1.4B** <sup>2027f</sup> | **29.1%** <sup>F5 Yr CAGR</sup>



### Scheme Messaging

**ISO 20022**

### Initiation/Authorization Methods

- 3** Bank Account
- Mobile
- QR Code

### Real-Time Acceptance

- 4** Banks
- Merchants
- P2P
- Billers

Growth has also been influenced by the popularity of the TWINT mobile overlay service for the Swiss near-real-time payments system — in 2021, TWINT had 3.5 million users in the market (out of a population of 8.7 million) with growing adoption as the service is further rolled out. Further developments in cross-border payments are on the horizon for TWINT, which will further boost its adoption and popularity. Finally, with the upcoming EU mandates for financial institutions to adopt the SEPA Inst payments scheme, Swiss banks that offer euro accounts will also need to adopt the scheme if they wish to continue doing so. Many are turning to Switzerland's Central Infrastructure (SIX) to provide support in meeting these requirements, as well as the SIC5 scheme, as broader adoption via a centralized service will significantly mitigate costs and investment for Tier 2 and 3 banks.



[Learn More About Global Real-Time Fraud Trends](#)

# 2023 Prime Time for Real-Time

## Turkey

The Central Bank of the Republic of Turkey introduced real-time payments in the country with the launch of Retail Payment System (RPS) in December 2012. The system supports individual P2P, C2B and B2B transfers, and also bulk transfers such as salary payments. However, transfers through RPS were only limited to business hours.

Real-Time Payments Launch

2012

Real-Time Payment Schemes

Retail Payment System

2012

FAST

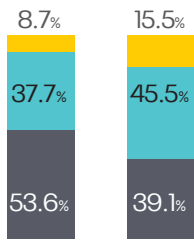
2021

### Real-Time Transactions

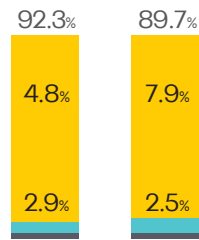
2.3<sup>B</sup> (2022)      6.1<sup>B</sup> (2027f)      21.3% (F5 Yr CAGR)

Shares of Volumes by Payments Instrument

Transactions

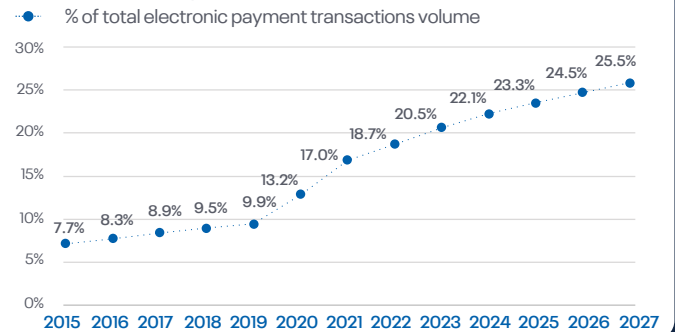


Spend (USD)



● Paper-based payments ● Electronic payments ● Real-time payments

Real-Time Payments Volume and Its Share in Overall Non-Paper-Based Transactions, 2015-27f



#### Mobile Wallet Trends



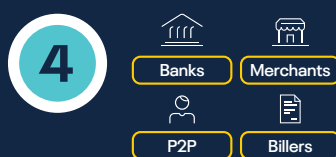
#### Initiation/Authorization Methods



#### Scheme Messaging

Proprietary

#### Real-Time Acceptance



This prompted the central bank to launch a new instant payments system called Instant and Continuous Transfer of Funds (FAST) in January 2021, making real-time payments available 24/7. The new system supports payments using mobile phone number, ID number, email address and QR code. The instant payments volume is set to record a 21.3% CAGR from 2022 to 2027.

#### Payments Fraud Rate

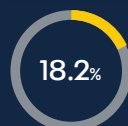


Population who reported being a victim of fraud in the last four years

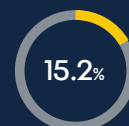
#### Top 3 Payment Fraud Types



My card was lost or stolen



Confidence trick



Identity theft



[Learn More About Global Real-Time Fraud Trends](#)

# 2023 Prime Time for Real-Time

## U.K.

The payments industry in the U.K. is strongly tied to card payments infrastructure. Real-time payments in the U.K. are expected to represent a 10.1% share of total payments volume in 2022, which is above the regional average. However, considering the U.K.'s Faster Payments system was a regional pioneer launched in 2008, its position in the region is not as strong as might be expected, with Sweden and Denmark notably ahead in terms of real-time payments' share of overall payments volume. However, this should change with the planned launch of the New Payments Architecture (NPA) in 2025, which will replace the aging 17-year-old Faster Payments scheme with a modern infrastructure designed to improve access, innovation and efficiency.

Real-Time Payments Launch

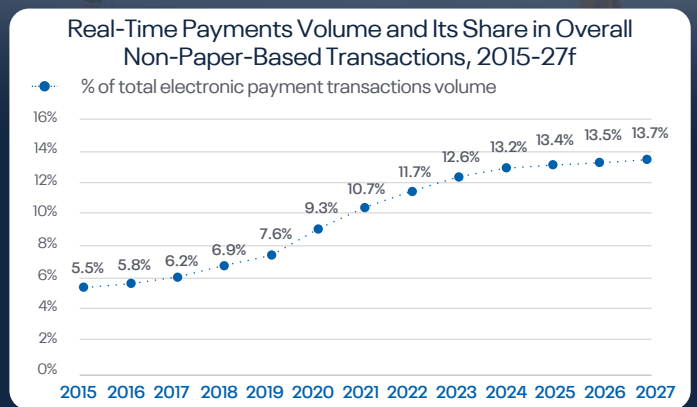
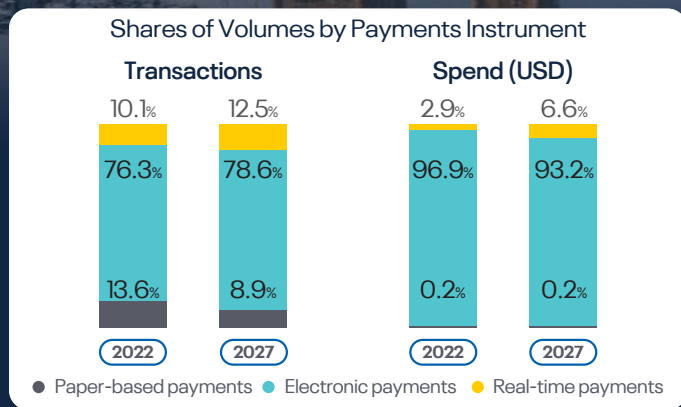
**2008**

Real-Time Payments Scheme

Faster Payments

**2008**

## Real-Time Transactions



### Mobile Wallet Trends



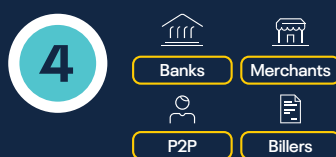
### Initiation/Authorization Methods



### Scheme Messaging

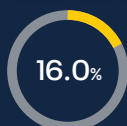
**ISO 8583**

### Real-Time Acceptance



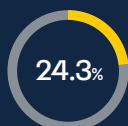
Supporting an extensive payments message based on the ISO 20022 financial messaging standard deployed by the most modern payment systems worldwide, NPA will allow for interoperability across both domestic — the U.K. high-value payments system CHAPS is moving to ISO 20022 in June — and international payment schemes. By 2027, real-time payments will have overtaken paper-based payment transactions, reaching 12.5% share of total payments volume, while electronic payments and paper-based payments will be at 78.6% and 8.9%, respectively. This speaks more to the rapid decline of cash in the market than the growth of real-time payments, though — the U.K. remains a card-dominated market.

### Payments Fraud Rate

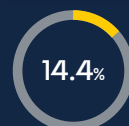


Population who reported being a victim of fraud in the last four years

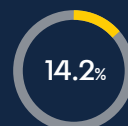
### Top 3 Payment Fraud Types



Confidence trick



Card details stolen/skimmed in person



Card details stolen online



[Learn More About Global Real-Time Fraud Trends](#)

# 2023 Prime Time for Real-Time

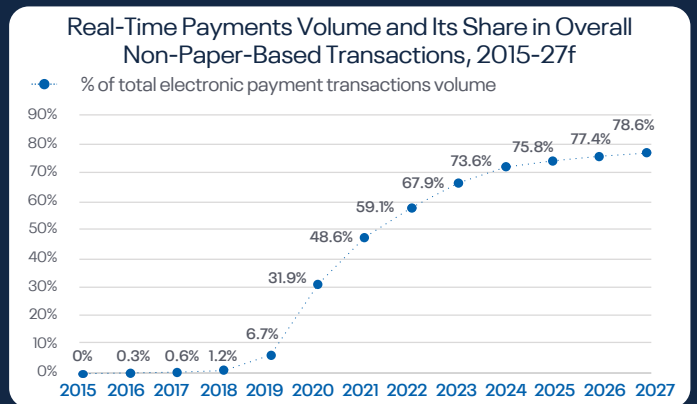
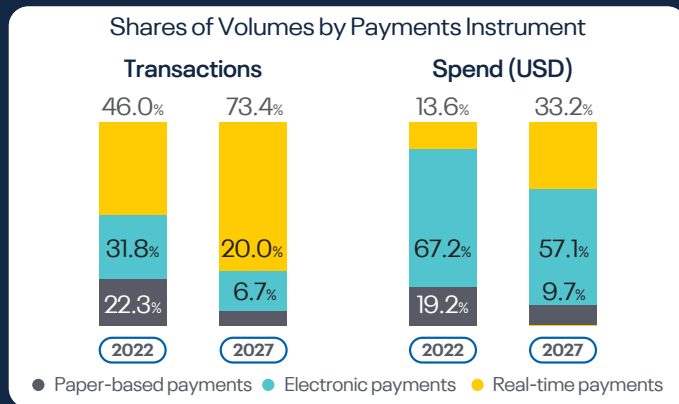
## Bahrain

Bahrain is one of the larger real-time payment markets in the MEASA region (not counting India), with instant payments accounting for 46% of total payments volume in the country, and the majority of all electronic payments. Real-time payments are thus a major component of the overall market, following a major upswing in its usage during 2020. Previously, Bahrain was a cash-dominated market. The future for real-time payments also looks positive for the market, with the share of overall payments volume accounted for by these services expected to reach 73.4% of all transactions in the market by 2027. This makes Bahrain one of the most established real-time payment markets in the region, if not the largest by volume.

Real-Time Payments Launch  
**2015**  
Real-Time Payments Scheme  
**Fawri+ 2015**

### Real-Time Transactions

**276M** <sup>2022</sup> | **1.3B** <sup>2027f</sup> | **35.5%** <sup>F5 Yr CAGR</sup>



#### Scheme Messaging

Unavailable

#### Initiation/Authorization Methods

- 3**
- Bank Account
  - Mobile
  - QR Code

#### Real-Time Acceptance

- 4**
- Banks
  - Merchants
  - P2P
  - Billers



[Learn More About Global Real-Time Fraud Trends](#)

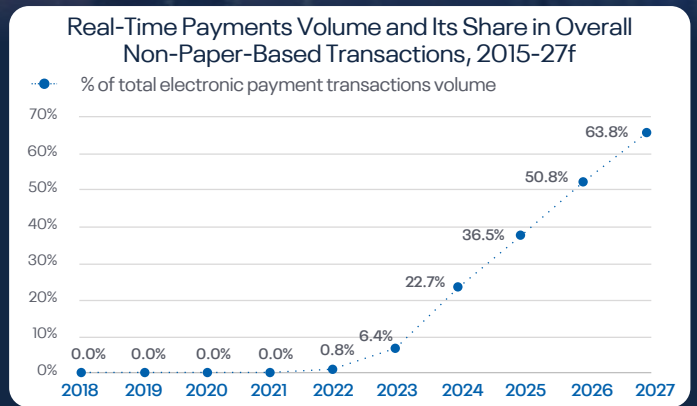
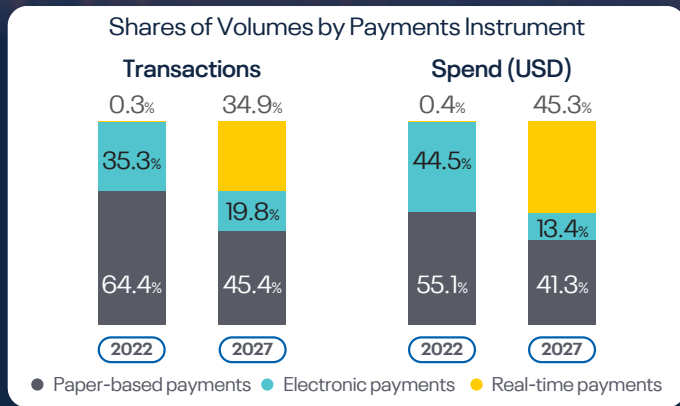
# 2023 Prime Time for Real-Time

## Egypt

In March 2022, the Central Bank of Egypt (CBE) launched the instant payment solution Instant Payment Network (IPN), which allows instant fund transfers through digital channels, including internet and mobile banking, as well as the InstaPay app. InstaPay is a mobile app licensed by the CBE as a payment service provider via the IPN. The solution allows customers of the participating banks to transfer funds between different accounts, the Meeza cards and Meeza digital wallet. Customers can transfer funds by selecting the recipients' registered mobile phone numbers or instant payment addresses (IPA) linked to their bank accounts.

Real-Time Payments Launch  
**2022**  
Real-Time Payments Scheme  
**IPN 2022**

### Real-Time Transactions



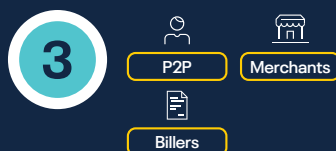
#### Scheme Messaging

Unavailable

#### Initiation/Authorization Methods



#### Real-Time Acceptance



IPA is a simplified address for the customer's account which can be used to send and receive money instead of using the full bank account details (name@InstaPay). The service is available 24/7, and the transaction limit is set at EGP50,000 (\$3,183.30) per transaction, EGP60,000 (\$3,819.97) per day and EGP200,000 (\$12,733.22) per month. As of February 2023, there are 10 participants including Arab Bank, Commercial International Bank, EG Bank, National Bank of Egypt, QNB Alahli, AlexBank, Banque Misr, SAIB Bank, Arab African International Bank and Banque du Caire.



[Learn More About Global Real-Time Fraud Trends](#)



# 2023 Prime Time for Real-Time

## India

The Indian real-time payments market is the most advanced in the world by far, ahead of developed and developing markets alike. Real-time payments were available in India since the launch of Immediate Payment Service (IMPS) in November 2010. However, the Unified Payments Interface (an overlay payments system launched in April 2016 based on IMPS) is the one which disrupted the payments space in the country, enabling real-time payments using QR codes, mobile numbers and virtual IDs.

Real-Time Payments Launch

2010

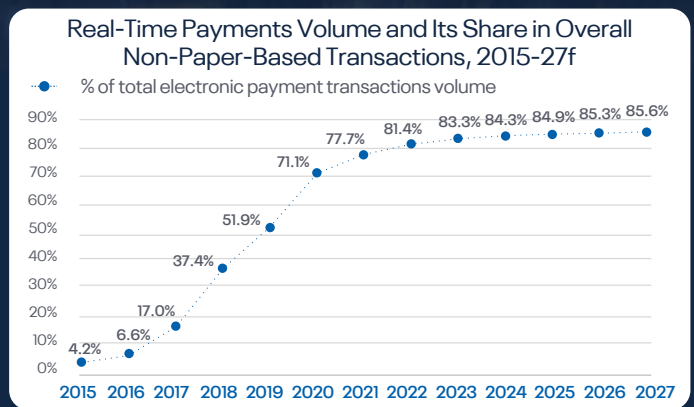
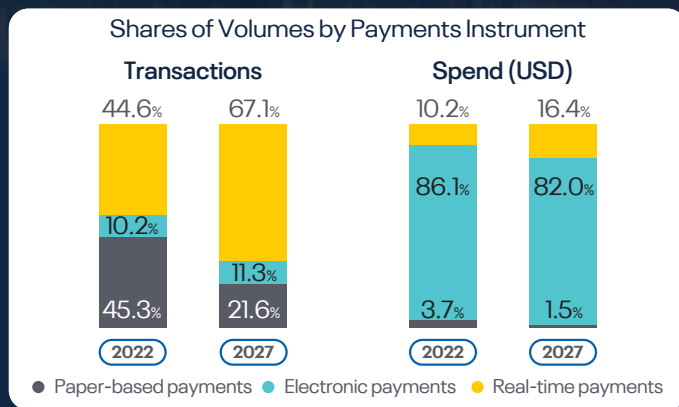
Real-Time Payment Schemes

IMPS  
2010

UPI  
2016

### Real-Time Transactions

89<sup>B</sup> <sup>2022</sup> | 235<sup>B</sup> <sup>2027f</sup> | 21.3% <sup>F5 Yr CAGR</sup>



#### Mobile Wallet Trends

90.4%  
% of adults who have a mobile wallet and have used it in the past year (2022)

#### Initiation/Authorization Methods

- Bank Account
- Mobile
- QR Code

#### Scheme Messaging

ISO  
8583

#### Real-Time Acceptance

- Banks
- Merchants
- P2P
- Billers

The wider adoption of UPI-based mobile payment apps, growing acceptance of QR-code payments among merchants and increasing preference for digital payments amid the COVID-19 pandemic all contributed to real-time payments accounting for a 44.6% share of total payments transaction volume in 2022. With consumers increasingly shifting from cash to mobile-based real-time payments, skipping payment cards, the share of real-time payments of total payments volume is forecasted to rise to 67.1% in 2027.

#### Payments Fraud Rate

44.6%

Population who reported being a victim of fraud in the last four years

#### Top 3 Payment Fraud Types

25.0%

Confidence trick

16.1%

Identity theft

15.5%

Card details stolen/skimmed in person



[Learn More About Global Real-Time Fraud Trends](#)

# 2023 Prime Time for Real-Time

## Kenya

Kenya launched its real-time payments system called PesaLink in 2017. It enables Kenyan consumers to instantly transfer funds between bank accounts and it handles multiple currencies such as Kenyan shillings, euros, U.S. dollars and British pounds. The Kenyan economy is very dependent on paper-based transactions; in 2022, paper-based transactions represented an 84.5% share of payments volume while real-time payments were only at 0.1%. Electronic payments (excluding real-time payments) were at a 15.4% share of payments volume.

Real-Time Payments Launch

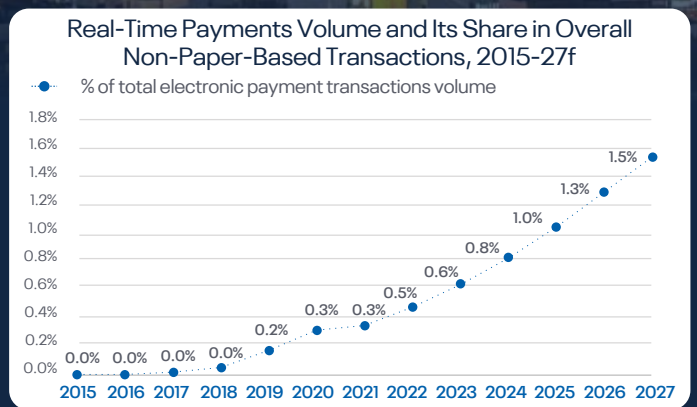
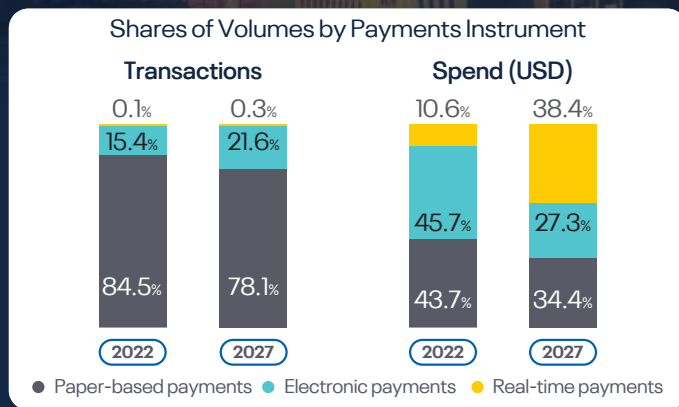
2017

Real-Time Payments Scheme

PesaLink  
2017

### Real-Time Transactions

12<sup>B</sup> <sup>2022</sup> | 58<sup>B</sup> <sup>2027f</sup> | 37.0% <sup>F5 Yr CAGR</sup>



#### Scheme Messaging

ISO  
20022

#### Initiation/Authorization Methods

2

- Bank Account
- Mobile

The limited access to electronic payments is an opportunity for real-time payments to steal market share away from paper-based transactions, but mobile money services (M-PESA foremost among them) have a strong hold on the electronic payments market in Kenya at present and will need to be collaborated with in order for real-time payments to make any real headway. 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. Projections for the share of real-time payments total payments volume are showing a small increase to 0.3% by 2027 at a CAGR of 37%. In October 2021, PesaLink migrated from ISO 8583 to ISO 20022 to facilitate a data driven payments ecosystem and support new use cases such as RTP (Request To Pay), payment initiation and direct debits.



[Learn More About Global Real-Time Fraud Trends](#)

# 2023 Prime Time for Real-Time

## Nigeria

NIBSS real-time payments (NIP) is the instant payments system in Nigeria which was launched by the Nigeria Inter-Bank Settlement System (NIBSS) in July 2011. The system 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, POS terminals and ATMs, which helped NIP to achieve high adoption and usage rates.

Real-Time Payments  
Launch

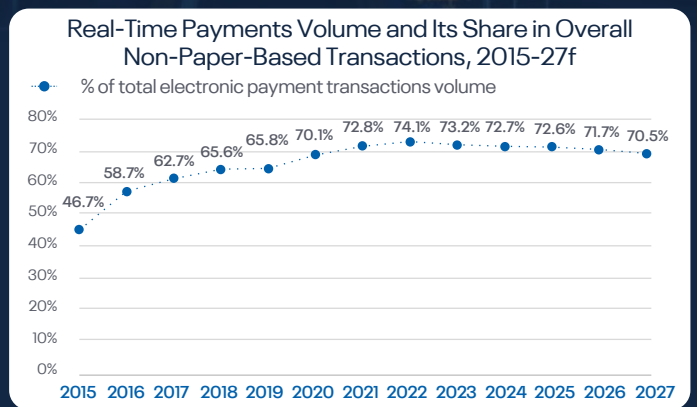
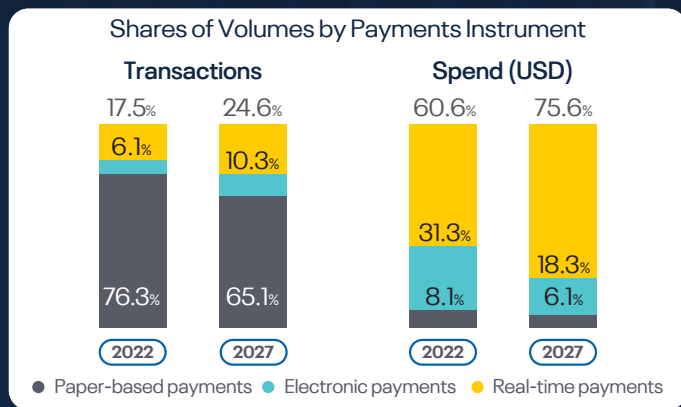
2011

Real-Time Payments  
Scheme

NIP

2011

### Real-Time Transactions



#### Mobile Wallet Trends



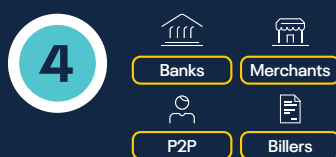
#### Initiation/Authorization Methods



#### Scheme Messaging

ISO  
8583

#### Real-Time Acceptance



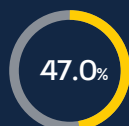
The COVID-19 pandemic also encouraged Nigerian consumers to shift from cash to electronic payment methods, which further supported real-time payments growth. Furthermore, in March 2021, the NIBSS launched NQR, an interoperable national QR code standard to facilitate instant P2B and P2P payments by scanning QR codes. This will further catapult instant payments use, helping it to record an 11.7% CAGR from 2022 to 2027 in terms of volume.

#### Payments Fraud Rate

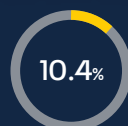


Population who reported being a victim of fraud in the last four years

#### Top 3 Payment Fraud Types



Confidence trick



Card details stolen/skimmed in person



My card was lost or stolen



[Learn More About Global Real-Time Fraud Trends](#)

# 2023 Prime Time for Real-Time

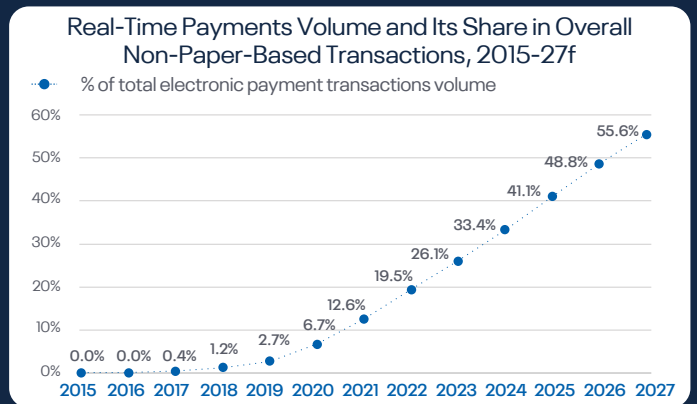
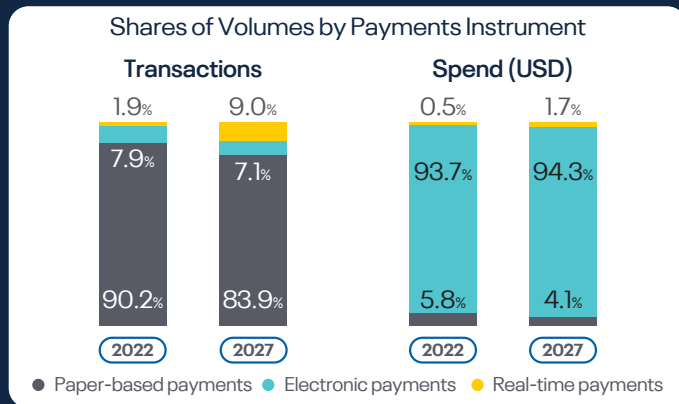
## Oman

Oman launched its mobile-based instant payments system called Mobile Payments Clearing & Settlement System (MPCSS, also known as MPClear) in July 2017. Although all the banks and payment service providers support the system, its exclusivity to mobile phones and low transaction limit are hindering the growth of real-time payments. The high preference towards paper-based payments among Omanis has also limited real-time payments growth. As a result, real-time payments accounted for just a 1.9% share of the total of the payments transaction volume in 2022. However, the government's push towards electronic payments, increasing awareness and improving payments infrastructure will support real-time payments volume forecasted at a 32.9% CAGR from 2022 to 2027.

Real-Time Payments Launch  
**2017**  
Real-Time Payments Scheme  
**MPCSS 2017**

### Real-Time Transactions

**9.1B** <sup>2022</sup> | **37.7B** <sup>2027f</sup> | **32.9%** <sup>F5 Yr CAGR</sup>



#### Scheme Messaging

**ISO 20022**

#### Initiation/Authorization Methods

- 3**
- Bank Account
  - Mobile
  - QR Code

#### Real-Time Acceptance

- 3**
- Banks
  - Merchants
  - P2P



[Learn More About Global Real-Time Fraud Trends](#)

# 2023 Prime Time for Real-Time

## Pakistan

Pakistan recently entered the instant payments race with the launch of Raast in January 2021. The system is being rolled out in phases and currently supports only bulk transfers, such as salaries and dividend payments, as well as government welfare disbursements. As a result, real-time payments occupied a negligible share of the total payments transaction volume in 2022. With the system being extended to C2B payments as well by the end of 2022, growth in real-time payments will observe a significant rise over the next few years, with their overall share of payments by volume expected to rise to 3.8% by 2027. Real-time payments are anticipated to register CAGRs of 85.8% and 82.7% in terms of volume and value respectively between 2022 and 2027.

Real-Time Payments Launch  
**2021**

Real-Time Payments Scheme

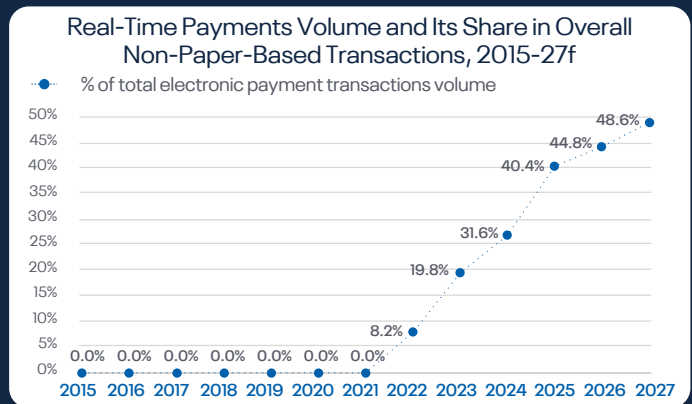
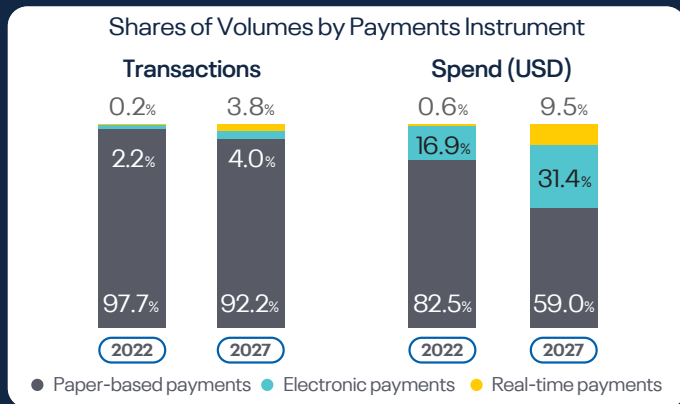
**Raast 2021**

### Real-Time Transactions

**67.8M** 2022

**1.5B** 2027f

**85.8%** F5 Yr CAGR



#### Scheme Messaging

**ISO 20022**

#### Initiation/Authorization Methods

**2** Bank Account  
QR Code

#### Real-Time Acceptance

**2** Banks  
P2P



[Learn More About Global Real-Time Fraud Trends](#)

# 2023 Prime Time for Real-Time

## Saudi Arabia

Saudi Arabia is one of the latest entrants to the real-time payments space. Sarie is the country's instant payments system launched by the Saudi Central Bank in April 2021. The system is supported by all the banks operating in the nation 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.

Real-Time Payments Launch

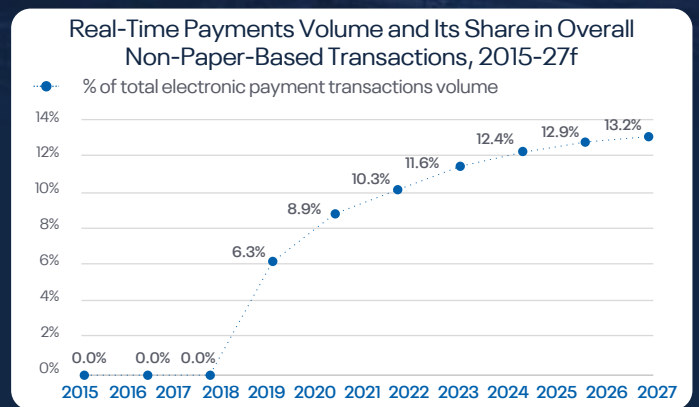
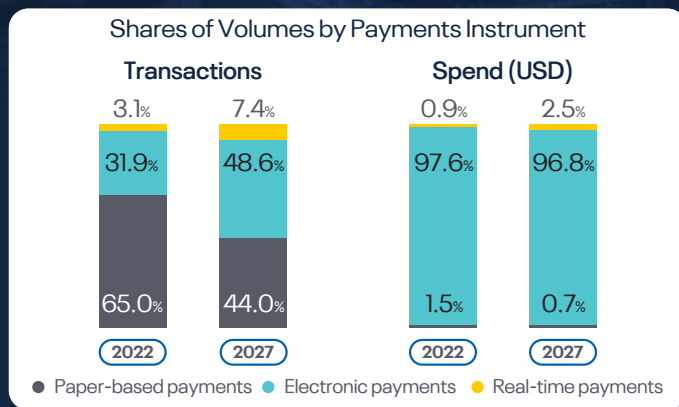
2021

Real-Time Payments Scheme

sarie  
2021

### Real-Time Transactions

352<sup>M</sup> <sup>2022</sup> | 1.2<sup>B</sup> <sup>2027f</sup> | 26.1% <sup>F5 Yr CAGR</sup>



#### Mobile Wallet Trends



#### Initiation/Authorization Methods



#### Scheme Messaging

ISO  
20022

#### Real-Time Acceptance



Still at a nascent stage, future prospects for real-time payments in the country look promising, with real-time volume expected to record a CAGR of 26.1% from 2022 to 2027. The government's initiatives to push electronic payments in the country and the accelerated shift towards non-cash payment methods amid the COVID-19 pandemic will support this growth.

#### Payments Fraud Rate



Population who reported being a victim of fraud in the last four years

#### Top 3 Payment Fraud Types



Confidence trick



Digital wallet account hacked



My card was lost or stolen



[Learn More About Global Real-Time Fraud Trends](#)

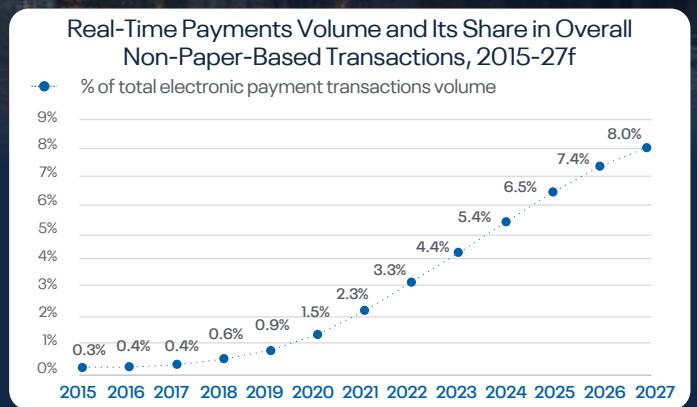
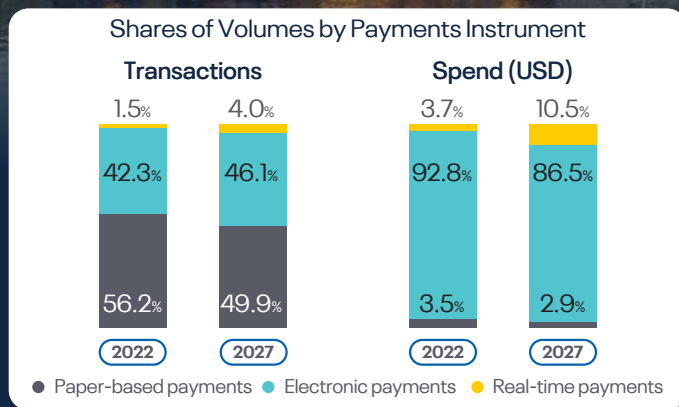
# 2023 Prime Time for Real-Time South Africa

South Africa is among the early adopters of real-time payments with the country launching its interbank instant payments system Real-Time Clearing (RTC) in 2006. Despite being available for more than 15 years, real-time payments have not gained significant prominence due to several factors such as limited customer awareness, limited participation and high fees charged by banks on RTC transfers. Consequently, real-time payments still accounted for just a 1.5% share of the total payments transaction volume in 2022. Due to the limitations of the existing system, BankServAfrica, the Payments Association of South Africa, the Banking Association of South Africa and other industry players are now collaboratively developing the Rapid Payments Programme (RPP), an interbank instant payments system.

Real-Time Payments Launch  
**2006**

Real-Time Payments Scheme  
**RTC 2006**

## Real-Time Transactions



#### Mobile Wallet Trends



#### Initiation/Authorization Methods



#### Scheme Messaging

**ISO 8583**

#### Real-Time Acceptance



This new mobile-friendly instant payments system will support payments using proxies such as mobile phone numbers and email addresses. It will also offer Request-to-Pay services. The RPP system is being built on the ISO 20022 messaging standard and will be launched commercially under the name PayShap in March 2023, starting with 11 major banks, before being rolled out to other banks and fintech companies. The existing system will be gradually migrated to the new system. The launch of the new system is anticipated to provide the much-needed push for real-time payments market growth in South Africa.

#### Payments Fraud Rate

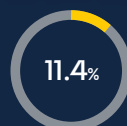


Population who reported being a victim of fraud in the last four years

#### Top 3 Payment Fraud Types



Confidence trick



Bank account hacked



Card details stolen/skimmed in person



[Learn More About Global Real-Time Fraud Trends](#)

# 2023 Prime Time for Real-Time

## Sri Lanka

The Common Electronic Fund Transfer Switch (CEFTS) is the instant payments system in Sri Lanka, launched in August 2015. Although the adoption and usage of real-time payments was initially low, the market gained significant traction in recent years, with the extension of CEFTS to support interbank QR-code payments and increasing popularity of mobile wallet solutions amid the COVID-19 pandemic. With the mobile wallets rapidly displacing low-value cash transactions, the real-time payments volume is anticipated to increase at a CAGR of 25.3% from 2022 to 2027. Consequently, their share of the total payments transaction volume is set to rise to 13.8% in 2027 from 5.0% in 2022.

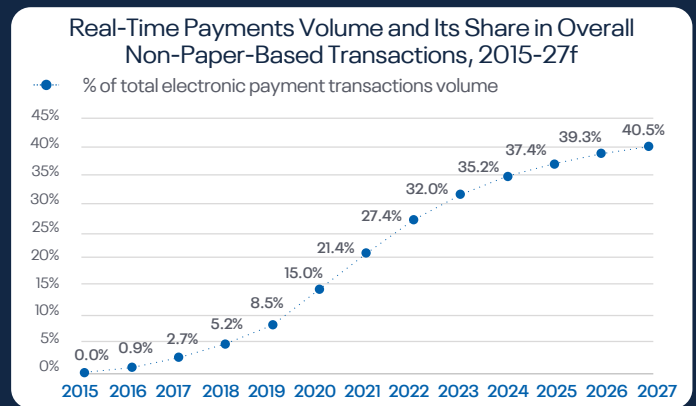
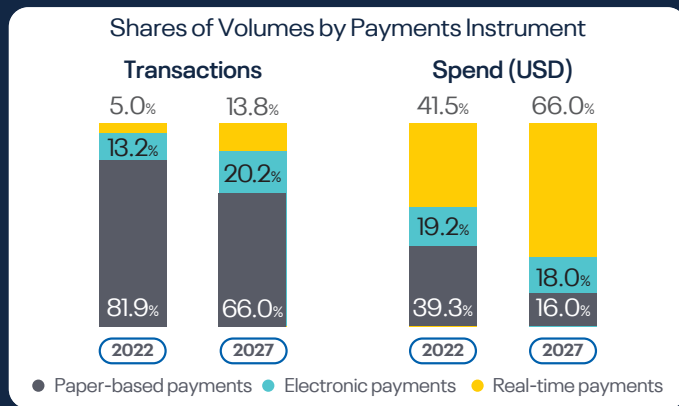
Real-Time Payments  
Launch

**2015**

Real-Time Payments  
Scheme

CEFTS  
**2015**

### Real-Time Transactions



#### Initiation/Authorization Methods



#### Real-Time Acceptance



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# 2023 Prime Time for Real-Time

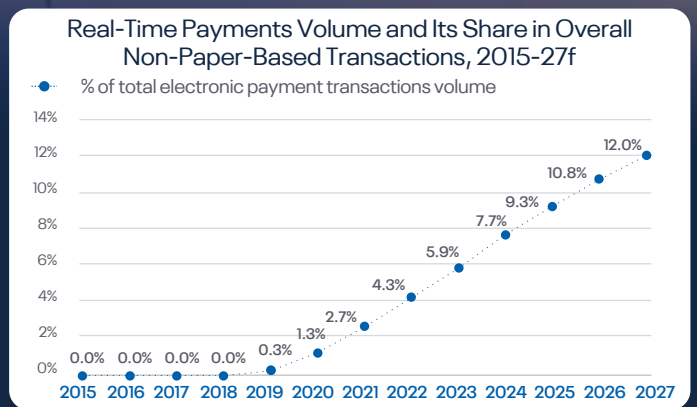
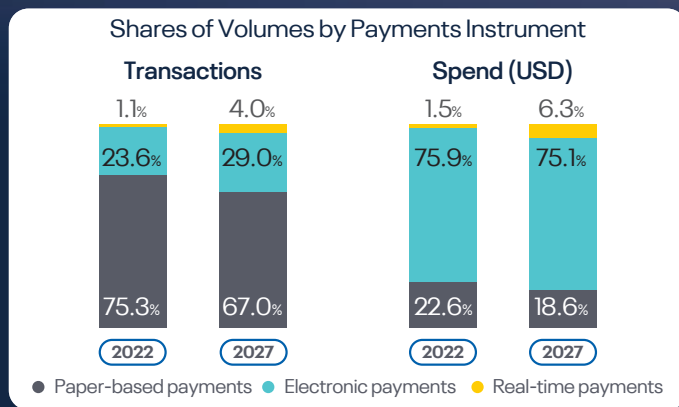
## U.A.E.

The U.A.E. introduced its instant payments system Immediate Payment Instruction (IPI) in mid-2019, focusing mostly on domestic volume and with no notable additions made since launch. Despite being supported by more than 70 institutions, its usage has not gained significant traction due to limited use cases and traditional preference towards paper-based payment instruments. Consequently, real-time payments just accounted for a 1.1% share of total payments volume of transactions in 2022.

Real-Time Payments Launch  
**2019**  
Real-Time Payments Scheme  
**IPI**  
**2019**

### Real-Time Transactions

**37.2M** <sup>2022</sup> | **146M** <sup>2027f</sup> | **31.5%** <sup>F5 Yr CAGR</sup>



#### Mobile Wallet Trends



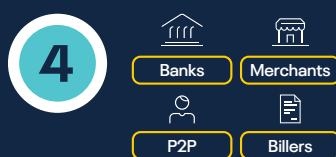
#### Initiation/Authorization Methods



#### Scheme Messaging

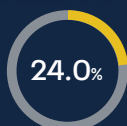
**ISO 20022**

#### Real-Time Acceptance



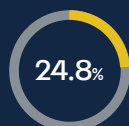
However, the central bank is now in the process of launching a new and more comprehensive instant payments scheme called National Instant Payment Platform, which enables interoperable fund transfers between bank accounts and eWallets. The new system will also enable transfers using mobile phone numbers, email addresses and any other unique identifier. The launch of IPP at the end of 2022 will provide the much-needed boost to the country's real-time payments market.

#### Payments Fraud Rate

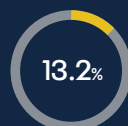


Population who reported being a victim of fraud in the last four years

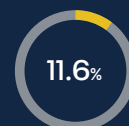
#### Top 3 Payment Fraud Types



Confidence trick



Card details stolen online



Card details stolen/skimmed in person



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# 2023 Prime Time for Real-Time

## Argentina

Argentina has three instant payment schemes. The first scheme, Pago Electrónico Inmediato (PEI), which was launched in 2016, facilitates P2P transfers between mobile wallets and supports real-time payments at mobile POS devices and via eCommerce through a payments button. 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 remained low due to their limitations and being prone to scams. As a result, in October 2020, the central bank approved the Transfers 3.0 scheme to create an open and interoperable payments system based on QR codes.

Real-Time Payments Launch

**2016**

Real-Time Payment Schemes

PEI

**2016**

DEBIN

**2017**

Transfers 3.0

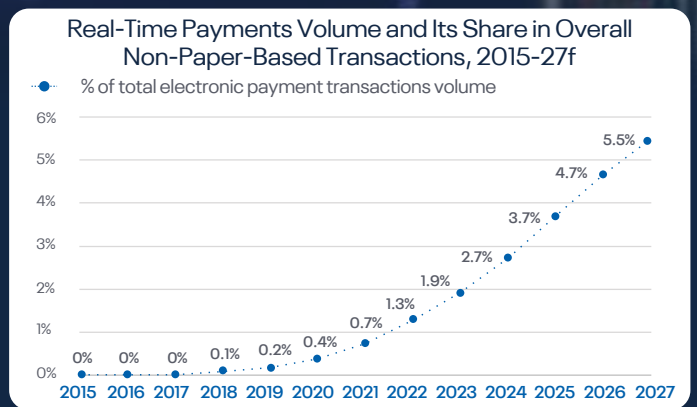
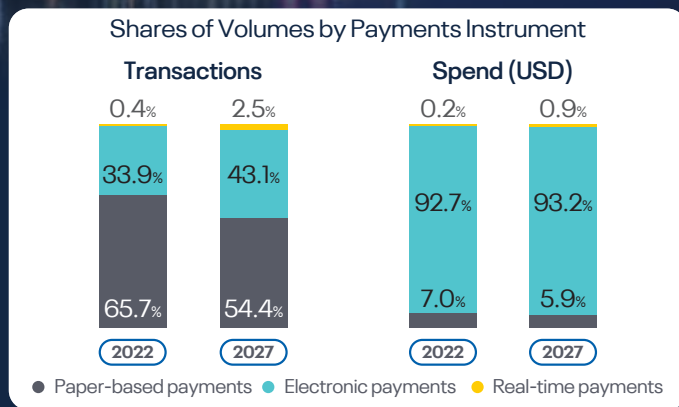
**2020**

## Real-Time Transactions

**57M** <sup>2022</sup>

**404M** <sup>2027f</sup>

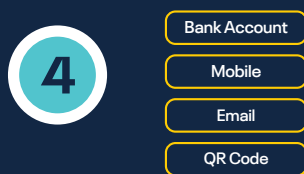
**48.1%** <sup>F5 Yr CAGR</sup>



### Mobile Wallet Trends



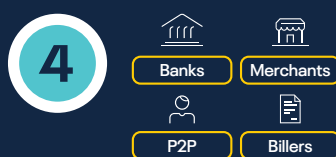
### Initiation/Authorization Methods



### Scheme Messaging

**Proprietary**

### Real-Time Acceptance



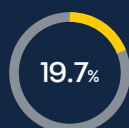
As part of the first stage of implementation of Transfers 3.0 in December 2020, a standardized QR code payments interface was launched allowing users to make payments by scanning a QR code with mobile banking apps, digital mobile banking apps or digital wallets, which have to be registered in the Central Bank as there are some technical requirements. The system aims to eventually replace the existing instant payment systems DEBIN and PEI. The launch of a new instant payments scheme and the accelerated shift towards electronic payments amid the COVID-19 outbreak will see real-time payments volume grow at a CAGR of 48.1% from 2022 to 2027.

### Payments Fraud Rate

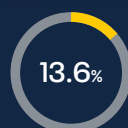


Population who reported being a victim of fraud in the last four years

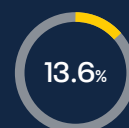
### Top 3 Payment Fraud Types



Confidence trick



Digital wallet account hacked



Card details stolen/skimmed in person



[Learn More About Global Real-Time Fraud Trends](#)

# 2023 Prime Time for Real-Time

## Brazil

Brazil has two real-time payment infrastructures in operation: SITRAF and PIX. SITRAF was the first to be introduced in 2002 and PIX, a mobile-based real-time payments service, was introduced in 2020. SITRAF only operates during banking hours, which limits the volume of activities the platform can manage. PIX, by contrast, is a real-time payments system that operates 24 hours a day, seven days a week, 365 days a year. Since its launch in 2020, PIX already surpassed SITRAF's adoption among participants, as it is available to the customers of 790 financial institutions, whereas SITRAF only had 104 participants. As of October 2022, an estimated 131 million users are already using PIX.

Real-Time Payments Launch

2002

Real-Time Payment Schemes

SITRAF  
2002

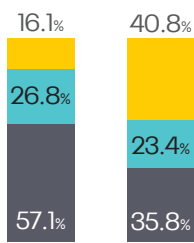
PIX  
2020

## Real-Time Transactions

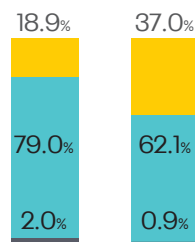
29.2<sup>B</sup> <sup>2022</sup> | 111.2<sup>B</sup> <sup>2027f</sup> | 30.7% <sup>F5 Yr CAGR</sup>

Shares of Volumes by Payments Instrument

Transactions

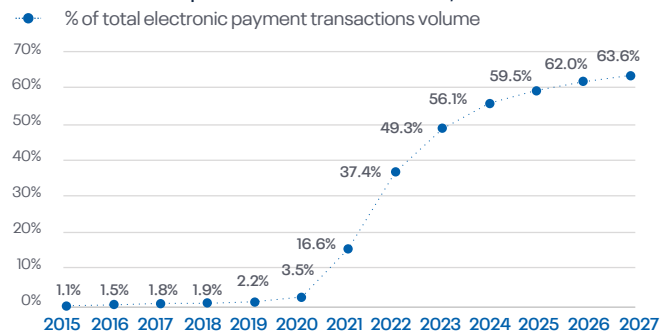


Spend (USD)



● Paper-based payments ● Electronic payments ● Real-time payments

Real-Time Payments Volume and Its Share in Overall Non-Paper-Based Transactions, 2015-27f



### Mobile Wallet Trends

66%

% of adults who have a mobile wallet and have used it in the past year (2022)

### Initiation/Authorization Methods

4

Bank Account

Mobile

Email

QR Code

### Scheme Messaging

ISO  
20022

### Real-Time Acceptance

4



Banks



Merchants



P2P



Billers

In 2022, Brazil was the second biggest and most developed real-time payments market in the world, behind only India. Its real-time payment systems represented a 16.1% share of total payments volume in 2022, behind non-real-time electronic payments and paper-based transactions, which were at 26.8% and 57.1%, respectively. But its market share is expected to grow significantly by 2027, when it is forecasted to reach a 40.8% share of payments volume, overpassing electronic payments (excluding real-time payments) which will decrease to 23.4% and even paper-based transactions, which will be at 35.8%. This rapid growth of real-time payment transactions is due to the widespread adoption of PIX by consumers and merchants for daily expenditures, which itself owes a lot to its strong support from the Brazilian government, as well as introducing a mobile-based payments service to an otherwise cash-dependent (rather than cash-preferring) populace.

### Payments Fraud Rate

22.6%

Population who reported being a victim of fraud in the last four years

### Top 3 Payment Fraud Types

28.5%

Confidence trick

17.9%

Card details stolen/skimmed in person

14.9%

Card details stolen online



[Learn More About Global Real-Time Fraud Trends](#)

# 2023 Prime Time for Real-Time

## Chile

Real-time payments in Chile have been available since the launch of Transferencia Electrónica de Fondos en Línea (TEF) by Centro de Compensación Automatizado (CCA) in 2008. Although Chile still shows figures of a high paper-based-payments-dominated society (43.6% in 2022), the country has made significant progress towards electronic payments supported by government initiatives, the rising banked population and the improved payments infrastructure.

Real-Time Payments Launch

2008

Real-Time Payments Scheme

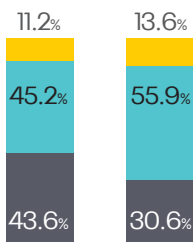
TEF  
2008

## Real-Time Transactions

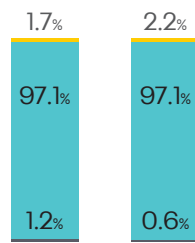
986M<sup>2022</sup> | 1.7B<sup>2027f</sup> | 12.0%<sup>F5 Yr CAGR</sup>

Shares of Volumes by Payments Instrument

Transactions

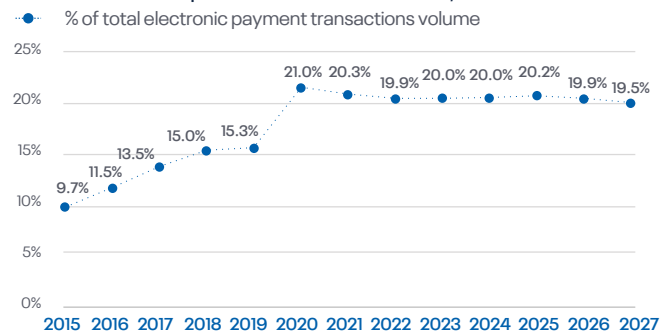


Spend (USD)



● Paper-based payments ● Electronic payments ● Real-time payments

Real-Time Payments Volume and Its Share in Overall Non-Paper-Based Transactions, 2015-27f



### Mobile Wallet Trends



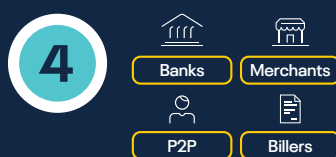
### Initiation/Authorization Methods



### Scheme Messaging

ISO  
8583

### Real-Time Acceptance



The COVID-19 pandemic has now further highlighted the importance of electronic payments, further boosting the shift towards digital payments, which has also helped real-time payments grow over the last few years. The instant payments volume is further expected to increase at a CAGR of 12.0% from 2022 to 2027.

### Payments Fraud Rate



Population who reported being a victim of fraud in the last four years

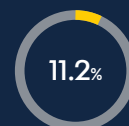
### Top 3 Payment Fraud Types



Confidence trick



Card details stolen online



My card was lost or stolen



[Learn More About Global Real-Time Fraud Trends](#)

# 2023 Prime Time for Real-Time

## Colombia

Colombia made real-time payments available in the country with the launch of the private initiative Transfiya in September 2019. The real-time payment volumes and values are relatively low compared to paper-based payments, just accounting for a 0.1% share. This can be attributed to less participation from financial institutions and the country's large unbanked population. Meanwhile, effective from September 2022, the daily transfer limit was increased to \$2 million, while the number of transactions is up to 15 transfers.

Real-Time Payments Launch

**2019**

Real-Time Payments Scheme

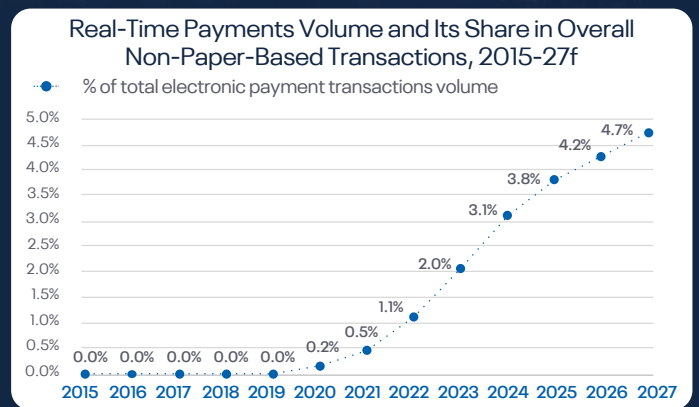
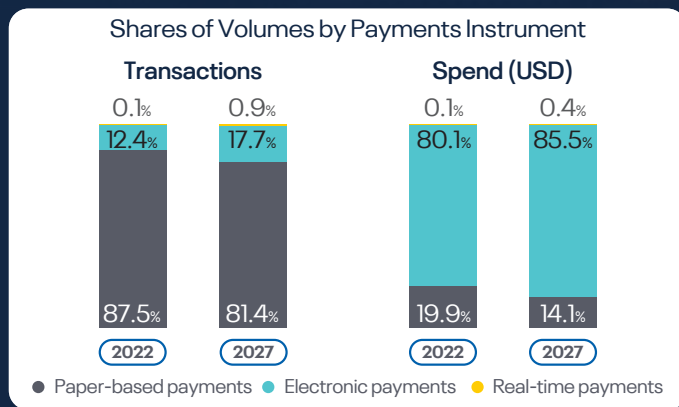
Transfiya  
**2019**

### Real-Time Transactions

**15M** <sup>2022</sup>

**92M** <sup>2027f</sup>

**43.4%** <sup>F5 Yr CAGR</sup>



#### Mobile Wallet Trends

**64.2%**  
% of adults who have a mobile wallet and have used it in the past year (2022)

#### Initiation/Authorization Methods

**1** Mobile

#### Scheme Messaging

**Proprietary**

#### Real-Time Acceptance

**3** Banks Merchants P2P

The Central Bank of Colombia (Banco de la República de Colombia) has been initiating the leadership to create an Immediate Payments Ecosystem, such as PIX, and with ACH Colombia planning to add B2B and QR code payments functionality to the Transfiya system, the future prospects of real-time payments in the country look promising and are expected to register robust growth both in terms of volume and value, increasing at respective CAGRs of 43.4% and 43.5% from 2022 to 2027.

#### Payments Fraud Rate

**15.4%**  
Population who reported being a victim of fraud in the last four years

#### Top 3 Payment Fraud Types

**28.2%**  
Confidence trick

**15.4%**  
Card details stolen online

**11.5%**  
Bank account hacked



[Learn More About Global Real-Time Fraud Trends](#)

# 2023 Prime Time for Real-Time

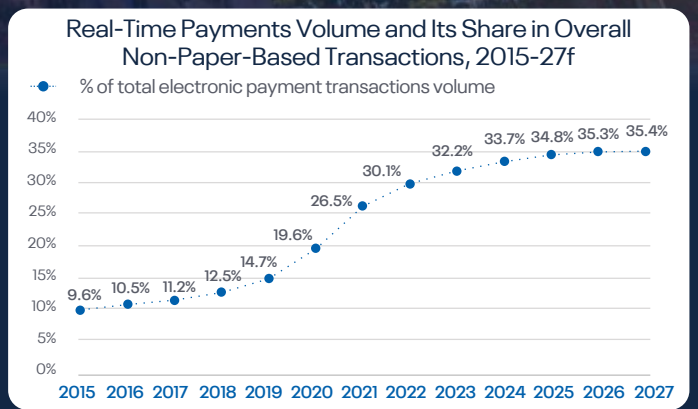
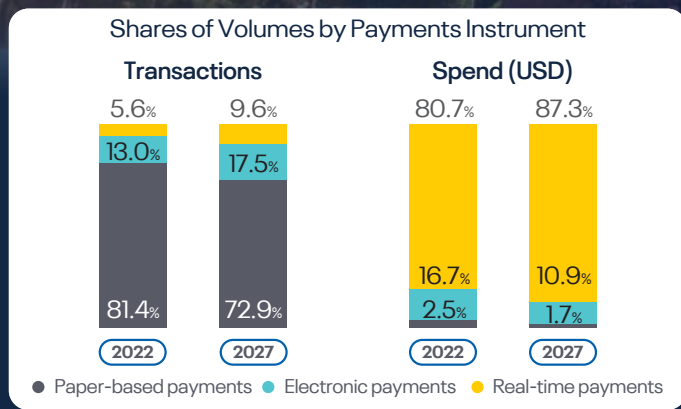
## Mexico

Mexico was an early adopter of real-time payments, with its Sistema de Pagos Electrónicos Interbancarios (SPEI) system in place since 2004. Despite the head start, adoption of real-time payments grew at a slower pace due to the country's highly unbanked population and lack of awareness of electronic payments. However, this does not tell the full story. When looking at adoption among the banked population, it is much higher, with about one in five of the banked population using real-time payments. The growth of real-time payments gained some traction in recent years, primarily due to the pandemic and 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.

Real-Time Payments Launch  
**2004**  
Real-Time Payments Scheme  
**SPEI 2004**

## Real-Time Transactions

**2.7<sub>B</sub>** <sup>2022</sup> | **5.0<sub>B</sub>** <sup>2027f</sup> | **13.1%** <sup>F5 Yr CAGR</sup>



### Mobile Wallet Trends

**62.9%**  
% of adults who have a mobile wallet and have used it in the past year (2022)

### Initiation/Authorization Methods

- Bank Account
- Mobile
- QR Code

### Scheme Messaging

**Proprietary**

### Real-Time Acceptance

- Banks
- Merchants
- P2P
- Billers

These new use cases are prime opportunities for banks to modernize with value-added services for consumers and businesses. With rising adoption of mobile wallets, increasing preference for electronic payments and growing consumer awareness, the instant payments volume is set to record 13.1% CAGR from 2022 to 2027. The time is now for banks to pivot strategies away from card transactions and focus on customer adoption and retention through real-time payments.

### Payments Fraud Rate

**21.6%**  
Population who reported being a victim of fraud in the last four years

### Top 3 Payment Fraud Types

**29.5%**  
Confidence trick

**15.2%**  
Identity theft

**13.4%**  
Card details stolen/skimmed in person



[Learn More About Global Real-Time Fraud Trends](#)

# 2023 Prime Time for Real-Time

## Peru

Real-time payments went live in Peru with the launch of Immediate Interbank Transfers in 2016. Although real-time payments have been available for quite some time, their adoption and usage has 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. While real-time payments accounted for just 0.3% of total payments transaction volume in 2022, paper-based transactions occupied a 92.3% share.

Real-Time Payments Launch

**2016**

Real-Time Payments Scheme

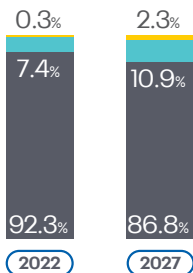
Immediate  
Interbank Transfers  
**2016**

### Real-Time Transactions

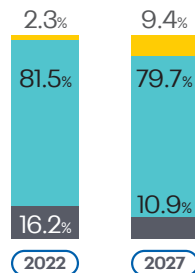
**107M** <sup>2022</sup> | **1.0B** <sup>2027f</sup> | **56.7%** <sup>F5 Yr CAGR</sup>

Shares of Volumes by Payments Instrument

Transactions

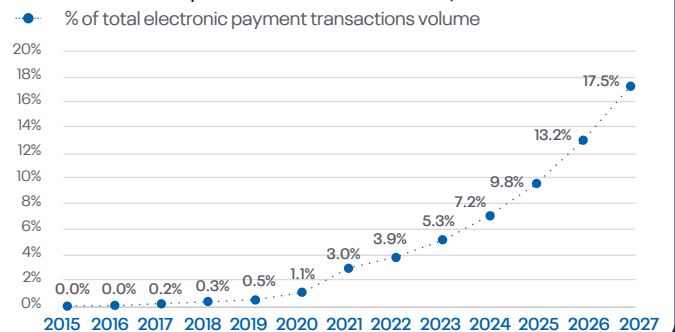


Spend (USD)



● Paper-based payments ● Electronic payments ● Real-time payments

Real-Time Payments Volume and Its Share in Overall Non-Paper-Based Transactions, 2015-27f



#### Mobile Wallet Trends

**60.9%**

% of adults who have a mobile wallet and have used it in the past year (2022)

#### Initiation/Authorization Methods

**1**

Bank Account

#### Scheme Messaging

**ISO 20022**

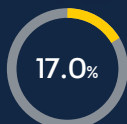
#### Real-Time Acceptance

**4**



However, with Cámara de Compensación Electrónica (CEC), the operator of the instant payments system, focusing on modernizing its system in line with international standards, real-time payments volume is set to record significant growth increasing at a 56.7% CAGR from 2022 to 2027. The CEC made the instant payments system available 24/7 starting December 7, 2020. It also partnered with Mastercard and ACI Worldwide in February 2021 to enable real-time payments based on the ISO 20022 standard.

#### Payments Fraud Rate

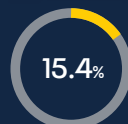


Population who reported being a victim of fraud in the last four years

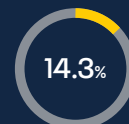
#### Top 3 Payment Fraud Types



Confidence trick



My card was lost or stolen



Identity theft



[Learn More About Global Real-Time Fraud Trends](#)

# 2023 Prime Time for Real-Time Canada

Real-time payments have been available in Canada since the launch of Interac e-Transfer in 2002. The adoption and use of real-time payments steadily gained traction over the last few years, thanks to the wider participation by more than 250 financial institutions as of November 2022, and continued preference for electronic payments among consumers. However, real-time payments still accounted for a smaller share of 6.0% in terms of volume in 2022, compared to 78.2% of the non-instant electronic payments. This is due to the high adoption and usage of payment cards in the country.

Real-Time Payments Launch

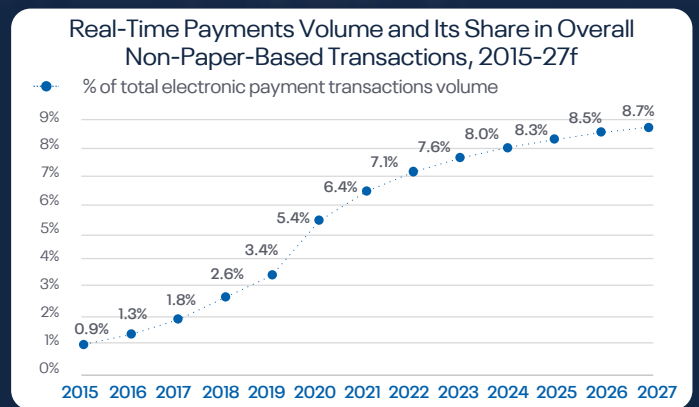
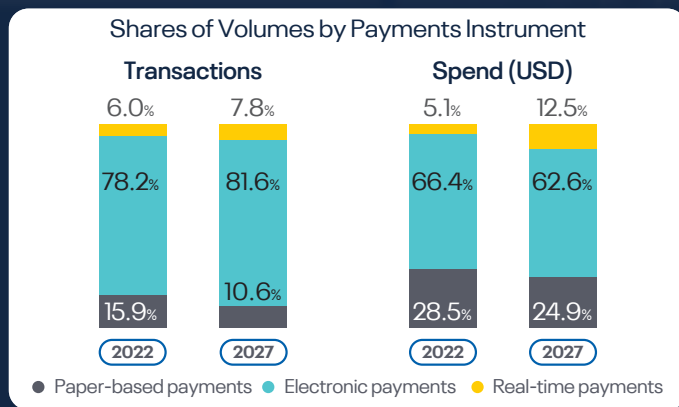
2002

Real-Time Payments Scheme

Interac e-Transfer

2002

## Real-Time Transactions



### Mobile Wallet Trends



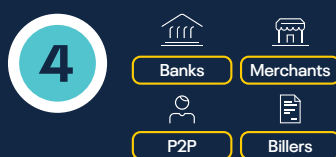
### Initiation/Authorization Methods



### Scheme Messaging

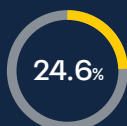
ISO  
20022

### Real-Time Acceptance



The increased contactless payments limit amid the COVID-19 outbreak has further pushed their usage for day-to-day, low-value transactions. Meanwhile, Payments Canada is developing a new and advanced real-time payments system known as Real-Time Rail (RTR), which is expected to go live in June 2023. The launch of the new system is anticipated to accelerate real-time payments growth over the next few years.

### Payments Fraud Rate

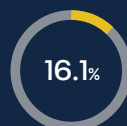


Population who reported being a victim of fraud in the last four years

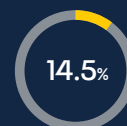
### Top 3 Payment Fraud Types



Confidence trick



Card details stolen/  
skimmed in person



Card details stolen online



[Learn More About Global Real-Time Fraud Trends](#)



# 2023 Prime Time for Real-Time U.S.

Real-time payments are still only a small piece of the overall payments mix in the U.S., accounting for only a 1.2% share of the total payments volume in 2022. At this level it is negligible compared to paper-based payments and non-real-time payment electronic payments respectively at 17.9% and 81% of all transactions. Future projections for real-time payments are expecting the trend to grow, as the volume of real-time payments is projected to grow at a CAGR of 32.6% between 2022 and 2027.

Real-Time Payments Launch

**2017**

Real-Time Payment Schemes

Real-Time Payments

**2017**

Zelle

**2017**

## Real-Time Transactions

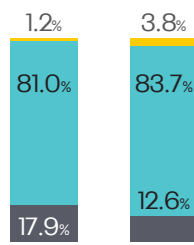
**2.8B** <sup>2022</sup>

**11.4B** <sup>2027f</sup>

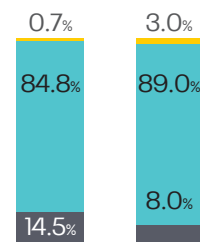
**32.6%** <sup>F5 Yr CAGR</sup>

Shares of Volumes by Payments Instrument

**Transactions**

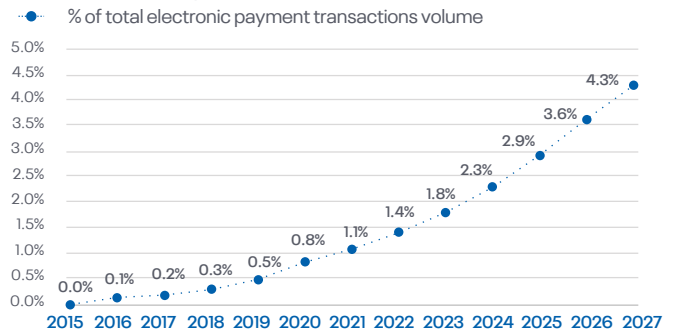


**Spend (USD)**



● Paper-based payments ● Electronic payments ● Real-time payments

Real-Time Payments Volume and Its Share in Overall Non-Paper-Based Transactions, 2015-27f



**Mobile Wallet Trends**

**49.9%**

% of adults who have a mobile wallet and have used it in the past year (2022)

**Initiation/Authorization Methods**

**3**

- Bank Account
- Mobile
- Email

**Scheme Messaging**

**ISO 20022**

**Real-Time Acceptance**

**4**

- Banks
- Merchants
- P2P
- Billers

The growth of real-time payments in the U.S. will benefit mainly from the launch of FedNow, expected in July 2023. The existing services in the U.S. — Zelle and the real-time payments network from The Clearing House (also connected with ACI Worldwide) — offer real-time payment transfers but aren't operated by the central bank like in other markets. Due to the complexity of the market, the U.S. is still lagging behind other countries that have already initiated a central bank-implemented, top-down real-time payments network. FedNow would provide a real-time network that covers the entire country, which is necessary for providing this service at a national level.

**Payments Fraud Rate**

**30.7%**

Population who reported being a victim of fraud in the last four years

**Top 3 Payment Fraud Types**

**18.6%**

Confidence trick

**16.9%**

Card details stolen/skimmed in person

**15.6%**

Identity Theft



[Learn More About Global Real-Time Fraud Trends](#)

### 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 reviewed by our team of expert analysts. Forecasts are provided five years into the future under this model, from the base year (2022 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 2022 Financial Services Consumer Survey, was conducted online in Q1-Q2 2022 among 49,751 consumers in 40 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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