

worldpay

THE GLOBAL PAYMENTS REPORT

How consumer choice is changing commerce





CUSTOMIZED 21 MAY 2024



Welcome to your customized report

Within your report you will find:

Pay Methods

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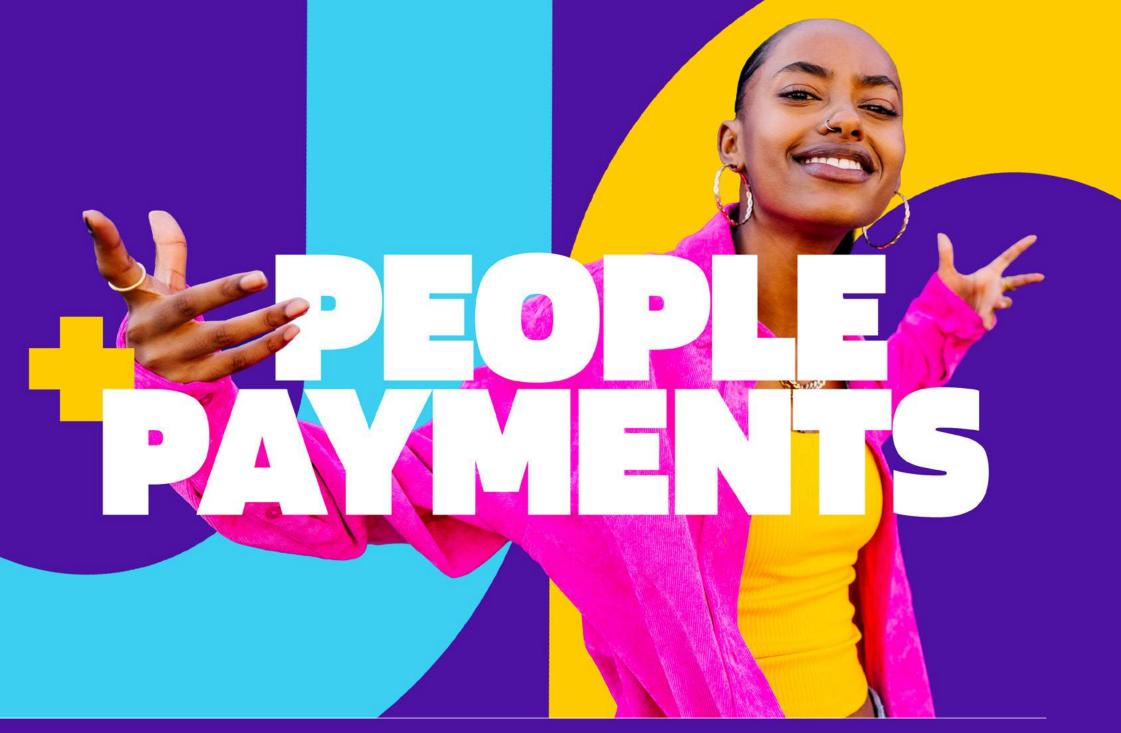
Payment Terms

Methodology

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INTRODUCTION

THE ERA OF PEOPLE AND PAYMENTS

The global payments landscape has throughout history been shaped most decisively by the technologies of the day. Cash in all its forms ruled for millennia and through the industrial age. Analog electronics arrived in the 20th century to support the reign of cards. The emergence of the internet and e-commerce ushered in the arrival of alternative payment methods in the late 1990s. Today, digital innovations generate an ever-expanding array of payment types. Consumers have more payment options than ever.

We're entering an era defined not by technology, but by people. We're entering an era where choice is the main driver of the payment landscape. Consumers and their collective choices are the new center of payments gravity, a living force that's pushing merchants to optimize payment choices. Today's choice era is one of limitless possibilities for consumers, merchants and the payments industry that connects them.

The era where people drive payments sees disruption as the engine of opportunity.

This new era is one where the payment industry is reinventing itself, looking to a future where they must satisfy a tapestry of need crafted by distinctly local intersection of choices. The era when people drive payments is a true synthesis of what came before, with cards and cash taking on new – and still essential – roles both in their traditional and newly reimagined digital forms.

And we're only scratching the surface. Join us as we explore the limitless possibilities in this new era of people driving payments.

EXECUTIVE SUMMARY

In 2024, the Global Payments Report continues its mission to document consumer payment behavior at checkout online and in-store.

The following are key insights from our ninth edition of the GPR.

In 2023, wallets are the people's payment choice
In 2023, wallets accounted for 50% of global e-com
spend (> \$3.1T) and 30% of global POS spend
(> \$10.8T). Still the fastest growing payment
method, by 2027 wallets are projected to account
for more than \$25 trillion in global transaction
value (49%) across e-commerce and POS.

Cards show strength inside and outside digital wallets

Consumer attraction to digital wallets isn't a turn away from cards. In card-dominated markets, card spend is simply shifting to digital wallets like Apple Pay, Google Pay and PayPal. Viewed in total, card transaction values are at an all-time high and continue to rise.



A2A remains challenged in card-heavy markets

Account-to-account (A2A) payments are becoming dominant from Brazil to India. A2A payments have found less success to date in card-saturated markets such as the UK and USA. Merchants crave A2A's lower cost of payment acceptance. Can consumers be enticed to break their card habits?



Consumer demand for BNPL is steady against headwinds

Buy Now Pay Later companies faced well-documented headwinds in 2023 including rising interest rates, looming regulation and souring investor sentiment. Consumers countered those headwinds by choosing BNPL more than ever. Banks, fintechs, big techs and platforms are stepping in to satisfy consumer demand and capture their spend.



Global e-com growth outpaces POS by > 2-1

Global e-commerce surpassed \$6.1 trillion in 2023 and is growing at more than twice the rate of global POS value. E-com growth is projected for 9% CAGR (versus 4% for POS) through 2027. E-com as a percentage of all commerce reached 14.4% globally in 2023 and forecast to exceed 17% by 2027.



Cash remains relevant amid economic uncertainty

Globally, cash fell -8% in 2023, and is expected to decline at -6% CAGR through 2027. Yet cash remains a vital payments tool for billions of consumers. In 2023, cash accounted for 16% (\$6 trillion) of global transaction value, including double-digit share in thirty of forty markets in this report.



Prepaid cards to surpass \$1 trillion in 2024

In 2024, prepaid cards will exceed \$1 trillion in global transaction value. Versatility drives prepaid cards' success: as gift cards, reloadable stored value cards, for payroll, business-to-consumer payments and as government benefits. Prepaid cards support financial inclusion by serving underbanked consumers.



Increasing financial inclusion signals sunset of post-pay

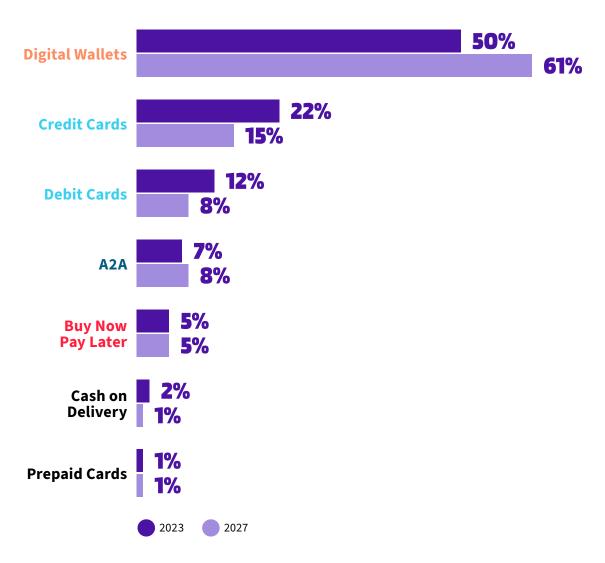
Post-pay is a voucher-based payment that allows consumers to shop online and pay at an affiliated store or ATM. Post-pay remains popular in cash-heavy LATAM and Japan, where in each it accounted for 4% and 5% of 2023 e-com transaction value, respectively. While still relevant in these markets, an upturn in financial inclusion and overall shift away from cash is signaling post-pay's sunset.





GLOBAL FOR PAYMENT METHODS

Transaction value % 2023-2027



Digital wallets retain global supremacy in e-commerce, reaching 50% of global transaction value in 2023. Wallets are the fastest growing e-commerce payment method with a projected 15% CAGR through 2027.

Credit and debit cards share of e-commerce transaction value as a direct payment method are projected to decline slightly through the forecast period to 2027. However, much of this "decline" is card spend shifting to use within digital wallets.

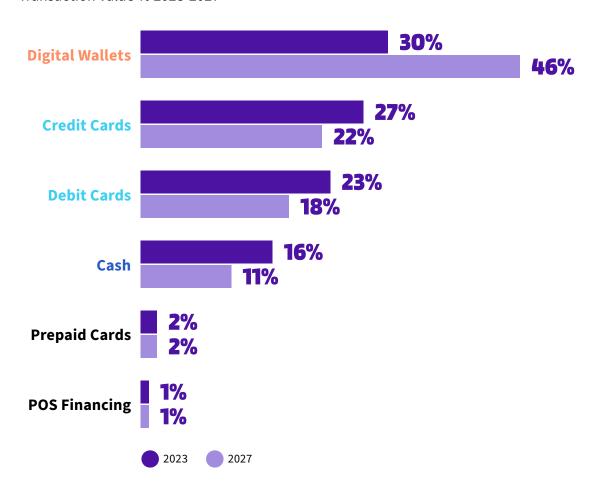
Account-to-account (A2A) payments continue to flourish in select markets such as Brazil, India and Poland, compensating for slower growth in large card-dominated markets such as the UK and USA. Global A2A transaction values are forecast to rise at 14% CAGR through 2027, gaining 1% global share during that time.

Buy Now Pay Later (BNPL) global transaction values grew 18% in 2022-23 to reach 5% share of global e-com spend, or over \$316 billion. We project growth in the forecast period to 2027 of 9% CAGR, equal to that of global e-com growth as a whole and therefore retaining 5% global share through 2027.

Cryptocurrencies (0.2%, ~\$11 billion), **post-pay** (0.3%, ~\$20 billion) and **pre-pay** (0.3%, ~\$17.5 billion) each registered less than 0.5% of global e-commerce transaction value in 2023.

GLOBAL POS PAYMENT METHODS

Transaction value % 2023-2027



Digital wallets extended their lead in global POS payments in 2023. Wallets accounted for approximately 30% of global POS transaction value, or more than \$10.8 trillion. Digital wallets are also the fastest growing POS payment method with 16% CAGR forecast to 2027, when wallets are projected to account for approximately \$19.6 trillion in POS spending.

Credit and debit cards continue to do the heavy lifting at the point of sale around the world, combined accounting for approximately half of all POS transaction value. In 2023, credit cards were responsible for 27% of global POS spend (over \$10 trillion), while debit cards accounted for 23% (over \$8.3 trillion).

Cash use continued to drop in 2023, accounting for 16% of global POS spend – approximately \$6 trillion – a transaction value decline of 8% versus 2022. Cash is forecast to fall by -6% CAGR through 2027 when it is projected to account for 11% of global POS spending (over \$4.6 trillion).

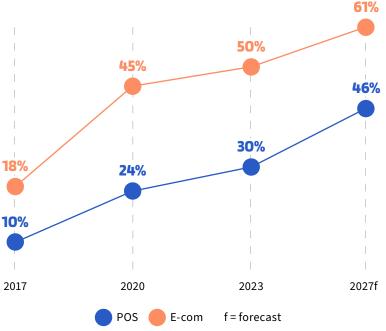
DIGITAL WALLETS ARE THE PEOPLE'S PAYMENT CHOICE

Digital wallets remained the people's choice for payments in 2023, accounting across channels for a combined \$14 trillion in consumer spending.

Wallets are the leading e-com payment method in APAC, Europe and North America today, and are projected to lead e-com payments in all global regions by 2027.

At POS, APAC remains an outlier with wallets representing 50% of spend, highest of any region. Digital wallets are projected to become the leading POS payment method in LATAM and MEA by 2027, markets that haven't had a legacy of card dominance. Wallets are catching up fast in the historically card-dominated markets with projected CAGRs of 24% in Europe and 23% in North America through 2027.





Wallets are the leading e-com payment method in APAC, Europe and North America today, and are projected to lead e-com payments in all global regions by 2027.





KEY GLOBAL DIGITAL WALLET STATS

2023 Transaction Value

E-com: \$3.1 trillion

POS: \$10.8 trillion

Total: \$14 trillion

2023-2027 Growth Forecast

E-com: 15% CAGR

POS: 16% CAGR

2027 Transaction Value Forecast

E-com: **\$5.4 trillion**

POS: \$19.6 trillion

Total: \$25 trillion

WINNERS IN THE ET RACE SPAN MULTIPLE INDUSTRIES

Competition for share of the nearly \$14 trillion global digital wallet market attracts major brands from multiple industries including smartphone manufacturers, e-commerce marketplaces, bank networks and global fintechs.



Smartphone manufacturers and operating system providers have an inside track with consumers by providing preloaded native digital wallet applications on mobile consumer devices. Leading global smartphone manufacturers including Apple, Google and **Samsung** are also among the world's leading digital wallet providers.









Leading global e-commerce
platforms have successfully deployed their own wallet solutions for use not just on their own platforms, but on third-party sites as well. Mercado
Pago from Mercado Libre (LATAM),
Amazon Pay from Amazon (Global),
Rakuten Pay from Rakuten (Global),
and ShopeePay from Shopee (APAC) are all among the leaders in the markets in which they operate.



Fintechs and super apps are among the world's most successful brands in digital wallets. Alipay and WeChat Pay dominate by far the world's largest and most influential wallet market in China. Paytm is among the leaders in India's fast growing digital payment market, while US-based PayPal is one of the exceptionally few wallets that has a truly global footprint.



Banks and bank networks seek to retain their influence in consumer payments with their own wallets.

MobilePay by Danske Bank is a leading wallet in Denmark and Finland; BKM Express provides wallets services for a consortium of thirteen Turkish banks; and MODO is known as "the wallet of the banks" in Argentina. Following the success of its P2P app, Zelle, major US banks are expected to launch the P2C payment app Paze in 2024.

























OR CODES AND INTEROPERABILITY ARE DRIVING WALLET USE

QR codes see significant use in countries outside of North America and Europe, particularly in Southeast Asia where payment system interoperability is fueling wallet adoption.

Juniper Research forecast QR code payments to grow over 590% in Southeast Asia Market by 2028.

The success of **Alipay** and **WeChat Pay** in China decisively established that QR codes could drive mass consumer adoption of digital payments. The two payment methods combined process an estimated 90% of more than \$7.5 trillion in 2023 digital wallet transaction value in China.

QR code payments have become ubiquitous across Southeast Asia due to their simplicity, standardization, inexpensive operation for merchants and support for underlying infrastructure from central banks. QR code-based payments are cost-effective for merchants as they require no special equipment such as POS terminals. Standardization of QR codes means merchants only need one QR code to accept payments from multiple wallets.



Real-time payment rails from central banks and bank associations – such as **BI-FAST** in Indonesia, **UPI** in India, **DuitNow** in Malaysia, **BancNet** in The Philippines, **PayNow** in Singapore and **PromptPay** in Thailand – provide the underlying infrastructure for the use of QR codes, helping to modernize payment systems, reduce reliance on cash and boost financial inclusion.

Cooperation among Southeast Asian central banks via the <u>Association of Southeast Asian Nations (ASEAN)</u> is helping to promote <u>crossborder interoperability</u> in an effort to boost regional economic integration and growth. Efforts from the private sector – such as that recently initiated <u>by Alipay+</u> – are also boosting regional wallet interoperability.

CARDS SHOW STRENGTH AS SHARE SHIFTS TO DIGITAL WALLETS

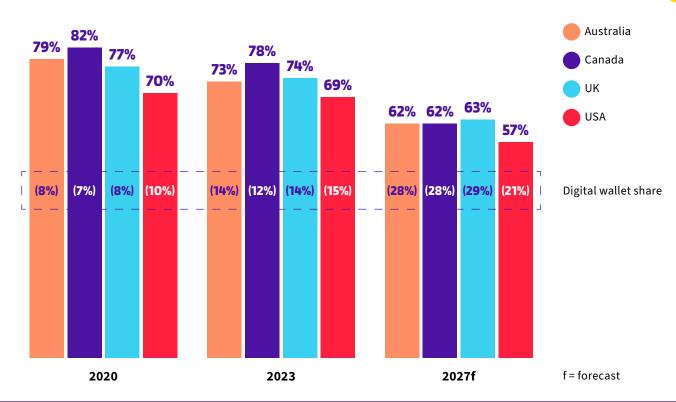
Credit and debit cards have ceded payment share to digital wallets, but they're far from losing relevance.

Cards as a direct payment tool are indeed losing share globally, even in historically strong card markets. Despite rising absolute transaction values, between 2020 and 2023 credit and debit cards combined lost share of POS payments in Australia, Canada, the UK and the USA.

A reasonable and frequently asked question arises: are cards losing share to digital wallets? The answer is yes, cards are losing share to wallets as the direct payment mechanism at the point of sale. Are cards therefore losing relevance? The answer to that is a decisive "no."

CREDIT 6 DEBIT CARD COMBINED SHARE OF POS TRANSACTION VALUE 2020-2027F

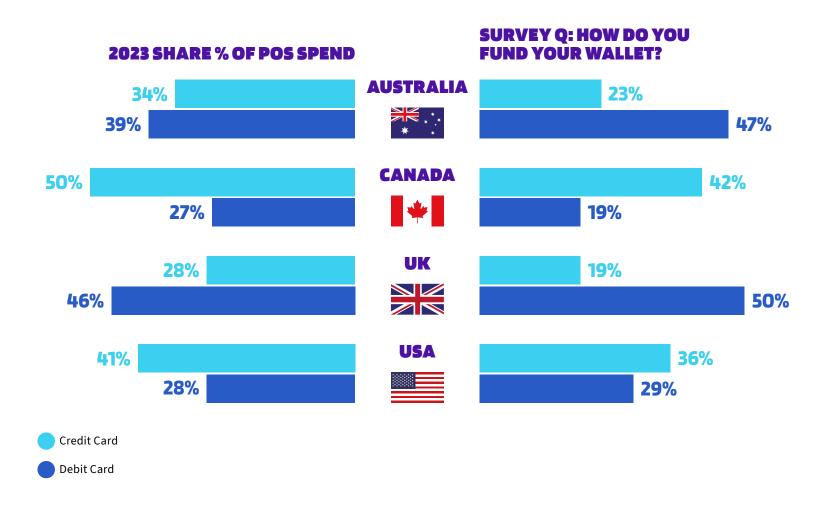
(+ Digital wallet share)



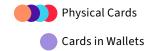
CARD SPEND IN WALLETS REFLECTS CARD SPEND IN EACH MARKET

Especially in historically card-dominated payment markets, the spend being "lost" is simply shifting to being used from within "pass-through" and "staged" digital wallets like **Apple Pay**, **Google Pay**/ **Google Wallet** and **PayPal**.

In our survey we asked consumers "how do you typically fund your mobile wallet?" Their answers consistently approximated the relative mix of credit and debit card spending inside wallets that takes place with physical cards outside wallets.

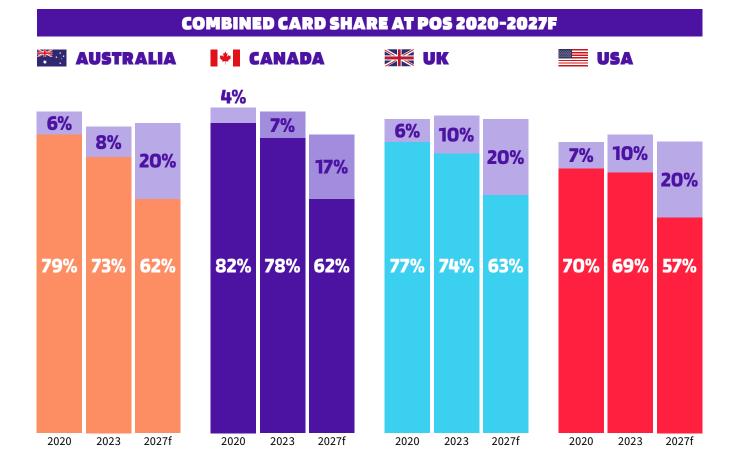


COMBINED, CARDS PROJECT CONTINUED STRENGTH



Including an estimated spend taking place from within wallets based on our survey results, cards project to maintain effectively flat shares through 2027. In these carddominated markets, that translates to nearly 80% of POS transaction value in 2027.

Wallets are changing the way consumers present cards in card-dominated markets but based on our survey data they're not fundamentally altering the underlying transaction shares. That may well change in the future as methods like A2A and BNPL account for bigger share of wallet funding, but cards look to retain relevance – and in many markets, dominance – for many years to come.



f = forecast



A2A IS THRIVING IN MARKETS WITH STRONG GOVERNMENT AND BANK SUPPORT

















- Central bank sponsored, launched in November 2020
- Subsidized consumer discounts to incentivize use
- E-com + POS, seeks to eventually replace cash and cards
- Projected to account for 50% of e-com payment value by 2027

- Central bank sponsored, launched in 2016
- Works with commercial digital wallets including Google Pay, Paytm, PhonePe, MobiKwik, and Amazon Pay
- E-com + POS, seeks to replace cash
- Wallets account for > 50%
 POS + e-com value

- Privately operated, <u>owned</u> <u>by six Polish banks</u> + Mastercard
- Launched in 2015, had over 14 million active users as of Q2 2023
- A2A payments accounted for 68% of Poland's e-com transaction value in 2023, and is projected to reach 73% by 2027
- Purchased by European Payments Initiative (EPI)
 itself owned by 16 large European banks – in October 2023
- Launched in 2005 by four major banks for use by all Dutch banks
- A2A accounted for 62% of Dutch e-commerce transaction value in 2023

...YET A2A REMAINS CHALLENGED IN CARD-DOMINATED MARKETS

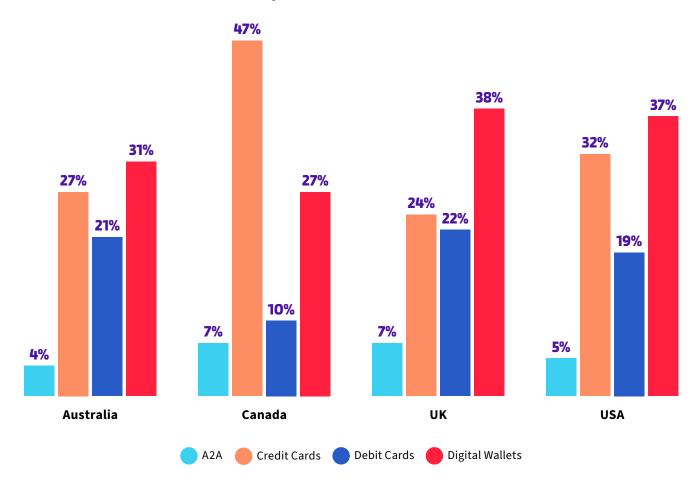
A2A growth has been considerably slower in established card markets such as Australia, Canada, the UK and the USA.
Merchant incentives are clear – they crave A2A's lower cost of payment acceptance.

However, incentives for consumers to adopt A2A payments are less obvious. Cards work for consumers, as evidenced by the more than \$20 trillion in global credit card and debit card spending in 2023.

The success of payment cards relies in large part on two factors consumers increasingly demand: purchase protections and loyalty rewards.

A2A payment schemes will need to solve these trust and reward puzzles to meaningfully influence consumer behavior in card-dominated markets. Loyalty and fraud prevention are currently services provided by intermediaries – card networks, financial institutions and payment service providers. These services are ultimately funded from interchange fees paid by

2023 A2A, CARD AND WALLET SHARE OF GOOD TRANSACTION VALUE, SELECT MARKETS



merchants. By design, A2A schemes have few or no intermediaries and thus have no structural chargeback mechanism so central to card schemes. Who, if anyone, will offer consumers fraud protection? Why should consumers give up their rewards?

Regulatory initiatives to promote open banking and new real-time payment systems coming online seek to change that equation in large consumer markets with high card penetration. To date, success has proved elusive.

In Australia, RBA Governor Michele Bullock articulated her frustration with the delays in adoption of the New Payments Platform (NPP) and its push payment service for consumer to business purchases, PayTo. Higher costs and poor user experience have raised concerns among legacy payment system providers about the utility of A2A payments. 2023 estimates reflect a downward revision to 5% of e-com transaction value for A2A while modest 9% CAGR to 2027 projects incremental A2A adoption and is subject to additional revision.

In Canada, implementation of <u>Payment Canada's</u> Real Time Rail (RTR) instant payment system was delayed again in 2023. The year concluded with

no specific timetable for release. While further studies are being pursued. Previous estimates and forecasts for A2A payment values in Canada have been revised downward.

In the US, FedNow adoption has been comparably minimal in its first year of operation. Meanwhile it appears that the presence of FedNow spurred an increase in adoption of RTP services from The Clearing House, FedNow's private competitor. With few compelling consumer to business use case deployments on the horizon, A2A payment estimates and forecasts have been revised downward.

Similarly, the UK government commissioned a 2023 report on how to improve payments in general and Open Banking in particular in the UK. Adoption of A2A in the UK remains low and to date has posed no threat to card dominance. If the UK Government initiative succeeds, share of A2A value in the UK could grow to 8-10% of e-commerce spending by 2027.

In September 2023, The European Payments
Initiative (EPI) launched wero, a new panEuropean digital wallet aimed at promoting realtime account-to-account payments in Europe.
In October 2023 EPI announced the acquisition

of the Dutch payment solution **iDEAL** and the Luxembourg A2A payment provider **Payconiq**. The ambitious <u>Nordic Project P27</u> was <u>cut short</u> in April 2023 after member countries withdrew their support and declined to go forward with the project.

A2A growth in Europe will in large measure depend on the success of the <u>new proposals</u> by the European Commission, published in October 2023, aimed at unlocking Open Banking. These include a new explicit obligation for banks to provide an API-based open banking interface and payment status information to third-party providers.

CONSUMERS GRAVITATE TO BNPL DESPITE HEADWINDS

Buy Now Pay Later (BNPL) companies continued to be challenged in 2023 by high interest rates, looming regulation, lowered valuations, and

\$316



The challenges BNPL companies face from a business model perspective are not the result of declining popularity of the payment method by consumers. Indeed, in 2023 consumer demand for BNPL reached an all-time high.

While many BNPL firms struggled through these headwinds, banks, fintechs, big techs and e-commerce platforms continue to add BNPL to serve persistent consumer demand.

\$452

Banks, big tech, retailers and regulators bring BNPL into the credit mainstream. Global BNPL transaction values grew 18% YoY from 2022-23 despite well-publicized headwinds. Our forecast for BNPL is 9% CAGR in global e-com through 2027, equal to that of e-com growth overall.

HEADWINDS SEPARATING BNPL WINNERS AND LOSERS

Though the plight of pure-play BNPL companies may be challenged in the near term due to high interest rates and a flight from fintech, banks, big techs, e-commerce platforms and super apps continue to add BNPL as part of their overall credit offerings to serve persistent consumer demand for the payment method.

The winners in the BNPL race are increasingly those for whom BNPL is not the primary business model. Major BNPL providers include fintechs (PayPal Pay in 4), Big Techs (Apple Pay Later), banks (My Chase Plan, NAB Pay Later) and card networks (Visa Installments, Mastercard Installments). In December 2023, Google announced their intention to partner with **Affirm** and **Zip** to provide BNPL services via its Google Pay wallet. Even the largest and best known global BNPL brands have diversified, pivoting from pure-play BNPL to become shopping platforms (Klarna) and to offering a wider range of traditional credit services (Afterpay, Affirm, Zip).

Whether the model of "pure play" BNPL providers will succeed is unclear, even given the most favorable macroeconomic and sector dynamic conditions. Headwinds in 2023 saw at least a dozen BNPL firms discontinue operations entirely, including **Openpay** and **Latitude Pay** in Australia, **Laterpay** in Germany, **myIOU** in Malaysia, **Zest** in India and **Pace** in Singapore.

Although some players, such as **Zip** and **Clearpay** (Afterpay's European brand), are pulling services from the European market, others, like Klarna, seized the opportunity to expand and grab more market share as demand for BNPL services continue unabated. Klarna offered positive news by reporting a quarterly profit in Q3 2023.

BNPL LEADERS: BIG TECHS, BANKS, FINTECHS

Klarna.





♠ Pay Later















SAMPLE OF BNPL COMPANIES CEASED OPERATIONS IN 2023

openpay



















pace.

GLOBAL E-COM GROWTH SLOWS YET REMAINS ROBUST

North America

MEA

LATAM

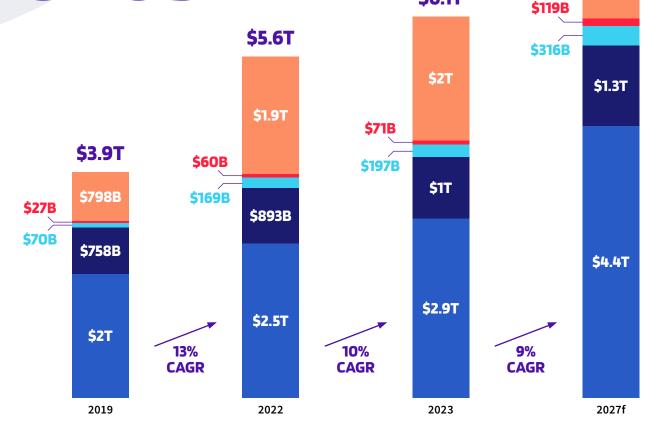
Europe

APAC

f = forecast

Global e-commerce surpassed \$6.1 trillion in 2023 and is growing at more than twice the rate of global POS.

E-com growth is projected for 9% CAGR (versus 4% for POS) through 2027. E-com as a percentage of all commerce therefore continues to rise, reaching 14.4% globally in 2023 and forecast to exceed 17% by 2027. High single-digit e-commerce growth is forecast for Europe (8%) and North America (7%), with double-digit growth in APAC (11%), LATAM (12%) and MEA (14%).



\$6.1T

\$8.8T

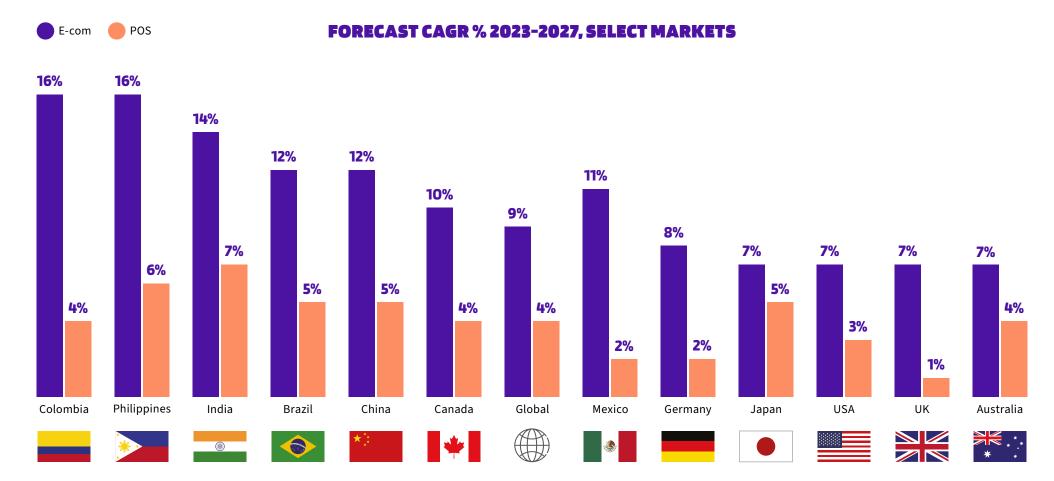
\$2.7T

GLOBAL E-COM TRANSACTION VALUE 2019 - 2027F, US\$ BILLIONS + GLOBAL CAGR

GLOBAL E-COM GROWTH OUTPACES POS BY > 2-1

The global e-commerce pie expanded by 10% – a half a trillion US\$ – in 2023 over 2022 to reach \$6.1 trillion in transaction value. Global e-com growth is forecast at 9% CAGR through 2027 (versus 4% for POS), when e-com transaction value is projected to be nearly \$8.8 trillion.

High single-digit growth is forecast for Europe and North America, with higher growth rates in the teens for APAC, LATAM and MEA.



CASHREMAINS RELEVANT AMID ECONOMIC UNCERTAINTY

Globally, **cash fell -8% YoY** from \$6.7 trillion in 2022 to \$6.1 trillion in 2023.

We project global cash transaction values will see a **continued decline of -6% CAGR** through 2027 when cash will account for an estimated \$4.7 trillion, or 11% of global POS transaction value.

GLOBAL CASH TRANSACTION VALUE 2017 - 2027F

\$US trillions (share % of POS)





Transaction Value

f = forecast



CASH'S CHANGING, DIVERSE AND ESSENTIAL ROLE

In 2023, cash was the leading payment method at POS transaction in 12 of the 40 markets covered in this report: Argentina, Colombia, Japan, Malaysia, Mexico, Nigeria, the Philippines, Peru, Poland, Spain, Thailand and Vietnam.

By 2027, we project that cash will remain the leading payment method in just five markets: Colombia, Mexico, Nigeria, Peru and Spain.

Even in long cash-heavy Germany, in 2023 debit cards (38%) surpassed cash (36%) to become the leading payment method among German

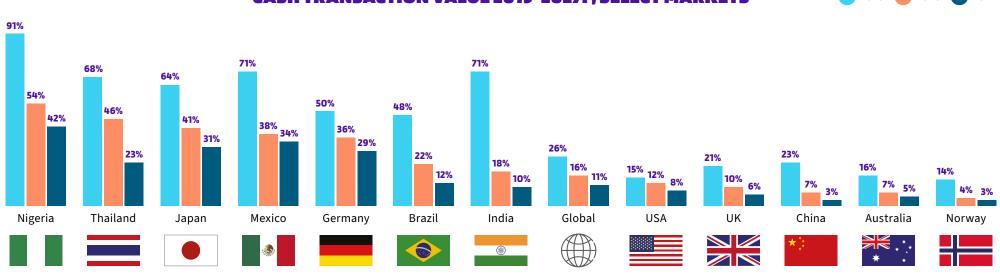
consumers at POS. Cash use ranged from low of 4% of transaction value in Norway to a high of 55% in Nigeria.

Yet cash remains a vital payments tool for billions of consumers worldwide. In many markets cash is used disproportionately by lower income consumers, those that are unbanked and underbanked. Consumers of many income strata turn to cash as a budgetary tool during high inflation and the cost of living crisis. This has led to campaigning and lobbying by consumer groups to protect access to cash.

In 2023, cash accounted for less than 10% of POS transaction value in one-in-four markets covered in this report: Australia, Canada, China, Denmark, Finland, Hong Kong, Netherlands, New Zealand, Norway and Sweden.

By 2027, we project **five additional countries will fall below the 10%** transaction value threshold for cash: France, Singapore, South Korea, the UK and the USA.

CASH TRANSACTION VALUE 2019-2027F, SELECT MARKETS



f = forecast

THE GLOBAL PAYMENTS REPORT 2024

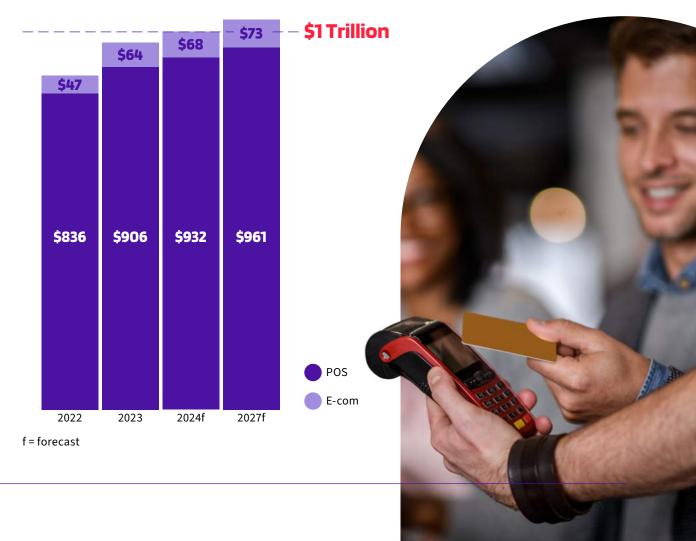
PREPAID CARD VALUE TO EXCEED \$1 TRILLION IN 2024

Prepaid cards serve an important role in the global payment ecosystem and are projected to exceed \$1 trillion in global transaction value across all channels in 2024.

Prepaid cards are thriving today because they offer a wide range of use cases: as private-label gift cards, general purpose reloadable cards, direct deposit payroll and for government benefit distribution. Prepaid cards offer utility to merchants, businesses, fintechs, banks, and card networks.

Above all, prepaid cards are extremely useful to consumers. Prepaid cards support financial inclusion by providing a convenient electronic payment tool to unbanked and underbanked consumers. Prepaid cards offer discretion to privacy-focused consumers and those concerned about personal information being exposed in data leaks. Prepaid cards are useful as gifts, for consumers who want to control their spending, for tourists, those traveling for business and for migrant workers.

PREPAID CARD GLOBAL TRANSACTION VALUE 2022-2027F (\$ BILLIONS)



PREPAID CARDS PLAY CRITICAL ROLES IN DIVERSE MARKETS

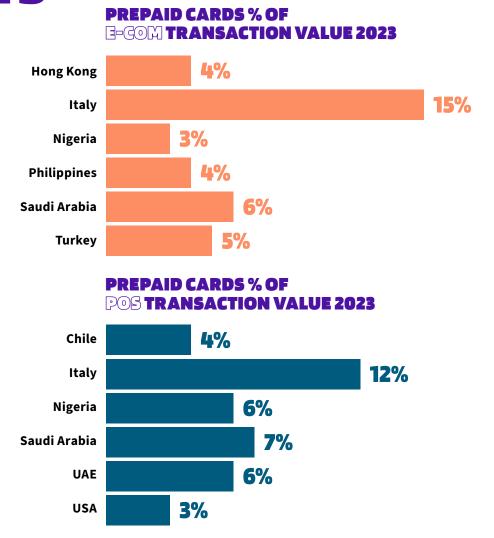
E-com Prepaid Card Share
POS Prepaid Card Share

Prepaid cards have long been popular among privacy-conscious Italian consumers. <u>Poste Italiane</u> (the Italian post office) offers **Postepay**, a popular reloadable prepaid card co-branded with Visa or Mastercard. Postepay can be used in stores, online and at ATMs both domestically and abroad. Postepay is an anchor in the Italian payment landscape, propelling prepaid cards in Italy to have the highest share of transaction value of any market in our report, both online and in-store.

In the Philippines, **GrabPay** offers **GrabPay Card**: a Mastercard-branded digital prepaid card that can be used to make online purchases and pay for digital subscriptions. Card holders also receive Grab Rewards points for purchases.

In Hong Kong, **Octopus** collaborated with Mastercard to launch a virtual prepaid card called **Octopus Wallet**. The card is linked to an Octopus digital wallet payment account and enables card holders to shop globally online at any merchants that accept Mastercard.

In Turkey, prepaid cards are growing among the unbanked population. Major banks offer prepaid cards with the aim of providing access to financial services. For instance, **Garanti BBVA's Bonus Piu** card can be used for cash withdrawals as well as in-store and online purchases.







For many years, post-pay methods helped consumers shop online and pay for their purchases in full post-order at an affiliated physical store or an ATM using an issued bar code, QR code or unique PIN.

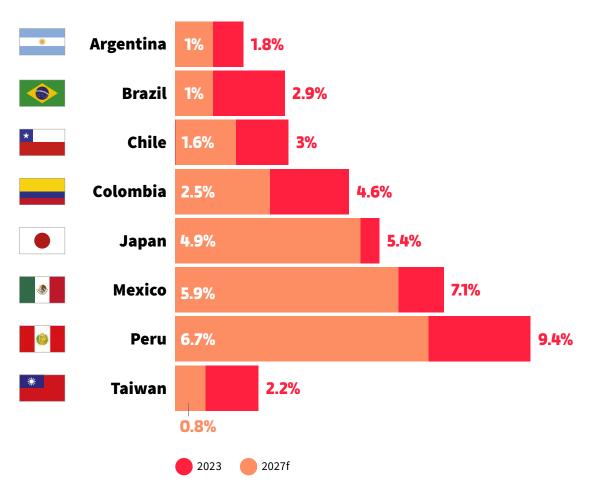
The vast majority of post-pay orders are paid for in cash, although other in-store payment methods can be made available.

While post-pay accounted for only 0.3% of e-com transaction value globally in 2023, post-pay is still heavily used in Latin America where it accounted for approximately 4% of the region's e-com transaction value in 2023 thanks to popular brands like **PagoEfectivo** in Peru, **OXXO** in Mexico, **Efecty** in Colombia, **Boleto Bancário** in Brazil, and **Pago Facil** and **Rapipago** in Argentina.

However, this trend has reached a plateau and we have seen a gradual decline of post-pay in the last few years, decreasing at -13% CAGR between 2019-2023. The biggest decline was observed in Argentina (CAGR -45% 19-23) and -35% in Brazil. This decline follows the same trajectory as cash, which halved its share of POS transactions in the last five years (down from 58% share in 2019 to 28% share in 2023 at the regional level).

We have seen a gradual decline of post-pay in the last few years, decreasing at -13% CAGR between 2019-2023.

POST-PAY % OF E-GOM TRANSACTION VALUE 2023-2027F





The decline in post-pay use coincides with the adoption of digital payment methods, a decreased reliance on cash, and a regional improvement in financial inclusion. Post-pay payment methods traditionally cater to unbanked and underbanked consumers. Efforts to increase access to financial services have significantly improved financial inclusion across LATAM. According to the World Bank, the unbanked population of Argentina was reduced from 67% in 2011 to 28%; in 2021 Brazil was reduced from 44% in 2011 to 16% in 2021; in Colombia, from 70% in 2011 to 40% in 2021. That trend is expected to continue, further lessening demand for post-pay.

Outside of LATAM, post-pay use is negligible except for Japan, where post-pay remains viable due to the continued popularity of cash. Payments are typically made at the over 55,000 Konbini convenience stores in Japan. But post-pay continues to decline. Post-pay in Japan accounted for 5% of e-commerce spend in 2023, down from 16% in 2019. This trend correlates with the fall in cash use in Japan, which dropped from 64% of POS transaction value in 2019 to 41% in 2023.





Payments are now more personal than ever, with how consumers pay varying by geography, by personal economic conditions, and nuanced by what they're purchasing.

As powerful as they are, consumer preferences are just one force among many driving greater fragmentation across the global payment ecosystem. Advances in technology, macroeconomic conditions, political context and the nature of regulatory schemes all exert significant influence in how payment landscapes evolve. Further, these forces can result in dramatically different payment landscapes from one vertical to another.

Here, Worldpay's payments experts explore key trends across five vertical sectors.





Knowing your retail customers provides the foundation to be prepared for every choice point on their purchase journey. That's especially true in discretionary retail, where removing all roadblocks to purchase is vital to convert sales. Payments are highly situational – each individual transaction involves a multitude of factors that may result in different payment methods being chosen.

Serving customer choice in retail means offering the most popular payment methods. For many, that starts with cards. While cards are dominant in many markets, they accounted for just over a third of global e-commerce value in 2023 (21% for credit cards, 12% for debit cards an 1% for prepaid cards). It's digital wallets that dominate online with a majority of 50% of global e-com value in 2023. Rounding out a checkout with account-to-account and BNPL offerings cover an additional 7% and 5% of global e-com value respectively.

Consumers are even being attracted to retailers based on the payment methods on offer, making payments a prominent part of winning and keeping customers. Data from the Baymard Institute suggests that in 2023, 11% of US online shoppers abandoned an online order because they weren't offered their preferred payment method. We have long known this in e-commerce, where the payments user experience is paramount to making a sale and even to increasing basket size. But this can also be said for in-store, where alternative payment methods like BNPL are gaining popularity.

BNPL has certainly become normalized for retail right across the gamut of sectors and price points. In a recent Worldpay survey¹, 21% of retail shoppers indicated they used BNPL at least once in the last year, including 30% of 27–35-year-olds.

An omnichannel approach is also becoming vital to satisfy consumer choice. Consumers, on average, are purchasing through three or more channels, and joining up their journeys provides a better user-experience, as well as enhanced sales and rewards scheme opportunities. In fact, 68% of shoppers told us they believe a seamless omnichannel experience will be important in the future¹, underlining the need to be fully connected with consumers right across physical and digital worlds.

With shoppers becoming more careful and considered in their spending habits, retailers will want to assess the choices they offer in all areas of the customer journey, as well as ensure that every interaction provides a chance to **deepen** loyalty, introduce new products, and create upsell opportunities.

Today, shoppers expect flexibility at their fingertips. Offering choice is no longer a nice-to-have – it's essential to keeping savvy shoppers happy and loyal.



The financial services sector has traditionally been slow to innovate, facing dual headwinds of needing to maintain interoperability with existing technology and to limit customer disruption. Even in the most advanced financial markets, it's still commonplace for consumers to pay for financial services by paper checks or by leveraging antiquated payment rails where transactions take days to clear.

Yet technology is becoming nimbler, opening doors to innovation.As the speed of innovation and cost of maintaining IT infrastructure rises, in-house solutions are being supplanted by superior third-party platforms. Having both "build" and "buy" options makes change easier.

All this innovation is coming just in time, as **consumers demand the same flawless experiences when paying for financial services** as when paying for a coffee or booking a car online. Financial services companies must evolve their checkout flows not just to match the experiences of other industry competitors. Financial services payments need to be flawless experiences that rival what consumers have grown accustomed to across all of their digital journeys.

So, what will change first? Unlike retail purchases dominated by card payments, financial service transactions have traditionally been bank transfers. Far from a frictionless experience, legacy **bank transfers will be supplanted by more innovative systems like account-to-account (A2A) payments,** leveraging both open banking as well as emerging real-time payment rails. A2A payments accounted for an estimated 7% of global e-commerce transaction value in 2023 and are projected to grow to 8% by 2027. A2A solutions often mimic the benefits of card payments – such as variable recurring payments – while offering merchants instant settlement and, critically, lower transaction fees.

Digital wallets' enhanced security is ideal for financial services payments. That's especially true in retail trading. With built-in two-factor authentication and tokenization, wallets offer more secure transactions and peace of mind for consumers when dealing with personal financial information. Wallets are win-wins for financial service consumers and firms alike when it comes to speed, security, and convenience, and regardless of the underlying payment method used.

Financial services firms need to innovate to keep pace with consumers who are reshaping payments. Offering A2A and digital wallet options is just a start. The customer experience in financial services payments must rise to meet a new, higher standard. Incentives such as rewards can also help move the needle on consumer behavior while boosting brand loyalty.

Software is becoming more interoperable and integrated, governments are driving favorable regulation, and more product innovations are on the market. Financial service providers need to react to rising consumer demand for flawless digital payment experiences.

ASIA-PACIFIC

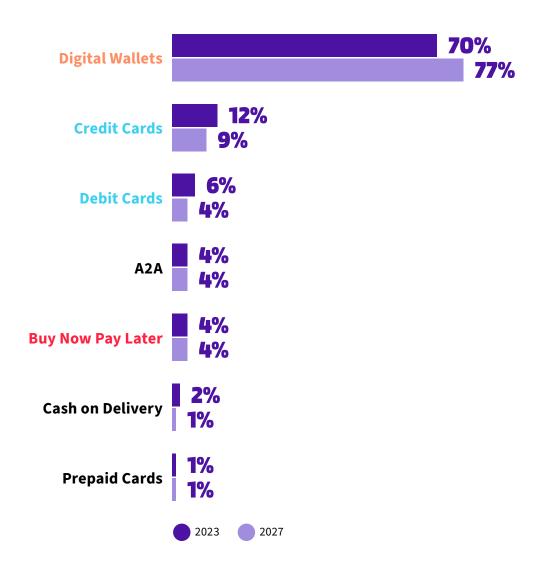
PAYMENT METHODS AND MARKET GUIDES





APAC GOM PAYMENT METHODS

Transaction value % 2023-2027



In 2023 APAC consumers continued to lead the world in digital wallet use online. Consumers in APAC used digital wallets for 70% of e-com transaction value in 2023. Wallets accounted for over \$2 trillion in e-commerce transaction value in 2023, which represented over 64% of global online digital wallet spend.

In 2023 digital wallets were the leading e-com payment method in five of fourteen APAC markets: China, India, Indonesia, The Philippines and Vietnam. By 2027 our forecasts indicate they'll be joined by Hong Kong, New Zealand, Singapore, South Korea and Taiwan.

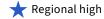
Credit cards were the people's choice for online payments in seven of fourteen APAC markets:
Australia, Hong Kong, Japan, New Zealand,
Singapore, South Korea and Taiwan. Direct credit card spend outside of digital wallets accounted for 12% of APAC's e-commerce transaction value in 2023.

Consumer demand for Buy Now Pay Later (BNPL) remained strong in 2023, with BNPL accounting for 4% of regional online spend, over \$120 billion in transaction value. BNPL forecast of 16% CAGR projects modest (less than 1%) growth in share in the forecast period to 2027.

APAC E-COM PAYMENT METHODS

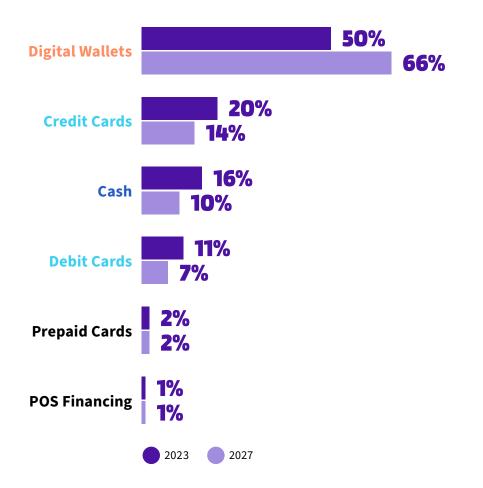
		Digital Wallets	Credit Cards	Debit Cards + Prepaid Cards	Account to Account (A2A)	Buy Now Pay Later	Cash on Delivery	Others
* *	Australia	31%	27%	22% 🜟	4%	15%	1%	<1%
*‡	China	82% 🜟	5%	5%	2%	4%	1%	1%
*	Hong Kong	32%	41%	7%	15%	1%	3%	1%
®	India	56%	15%	9%	12%	3%	3%	1%
	Indonesia	40%	10%	8%	28%	3%	11%	1%
	Japan	20%	57%	5%	6%	3%	2%	6%
C *	Malaysia	24%	16%	12%	39%	4%	3%	2%
*	New Zealand	24%	28%	23%	12%	11%	<1%	<1%
*	Philippines	34%	19%	16%	16%	1%	14%	<1%
(:	Singapore	37 %	42%	8%	8%	3%	1%	1%
	South Korea	27%	56%	8%	2%	1%	1%	2%
*	Taiwan	26%	47%	5%	9%	1%	9%	3%
	Thailand	27%	12%	7 %	44% ★	1%	8%	1%
*	Vietnam	36%	17%	9%	20%	1%	17% ★	1%

Country leading payment method



APAC POS PAYMENT METHODS

Transaction value % 2023-2027



Digital wallets achieved another significant milestone in 2023, surpassing 50% of POS spend across APAC. Wallets represented more than \$7.8 trillion in POS transaction value in 2023, nearly 72% of the \$10.8 trillion global POS digital wallet market.

Wallets were the leading payment method at POS in only China and India in 2023; by 2027 our forecasts indicate wallets will lead in all APAC markets except Australia, Hong Kong and New Zealand. Driven by increasingly ubiquitous interoperable QR codes, wallets are projected to grow at 13% CAGR to 2027, rising to represent nearly two-thirds (66%) of APAC POS spend in 2027 (~\$12.7 trillion in transaction value).

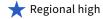
The use of cash continues to drop rapidly across APAC as consumers, merchants and governments pivot to digital payments. The use of cash across APAC fell 12% year-over-year in 2023, falling from 19% to 16% of regional POS transaction value. Cash was the leading POS payment method in six of fourteen APAC markets in 2023. Accounting for more than \$2.5 trillion in 2023 transaction value, regional cash use is forecast to contract by -8% CAGR from 2023 to 2027.

Cards are the consumer's choice for in-person payments in six APAC markets. Physical credit cards are the people's choice in Hong Kong, New Zealand, Singapore, South Korea and Taiwan, while physical debit cards are the in-person preference in Australia.

APAC POS PAYMENT METHODS

		Cash	Credit Cards	Debit Cards	Prepaid Cards	Digital Wallets	POS Financing	
* *	Australia	7 %	34%	39% 🛨	1%	15%	4% 🛨	
*‡	China	7 %	13%	11%	2%	65% 🛨	1%	
\$	Hong Kong	9%	52%	5%	4%	27%	2%	
(6)	India	18%	18%	10%	1%	51%	2%	
	Indonesia	38%	11%	15%	2%	32%	2%	
	Japan	41%	34%	3%	3%	17%	2%	
(*	Malaysia	32%	21%	14%	4% 🛨	24%	4%	
*	New Zealand	6%	44%	34%	2%	11%	2%	
*	Philippines	44%	17%	15%	1%	20%	2%	
C :	Singapore	15%	37%	20%	4% ★	22%	2%	
	South Korea	10%	58% 🛨	12%	2%	15%	2%	
*	Taiwan	25%	47%	6%	2%	18%	2%	
	Thailand	46% 🛨	13%	9%	2%	28%	2%	
*	Vietnam	38%	19%	9%	1%	31%	2%	

Country leading payment method



- In 2023, Australia's once soaring Buy Now Pay Later (BNPL) market showed signs of stress. Zip retreated from ten international markets, while six domestic BNPL firms discontinued operations including Bundll, Fupay, Genoapay, Latitude Pay and Openpay. Yet Australian consumers continue to choose BNPL, especially younger shoppers. BNPL is projected to maintain 15% share and to eclipse \$10.4 billion in e-com transaction value by 2027.
- Led by global brands Apple Pay and Google Pay, digital wallet POS transaction value is projected to double from 15% in 2023 to 30% in 2027. Wallets are the leading e-commerce payment method with 31% of 2023 transaction value, with Aussie consumers preferring PayPal when shopping online.
- The Australian Government asserted regulatory authority over BNPL and digital wallets in 2023. In October, the Reserve Bank of Australia (RBA) presented draft legislation that would regulate wallet providers under the 1998 Payment Systems Act. BNPL would be regulated as credit cards. Regulations were delayed until 2024 due to administrative bottlenecks in legislation drafting.

SIMINITE & BUNINITE

Population

27th

25,978,000

GDP Per Capita

6th

\$64,491

POS Size

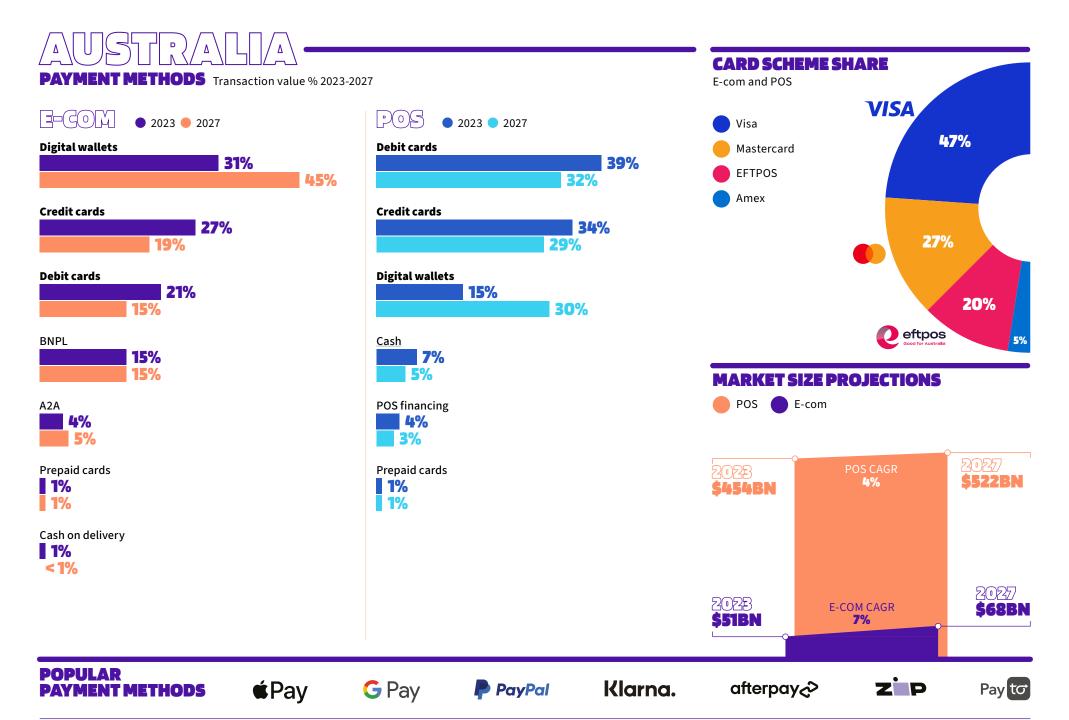
15th

E-com Size

14th

Rankings are out of 40 GPR markets







SNOILELIUS CONSICULO SI SILICULUS CON SILICU

- China continues to lead all global markets in digital wallet adoption across shopping channels. Wallets represented an estimated 82% of e-com transaction value in 2023 or nearly \$1.8 trillion. Only slightly less dominant at POS, digital wallets accounted for nearly two-thirds (66%) of POS spend in 2023, or nearly \$5.8 trillion.
- Notable given their current dominance, digital wallets are the fastest growing payment method in e-commerce and at POS. Wallets are forecast to grow at 13% CAGR from 2023-27, when they are projected to account for 86% of e-com spend. At POS, wallets are projected to grow at 10% CAGR to 2027, when we estimate wallets will represent 79% of POS transaction value.
- China's payment market is overwhelmingly led by three ubiquitous payment brands: the digital wallets Alipay and WeChat Pay, and the card network UnionPay. Alipay and WeChat Pay combined control an estimated 90%+ of the world's largest digital wallet market, while UnionPay has an effective monopoly with 99% of card payment value.
- State-owned UnionPay has historically transacted nearly all domestic card volume, but that's beginning to change. In July 2023, wallet giants Alipay and WeChat Pay separately announced they'd each allow visitors to link their Diners Club, Discover, JCB, Mastercard and Visa cards to use wherever Alipay and WeChat Pay are accepted. Then in November 2023, The People's Bank of China (PBC) issued a bank card clearing license to Mastercard for issuing and processing in China.

Population

2nd1,412,175,000

GDP Per Capita

27th

\$12,720

POS Size

(° b)

2nd

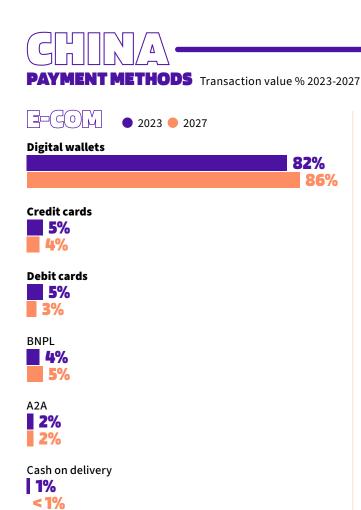
\$8.8 trillion

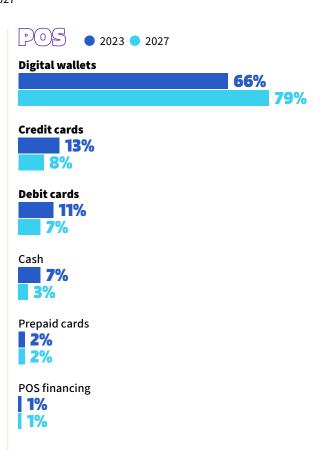
E-com Size

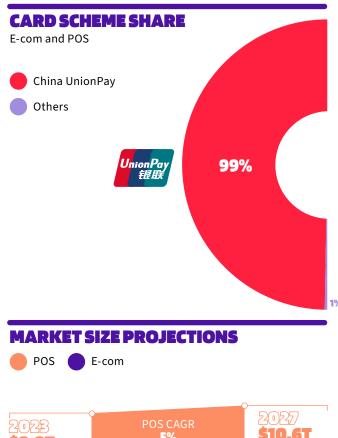
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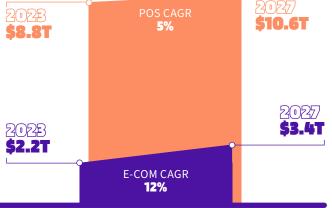
\$2.2 trillion

Rankings are out of 40 GPR markets









POPULAR PAYMENT METHODS











- Credit cards are the dominant payment method in Hong Kong both online and at POS. In 2023 credit cards accounted for 41% of e-com spend and more than half (52%) of POS value. Debit cards account for less than 10% of credit card value across channels. As in all credit-card dominant markets, rewards are a major driver of credit card popularity.
- Credit card spend is shifting to wallets.

 Digital wallets are on pace to eclipse credit cards in direct e-commerce spend by 2027.

 Credit card dominance at POS is forecast to persist, with 2027 projected share for credit cards (43%) marginally outpacing digital wallets (42%). 47% of Hong Kong consumers cited credit cards as their primary payment method within wallets.
- Prepaid cards play a critical role in Hong Kong's payment market. Octopus is a prepaid card used by an estimated 98% of Hong Kong consumers. Prepaid card transaction values saw an estimated 40% boost in 2023 due to their use as a conduit for distribution of benefits under the government's Consumption Voucher Scheme.
- In 2023 prepaid cards accounted for 4% of spend across both e-commerce and at POS in Hong Kong. While prepaid card share is projected to decline slightly to 2027, as is the case with credit and debit cards, prepaid card spend is shifting to use within wallets. New CEO <u>Tim Ying Tien Chi</u> stated in October 2023 Octopus's goal to be "on every phone in every pocket."

S LANKINGS

Population

34th

7,346,000

GDP Per Capita

13th

\$48.983

POS Size

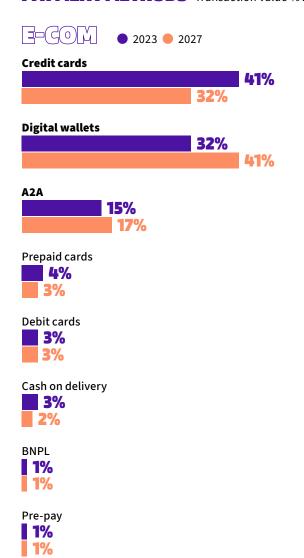
20th

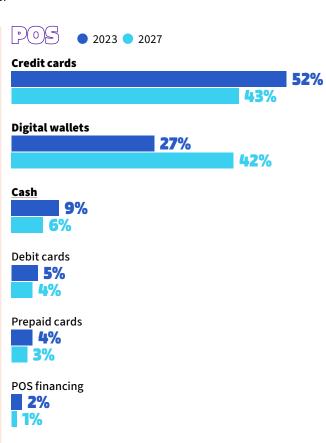
E-com Size

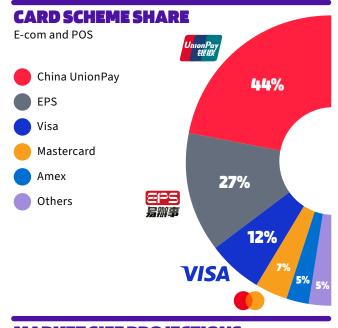
25th

Rankings are out of 40 GPR markets

IETHODS Transaction value % 2023-2027

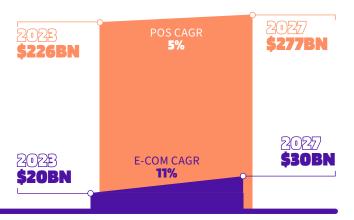












POPULAR

Alipay HK















Credit cards transaction values have

increased both online and in store. In 2023,

credit cards claimed 15% of e-com and 18% of POS transaction value. 2023 brought

increasing opportunities to link credit cards for use within UPI. We expect use of cards

directly to decline online and in-store as card-based transactions increasingly take

place within wallets.

• UPI popularity is driving dramatic growth

all UPI transactions are initiated from just

in digital wallet value. An estimated 95% of

three digital wallets: **Google Pay, Paytm** and **PhonePe**. Digital wallet spending accounted

for 56% of e-com value in 2023. Wallet growth spiked 59% year-over-year to claim 51% of POS

spend as wallets are used in conjunction with QR codes. Wallets are on pace to dominate with

75% of e-com and 73% of POS spending by 2027.

Population

1st1,417,173,000

GDP Per Capita

39th

\$2,38

POS Size

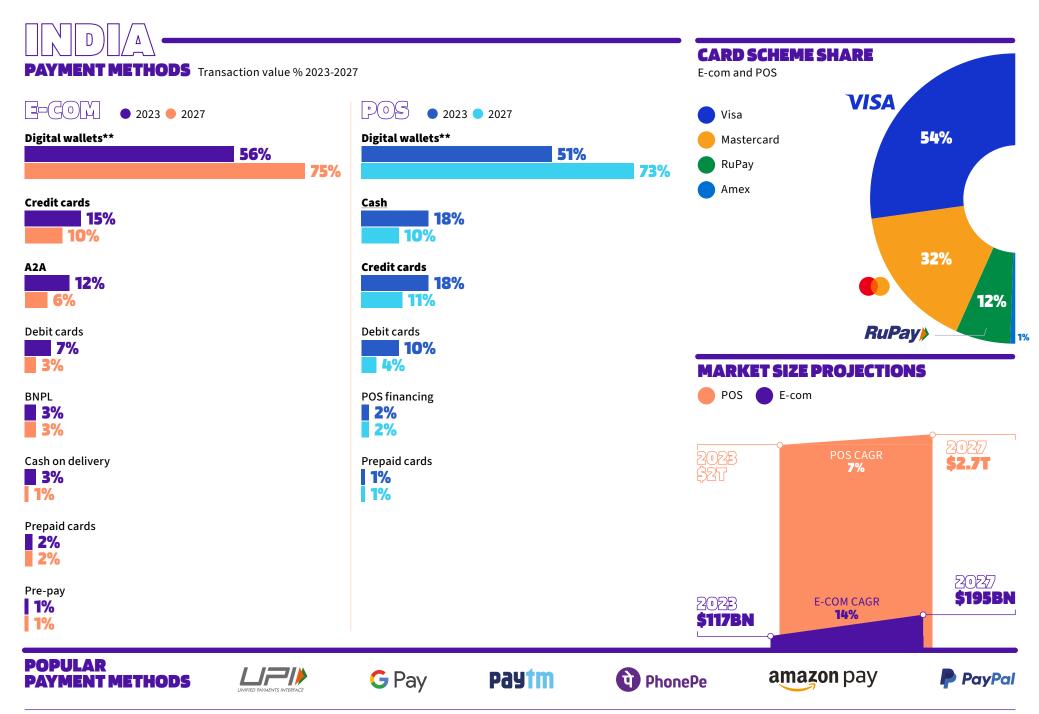
3rd

\$2.02 trillion

-com Size

7th

Rankings are out of 40 GPR markets



- Digital wallets are the leading payment **method** among Indonesian consumers shopping online, commanding 40% of e-com spend in 2023. Wallet use is also growing fast at the point of sale, driven by the popularity of Quick Response Code Indonesia Standard (QRIS). Wallets accounted for 34% of POS spend in 2023 and are projected to reach 49% by 2027. Leading wallets include DANA, GoPay, Lazada Wallet, LinkAja!, OVO and ShopeePay.
- Account-to-account (A2A) payments are popular in Indonesia, accounting for 28% of 2023 e-com transaction value. Bank Indonesia's launch of the instant payment service **BI-FAST** in 2021 is driving new A2A adoption. In March 2023, BI-FAST reported 94% of the national retail payment system participation.
- Buy now, pay later (BNPL) has found a niche in Indonesia, filling a financial inclusion gap among a population reported to be 48% unbanked. Credit demand is being met via BNPL by banks, fintechs (**Kredivo**), super apps (GoPayLater) and eCom platforms (Traveloka PayLater, SPayLater). In October 2023 the Indonesia Financial Services Authority (OJK) suspended domestic firm Akulaku from providing BNPL. Our BNPL forecast is for CAGR 10% between 2023-2027
- Credit card and debit card use is comparably low among Indonesia's consumers. Cards are far from niche, however: credit and debit cards combined accounted for 25% of consumer spend across all shopping channels in 2023.

Population

275,501,000

GDP Per Capita

\$4,788

POS Size

\$636 billion

E-com Size

\$45 billion



Rankings are out of 40 GPR markets

PAYMENT METHODS Transaction value % 2023-2027 2023 2027 Digital wallets

28%

A2A

Cash on delivery

Credit cards

Debit cards

BNPL

3%

Prepaid cards
1%
1%

3%

Pre-pay

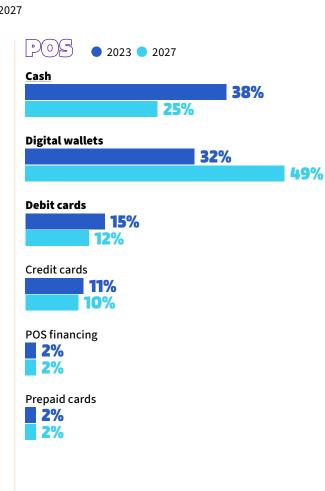
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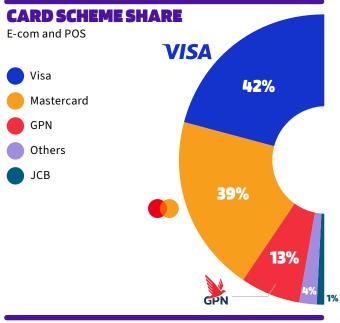
1%

7%

11%

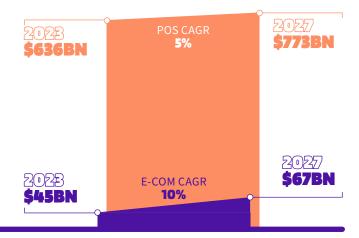
10%











POPULAR PAYMENT METHODS



47%















worldpay

- Japanese consumers continue to choose cash which accounted for 41% of POS transaction value in 2023. Cash use is declining slowly, with forecast -2% CAGR through 2027 when we project cash will represent 31% of POS spend.
- Cash plays an important role in e-commerce via codes paid for at Konbini (convenience) stores. Konbini cash payments continue to be displaced by cards and digital payments – post-pay accounted for an estimated 20% of e-com transaction value as recently as 2018. Yet post-pay services are more than niche, accounting for 5% of online spend in 2023.
- Digital payments in Japan are gaining steam.
 Digital wallets accounted for 20% of e-com
 spend in 2023. Wallets remain the fastest
 growing payment method online, projected at
 16% CAGR through 2027. Digital wallet use is

- accelerating even faster at POS. Wallets held 17% share in 2023; with 24% CAGR forecast from 2023-27, wallets share is projected to double to 34% by 2027.
- Credit cards accounted an outright majority 57% of e-com transaction value and 34% of POS spend in 2023, combined more than \$820 billion. Credit card issuers offer consumers opportunity to split revolving debt into installments, seeking to retain that spend versus BNPL offerings.
- Prepaid cards availability was suspended in August 2023. Sales of the ubiquitous prepaid cards <u>Suica</u> and <u>Pasmo</u> were <u>indefinitely</u> <u>suspended</u> due to the global semiconductor shortage. Prepaid cards were nevertheless on track to represent 1% of online and 3% of POS transaction value in 2023.

Population

8th

125,124,000

GDP Per Capita

20th

\$33,815

POS Size

ره ۵

4th

\$1.9 trillion

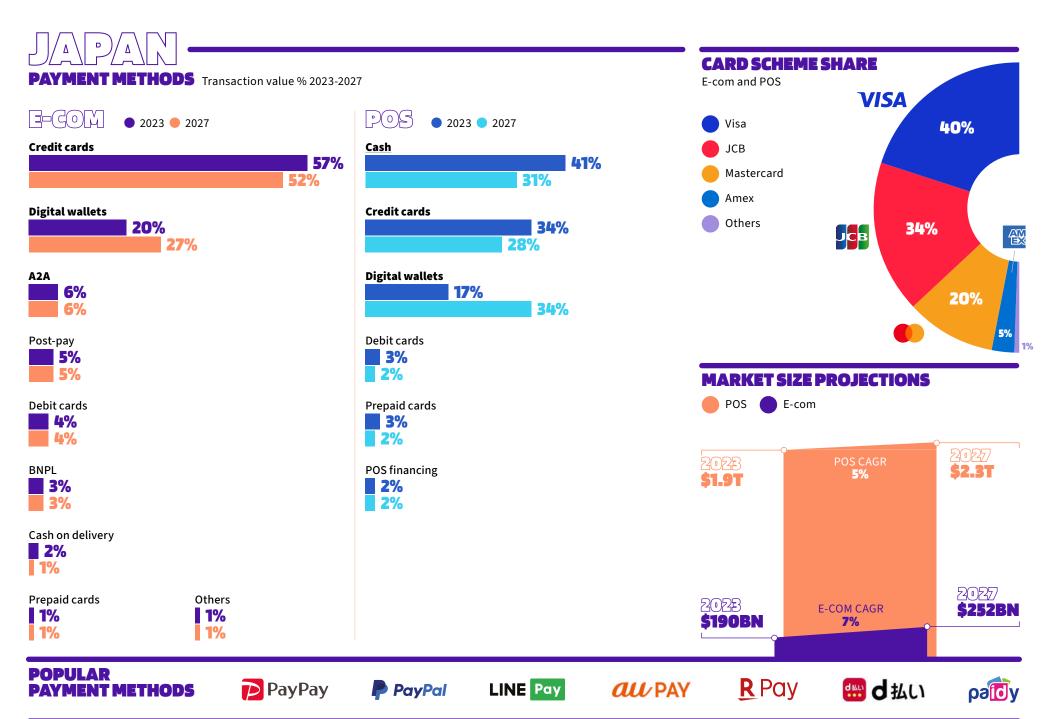
E-com Size

4th

\$190 billion



Rankings are out of 40 GPR markets







 Malaysian consumers prefer account-to- Malaysia continues to make progress account (A2A) payments when shopping toward its goal to become a cashless **online.** Malaysia has made considerable **society.** Malaysia's government seeks to strides in financial inclusion, reducing its achieve a cashless society by 2030 as part of percentage of unbanked consumers from 34% the 2021 Malaysia Digital Economy Blueprint. in 2011 to 12% in 2021. Consumers can make Early indicators are positive, with cash use being slashed by half from 64% in 2019 to e-commerce payments using the Financial Process Exchange (FPX) and **DuitNow**, which 32% in 2023. While cashless by 2030 may are used from within the consumer's banking prove elusive, cash use is projected to fall at app. A2A comprised 39% of Malaysia's e-com a dramatic -11% CAGR from 2023-2027. • Malaysia is among four Southeast Asia

• Digital wallets are second choice among Malaysian consumers both online and at POS. Popular wallets in Malaysia include **Touch 'n** Go eWallet, GrabPay, Boost and ShopeePay. Wallets are poised for explosive growth of 21% CAGR at POS on a pace to account for 44% of POS transaction value by 2027.

markets to connect their real time payment systems. Consumers in Indonesia, Malaysia, Singapore and Thailand can now pay in local <u>currencies</u> in any of the ASEAN countries using interoperable QR codes, with the Philippines to follow.

(° b)

Population

33,938,000

GDP Per Capita

\$11,971

POS Size

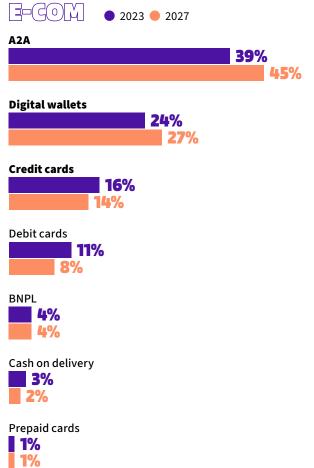
\$163 billion

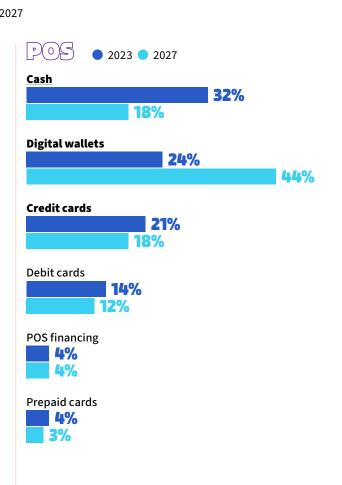
E-com Size

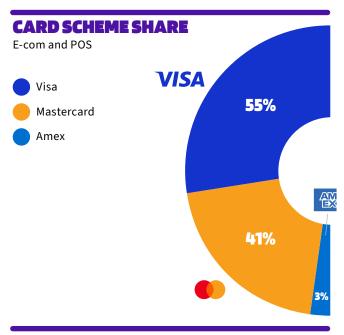
\$10.1 billion

Rankings are out of 40 GPR markets

PAYMENT METHODS Transaction value % 2023-2027 2023 2027 2027

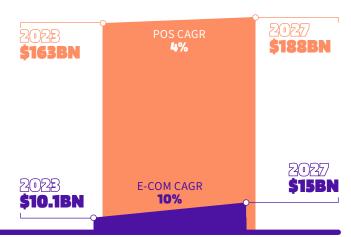




























- Kiwi consumers are strongly attached to credit and debit cards. Cards comprised half of all e-com spend, with credit cards (28%) outpacing debit cards (22%). Card preference is even more pronounced in store as cards dominate with 80% of all POS spending (44% credit, 34% debit, 2% prepaid). Once dominant, debit cards and the EFTPOS network have ceded share to credit cards with increasingly more consumers choosing credit card payments for their rewards programs.
- Digital wallet use is growing fast, driven by global brands like Apple Pay, Google Pay and PayPal. Digital wallets accounted for 24% of online and 11% of POS transaction value in 2023, with 19% CAGR forecast online and 22% CAGR at POS from 2023-2027 forecast.
- New Zealand financial conduct authorities are seeking to regulate Buy Now Pay Later. An amendment to the Credit Contract and Consumer Finance Act (CCCFA) declares BNPL contracts to be consumer credit contracts and subject to that regulation. BNPL accounted for 11% of e-commerce transaction value in 2023. approximately \$845 million. Our forecast sees BNPL share declining slightly to 9% of e-com transaction value in 2027.
- In May 2023, New Zealand banks began processing payments seven day a week. Payments NZ implemented the change as "next step in modernising the country's payments system" that would among other benefits boost cash flow for small businesses. New Zealand lacks a domestic real-time payments system.

Population

5,124,000

GDP Per Capita

\$48.249

POS Size

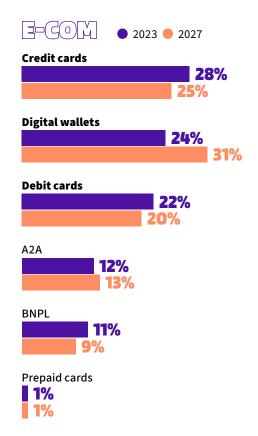
\$72 billion

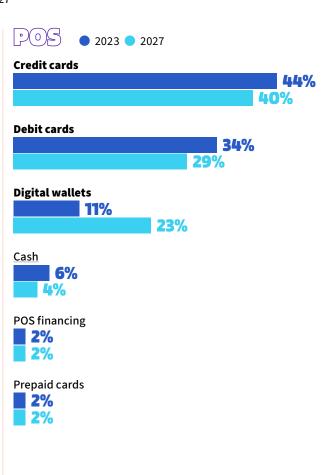
E-com Size

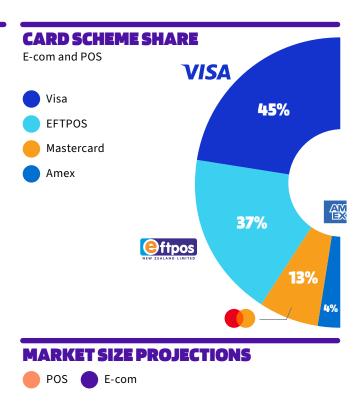


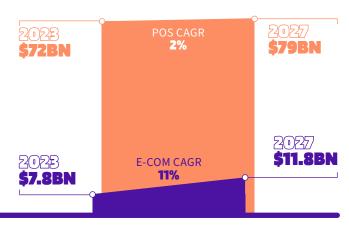
Rankings are out of 40 GPR markets

PAYMENT METHODS Transaction value % 2023-2027









POPULAR PAYMENT METHODS









afterpay<>



- Cash remains the people's choice for consumers when paying at the point of sale. Though not as dominant as before the pandemic, cash accounted for 44% of POS spend in 2023. Cash displacement in favor of digital wallet use with interoperable QR codes will continue with cash use projected to contract at -8% CAGR from 2023-20027.
- Filipino consumers' attachment to cash extends to e-commerce. Cash on delivery accounted for 14% of online spending in 2023, among the highest rates in the world. Many consumers prefer paying by cash due to trust issues, wanting to inspect goods for defects and authenticity prior to payment.
- Digital wallet use continues to grow rapidly online and in-store. Wallets accounted for 34% of e-commerce and 20% of POS spend in 2023 for a combined transaction value of nearly \$57 billion. GCash is the wallet of

- choice among Filipino consumers, selected as their main wallet by 89% of those surveyed.
- Wallet use is boosted by shopping platform giants <u>Shopee</u> and <u>Lazada</u> which offer their own digital payment solutions. <u>ShopeePay</u> and <u>Lazada Wallet</u> offer consumers benefits such as cash back and free shipping when making payments using the solutions on their respective platforms.
- In December 2023, the <u>central bank of The Philippines (BSP) extended a moratorium on fee hikes by users of the InstaPay and PESONet</u> instant payment systems. The freeze sought to force the payments industry to implement zero fees for small value digital wallet transactions. The BSP indicated such efforts were to support its <u>financial inclusion mandate</u>. Many banks <u>waived such fees entirely during the 2023 holiday season</u>.

Population

9th

115,559,000

GDP Per Capita

38th

\$3,498

POS Size

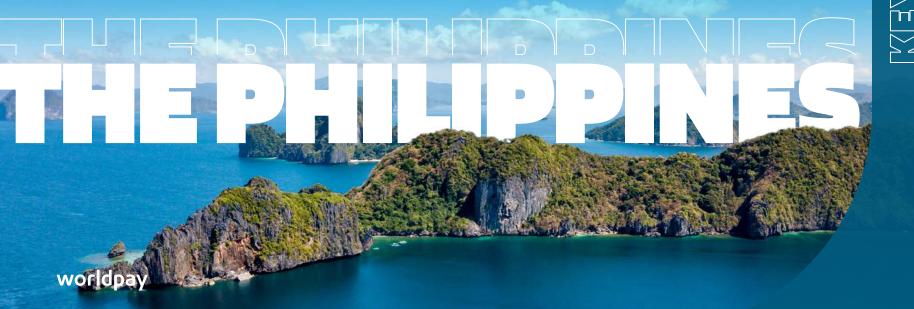
18th

\$246 billion

E-com Size

26th

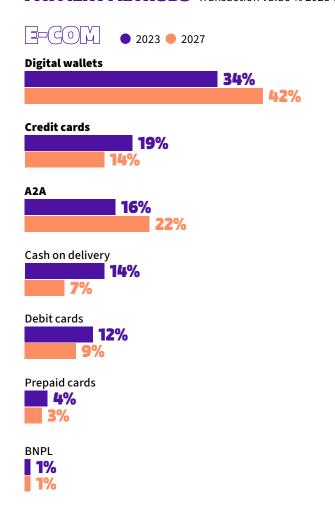
\$20 billion

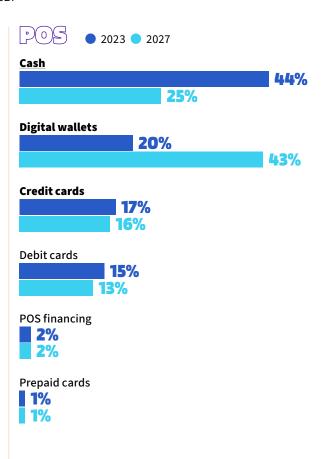


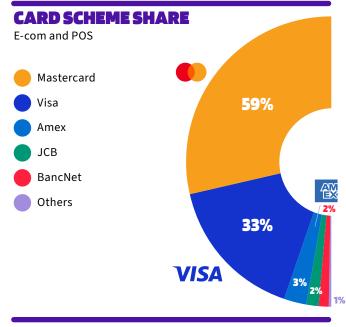
Rankings are out of 40 GPR markets

THE PHILIPPINES

PAYMENT METHODS Transaction value % 2023-2027

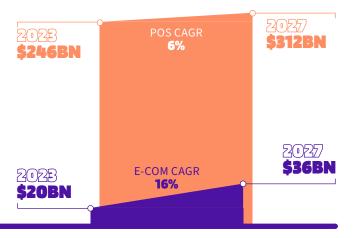












POPULAR
PAYMENT METHODS













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- Digital payments at POS have been fueled by the Singapore Quick Response Code (SGQR), the world's first unified payment QR code. In 2023, the Monetary Authority of Singapore (MAS) introduced an upgrade to the system, SGQR+, that will allow merchants to accept 23 payment methods by signing up with just one financial institution.
- We project digital payments will double their share of POS payments by 2027. Wallets grew 32% in 2023 year over year to account for 22% of POS transaction value. The successes to date of SGQR, the increasing interoperability of regional payment systems informs a strong growth forecast for wallets at POS of 22% CAGR between 2023-2027 that will propel wallets to 44% share by 2027.
- Singapore and Indonesia introduced cross-border payments via interoperable QR codes. The program officially launched in November 2023 and aims to create seamless payments connectivity between consumers across member states under the ASEAN Payments Policy Framework. The enhancements are expected to create frictionless payment experiences for tourists and online consumers, expand audiences for merchants and stimulate regional economic growth.
- A constant through Singapore's changing payment landscape are cards that combined accounted for a majority of consumer spend online and in store. Credit cards were the consumer's choice as the leading payment method by transaction value in e-commerce (42%) and at POS (37%) in 2023, while debit cards represented 7% of online and 20% of POS spend.

SPNIXINGS S

Population

36th

5,637,000

GDP Per Capita

3rd

\$82.807

POS Size

38th

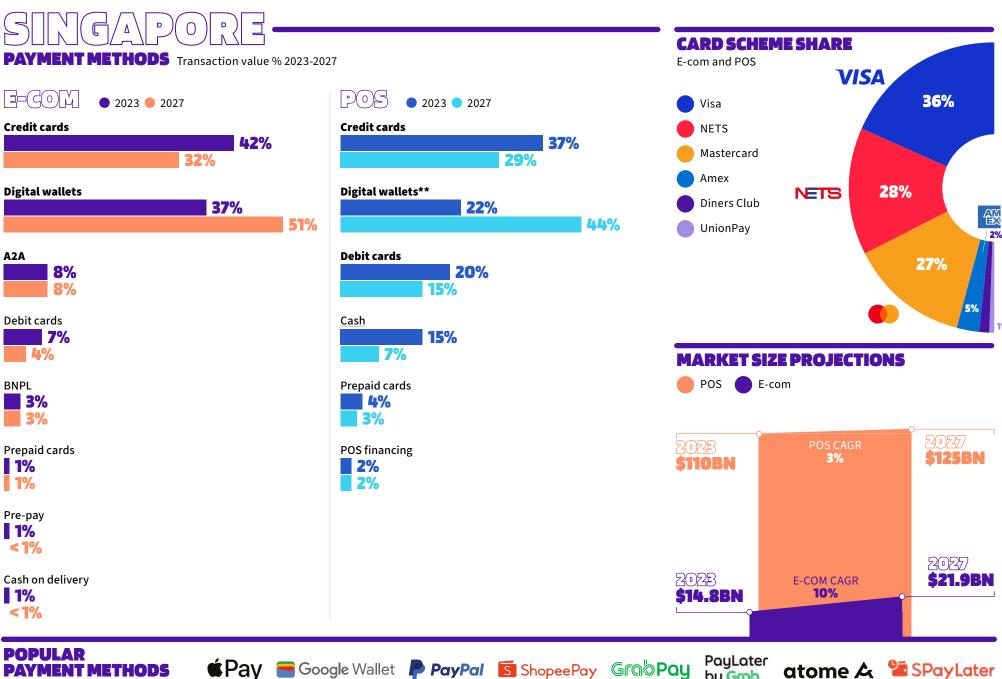
\$110 billion

E-com Size

33rd

\$14.8 billion

Rankings are out of 40 GPR markets





















- South Korean consumers use credit cards at POS at the highest rate in this report. Credit cards registered 58% of POS spend in 2023, nearly \$338 billion. Credit card dominance extends online where it accounted for 56% of e-com transaction value in 2023. This dominance isn't surprising given government incentives such as tax rebates to encourage for consumer to use credit cards.
- Digital payments are drawing that card spend to use within wallets. Wallets are expected to surpass credit cards in share by 2027 online and in-store. However, among South Korean consumers surveyed, 46% indicated cards as the main way they fund their digital wallets, showing the continued strong future for cards.
- South Korea has a straightforward online payment market structure. In 2023, cards and digital wallets combined accounted for 90% of e-commerce transaction value. Merchants can connect with South Korean consumers with a targeted and streamlined set of popular card and wallet brands.
- Apple Pay made its long-awaited South Korea launch in March 2023. Apple Pay will compete for share of this growing digital wallet market with leading domestic wallets Kakao Pay, Naver Pay, Samsung Pay. Digital wallets accounted for 27% of e-commerce and 15% of POS spend in 2023 and are projected to grow at 21% CAGR online and 31% CAGR at POS 2023-2027.

Population

19th

51,628,000

GDP Per Capita

21st

\$32,245

POS Size

14th

\$586 billion

F-com Siza

6th

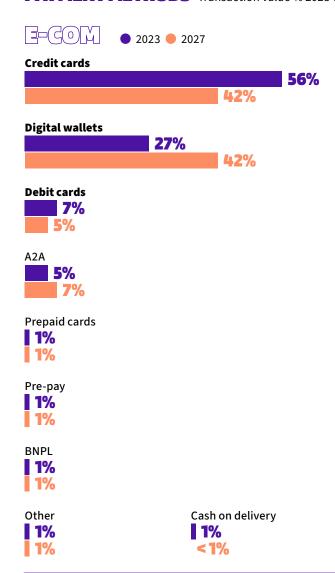
\$119 billion

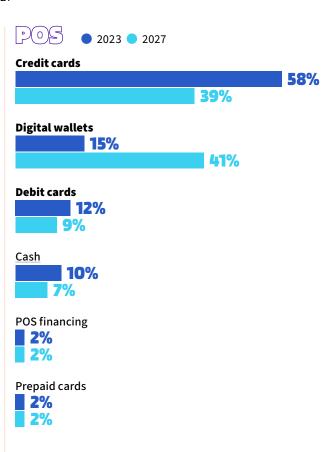
Rankings are out of 40 GPR markets

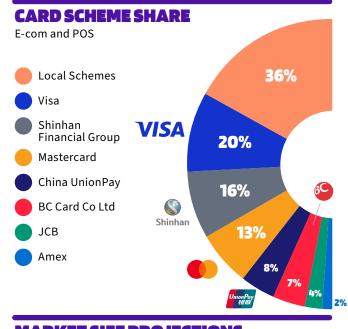


SOUTH KOREA

PAYMENT METHODS Transaction value % 2023-2027

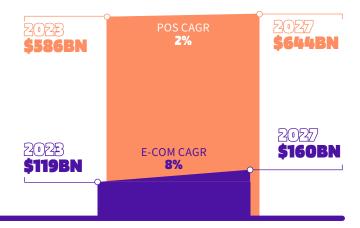












POPULAR PAYMENT METHODS









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- Credit cards were the leading payment method both online and at POS in 2023, accounting for 47% of spend in both shopping channels. Consumers are increasingly shifting use of credit cards to card-linked wallets, which are projected to eclipse credit cards as the leading payment method online and at POS by 2027.
- Prepaid cards fill an important payment niche in Taiwan, accounting for 2% of POS transaction value in 2023. Two prepaid cards dominate the market: <u>EasyCard</u> and <u>iPass</u>. Originally designed for use in public transportation, today these stored value cards are accepted at a wide range of retail stores and are popular among both residents and tourists.
- Digital wallets are gaining significant traction at POS. In 2023, wallets accounted for 18% of POS transaction value, up from 16% in 2022. In August 2023, Apple launched Tap to Pay in Taiwan, allowing merchants to accept payments using just an iPhone. The increasing popularity of the Taiwan Pay QR Code is also driving wallet use. Digital wallets are projected to grow at 27% CAGR through 2027 when they will command an estimated 41% of POS transaction value.
- The use of cash continues to fall as consumers shift to digital payment methods. Cash use has fallen by nearly half since before the pandemic, from 48% of POS transaction value in 2019 to 25% in 2023. We expect this trend to continue, with cash's share dropping by half again and falling to 12% of POS value by 2027.

SDNIMINUS S

Population

28th

23,570,000

GDP Per Capita

19th

\$33,907

POS Size

29th

\$150 billion

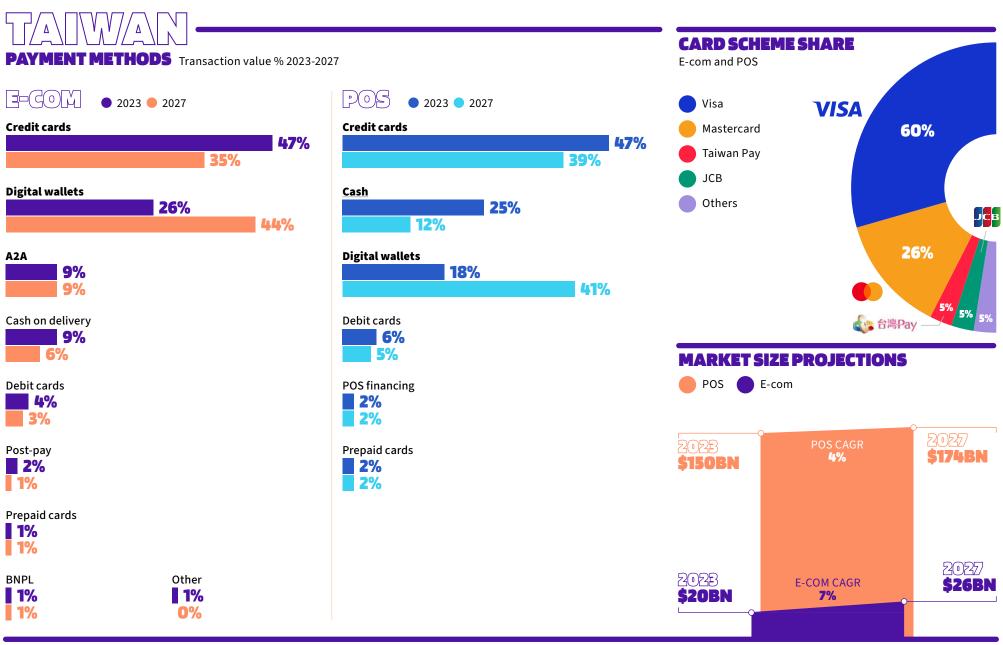
E-com Size

27th

\$20 billion



Rankings are out of 40 GPR markets





















- Cash is still king in Thailand, but its reign is coming to an end. Thai consumers have the highest rate of cash use in APAC, with cash accounting for 46% of transaction value in 2023. Thailand's government is seeking to reduce the amount of cash in circulation in half by 2026, largely by promoting the use wallet-based payments using interoperable QR codes. Our projection is for cash use to decline at -12% CAGR through 2027 when we expect cash will fall to 23% of POS spending.
- The use of digital wallets is accelerating due to rapid adoption of QR code payments. QR codes utilizing Thailand's <u>PromptPay</u> instant payment rail are driving digital wallet growth at POS of 22% CAGR from 2023-2027. Our projections see digital wallets overtaking cash and accounting for more than half (53%) of all POS payment value by 2027.
- Account-to-account (A2A) payments are the leading online payment method in Thailand. PromptPay allows consumers to pay for goods and services online directly from within their banking app. A2A accounted for 44% of e-com transaction value in 2023 and is projected to grow at 17% CAGR from 2023-2027.
- Digital wallets have emerged as a vehicle for distributing government aid. A digital wallet program is set to commence in May 2024. All eligible Thai citizens will receive the funds (10,000 baht, or approximately \$280) in the state-owned Krungthai Bank super app Paotang. Paotang has a "g-wallet" feature to distribute government funds.

TATE GENANKINGE

Population

13th

71,697,000

DP Per Capita

33rd

\$6,908

POS Size

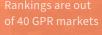
32nd

\$143 billion

E-com Size

24th

\$22.5 billion





CARD SCHEME SHARE PAYMENT METHODS Transaction value % 2023-2027 E-com and POS F-GOM POS **2023 2027 2023 2027** Visa A2A Cash Mastercard VISA 46% 44% 70% Amex 23% JCB **Digital wallets Digital wallets** Thai Payment **27%** 28% Network 36% **53% Credit cards Credit cards** 12% 13% 27% **12%** Cash on delivery Debit cards 8% 9% 8% **3**% **MARKET SIZE PROJECTIONS** E-com **POS financing** POS **Debit cards** 6% **2**% 2% BNPL Prepaid cards 2023 4% **\$170BN 1**% **2**% **1** 1% 1% **Prepaid cards 1**% **1**% 2027 E-COM CAGR 2023 Pre-pay 16% \$22.5BN 1%

POPULAR PAYMENT METHODS

< 1%















- Digital payments are soaring in Vietnam.

 Wallets accounted for 31% of POS transaction value in 2023, second only to cash. The rapid adoption of QR code based payments fuels our projection of 20% CAGR for 2023-2027; wallets are expected to attain 50% of POS value by 2027. Wallets were the leading payment method online in 2023 with 36% of e-com transaction value; wallets are projected to grow at 24% CAGR to 2027 when they'll account for an estimated 49% of e-com value.
- The digital payment market in Vietnam is dominated by domestic fintech providers. The digital wallet market is led by the popular super app MoMo, with smaller shares by Vietnamese wallets Moca, VNPAY and ZaloPay, In addition to international brands like PayPal, Samsung Pay (since 2017) and Google Wallet (since 2022).
- Vietnamese consumers are comparatively heavy users of cash. Cash remained the leading payment method at POS in 2023 with an estimated 38% of transaction value. Yet that's less than half the 85% of in-person payment value cash represented in 2019. The Vietnamese Government and the State Bank of Vietnam have promoted digital payments in remote and rural areas where cash use remains high. We project cash will fall to 24% of POS transaction value by 2027.
- Vietnam has the highest rate of Cash on Delivery among the 40 markets in this report, with COD accounting for 17% of transaction value in 2023. Cash on Delivery is following the same trajectory of cash overall

 falling by nearly half since 2019 when COD represented 29% of e-com payment value.

Population

10th

98,186,000

GDP Per Capita

37th

\$4,163

POS Size

ره ۵

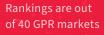
27th

\$173 billion

E-com Size

28th

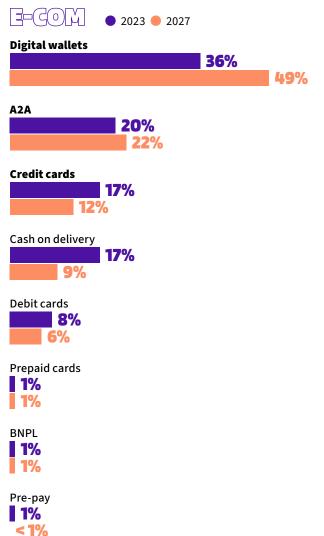
\$20 billion

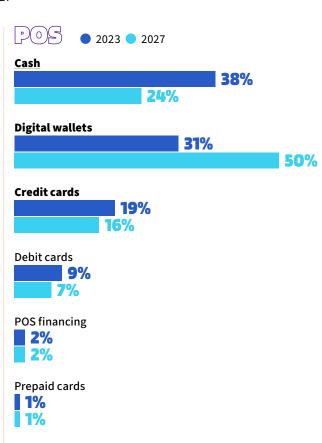


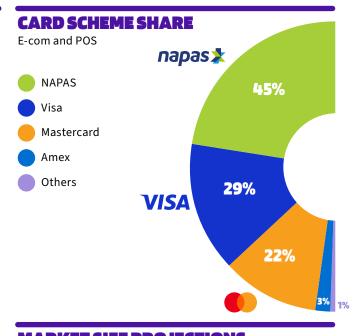


PAYMENT METHODS Trans 2023 2027 Digital wallets



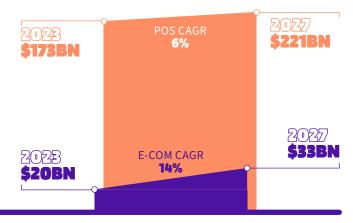




























General definitions

Alternative payment methods (APMs) -

Payment methods other than the traditional payment methods of cash and cards. Alternative payment methods include account-to-account (A2A), buy now pay later (BNPL), cryptocurrencies, digital wallets, pre-pay, post-pay and POS financing. APMs are now ascendant in e-com and will soon achieve parity with traditional payment methods at POS.

Therefore, we've effectively dropped "alternative" in regard to industry leading payment methods, while acknowledging its continued use in the payments industry. Globally in 2023, APMs accounted for approximately 65% of e-com and 31% of POS and transaction value.

Compound annual growth rate (CAGR) -

Compound annual growth rate for a given period of years. CAGR projections are offered in this report for e-com and POS transaction values at the global, regional and individual market level projected 2023 through 2027. CAGRs offered for specific payment methods refer to the projected growth rates of absolute transaction value, not of the share of transaction value.

e-commerce (e-com) – Consumer purchases of goods and services made online by consumers from businesses via the internet, regardless of device or application. Our analysis is confined to person-to-business payments and excludes consumer payments to governments and purchases or installment payments of motor vehicles, real estate, rent, investments, utility and other bill or loan payments.

Global e-com transaction value for the 40 markets covered in GPR 2024 was over \$6.1 trillion in 2023. Our projection of 9% CAGR for e-com growth projects to a total global e-com market size of approximately \$8.8 trillion in 2027.

e-com as % of all commerce – E-commerce transaction value as a percentage of all commerce including e-com and POS sales. Global e-com sales represented approximately 14% of all commerce in 2023. Higher estimated growth rates for e-com relative to POS will see e-com as a percentage of all commerce rise to a projected 17% globally by 2027.

GPR – The Global Payments Report, Worldpay's industry-leading account of how consumers pay at checkout online and in-store in 40 leading global markets. This 2024 version is the GPR's ninth edition.

Point of sale (POS) – All person-to-business transactions that occur at the physical point of sale. Our analysis includes traditional instore transactions as well as all face-to-face transactions, regardless of where they take place.

Global POS transaction value for the 40 markets covered in this report was nearly \$36.5 trillion in 2023. Our projection of 4% CAGR for POS growth projects to a total global POS market size of approximately \$42.3 trillion in 2027

Real-time payment – An electronic payment where funds are irrevocably transferred from one account to another, confirmation of the payment is available to the originator and receiver, and the initiation, clearance and settlement of funds occur simultaneously and effectively in real time.

Transaction value – The total sum of U.S. dollars estimated to have been paid by consumers to businesses in e-commerce and at POS. Our analysis of payment method share is based on transaction value, not the number of transactions. The share of each payment method is based on the dollar value of transactions at the country, regional and global levels.

Payment methods

Account-to-account (A2A) – Electronic payments made directly from one party to another while bypassing card network rails. A2A payments are embedded in apps and online services such as Pix in Brazil, iDEAL in The Netherlands and BLIK in Poland. A2A includes bank transfers (for push payments) and direct debits (for pull payments). A2A is classed separately in the report's e-com payment method share analysis. At POS, A2A transactions are classed within digital wallets; we expect to break them out separately in GPR 2025. In 2023, A2A payments accounted for an estimated 7% of global e-com transaction value, or approximately \$449 billion.

Buy now pay later (BNPL) – BNPL service providers settle a payment with the merchant at the time of purchase while allowing consumers to pay for goods and services at a later date, typically in a finite set of installments and without interest if repaid within the agreed time. BNPL accounted for approximately 5% of global e-com transaction value in 2023, an estimated \$316 billion.

Cash – Our analysis of cash is limited to physical cash or checks and excludes central bank digital currencies (CBDCs). Once the undisputed leader in POS commerce, physical cash accounted for approximately 16% of global POS transaction value in 2023, or \$6 trillion. Cash is projected to continue to decline to approximately 11% of global POS spend by 2027, roughly \$4.7 trillion.

Cash on delivery (COD) – Goods ordered online and paid for with cash at the time of delivery. COD accounted for 2% of global e-com transaction value in 2023, or \$101 billion. We project COD will fall to 1% of global e-com spend by 2027, when it will account for approximately \$51 billion of e-com spend.

Credit card – An essential anchor of personto-business payments for over half a century, credit cards are issued by financial institutions affiliated with a global card brand network such as Mastercard, Visa and UnionPay. Credit cards allow consumers to make purchases with credit from a financial institution. Our analysis of credit cards includes charge cards and deferred debit cards. In 2023, direct credit card use represented 21% of global e-com transaction value (over \$1.3 trillion) and 27% of global POS transaction value (nearly \$10 trillion).

Cryptocurrencies – Cryptocurrencies include private coins such as Bitcoin and Ethereum, stablecoins such as Tether and USD Coin. Central Bank Digital Currencies (CBDCs) are not in scope and are currently classified within "Other." Cryptocurrencies accounted for approximately 0.2% of global e-com transaction value in 2023 and did not reach 0.5% in any of the 40 markets in our report.

Debit card – Cards that facilitate purchases with funds directly debited from consumer accounts held at a financial institution. Debit cards are issued by financial institutions in affiliation with a global card brand network such as **Mastercard**, **JCB** or **UnionPay**. In 2023, debit cards accounted for 12% of global e-com transaction value (over \$750 billion) and 23% of global POS transaction value (nearly \$8.3 trillion).

Digital wallet – Apps that securely store payment credentials, allowing consumers to pay for goods and services in e-commerce and at the point of sale. Our classification is broadly inclusive of pass-through wallets that facilitate card transactions, stored value wallets and mobile money wallets and includes global brands such as Alipay, Apple Pay, Google Pay, M-Pesa and PayPal as well as local and regional wallets. In 2023, digital wallets accounted for and estimated 50% of e-com (\$3.1 trillion) and 30% (\$10.8 trillion) of POS transaction value.

POS financing – Credit extended to consumers at the point of sale. This includes credit offered by retailers such as layaway financing, by financial institutions, and by third-party BNPL services such as **Klarna**, **Afterpay** and **Affirm**. POS financing accounted for approximately 1% of global POS transaction value in 2023, or nearly \$520 billion.

Post-pay – Consumers order products online and pay for them in full later at an affiliated physical store or ATM. Although post-pay services represent only 0.3% of e-com transaction value globally, post-pay accounts for approximately 4% of LATAM e-com transaction value. Post-pay also thrives in Japan, where payments are typically made at Konbini (convenience) stores.

Prepaid card – Cards issued by financial institutions that run scheme networks such as Visa and Mastercard that are funded in advance. Prepaid cards can be funded once or be reloaded, and they can be used to make purchases as easily as debit or credit cards. Our scope is inclusive of prepaid cards issued as payroll and as government benefits. In 2023, prepaid cards accounted for 1% of e-com (over \$64 billion) and approximately 2% of global POS transaction value (approximately \$906 billion).

Pre-pay – Services that allow consumers to make e-commerce purchases without a card account and without providing personal data. Services such as Paysafecard and Neosurf offer flexible payments via vouchers redeemable at participating merchants. Pre-pay accounted for approximately 0.3% of global e-com transaction value in 2023.

Others – We continue to track other emerging and otherwise uncategorized e-com payment methods, like central bank digital currencies and direct carrier billing. In 2023, uncategorized payment methods combined to account for approximately 0.2% of global e-com spend.



METHODOLOGY

This ninth edition of The Global Payments Report (GPR 2024) offers a snapshot of today's consumer to business payments landscape: globally, by region and in 40 select markets that account for 88% of global GDP.

The report documents consumer payment methods when shopping online and at the physical point of sale highlighted by our payment method share analysis for the past year, 2023. The data is complemented by a series of insights highlighting the most relevant themes in the world of payments.

GPR 2024 provides our view of the market, based on internal expertise, our own research and third-party vendor data. GlobalData's 2023 Financial Services Consumer Survey provides the foundational consumer feedback and was conducted online in H1 2023 among 48,000 consumers in 40 markets.

The Worldpay Market Insights team develops the GPR based on GlobalData survey results which are further supplemented by Worldpay internal data, public data sources from central banks, NGOs, payment associations, company filings, news accounts and third party published reports. References to external sources are noted by a hyperlink to the original source. This data is processed through Worldpay's proprietary model & categorization scheme, and the resulting data

is validated with industry experts inside and outside of Worldpay. Share of payment methods in a market are estimated using aforementioned data model. Additionally, Worldpay's model is based on total transaction value, not the number of transactions.

The Global Payments Report continues to evolve to reflect market changes, evolving standards and reader feedback. In this 2024 edition, we've supplemented our payment share analysis with projections for the evolution of each market through 2027 at the global, regional and individual market levels. Prior to this edition, we only published payment method forecast globally and by region. Payment method share forecasts consider historical growth trends, microeconomic conditions, regulatory environments, technological innovations, landscape of market actors and other factors.

E-commerce market size and forecast data is sourced primarily from GlobalData's E-Commerce Analytics database based on data retrieved in July 2023. 2022 figures were updated in line with new revisions by GlobalData; 2023 data cited in



the report are therefore estimates for the year. GlobalData collected this information using consumer surveys, B2B surveys and desk research. Our e-commerce market size estimates include retail, food and drink, travel, gaming, gambling, and digital content streaming.

GlobalData's proprietary e-commerce market size growth model provides the foundation for our growth analysis. E-commerce market size growth estimates for Argentina, India, Indonesia, Peru, Spain, Taiwan, and Thailand are based on our own analysis that include blended estimates from local government statistical authorities, NGOs and third-party research firms. The Worldpay Market Insights team determines the final published market size estimates and projections.

2023-2027 POS market sizes were calculated using macroeconomic data from McKinsey & Company, which continuously maintains its payments database from over 200 global sources, including public data, consumer surveys and local research team inputs. Total POS market size through 2027 was forecasted based on available macroeconomic projections at the time of writing. All projections are subject to changes in world events, market dynamics and other forces over the period concerned (to 2027). Any indicative predictions based on the data we have used should be treated as such.

We augmented several POS market size calculations with additional insights from government sources, third-party vendors and other publicly available datasets. We also revised our published 2022 market size estimates in line with more recently available data for Argentina, Australia, Brazil, Chile, China, Taiwan, Thailand, and the UAE. These changes have affected regional and global estimates for payment method share, most notably due to the weight of the revised China data.

All market size data relate to the industry, not from direct Worldpay business. POS market size estimates include retail, entertainment, hospitality, grocery, food and drink. All estimates analyze consumer to business payments in the specified verticals only. Bill payments, personto-person (P2P) and business-to-business (B2B) payments fall out of scope.

Card scheme figures were sourced from Euromonitor and GlobalData with further internal analysis, and these are representative of all consumerto-business payments including via e-commerce and at POS.

Additional secondary sources for this report include data from local card, banking and payments associations; card scheme and payment provider published data; e-commerce industry reports and studies; news articles; and international organizations including The World Bank and International Monetary Fund.

Certain information set forth in this report contains forward-looking statements including projections as to possible scenarios for market sizes and the consumer to business payment method landscape. All projections are inherently speculative and subject to infinitely variable changes in market dynamics over the period concerned (to 2027). All estimates in this report are thus offered on an "as is" basis as our best faith estimates at the time of writing.

worldpay

Worldpay is an industry leading payments technology and solutions company with unique capabilities to power omni-commerce across the globe. Our processing solutions allow businesses of all sizes to take, make and manage payments in-person and online from anywhere in the world. Annually, we process over 50 billion transactions across 146 countries and 135 currencies. We help our customers become more efficient, more secure and more successful.

To learn more, visit <u>worldpay.com</u> or follow us on <u>LinkedIn</u>, <u>X</u>, and on <u>Facebook</u>.

Reach out to the GPR team at <u>GPR@worldpay.com</u>

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