

worldpay
from FIS

GLOBAL PAYMENTS REPORT

The pathways of people and payments

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THE PATHWAYS OF PEOPLE AND PAYMENTS

To follow the path of commerce across human history, just trace the routes of our movement. You'll find it on the flow of rivers, the pull of ocean currents, and with the push of the trade winds. It's written in the cut of ancient wagon-rutted roads and the vapor trails left thousands of feet above our heads. Everywhere we've dared to venture, we've taken commerce with us – as fundamental a tool to our progress as any vehicle.

Commerce has always connected us.

It hasn't come without its obstacles, however. If traversing rugged continents and crossing the vast, unmarked seas weren't daunting enough, today we must also learn to navigate an ever-changing world of payments landscapes. It requires reaching across geographical and generational divides, steering with the current consumer trends and technological innovations, and having the foresight to anticipate what's waiting just over the horizon.

It's no easy task. It's why we've assembled Global Payments Report 2020.

Here, we'll explore the differences between and, more often, the similarities among the world's nations, uncovering the impact of geography and technology, societies and economies. We'll discover how forms of payment are woven into the exchange of goods and services, ideas and innovations, not just within their respective countries, but as they transcend borders and boundaries to make global commerce possible.

But more than a document of how far commerce has come, this report focuses on how much further we can go. We look forward to the progress of Southeast Asia, the influence of Generation Z, and the growing personal touch of account-to-account payments. Identifying new developments in technology, we find there's exciting potential in listening to what technology has to tell us (literally) and in coming together through social communities.

As we close the gaps that separate us, we arrive at the realization that the farthest reaches of this planet were never corners of the map, but the very centers of their own thriving cultures and economies. To become better acquainted with the stories and landscapes that shape our national identities is to create inroads that help lead us toward one another. Where our paths cross is where commerce has always occurred.

So meet us on the pathways of people and payments, and let's get things moving.





GLOBAL PAYMENT TRENDS



GLOBAL PAYMENT TRENDS

The evolution of consumer payment methods continues to unfold, reshaping payments diversely in its wake around the world. The ways we pay emerge from our cultures, habits, innovations, and the technology available to us. Every mix of payment methods arises from those unique local circumstances: economic, political, regulatory, infrastructure, language, and culture. Payment preferences are as diverse as the people that use them.

Yet even in the wake of change, we find global trends across the universe of commerce. In 2020, the biggest trend in consumer payment preferences continues to be the rise of digital and mobile wallets. They make shopping online easier than ever and already lead eCommerce payment preferences with 42% of spending in 2019—up from 36% since 2018. China continues to lead the way in digital and mobile wallet use accounting for a remarkable 71% of eCommerce spend, but adoption is increasing everywhere: 32% of eCommerce spend in India, 25% in Germany, and 24% in the US.

Mobile wallets are also transforming payments at the point of sale: over one billion shoppers will make a digital or mobile wallet payment in 2020.¹ From retailer-specific apps to wallets issued by financial institutions, device manufacturers and technology platforms, digital and mobile wallets are providing convenience and safety to consumers and businesses around the world. The smartphone is becoming the new wallet and many consumers are choosing to put their preferred cards in their phone in lieu of carrying the physical card. That's driving big changes in global point of sale payment adoption: from 16% in 2018 to 22% in 2019.

In China—where digital/mobile wallets Alipay from Ant Financial and WeChat Pay from Tencent dominate, mobile proximity payments using QR codes drove nearly half (48%) of point of sale payments in 2019. China's overwhelming adoption of mobile and digital wallets at the point of sale remains an outlier from the rest of the world, yet the global trend is clearly following in their footsteps. Digital and mobile wallets already account for 22% of global point of sale spend in 2019 and we project they will account for nearly a third (30%) of consumer payments within 5 years.





Outside of China, the most popular digital and mobile wallets are colloquially known as “The Pays.” Until recently that shortlist included Apple Pay, Google Pay, and Samsung Pay. Those incumbents are now facing competition from another “pay”—Amazon Pay. Amazon reports growth of 59% in active merchants and 103% in overall revenue from between 2017 and 2018; all Amazon Pay markets globally are showcasing double-digit growth.²

Rounding out eCommerce, the growing share of mobile and digital wallet adoption we project through 2023 comes largely from gradual declines in the physical use of credit cards, debit cards, and charge/deferred debit. Cash on delivery, pre-paid cards, and PostPay services continue to provide essential services in some markets yet will likely see their overall share slowly decline through 2023. The only other online payment method we forecast to gain market share are buy now pay later—such as Affirm, Afterpay and Klarna—to satisfy consumers who enjoy the immediacy that this option provides. We forecast these services will earn nearly 3% of global eCommerce spend by 2023.

At the point of sale, we expect to see more transactions conducted digitally—driving further decline in cash use. We forecast modest global gains for both credit cards and debit cards at the point of sale. They will continue to anchor the market representing nearly half of global point of sale spend in 2023 as consumers continue to follow the ingrained habit of reaching for a card when making a payment.

¹ “Global Mobile Payment Users 2019.” Yoram Wurmser, eMarketer, Oct 24, 2019. <https://www.emarketer.com/content/us-mobile-payment-users-2019>

² Amazon, July 2019

Global eCom payment methods



Global POS payment methods



	2019	2023*
Digital/Mobile Wallet	41.8%	52.2%
Credit Card	24.2%	18.8%
Debit Card	10.6%	8.8%
Bank Transfer	9.0%	9.3%
Charge & Deferred Debit Card	5.0%	3.0%
Cash on Delivery	4.5%	2.7%
Buy Now Pay Later	1.6%	2.8%
PostPay	1.3%	0.9%
Pre-Paid Card	1.0%	0.5%
PrePay	0.6%	0.3%
Other	0.6%	0.3%

	2019	2023*
Cash	30.2%	18.7%
Debit Card	24.3%	26.3%
Digital/Mobile Wallet	21.5%	29.6%
Credit Card	20.9%	22.3%
Charge Card	2.1%	2.1%
Pre-Paid Card	1.0%	1.2%

*Forecasted



NORTH AMERICA PAYMENT TRENDS

North America has been a traditional global innovator, consistently at the forefront of payment technology as well as retail and financial services. The region has relied heavily on the stability and convenience of its well-established payments infrastructure, which has helped foster a culture of predictable payment habits. This, however, has also contributed to an entrenched dependence on credit and debit cards, creating the potential for significant disruption.

Developed over decades of habitual use, North American consumers have a strong attachment to credit cards. The leading payment preference in eCommerce purchases, they account for a third of online spending. As digital and mobile wallets continue to integrate into the checkout experience, and the need for physical cards lessens, our estimates see credit card use in eCommerce gradually declining to 27% of consumer spend by 2023.

At the point of sale, credit cards continue their long reign of dominance with 40% of consumer spend in 2019. Overall, we expect credit will still earn 42% of the point of sale in 2023, which is expected to approach \$5 trillion by that time. For Canadian consumers, credit cards remain the overwhelming choice, accounting for 51% of point of sale and 60% of eCommerce spend while American consumers split their payment preferences between several different methods.

In the next five years, much of that credit card spend will migrate into mobile and digital wallets. As smart devices become inseparable from the tasks and habits of daily life and generational familiarity only reinforces their use, digital/mobile wallets are poised to find widespread acceptance. Enabling convenient and reliable transactions for a variety of experiences, millions of consumers already use mobile order-and-pay apps to make purchases in-store and online – streamlining the payment process and paving the way for the future of commerce.

This resonance with consumers is resulting in a surge of digital and mobile wallet use across North America. They have risen from 20% in our 2018 report to account for 24% of regional eCommerce spend in 2019.





We project digital/mobile wallets will soon overtake credit cards to become the leading online payment method to account for 37% of North American eCommerce spend by 2023.

The growth of digital and mobile wallets at the point of sale is no less dramatic, rising from 3% in 2018 to 6% in 2019. We project the use of digital/mobile wallet will nearly double again—to 10% of point of sale spend—by 2023. Though a small percentage, that amounts to well over US\$1 trillion transacted via mobile or digital wallets at the North American point of sale within five years. The long-awaited digital/mobile wallet tipping point seems to have finally arrived.

For consumers who prefer to spend the cash they have available, debit cards continue to deliver value for North American consumers, earning 18% of eCommerce and 34% of point of sale spend in 2019. Our forecasts do reflect a slow decline in debit card share through 2023 in eCommerce and the point of sale. However, debit is not declining in overall importance; payment market share is shifting into mobile and digital wallets and many of those wallets are linked to both credit and debit card accounts.

Rounding out North American eCommerce, we expect charge and deferred debit to experience modest declines from 11% in 2019 to 9% in 2023. Cash on delivery and pre-paid cards will continue to see their remaining influence wane. Aside from large market share gains for digital/mobile wallets, we see buy now pay later solutions gaining eCommerce share. We expect these services—such as Affirm, Afterpay, and Klarna—to gain traction and triple their current 1% eCommerce market share to 3% by 2023.

North American consumers, though loyal to familiar payment methods, have long been resistant to innovation – especially where convenience is concerned. With the same influence, but pulled ahead by the well-connected, more independent Generation Z, a new class of consumer is emerging here: quick to reach for seamless mobile technologies, leaving conventional payments behind along with their traditional wallets.

North America eCom payment methods



North America POS payment methods



	2019	2023*
Credit Card	34.4%	26.8%
Digital/Mobile Wallet	23.7%	36.6%
Debit Card	17.6%	15.2%
Charge & Deferred Debit Card	10.5%	9.1%
Bank Transfer	5.9%	6.3%
Cash on Delivery	3.2%	1.7%
PostPay	1.0%	0.2%
Other	1.0%	0.3%
Buy Now Pay Later	0.9%	3.0%
Pre-Paid Card	0.9%	0.3%
PrePay	0.9%	0.4%

	2019	2023*
Credit Card	40.1%	41.6%
Debit Card	33.5%	31.5%
Cash	14.6%	10.8%
Digital/Mobile Wallet	6.0%	10.1%
Charge Card	3.9%	4.0%
Pre-Paid Card	1.9%	2.0%

*Forecasted

A young man with a beard, wearing a black quilted leather jacket, and a young woman with long dark hair, wearing a brown jacket and a white scarf, are smiling and looking at a smartphone together. They are outdoors, possibly at a cafe or restaurant, with a white cup visible on a table in the foreground. The background is slightly blurred, showing an outdoor setting with plants and buildings.

LATIN AMERICA PAYMENT TRENDS

In an era of unprecedented volatility in payment methods worldwide, payments in Latin America are proving remarkably stable. Some consumer payment methods are changing in line with broad global trends, like the move toward digital wallets. Yet LATAM consumer preferences also run counter to global payment trends: while credit and debit card use are declining globally, we project them to maintain strength in eCommerce and grow at the point of sale.

Cash continues to dominate at the point of sale in LATAM like nowhere else in the world. Cash accounts for 58% of point of sale (POS) spend—compared to a low of 15% in North America and 30% globally. The persistence of cash reflects a large unbanked or underbanked population, limited penetration of POS electronic payment acceptance, high banking fees for consumers, and persistent concerns about fraud. Smartphone penetration among consumers has grown at a much higher rate than those who use traditional financial services, resulting in an interest in digital payments but without the infrastructure to support it in the same way as the rest of the world.

Cash also exerts significant influence on eCommerce. PostPay services allow consumers to make purchases electronically while ultimately completing the transaction with cash—at ATMs, convenience stores, and bank branches. PostPay accounts for 8% of regional eCommerce spend, while cash on delivery represents an additional 5.8%.

Brazil's Boleto Bancário—known simply as 'Boleto'—is the leading PostPay service in Brazil, home to the largest economy in Latin America. Brazil boasts a vibrant and growing eCommerce market with 11% CAGR through 2023, despite challenging economic headwinds. Led by Boleto, PostPay accounts for 16% of Brazilian eCommerce spend, trailing only credit cards as the payment method of choice.

Opportunities abound for global brands and businesses across LATAM, despite macroeconomic concerns and increasing political uncertainties. We project eCommerce will grow at a CAGR of 12% through 2023 in Mexico, where credit and debit cards lead with more





than 50% market share. eCommerce is also booming in Argentina where we project 19% CAGR through 2023.

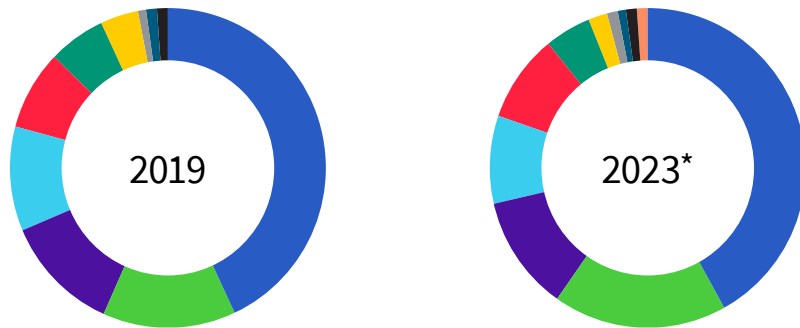
In Peru—included in our report for the first time—cash is the overwhelming choice of consumers at the point of sale, accounting for 60% of spend. Peruvians are gravitating to eCommerce as access to the internet is expanding via increasing mobile penetration. eCommerce represented 12% of Peruvian consumer spend in 2019, compared to just 4% in neighboring Chile and 4% in Colombia.

As we look to the future we expect to see a competitive landscape of FinTech offerings seeking to reach the region's large unbanked and underbanked populations, primarily through their mobile devices and neobanks. LATAM is home to a large variety of FinTech companies achieving success. Argentina-based eCommerce platform Mercado Libre and its payments platform, Mercado Pago brought mobile payments to the region. PagSeguro in Brazil started as the payments platform of Universo Online (UOL group) and is now expanding into the regionally underserved market of point of sale merchant acceptance.

We project digital and mobile wallets to grow from 14% to 18% of LATAM eCommerce spend through 2023, while nearly tripling to 5% of POS spend in the same time frame. Progress in this area will be driven in part by regulatory initiatives and continued build out of infrastructure to support new digital services like digital/mobile wallets and branchless banks. The latter is likely to capture growing populations of smartphone users in more device-driven commerce and financial services adoption. Competition is expanding in Brazil as the result of regulatory efforts enacted over the last decade that greatly increased competition among both acquirers and card brands. Recent reforms in Mexico and those under consideration in Chile point to more financial inclusion for LATAM consumers—and a more predictable environment for businesses hoping to reach them.



Latin America eCom payment methods



Latin America POS payment methods



	2019	2023*
Credit Card	43.8%	42.7%
Digital/Mobile Wallet	13.8%	18.0%
Debit Card	11.9%	12.2%
Bank Transfer	10.9%	8.9%
PostPay	7.9%	9.1%
Cash on Delivery	5.8%	4.9%
Charge & Deferred Debit Card	3.5%	1.6%
Pre-Paid Card	1.3%	1.0%
PrePay	0.6%	0.5%
Other	0.6%	0.6%
Buy Now Pay Later	0.0%	0.6%

	2019	2023*
Cash	58.2%	43.2%
Credit Card	22.3%	26.9%
Debit Card	16.9%	24.3%
Digital/Mobile Wallet	2.4%	5.3%
Pre-Paid Card	0.1%	0.2%
Charge Card	0.1%	0.2%

*Forecasted



EMEA PAYMENT TRENDS

It's one of the largest and most diverse regions on the planet. It covers three continents (four if you include Danish Greenland). Nearly 2,000 native languages are spoken. Europe, the Middle East, and Africa is a designation that eludes simple categorization. It is also, however, a market that is characterized by a singular, driving force: convenience.

Across EMEA, payment preferences are changing to accommodate the need for ease of payment. As businesses adjust to mobile-connected consumers and traditional banks respond to regulatory initiatives that stimulate competition from FinTech innovators, EMEA is being transformed to meet the needs of an evolving consumer. Especially online.

This year, digital and mobile wallets are absorbing eCommerce spend at a rapid rate, jumping from 21% in 2018 to 25% in 2019 and projected to reach 29% by 2023. Bank transfers are expected to earn an even greater share of eCommerce spend over the next five years, owing largely to PSD2 and its drive to spur innovation and competition.

Another disruptor, "buy now pay later" services like Klarna, Affirm, and Afterpay are making an impact on online payments. Catering to growing consumer desires, particularly from Gen Z and Millennials, they offer flexible financing on a situational basis without the longer-term commitment and expense of traditional credit cards. We project these payments to account for 9% of eCommerce spend by 2023, triple the rate we reported in 2018.

Gains by these payment innovations comes at the expense of credit cards, debit cards, and charge/deferred debit cards but traditional card-based payments aren't going away anytime soon. Our report acknowledges that many digital/mobile wallet transactions are linked to underlying credit and debit accounts. And our forecast of strong mid-teens market share attests to the persistent value of these methods, even while they face ongoing competitive pressures.

Debit cards remain at the top of point of sale (POS) payment methods in EMEA. The gap between debit and its nearest competitors will only grow, we expect, with debit increasing from 38% to 46% of POS spend within the next five years – all while use of cash at the POS rapidly





declines across the region, dropping from 44% in 2019 to just 28% by 2023 according to our data.

Our projections also suggest that POS cash spend will move to debit cards, credit cards, and digital/mobile wallets. We predict digital/mobile wallets will more than double their share of POS spend from 4% in 2019 to 9% by 2023. Charge and deferred debit cards will maintain strength at the POS through 2023, driven by heavy use in France and Denmark.

In Africa, entrenched challenges include a large unbanked population and a lack of infrastructure to support digital payments. Transactions are mostly made at POS with cash: in Nigeria, over 98% of all transactions are at the POS, and 91% of those transactions are paid in cash. Ongoing regulatory efforts throughout the continent seek to promote financial inclusion to deliver electronic payments to underserved populations.

Lastly, we find the payment landscape in the Middle East is at a crossroads. Despite increasing movement toward electronic payments, few clear winners have emerged to date. Consider the case of the UAE where credit cards, debit cards, digital/mobile wallets, cash on delivery, and bank transfers all command double-digit shares of a highly fragmented eCommerce spend. Regulatory efforts are progressing from Saudi Arabia to the UAE promoting financial inclusion through the development of the electronic payment infrastructure.

The EMEA is positioned for change. In as little as the next five years, we expect to see substantial shifts in eCommerce spend – digital and mobile wallets will continue to grab market share, as will bank transfers and buy now pay later options. We project that the gradual decline in use of cash at the POS will be absorbed by a range of credit, debit, and mobile/digital wallets, particularly throughout Europe and the Middle East. We also see PSD2 and open banking as catalysts for additional change, which will have long-term effects on payment methods both online and in-store.

Broad as the EMEA may be, consumers from Norway to South Africa, Albania to Zimbabwe all share a desire for simpler, supported payment options.

EMEA eCom payment methods



EMEA POS payment methods



	2019	2023*
Digital/Mobile Wallet	24.6%	29.0%
Credit Card	19.7%	14.9%
Debit Card	18.2%	16.1%
Bank Transfer	16.3%	20.4%
Charge & Deferred Debit Card	6.7%	3.6%
Buy Now Pay Later	5.8%	8.9%
Cash on Delivery	4.7%	3.9%
Other	1.5%	1.2%
Pre-Paid Card	1.3%	0.9%
PrePay	1.3%	1.0%
PostPay	0.0%	0.1%

	2019	2023*
Cash	43.6%	28.0%
Debit Card	37.7%	46.4%
Credit Card	7.9%	9.3%
Charge Card	5.5%	5.6%
Digital/Mobile Wallet	4.4%	9.4%
Pre-Paid Card	1.0%	1.2%

*Forecasted

A woman with dark hair, wearing a brown cardigan, is sitting on a balcony and looking at a tablet. The background shows a cityscape with buildings and a railing. The lighting is warm, suggesting late afternoon or early morning.

ASIA PACIFIC PAYMENT TRENDS

The Asia-Pacific region is a hotbed of payment innovation that offers a fascinating study in contrasts. Connecting with APAC consumers requires an understanding of cultural, religious, and economic differences that defy simplistic categorization.

Though consumers pay in many ways, one broad trend is clear: APAC consumers are gravitating toward the use of mobile and digital wallets. A perfect storm of factors is fueling widespread use of electronic payments across the region, both in eCommerce and at the point of sale. Ubiquitous mobile devices, advanced digital infrastructure and the growing power of “super apps” have helped digital/mobile wallets rise fastest in APAC.

Digital and mobile wallets now account for a remarkable 58% of regional eCommerce payments, a number we expect to reach 68.2% by 2023. Far from limited to online, the growing influence of digital/mobile wallets at the point of sale is even more dramatic. They now surpass even cash at the point of sale, rising from 27% of point of sale payment volume in our 2018 Global Payments Report to 36% in 2019.

China’s influence on payment trends throughout APAC is decisive. Led by Alipay and WeChat Pay, mobile and digital wallets account for 71% of eCommerce transactions in China. At the point of sale, the shift is no less dramatic as digital/mobile wallets now account for 48% of payment volume in China—more than double the rate of cash.

Payment methods reflect a wide spectrum of diversity in economic conditions, government regulations, and infrastructure capacities. Credit and debit cards lead the way in the more mature economies of Japan, Singapore, and South Korea. Cash remains king in developing economies such as the Philippines, so much so that it also plays a major role in eCommerce via cash on delivery.

Bank transfers are the leading payment preference for eCommerce purchases in Indonesia and Thailand. Elsewhere in the region we see credit cards retaining strength in Hong Kong and South Korea, where





credit is the leading payment method for both eCommerce and the point of sale. While in fast-growing Vietnam the draw of cash is so great that cash on delivery is the leading payment method for eCommerce.

Opportunities for global brands in the region remain strong, despite risks from weakening global demand and trade tensions between the US and China. Our data includes double-digit compound annual growth rates in eCommerce across the region: 13% in China, 19% in India, 16% in The Philippines, 17% in Vietnam. Overall economic growth has moderated from highs of recent years, yet growth at the point of sale is anything but stagnant: 9% CAGR in China, 11% in India, and 10% in Indonesia.

We expect regulatory initiatives and infrastructure development across the region that will continue to promote the growth of digital payments, especially the use of digital and mobile wallets. Companies seeking to penetrate APAC markets need to be able to navigate complexity, uncertainty and change in regulatory schemes. This landscape puts a premium on experienced partners with local knowledge on payment methods tailored to satisfy consumer, regulatory, and operational needs.

Payment types are diverse, but what's common across the region is rising consumer expectations for speed, safety, and convenience. How—or whether—the rapid pace of digital payment adoption in APAC will influence the rest of the world remains unclear. What is clear is that Asia-Pacific will continue to be the focus of increasing attention from global brands as they seek to connect with the largest concentration of consumers ever assembled.



Asia Pacific eCom payment methods



Asia Pacific POS payment methods



	2019	2023*
Digital/Mobile Wallet	58.4%	68.2%
Credit Card	20.1%	15.8%
Bank Transfer	7.6%	6.9%
Cash on Delivery	5.1%	2.7%
Debit Card	4.2%	3.3%
PostPay	1.6%	1.1%
Charge & Deferred Debit Card	1.3%	0.7%
Pre-Paid Card	1.0%	0.5%
Buy Now Pay Later	0.3%	0.7%
PrePay	0.3%	0.1%
Other	0.1%	0.0%

	2019	2023*
Digital/Mobile Wallet	35.9%	45.1%
Cash	30.3%	17.0%
Credit Card	16.8%	18.6%
Debit Card	16.0%	18.1%
Pre-Paid Card	0.8%	0.9%
Charge Card	0.3%	0.3%

*Forecasted



KEY INSIGHTS



CATCHING THE NEXT GROWTH WAVE IN SOUTHEAST ASIA

A wave of growth is surging across Southeast Asia. The traditional and largely rural societies of Southeast Asia are witnessing rapid transformation. This region is home to over 660 million people, half of whom will live in cities by 2020.

That sweeping change is ripe with opportunity—especially in the realm of eCommerce where growth rates are among the highest in the world. Digitization is changing how consumers shop and providing new opportunities for the unbanked to make purchases. The World Bank estimates that two-thirds of the world's 1.7 billion unbanked citizens have access to a mobile phone.¹ Digitization is aiding financial inclusion by connecting millions of new consumers to essential financial services—while converting more of the cash economy to digital payments.

The historical wealth gap among the population has also limited access to commerce in the rest of the world, but digitization is

helping to close that gap. A growing middle class is emerging that's expected to reach 350 million representing \$300 billion in disposable income by 2022.² An emerging middle class means rising affluence, internet access, and increased aspirations for convenience—and the disposable income to help achieve those aspirations.

Regardless of class, everyone in the region seems to have a smartphone. Southeast Asia is proving to be the most engaged internet region in the world, with users in Indonesia, Malaysia, the Philippines, and Thailand ranking among the top 10 globally in mobile internet use.³

Many leading eCommerce companies are investing heavily in the infrastructure to serve these consumers including marketplace sectors, logistics centers, and payment methods. These developments are combining to stimulate further online growth potential. The region is expected to experience 14.3% CAGR from 2020 to 2023.

Digital and mobile wallets represent a tremendous growth opportunity as a payment method in Southeast Asia. That's certainly true for the newly emergent middle class equipped with smartphones, disposable income, and an appetite for consumption. Yet it's those with the least money that are seeing the greatest impact of digital payments. Digital payment methods can deliver unmet needs for those who historically were unable to access financial services due to a lack of physical banking infrastructure.

Payment methods in Southeast Asia are strongly influenced by local, historical, socioeconomic, and regulatory factors that make them resistant to homogenization. That said, the trend toward digitization of payments is clear. While cash remains the dominant payment method, there are signs that Southeast Asian consumers may leapfrog cards altogether and—like China before them—move quickly to mobile and digital wallets. China's influence is significant in the Southeast Asian payment landscape. Increased tourism is affecting changes with point of sale transactions as Chinese tourists expect to be able to use the same payment methods abroad as they do at home. Stronger bilateral ties such as common payment methods and expansive infrastructure investments are also helping to open cross-border opportunities for local Southeast Asian brands selling back to Chinese consumers.

Indonesia (19% eCom 2019-2023 CAGR)

The largest market in Southeast Asia, Indonesia is the fourth most populous nation globally and contains the largest regional middle class. Indonesia has the 16th largest economy in the world—larger than Argentina, Turkey, or The Netherlands.⁴ Bank transfer remains the leading eCommerce payment method, while digital wallets hold second spot at 25% eCom market share.

Malaysia (16% eCom 2019-2023 CAGR)

Malaysia's decade-long period of economic expansion is expected to continue. The World Bank projects that Malaysia will transition from an upper middle-income economy to a high-income economy by 2024.⁵ Bank transfers represent nearly half of all eCommerce payments. Strong regulatory and currency controls underscore the importance of having an international acquirer with long-standing in-country experience.





Philippines (16% eCom 2019-2023 CAGR)

While eCommerce in the Philippines is growing, it faces headwinds including a high unbanked population, inadequate banking infrastructure, and low acceptance of payment cards at merchant outlets.⁶ This makes cash on delivery the Philippines' leading eCommerce payment method, with cash being used in many convenience stores such as 7-Eleven, Mini Stop, and Alfamart. The central bank of the Philippines hopes to make 20% of all transactions in the Philippines electronic in 2020.⁷

Singapore: (8% eCom 2019-2023 CAGR)

The island city-state of Singapore stands out from its neighbors, offering one of the most mature eCommerce markets in the world. Singapore boasts secure internet infrastructure, an overwhelmingly banked population, and a reliable postal system.⁸ Singapore represents a strong cross-border eCommerce opportunity: 73% of online shoppers made a cross-border purchase in 2019.⁹ In contrast to much of the Southeast Asia region, credit cards dwarf all other eCommerce payment methods, and are the most popular payment method.

Thailand (10% eCom 2019-2023 CAGR)

Thailand continues to experience double-digit eCommerce growth, though the country remains challenged by infrastructure limitations. Thailand 4.0 is a comprehensive strategy for the development of national infrastructure, including the digital transformation of the country.¹⁰ That strategy seems to be paying off, as digital and mobile wallets are now nearly on par with cash on delivery and trailing only bank transfer as a payment method. Debit and credit card use remain low in a society that remains largely cash-centric.

Vietnam (17% eCom 2019-2023 CAGR)

Vietnam has witnessed an almost complete transformation in the past three decades. The country's emergence from a centrally-planned to market economy has significantly raised the economic output and standard of living for Vietnam's citizens. Vietnam is a mobile-first society, with almost 99% of internet users between ages 15-64 owning a smartphone.¹¹ Cash on delivery and bank transfers lead the way for online payments, with use of mobile and digital wallets fast picking up steam.

Asia has the highest adoption of digital payments in the world. As smartphones and internet access continue to make a big world smaller, those devices offer consumers simple ways to pay in a region still largely driven by cash payments. Coupled with the continued development of physical infrastructure, digital payments are helping to lay the groundwork for a more inclusive society—as well as an inviting market for eCommerce growth.

¹ “Financial Inclusion on the Rise, But Gaps Remain, Global Findex Database Shows.” The World Bank, April 19, 2018. <https://www.worldbank.org/en/news/press-release/2018/04/19/financial-inclusion-on-the-rise-but-gaps-remain-global-findex-database-shows>

² “Understanding Southeast Asia’s Emerging Middle Class.” Florian Hoppe and Aadarsh Bajjal, Bain & Company, March 18, 2019. <https://www.bain.com/insights/understanding-southeast-asias-emerging-middle-class/>

³ “e-Economy SEA 2019: 4 Things to Know about Southeast Asia’s Internet Economy.” Temasek, October 3, 2019. <https://www.temasek.com.sg/en/news-and-views/stories/future/southeast-asia-internet-economy-2019.html>

⁴ “GDP Ranked by Country 2019.” World Population Review. <http://worldpopulationreview.com/countries/countries-by-gdp/>

⁵ “The World Bank in Malaysia.” The World Bank, March 2019. <https://www.worldbank.org/en/country/malaysia/overview>

⁶ “Philippines Cards & Payments: Opportunities and Risks to 2022.” GlobalData, February 2019. <https://www.globaldata.com/store/report/fs0204ci--payments-landscape-in-the-philippines-opportunities-and-risks-to-2022/>

⁷ “5 Mobile Payment Apps in the Philippines That Will Help You Go Cashless.” Lorenzo Kyle Subido, Esquire, April 8, 2019. <https://www.esquiremag.ph/money/industry/mobile-payment-apps-philippines-a00288-20190408-lfrm2>

⁸ “(B2C) E-commerce Index for 2018.” United Nations Conference on Trade and Development, December 18, 2018. https://unctad.org/en/PublicationsLibrary/tn_unctad_ict4d12_en.pdf

⁹ “Singapore B2C eCommerce Market 2019.” yStats, August 2019. <https://www.ystats.com/market-reports/singapore-b2c-e-commerce-market-2019/>

¹⁰ Royal Thai Embassy. <https://thaiembdc.org/thailand-4-0-2/>

¹¹ “Smartphone Users, Vietnam 2019-2023.” eMarketer, April 2019. <https://www.emarketer.com/forecasts/5a4fa066d8690c0c28d1f388>





GEN Z: INDIVIDUALIZING AT SCALE

Generations ago, commerce was simple. One shopkeeper worked to meet one customer's needs. Serving one customer at a time: the scale of commerce was highly individualized.

As populations grew, the scale of commerce had to change to keep up. Mass production to meet the needs of new consumers fueled by more media meant that individual needs were often lost in the shuffle. One-to-one relationships were replaced with one-to-many.

That's changing, again. Today's youth have renewed a focus on the individual. Generation Z—the children and young adults of today—are growing up in a technological revolution. They're helping reinvigorate the one-to-one roots of commerce.

Fused with the data that makes mass-personalization possible, technology is powering the possibility of one-to-one customer relationships in the digital age. Mass consumer culture doesn't sit well

with a generation that is immersed in individual expression. Off-the-shelf, pre-packaged solutions won't satisfy their unique aspirations.

Gen Z comprises the current school-aged population with the eldest now graduating college and entering the workforce. Although there's no official generational dividing line, a rough consensus for Gen Z is those born from the late 90s to early 2010s. This generation makes up more than a quarter (26.6%) of the global population. As a percentage of the population, Gen Z is proportionally largest in sub-Saharan Africa (43%), the Middle East (31%) and South Asia (30%), and smallest in North America (19%) and the European Union (15%).¹

Gen Z is the first fully-native digital generation. They don't need to "migrate to" or "learn to adapt" digital technologies or map them to their analog equivalents. Our digital, mobile-first world is the only reality they've ever known.

For many, their social media lives began even before birth as parents documented their first days and following years on dedicated social media accounts set up for their children. They've never known a reality where social media wasn't seemingly everywhere. This generation has been exposed to new platforms allowing for the creation of their own realities. YouTube has launched a new generation of child "stars" and opened doors to brand partnerships with individuals. This creativity often manifests not just in willingness but an innate need to be active agents and collaborators with brands. They don't reject brand engagement, but that engagement can't be top-down, it has to be collaborative.

This creativity, technologically savvy, and instinctive social learning have fostered a healthy sense of skepticism. Learning how to navigate the world in the era of "fake news" and having their digital lives saturated with messages of questionable quality and authenticity makes Gen Z discerning critics. They're driven to be authentic and recoil from brands that fail to adhere to their own values.

Gen Z seeks to find their own truths, carve their own paths, and define their own realities and they appear to be different than the generations that have come before them. How will Gen Z influence and even redefine the commerce of the next decade?

They expect more personalization, higher quality, and greater performance from brands. They also look to collaboration to creatively influence their own experiences. Pushing the boundaries of customer experience is essential for brands seeking long-term relationships with Gen Z customers.

Serving the needs of Gen Z shoppers promises to be a dynamic and progressive experience. Retailers that provide simple, intuitive interfaces, lightning-fast speed, and personalization will be well positioned to create loyal customers.

Gen Z's social nature prefers organic interactions when it comes to commerce. That puts social media on the front lines. Social strategy needs to be philosophically whole and operationally inseparable from





brand strategy. Projecting aspirational values that resonate with your audiences is vital—but they have to be authentic.

This generation craves real two-way dialogue. 60% of Gen Z believes it's important for brands to value their opinion, and 35% of those in mature markets feel their favorite brand understands them as an individual.²

Brands that want to meet their Gen Z customers' demands will need to close the gap between their social and commercial experiences. Tightly integrated opportunities for contextual commerce abound, from “buy now” buttons to native shopping integrations.

Brands seeking to earn the favor of Gen Z will need to cater to their payment preferences as well. Like the generation itself, Gen Z's payment preferences are more digital, more social, more flexible, and more mobile-focused than any other generation.

Wherever and however Gen Z shops, the smartphone is ever-present. Gen Z uses digital services and mobile wallets more frequently than older generations. Over half use digital wallets at least once a month, three quarters use a digital payment app from financial service providers and others, while 79% use peer-to-peer (P2P) payment apps at least once a month.³

Accepting a range of smartphone-based digital wallets is vital to serve a generation that seems to have bypassed using plastic cards as a payment method. Though globally recognized brands have proportionally large share, digital wallets are resisting homogenization with local and regional alternatives thriving around the world.

Offering a range of digital wallets is a necessary condition to serving the needs of Gen Z, but it's not nearly sufficient on its own. Gen Z's desire for innovative alternatives extends to the entirety of banking, payments, and financial services.

Gen Z isn't instinctively drawn to the same banking, payment and investment tools as their parents' generation. They are drawn to financial products and services that deliver practicality and convenience. Alternative financing options that emphasize short-term flexibility—such as “buy now pay later” services find themselves fitting with generational need.

From peer-to-peer (P2P) services that are increasingly being accepted for business-to-consumer (B2C) transactions, to direct debits; from checking to satisfy recurring payment arrangements, to purely digital banking services: Gen Z is ready and eager to engage with cutting-edge financial services and payment innovations.

Looking forward ten years, Gen Z's stature, spending power, and influence will only continue to grow as they enter the workforce and their predecessors head into retirement. Their importance to global retailers is outsized as they're the generation whose behaviors will reshape commerce over decades to come.

The ability to craft seamless omnichannel experiences brimming with personalization that follow customer journeys organically and offer consistency regardless of channel isn't easy. But it's entirely necessary. This generation won't necessarily retreat from retargeting, social listening, and other uses of data that serve their individual needs. Delivering omnichannel experiences built on a foundation of customer-centric design and flawless secure payments is no longer a luxury, it's necessary to serve Gen Z.

Establishing meaningful connections with Gen Z is a long-term approach, but one that requires focused attention. Strategies should be formulated and implemented with appropriate care, yet with an urgency that Gen Z increasingly demands.

¹ World Bank Population Data. <https://data.worldbank.org/indicator/SP.POP.0014.TO.ZS?end=2015&start=1995>

² Business Insider; “Banking and Payments for Gen Z: These digital natives are the next big opportunity — here are the winning strategies”; August 2019. <https://intelligence.businessinsider.com/post/banking-and-payments-for-gen-z-these-digital-natives-are-the-next-big-opportunity-here-are-the-winning-strategies-2019-4>

³ BI Intelligence; “How payments providers can cater to Gen Z to tap into a \$143 billion volume opportunity”; April 2019. <https://www.businessinsider.com/banking-and-payments-for-gen-z>





THE NEW COMMUNITIES OF COMMERCE

Commerce evolved around our core human needs to exchange and collaborate. Technology forever changed the context of commerce. eCommerce is the great scale enabler, while social media connects us to our natural communities, wherever we are—wherever they are.

Today, new communities of commerce are forming at the intersection of social media and eCommerce.

Since its inception, social media let brands influence conversations among customers. Today social commerce extends beyond influence to drive sales conversion. Social media companies look to leverage and monetize the distinctive power of the context they've created, but it doesn't stop there. Brands are routinely creating partnerships to further influence consumers by bringing together complementary products.

The potential of social commerce to emerge as a dynamic sales channel has long been recognized by brands, eCommerce merchants,

and social media platforms alike. In theory, social media is ideal for commerce because social contexts are inherently ripe for influence.

Social media's potential required a catalyst to activate. That spark has arrived with the rise of the smartphone as *the* way global consumers connect with the internet. Estimates suggest there are more than 3.3 billion smartphone users globally, with another 500 million to be added by 2021.¹

The popularity of the smartphone and the rise of online reviews has enabled consumers to make or break brands based on personal ethics and social engagement. Consumers' influence is no longer limited to local communities but has the potential to spread exponentially giving brands greater exposure, good and bad.

Some social media companies are designed in a way that makes them especially fertile ground for social commerce. Instagram and

Pinterest both are highly visual, strongly social, and offer exceptional mobile experiences. Allowing consumers to see before they buy while including the purchase function right in the experience enhances the online shopping experience in new ways.

Fast, simple, secure, trusted payment methods are essential ingredients for turning social media from influencer to sales converter. Reducing the distance between discovery and conversion requires an uninterrupted “digital last mile.” That translates to secure checkout that minimizes friction, like offering digital wallets, mobile-optimized checkout, and even flexible financing.

Social media is an ideal setting to reach customers with the right message about the right products, at the right place, and the right time. Social media and eCommerce are blending to produce vibrant hybrids that draw from the best of buying efficiency and social collaboration in a variety of ways.

- **Customer engagement via reviews, recommendations.** Customer feedback in the form of reviews, recommendations, shares, and likes are the oldest forms of social commerce.
- **eCommerce referral traffic.** In the US, referral to eCommerce sites from social media nearly tripled between Q1 2016 and Q1 2019, from 3.1% to 9.1% of all eCommerce referrals.²
- **“Buy” buttons.** “Buy now” is a call to action that extends one-click ordering simplicity, making impulse purchases easier than ever.
- **Buy now pay later options.** Payment options that delay full payment at checkout are further increasing conversion rates and encouraging online impulse purchases.
- **Causal marketing.** Younger generations are interested in rallying behind brands that combine purpose and passion with a social cause.
- **Native shopping integrations are emerging.** Social media platforms are embedding shopping directly into the app.





China is leading the way in social commerce, fueled by the overwhelming preference of Chinese consumers to access the internet via smartphones. Having largely leapfrogged the desktop era and gone straight to mobile, Chinese internet users gravitate to social sharing features by the countless millions. WeChat is a “super app” enabling everything from booking flights and hotels to socializing with friends without ever leaving the app. Integrated payments via QR code and the digital wallet WeChat Pay help tie it all together.

WeChat’s most dramatic innovations include Mini Programs. Social sharing is the leading discovery method for Mini apps. Western brands such as Dior, Sephora, and Feelunqie are all finding success with Mini apps.

Shopping through social media is also popular with Australian consumers. 81% made a purchase through social media in 2018 with Facebook the most popular platform.³ Consumers who engage with businesses through the Messenger app can now purchase directly in the conversation through a single tap.

In the US, 2019 saw Instagram’s release of “Checkout on Instagram.” This feature allows consumers to shop products through an Instastory or a post without ever leaving the app. Snapchat now offers similar functionality: “Shop and Cop” lets users browse and buy from any brand entirely within the Snapchat mobile app.⁴

Beijing-based TikTok is enjoying in-app revenue growth in India by allowing users to buy TikTok coins which are then used to buy digital gifts for other users.

Bogotá-based Elenas, billed as the “first social commerce startup in Latin America,” has launched with a focus on disrupting the direct sales market. Their mission is to provide women an opportunity to become brand ambassadors who can promote products over WhatsApp and other social media to earn income.⁵

US-based Pinterest's "Shop the Look" enables shoppers to buy clothing or home decor in items they pin. Tapping the blue circle brings up additional recommendations for similar items as well as ideas for using those products.

Social commerce is an evolving discipline that has hardly scratched the surface of the possible. Reducing friction makes shopping easier and more efficient for consumers, delivers higher conversion rates and ROI for brands, and cements social media as an increasingly effective sales channel.

Brands have long recognized the strong social and emotional components of shopping. That's taken on new meaning in a world driven by technology. The commercialization of social media naturally extends that in the digital age. The age has also let us reinvent the context in which consumer emotions are stimulated with products presented in lifestyle experiences that often include our friends and other influencers, creating that perfect place for us to find just the right things.

¹ "Number of smartphone users worldwide." Statista, July 26, 2019. <https://www.statista.com/statistics/330695/number-of-smartphone-users-worldwide/>

² "Why Facebook Provides Scale, but Instagram and Pinterest Offer Relevance for Social Commerce." Andrew Lipsman, eMarketer, Jun 5, 2019. <https://www.emarketer.com/content/why-facebook-provides-scale-but-instagram-and-pinterest-offer-relevance-for-social-commerce/>

³ "What social commerce means for small business." PayPal editorial staff, Aug 30, 2019. <https://www.paypal.com/au/brc/article/social-commerce-for-small-business>

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PAYMENTS, MOST PERSONAL- THE RISE OF A2A PAYMENTS

Digital payments have gained adoption for many reasons: the rise of the internet and eCommerce around the world; the desire or need to leapfrog complex payments infrastructures; and, increasingly, the efforts of startups, FinTechs, financial institutions, and brands of all kinds to keep consumers, and their wallets close.

One payment path destined for further digitalization is account-to-account (A2A) payment. Account-to-account payments have been around for many years and cover a variety of use cases; from peer-to-peer payments through apps to wire transfers, to Automated Clearing House (ACH) payments. Their digital presence has been felt in the bevy of consumer apps that allow us to pay each other—when we share a meal, buy the other a ticket, etc. But the implications are perhaps even more far-reaching when barriers are broken down allowing consumers to pay businesses directly from a banking account. Increasing competitive and regulatory influences might speed up the adoption of digital A2A payments.

Regulatory initiatives such as open banking and the EU's second Payment Services Directive (PSD2) are helping open doors to further payment innovation. These initiatives allow third parties to facilitate payments from customers' accounts. The EU's second Payment Services Directive (PSD2) goes further by making consumer banking data available to third parties with proper authorization from consumers where financial institutions have historically controlled direct payments between consumer and business bank accounts. PSD2 and similar initiatives open the door for FinTech competitors to also offer these services.

Account-to-account payments could help provide additional cost savings benefits to businesses by reducing the cost of payment acceptance. The ability to process payments from account to account exists today through ACH payments, but consumers usually must provide detailed banking account information to complete the payment. Open banking helps provide ways for consumers to

authorize payment from a bank account without having to supply their banking account details, all while still helping meet the desired need for security. Many consumers view payments as balancing their need for security and their desire for convenience.

The popularity of peer-to-peer payments (P2P) proved convenience may be one of the strongest motivators. Consumer Reports identified three areas of P2P payment app concerns and risks for consumers: problem resolution related to misdirected payments, the importance of payment security, and privacy concerns.¹ But this hasn't stopped consumers from embracing this technology. Businesses that find the balance between desired payment convenience and the needs of security are more likely to turn occasional shoppers into loyal customers.

Peer-to-peer payment apps offer endless practical use cases, like splitting a restaurant bill, paying a babysitter, or sending money to kids away at college. Whether repaying a friend for theater tickets or paying an individual share of rent, person-to-person payments are also decidedly social. That's especially true when pooling funds for shared experiences, as is common among Millennials and Gen Z.

The number of peer-to-peer payment app providers reflects the scope of possible opportunity and includes some of the biggest global names in tech, social media, and financial institutions.

US-based Venmo is a mobile-first P2P service that appeals to youth with emojis and a scrolling social feed of payment activity. Owned by PayPal, also based in the US, Venmo processed \$24 billion of total payment volume in Q2 2019, growing 70% YoY.² US-based Zelle offers partners access to 95 million customers through an extensive network of participating financial institutions. \$44 billion was sent through Zelle in Q2 2019, a 56% YoY increase in total payment volume.³

PayPal has a solid base as a digital wallet with broad acceptance at online retailers. Downloads of Square's US based Cash App (59.8m) surpassed those of Venmo (52.7m) in 2019.⁴ Apple Cash allows transfers between any two Apple users in the US via an iPhone, iPad, and Apple Watch.





Google Pay introduced P2P payments to the US market in 2018 and to India in 2019. India welcomed a wave of new peer-to-peer services in 2019, including Paytm, WhatsApp Pay, and Amazon Pay. From Alipay in China to Spain's Bizum, France's Lydia, MercadoPago in Argentina, or UK-based Neteller, P2P payment functionality is emerging as a core functionality for the mobile wallets consumers prefer.

Regulatory efforts have an overall aim of facilitating safer payments, like the provisions of PSD2 that require Strong Customer Authentication (otherwise known as SCA) for all electronic transactions in the European Economic Area. Tokenized credentials, multifactor authentication, and Dynamic Linking technology offer additional protection to consumers. PSD2's authentication mandates may also help to replace screen-scraping methods by FinTech companies with direct API access to authorized customer data. This API access would open up new possibilities within the checkout experience. Merchants will have the ability to present shoppers with a view of their available bank accounts including their account balances, in order to select their most desirable payment source. Funds can then be transferred through ACH for near-instant access between business and consumer.

European regulators are at the forefront of open banking initiatives that are being implemented from Australia to Brazil, while progress toward new open banking regulations is being made in Canada, India, Japan, and Singapore. Data privacy is a worldwide issue with payments being just one part. As cross border business continues to grow, the need for clear standards and regulations surrounding payment data and customer information will become even more vital.

The rise of P2P payments show that real-time payments have the ability to set new trends in how we pay online. Global regulatory trends such as open banking initiatives and PSD2 may provide additional motivation to expedite payment innovations.

Over the next decade, the story of peer-to-peer and account-to-account payments will be defined by convergence: how best will these services fit within the larger ecosystem of financial services and payment options? Financial institutions, technology platforms, device manufacturers, and social media networks all seek to leverage the popularity of peer-to-peer apps to maintain and expand their presence with consumers.

Real time account-to account payment is just one alternative payment method among hundreds—but it's one that's increasingly attractive to businesses. Making it appealing to consumers will be the key to unlocking adoption.

¹ "Peer-to-Peer Payments Are Generally Safe, But Consumers Must Be Aware of Risks." Consumer Reports, August 6, 2018. <https://www.consumerreports.org/digital-payments/peer-to-peer-payments-are-generally-safe-but-consumers-must-be-aware-of-risks/>

² "PayPal Reports Second Quarter 2019 Results." PayPal press release, July 24, 2019. <https://www.paypal.com/stories/us/paypal-reports-second-quarter-2019-results>

³ "Zelle® Announces \$44 Billion Sent on 171 Million Transactions in Q2 2019." Early Warning Services, LLC Press Release, July 23, 2019. <https://www.earlywarning.com/press-release/zelle-announces-44-billion-sent-171-million-transactions-q2-2019>

⁴ "Square just had its best month ever for Cash App downloads, analyst says." Emily Bary, MarketWatch, August 21, 2019. <https://www.marketwatch.com/story/square-just-had-its-best-month-ever-for-cash-app-downloads-analyst-says-2019-08-20>





THE VOICE OF COMMERCE

Today's voice technologies are closing the gap between fantasy and reality. A growing ability to mimic human interaction represents a tipping point that alters our relationships with machines.

The interfaces that allow humans and machines to communicate have grown smaller as they've grown more powerful. From mainframes to desktops to smartphones, we've fed machines punch cards, typed on keyboards, and tapped on digital devices. Voice still requires a digital device—but now it only needs to be nearby, within the sound of our unique voices.

Early efforts to understand and replicate human speech were awkward, simplistic, and impractical. The monotone, robotic interfaces of the past are gone. In their place are lively personal assistants, in some cases with the ability to listen, understand, and respond intelligently in real time.

We each emerge from experiences with assistants and smart speakers knowing the potential from their interconnectedness with functions that run our lives—home security, lights, and certainly, things we need to buy or

replenish. What then is to come from our relationships with these devices and the voices shared between us?

Voice recognition technologies are wildly popular around the world, from Amazon's Alexa to Apple's Siri, Google Assistant to Microsoft's Cortana. In China, Baidu's Xiaodu device surpassed Google's Home to become the second leading smart speaker globally in 2019.¹ Smart speaker offerings from Chinese tech titans Alibaba and Xiaomi also place among the top five manufacturers of global smart speakers.²

Smart speakers are one of the fastest growing consumer technologies since the smartphone. They were poised to overtake wearable bands by the end of 2019 and tablet computers by 2020, with a global installed base expected to top 207.9 million units in 2019.³

Leading research firm, Juniper Research, projects that digital voice assistants worldwide will triple to 8 billion by 2023, propelled by the use of voice technology in smart TVs, wearables, and smart speakers. Juniper

projects that voice commerce will involve mostly digital purchases until digital assistants offer truly seamless cross-platform experiences.⁴

In the US, the number of voice assistant users is projected to exceed 111 million in 2019, a 9.5% increase from 2018 and representing 33.8% market penetration.⁵ 2019 estimates of smart speaker users find China with the most at 85.5 million (10.0% internet user penetration), outpacing the US next with 74.2 million (26% penetration).⁶

Younger generations are leading the way as early adopters of voice assistants. Gen Z in particular has grown up with significantly elevated expectations about how technology enhances virtually everything about how they live their lives. In a 2019 survey, more than two-thirds (67%) of Millennials and Gen Z reported communicating with a company via voice assistant, with 35% saying they prefer that method.⁷

Commercial applications of voice are all around us. In 2019, 31 million US shoppers will use a smart speaker to shop. Approximately 21 million US shoppers used their smart speaker to make a purchase in 2019, a 32.2% increase over 2018.⁸ Spending on voice shopping in the US and the UK is expected to surpass \$40B by 2022.⁹

The commercial potential of voice is being realized now. For example, Amazon's ownership of voice technology, Echo devices, its eCommerce platform, and Amazon Basics product line of everyday items represent a potent commercial combination.¹⁰ The sheer range of devices that can be accessed with voice user interfaces (VUIs)—game consoles, TVs, cars, smart watches, cable and satellite TV providers, even refrigerators—means Amazon is not alone. Apple's Siri, Google Assistant, Microsoft's Cortana, and Samsung's Bixby are all aggressively seeking to expand their multiplatform capabilities.

Though voice recognition technology is proving effective in a wide range of practical applications, its commercial potential remains largely unfulfilled to date.

A 2019 Forrester Research study found voice assistants to have a high rate of failure when it came to specific commerce questions. Amazon's Alexa, Apple's Siri, Google Assistant, and Microsoft's Cortana combined to only provide what were deemed useful answers to 35% of voice searches.¹¹





The best shopping experiences have a strong visual component that enables casual discovery. The first generation of voice-enabled devices tended to be audio-only, making browsing impractical. That's changing as screens are added to voice assistants, like Amazon's Echo Show, Google's Nest Home Hub, and Lenovo's Smart Display.

The security of voice commerce is of paramount concern to shoppers. A recent Amazon Pay consumer survey found almost half of respondents indicating the safety of their personal and financial information were their most pressing concerns.¹²

The opportunity of voice connected commerce will rise as further friction is removed. Brands are constantly innovating to reduce friction. They're also working tirelessly to integrate more meaningful, intimate relationships with consumers. And, given the intimacy of voice—we can expect it to continue as a powerful tool in closing the distance between desire and its fulfillment.

¹ "Alexa, who is Baidu? Chinese firm passes Google to become Amazon's top smart-speaker rival." Marie C. Baca, The Washington Post, August 26, 2019. <https://www.washingtonpost.com/technology/2019/08/26/alexa-who-is-baidu-chinese-firm-passes-google-become-amazons-top-smart-speaker-rival/>

² "Alexa, who is Baidu? Chinese firm passes Google to become Amazon's top smart-speaker rival." Marie C. Baca, The Washington Post, August 26, 2019. <https://www.washingtonpost.com/technology/2019/08/26/alexa-who-is-baidu-chinese-firm-passes-google-become-amazons-top-smart-speaker-rival/>

³ "Canalys: Global smart speaker installed base to top 200 million by end of 2019 [April 15, 2019];" <https://www.canalys.com/newsroom/canalys-global-smart-speaker-installed-base-to-top-200-million-by-end-of-2019>

⁴ "Digital Voice Assistants in Use to Triple to 8 Billion by 2023, Driven by Smart Home Devices;" Juniper Research; February 12, 2018. <https://www.juniperresearch.com/press/press-releases/digital-voice-assistants-in-use-to-triple>

⁵ "US Voice Assistant Users 2019: Who, What, When, Where and Why." Victoria Petrock, eMarketer, July 15, 2019. <https://www.emarketer.com/content/us-voice-assistant-users-2019>

⁶ "Global Smart Speaker Users 2019: Trends for Canada, China, France, Germany, the UK and the US." Corey McNair, eMarketer, January 2, 2019. <https://www.emarketer.com/content/global-smart-speaker-users-2019>

⁷ <https://www.salesforce.com/blog/2019/03/voice-assistant-generations-research.html>

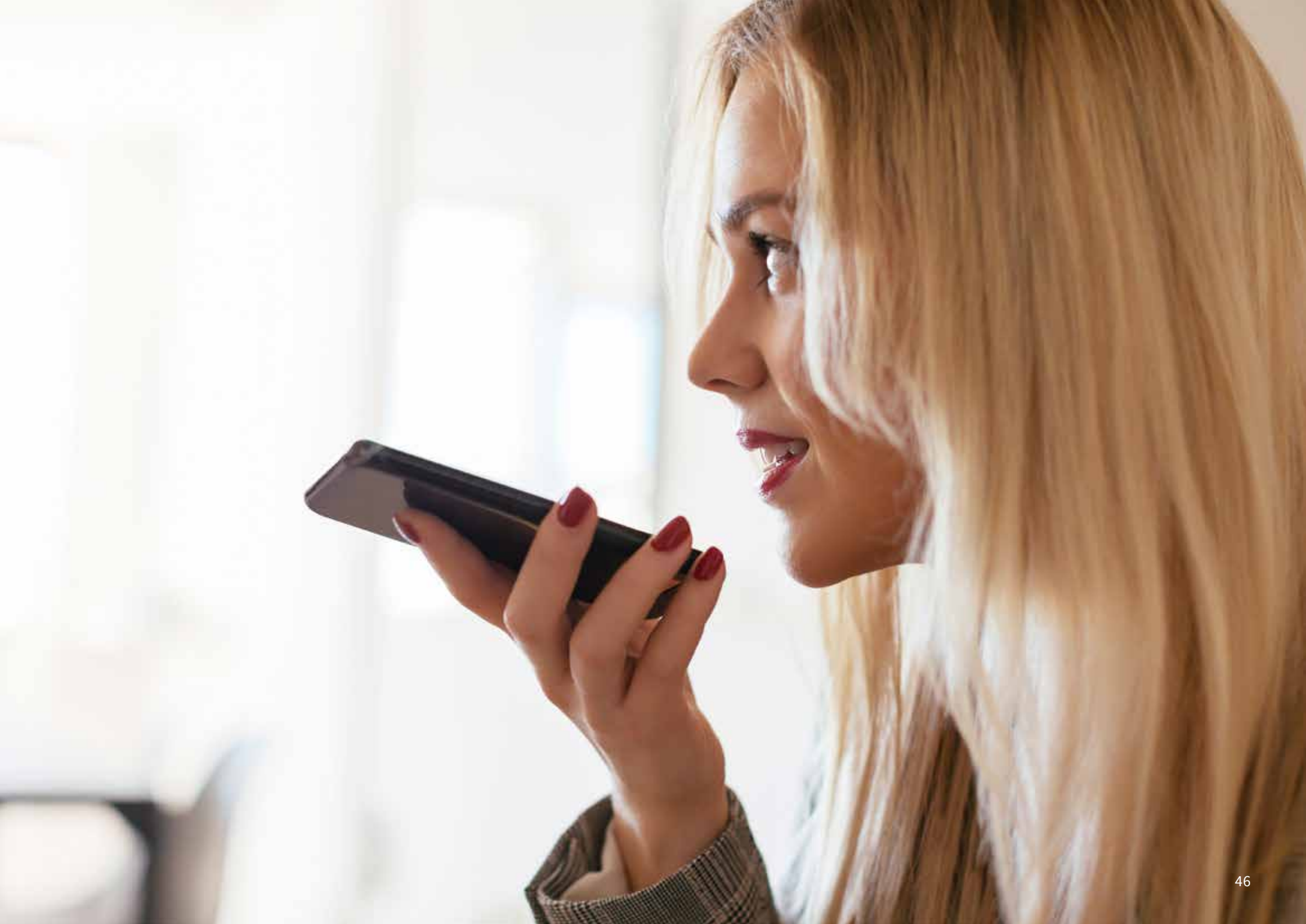
⁸ "Smart Speaker Shopping Gains Traction." Lucy Koch, eMarketer, Jul 8, 2019. <https://www.emarketer.com/content/smart-speaker-shopping-gains-traction>

⁹ "Voice Shopping Set to Jump to \$40 Billion By 2022, Rising From \$2 Billion Today." OC&C Strategy Consultants, Feb 28, 2018. <https://www.prnewswire.com/news-releases/voice-shopping-set-to-jump-to-40-billion-by-2022-rising-from-2-billion-today-300605596.html>

¹⁰ "Hey Alexa, Why is Voice Shopping So Lousy?" Arielle Pardes, Wired, June 17, 2019. <https://www.wired.com/story/why-is-voice-shopping-bad/>

¹¹ "Voice Assistants Cannot Answer All Your Questions." Collin Colburn & Arleen Chien, Forrester Research, April 24, 2019. <https://go.forrester.com/blogs/voice-assistants-cannot-answer-all-your-questions/>

¹² "Voice Assistants Cannot Answer All Your Questions." Collin Colburn & Arleen Chien, Forrester Research, April 24, 2019. <https://go.forrester.com/blogs/voice-assistants-cannot-answer-all-your-questions/>





MARKET GUIDES

ARGENTINA

Named for its fabled abundance of silver, Argentina is derived from the Latin “argentum,” the color of silver. The mountain of precious metal never materialized – maybe it should have adopted the color burgundy instead. Since the 16th century, Argentina has been one of the world’s leading producers of wine. At point of sale, however, Argentinian consumers prefer green; cash outpends cards (54% to 41%, respectively), although credit cards top eCommerce payments (43%).

FAST STATS

2019 sales %
from eCom

7%

2019* - 2023**
eCom CAGR

19%

2019 sales %
from mCom

44%

2019* - 2023**
POS CAGR

10%

2019 % eCom spend using
Digital/Mobile Wallet

20%

2019* Internet
penetration

93%

2019 % POS spend using
Digital/Mobile Wallet

4%

2019* Mobile
penetration

73%

FORECAST

2023 %**
sales from eCom

9%

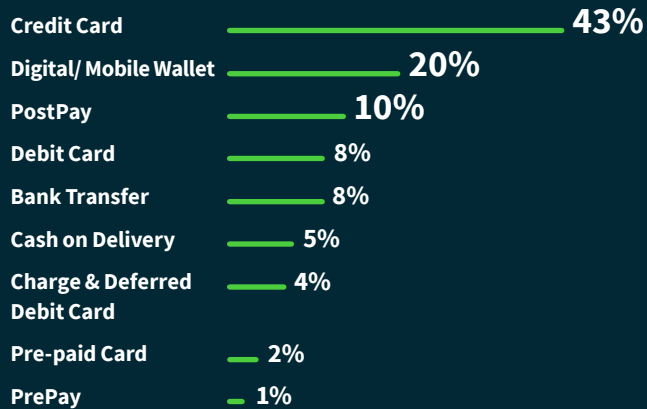
2023 %**
sales from mCom

58%

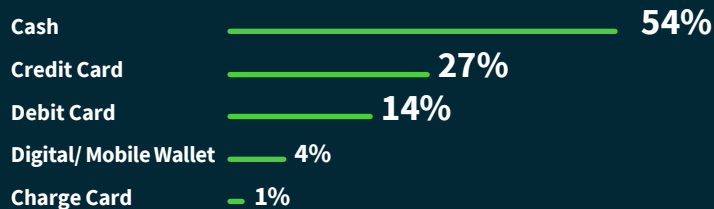
TOP TIP

Digital wallets are growing faster here than any other market in the Latin American region – now catching 20% of online transactions. Offer local digital/mobile wallets such as Mercado Pago when selecting a payment portfolio for both eCommerce and point of sale.

2019 eCom mix by payment method

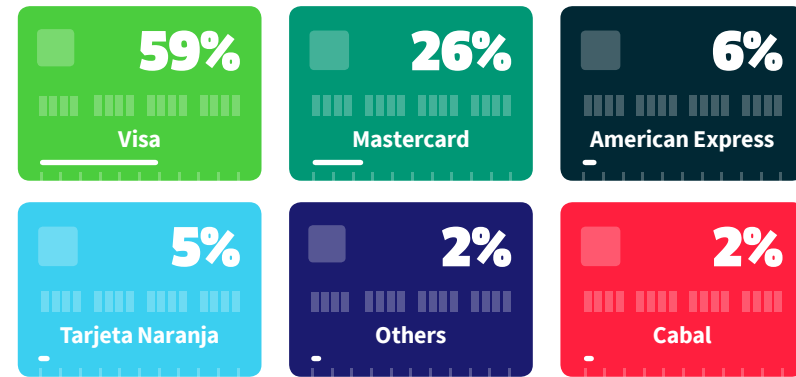


2019 point of sale mix by payment method

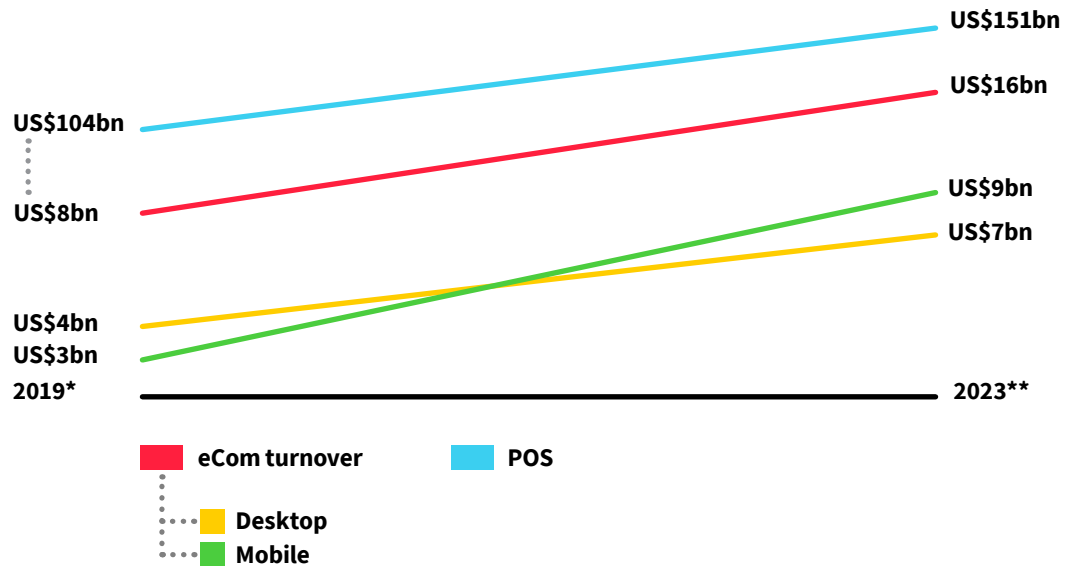


* Estimated **Forecasted
Numbers adjusted for rounding may impact totals.

2018 card brand breakdowns (eCom and POS)



POS and eCom projected growth



Popular alternative payment methods



AUSTRALIA

In the land “Down Under,” personal devices are on top. Australia has one of the highest smartphone penetrations in the world. With mobile use projected at 84% of the population and internet penetration at 90%, it’s no wonder that the country is a leader in eCommerce – tenth largest by revenue, with digital and mobile wallet use continuing to gain market share.

FAST STATS

2019 sales %
from eCom

5%

2019* - 2023**
eCom CAGR

9%

2019 sales %
from mCom

50%

2019* - 2023**
POS CAGR

5%

2019 % eCom spend using
Digital/Mobile Wallet

22%

2019* Internet
penetration

87%

2019 % POS spend using
Digital/Mobile Wallet

6%

2019* Mobile
penetration

84%

FORECAST

2023 %**
sales from eCom

6%

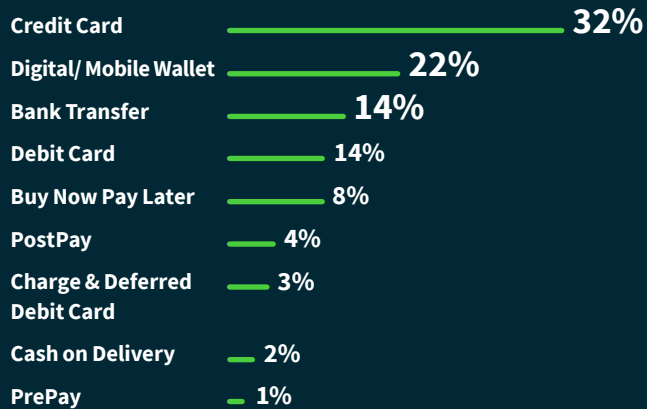
2023 %**
sales from mCom

64%

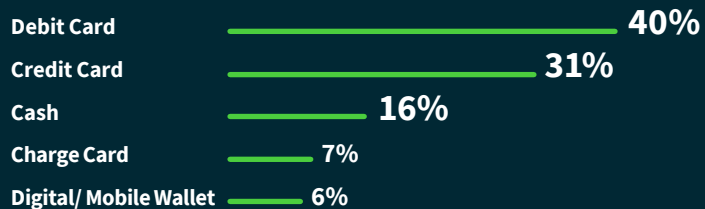
TOP TIP

Credit and debit cards are proliferating in the land Down Under, and buy now pay later payments have become standard. Brands like Afterpay – with competition from Zip and Humm – are winning over consumers by providing ease of payment and the option to spread payments out over installments. Consumers like choice when shopping online. Implement additional checkout options such as buy now pay later, single-click wallets, and bank transfers. And as mobile commerce becomes further simplified, pay close attention to the entire checkout experience to reduce friction for shoppers.

2019 eCom mix by payment method



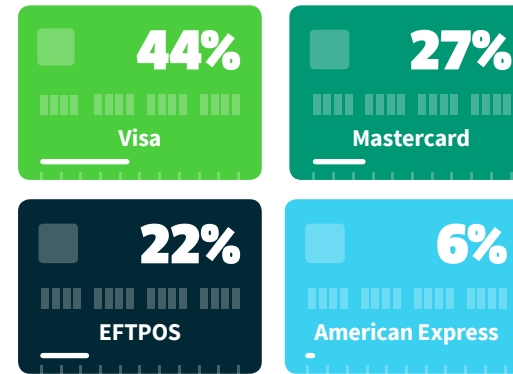
2019 point of sale mix by payment method



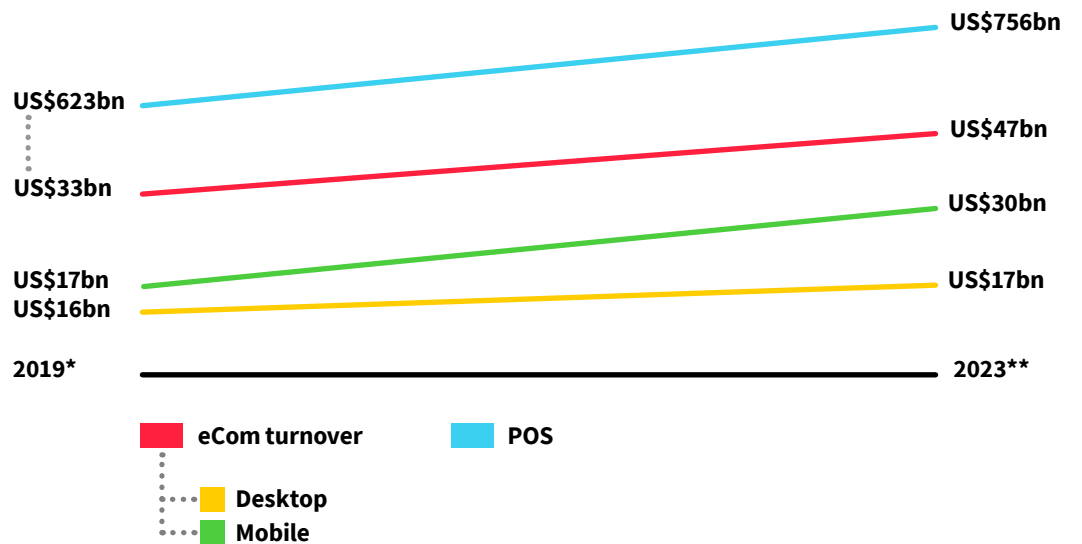
* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.

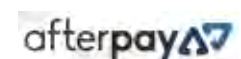
2018 card brand breakdowns (eCom and POS)



POS and eCom projected growth



Popular alternative payment methods



BELGIUM

A hub of European transportation, Belgium's internet and mobile penetration is exceptionally high. Driving Belgian eCommerce with 81% market share (and leading point of sale purchases as well), Bancontact debit card is the country's preferred card brand. Issued with every Belgian bank account, Bancontact has 15 million cards in circulation – currently more cards than there are Belgians.¹

¹ alternativeairlines.com/bancontact

FAST STATS

2019 sales %
from eCom

7%

2019* - 2023**
eCom CAGR

9%

2019 sales %
from mCom

21%

2019* - 2023**
POS CAGR

3%

2019 % eCom spend using
Digital/Mobile Wallet

16%

2019* Internet
penetration

94%

2019 % POS spend using
Digital/Mobile Wallet

2%

2019* Mobile
penetration

81%

FORECAST

2023 %**
sales from eCom

9%

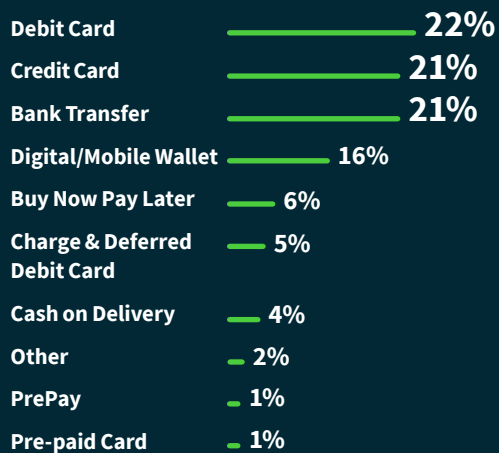
2023 %**
sales from mCom

27%

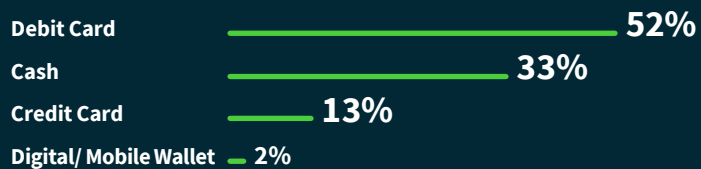
TOP TIP

Belgian consumers need payment options when it comes to online shopping. Providing options for payment via credit and debit cards, digital wallets, bank transfer options, and buy now pay later options are what you need to consider to satisfy them. Start by offering the card brands that have become the most popular; that will help ease the implementation for initial card acceptance set-up. At the point of sale, consumers generally use cash or cash, credit, or debit cards so accepting Bancontact and Visa will meet the needs of most customers.

2019 eCom mix by payment method



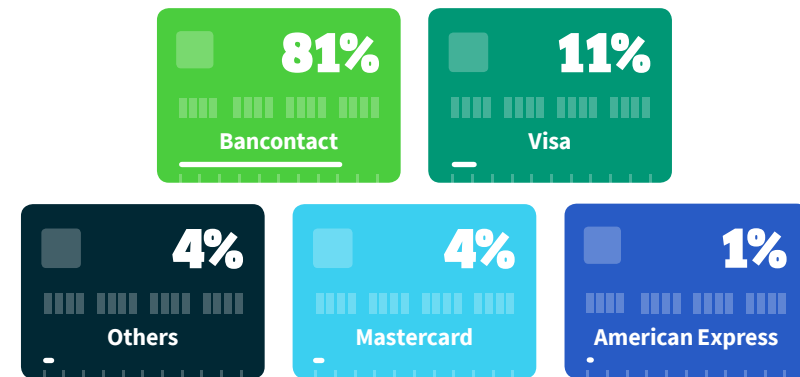
2019 point of sale mix by payment method



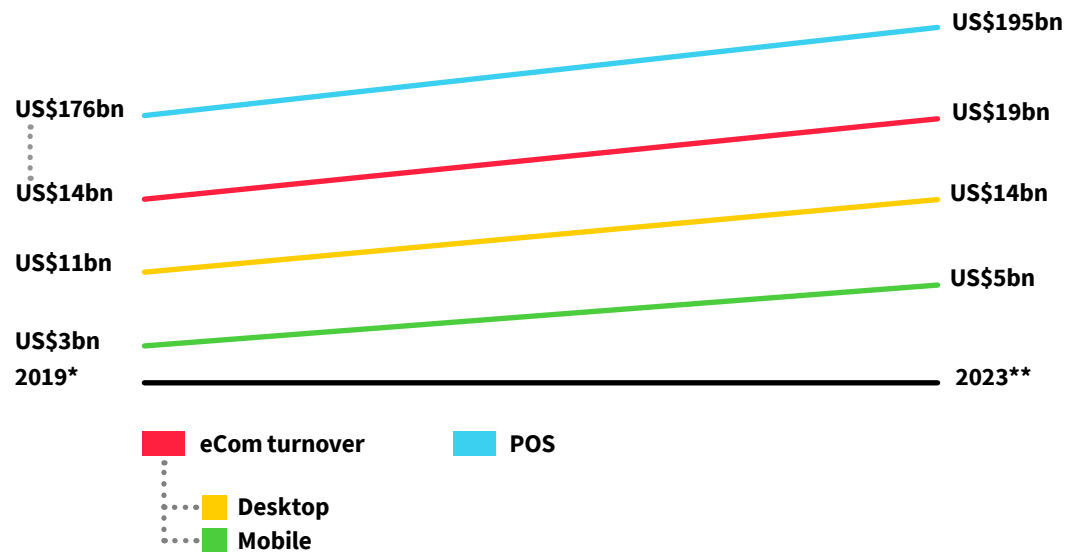
* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.

2018 card brand breakdowns (eCom and POS)



POS and eCom projected growth



Popular alternative payment methods



BRAZIL

An annual celebration leading up to Ash Wednesday, the Carnival of Brazil is an event of rhythm and spectacle. Through the streets of cities across the country, its population turns out en masse to sing and dance in this six-day party – Rio de Janeiro alone drawing over two million people per day to its festivities. Although much of its workforce stops to attend Carnival, many retail, hospitality, and restaurant establishments remain busy, catering to their fellow Brazilians who prefer to pay in cash (47%), followed by credit (30%) and debit (20%) cards. When Brazilians shop online, credit cards remain most popular.

FAST STATS

2019 sales %
from eCom

4%

2019* - 2023**
eCom CAGR

11%

2019 sales %
from mCom

44%

2019* - 2023**
POS CAGR

7%

2019 % eCom spend using
Digital/Mobile Wallet

11%

2019* Internet
penetration

71%

2019 % POS spend using
Digital/Mobile Wallet

3%

2019* Mobile
penetration

66%

FORECAST

2023 %**
sales from eCom

4%

2023 %**
sales from mCom

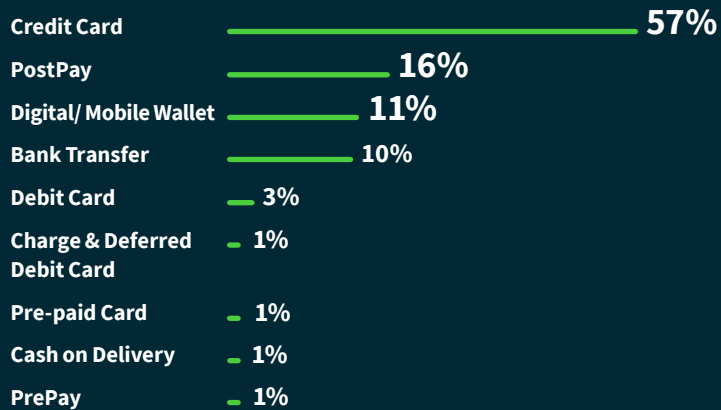
60%

TOP TIP

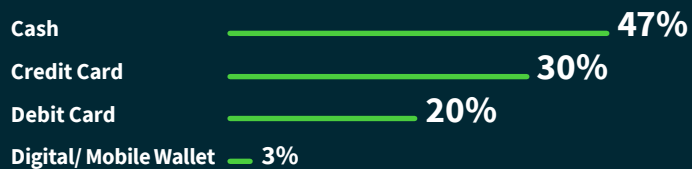
Current discussions on open banking regulations will create new opportunities for peer to peer transactions in 2020, and by 2023, mobile devices will account for nearly half (48.5%) of the country's retail online sales. Already the third largest base of monthly Instagram and Facebook users in the world,¹ Brazil gives good reason to embrace mobile payment acceptance.

¹eMarketer

2019 eCom mix by payment method



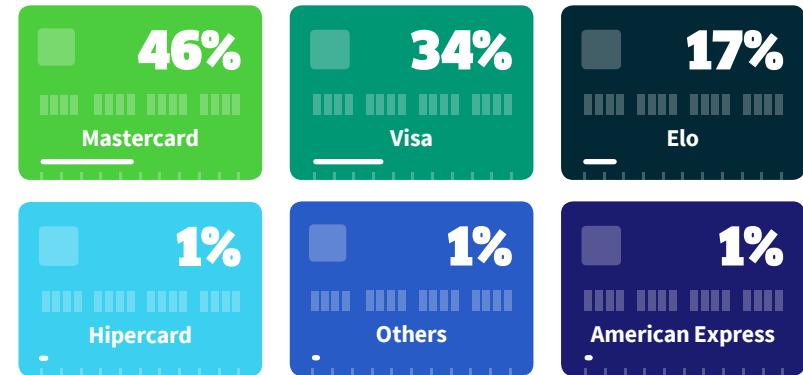
2019 point of sale mix by payment method



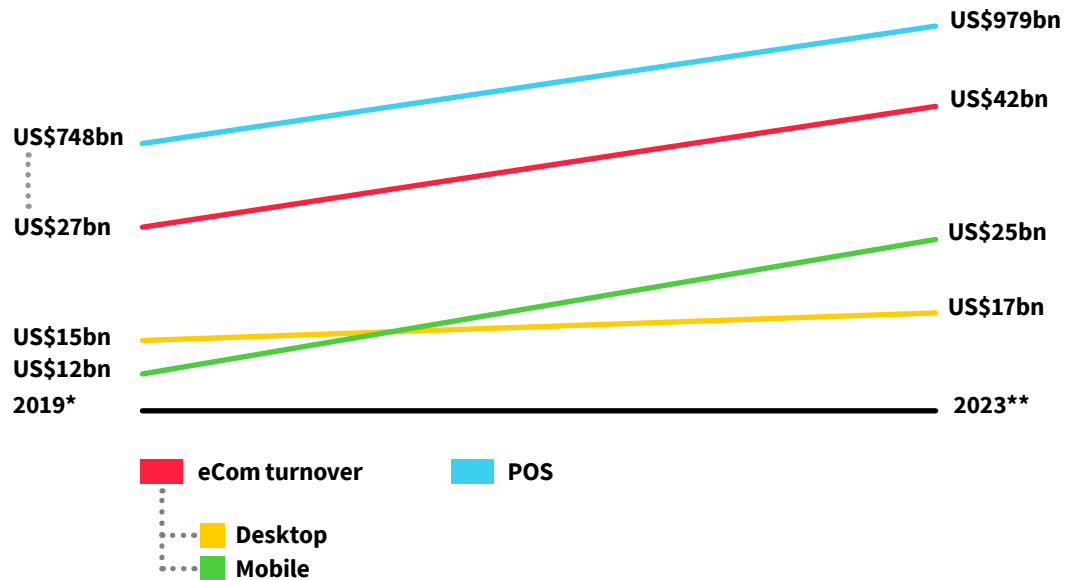
* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.

2018 card brand breakdowns (eCom and POS)



POS and eCom projected growth



Popular alternative payment methods



CANADA

Sweet consumerism: Canada is the world's leading consumer of doughnuts. And with more doughnut shops per capita than any other country in the world, they're using cards over cash at the counter for all types of purchases. At point of sale and online, Canadians prefer credit over debit. Naturally, coffee is the favorite beverage of adults (after tap water).¹

¹Canadian Broadcasting Corporation

FAST STATS

2019 sales %
from eCom

7%

2019* - 2023**
eCom CAGR

10%

2019 sales %
from mCom

25%

2019* - 2023**
POS CAGR

4%

2019 % eCom spend using
Digital/Mobile Wallet

18%

2019* Internet
penetration

93%

2019 % POS spend using
Digital/Mobile Wallet

4%

2019* Mobile
penetration

81%

FORECAST

2023 %**
sales from eCom

9%

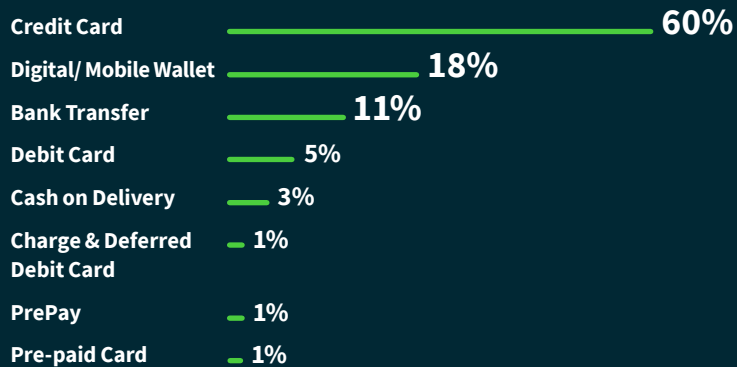
2023 %**
sales from mCom

28%

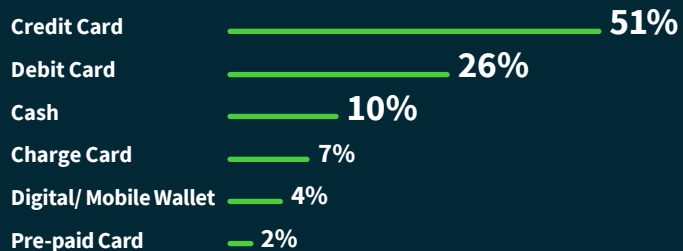
TOP TIP

Canadians continue to reach for credit cards at the point of sale and for online transactions. It's important to accept all popular credit card brands—Visa, Interac, and Mastercard to satisfy the majority of consumers. Digital and mobile wallets also continue to gain adoption. Accepting popular digital/mobile wallets such as PayPal, Visa Checkout, and Masterpass will provide convenience to consumers who are migrating to digital cards over physical ones.

2019 eCom mix by payment method

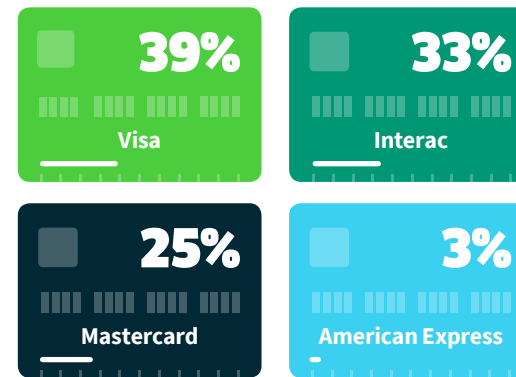


2019 point of sale mix by payment method

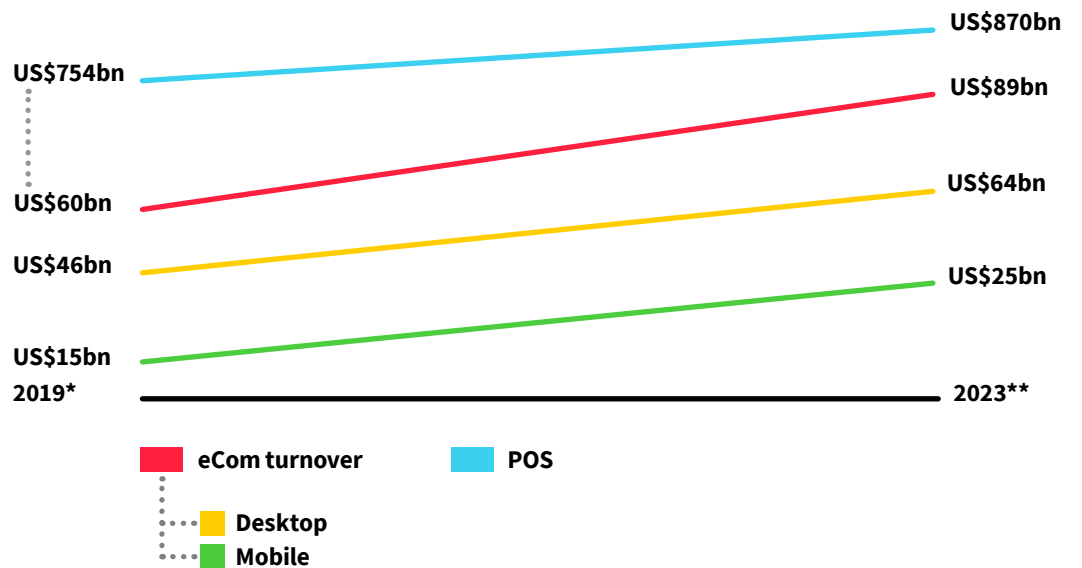


* Estimated **Forecasted
Numbers adjusted for rounding may impact totals.

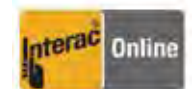
2018 card brand breakdowns (eCom and POS)



POS and eCom projected growth



Popular alternative payment methods



CHILE

Chile is the world's longest country, yet contains some of the globe's most diverse landscapes. From arid deserts to lush, forested lakes, from sandy beaches to glacial mountains, Chile includes a little bit of everything within its 2,647x93 mile dimensions. When it comes to preferred method of payment, cards dominate online spending. However, Chileans gravitate toward a single overall payment type: cash, which accounts for 51% of point of sale market share.

FAST STATS

2019 sales %
from eCom

4%

2019* - 2023**
eCom CAGR

16%

2019 sales %
from mCom

24%

2019* - 2023**
POS CAGR

8%

2019 % eCom spend using
Digital/Mobile Wallet

6%

2019* Internet
penetration

78%

2019 % POS spend using
Digital/Mobile Wallet

2%

2019* Mobile
penetration

75%

FORECAST

2023 %**
sales from eCom

6%

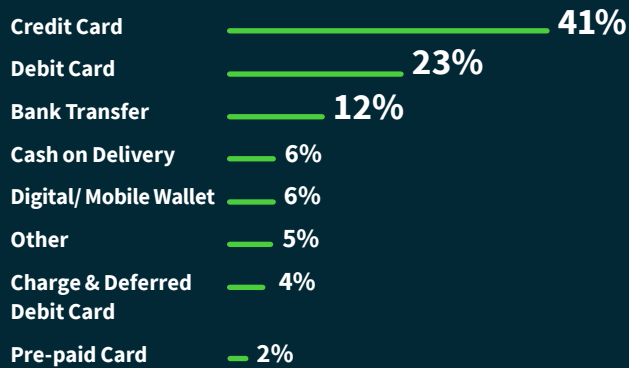
2023 %**
sales from mCom

35%

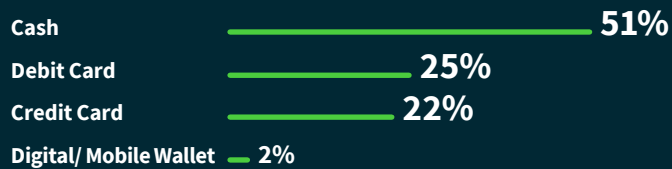
TOP TIP

Don't turn down local payment options like Redcompra, Chile's popular debit card option that accounts for 34% market share. Another country moving quickly in mobile adoption, it's also expected to be one of the top mCommerce nations in the region.

2019 eCom mix by payment method

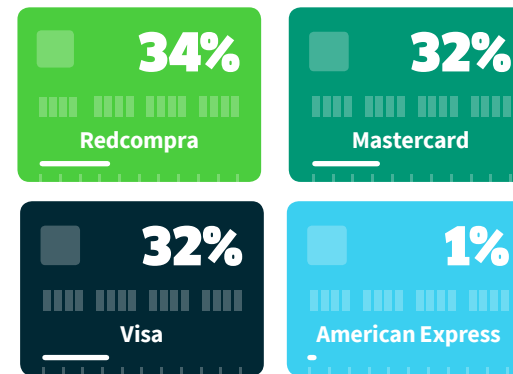


2019 point of sale mix by payment method

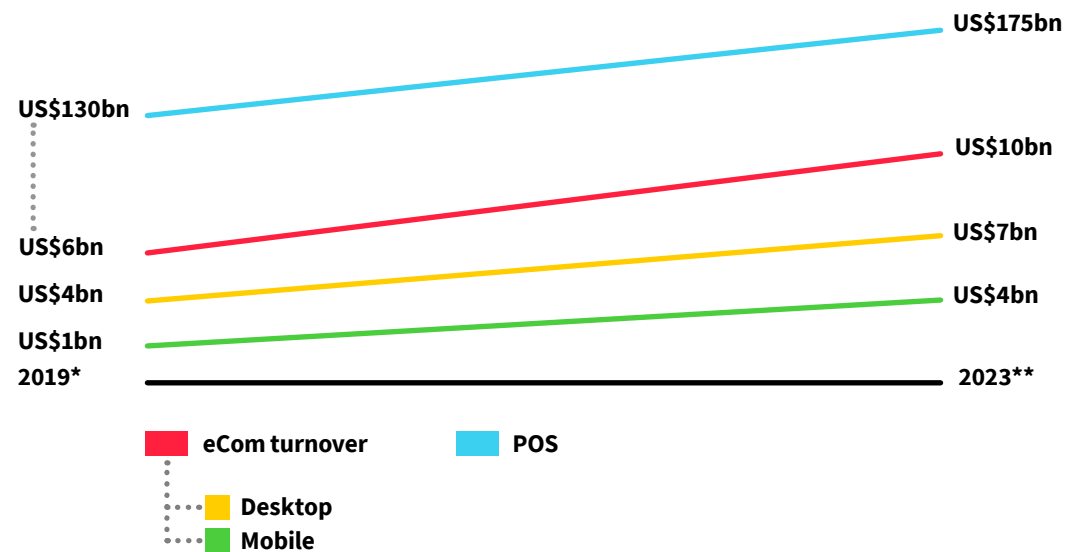


* Estimated **Forecasted
Numbers adjusted for rounding may impact totals.

2018 card brand breakdowns (eCom and POS)



POS and eCom projected growth



Popular alternative payment methods



CHINA

According to the Chinese calendar, the Year of the Rat begins on Jan. 25, 2020. Of the 12 Chinese Zodiac animals, the Rat is characterized by alertness, flexibility, and vitality – much like digital/mobile wallets, the preferred payment method for Chinese consumers in both eCommerce transactions (71%) and point of sale purchases (48%). However, in both cases, China UnionPay is the dominant card brand, claiming 99% of the market share, making it the world's largest card network.

FAST STATS

2019 sales %
from eCom

8%

2019* - 2023**
eCom CAGR

13%

2019 sales %
from mCom

62%

2019* - 2023**
POS CAGR

9%

2019 % eCom spend using
Digital/Mobile Wallet

71%

2019* Internet
penetration

60%

2019 % POS spend using
Digital/Mobile Wallet

48%

2019* Mobile
penetration

73%

FORECAST

2023 %**
sales from eCom

10%

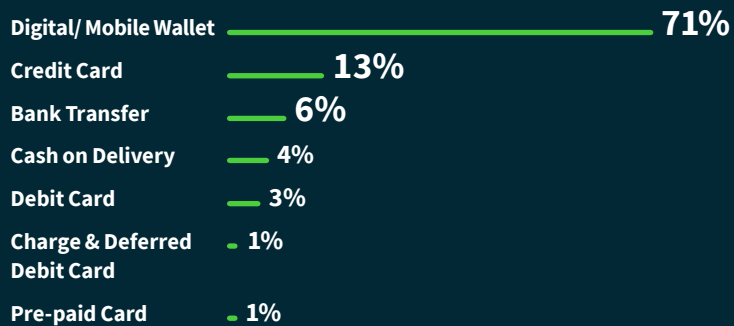
2023 %**
sales from mCom

66%

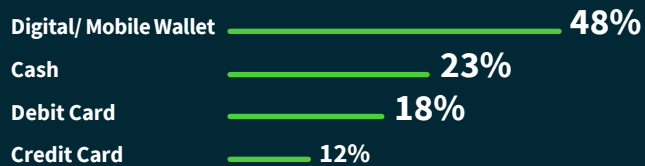
TOP TIP

Being open minded to outside economic influences has increased the world's exposure to China. It remains, however, fixed in local payment services. China UnionPay credit and debit cards are the most used card brand. Mobile and digital wallets like Alipay and WeChat Pay currently dominate China's online market and are growing quickly in physical stores as well.

2019 eCom mix by payment method

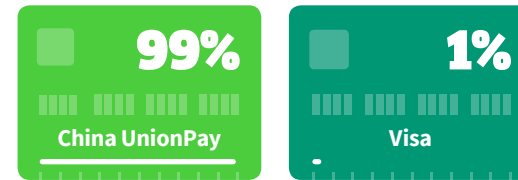


2019 point of sale mix by payment method

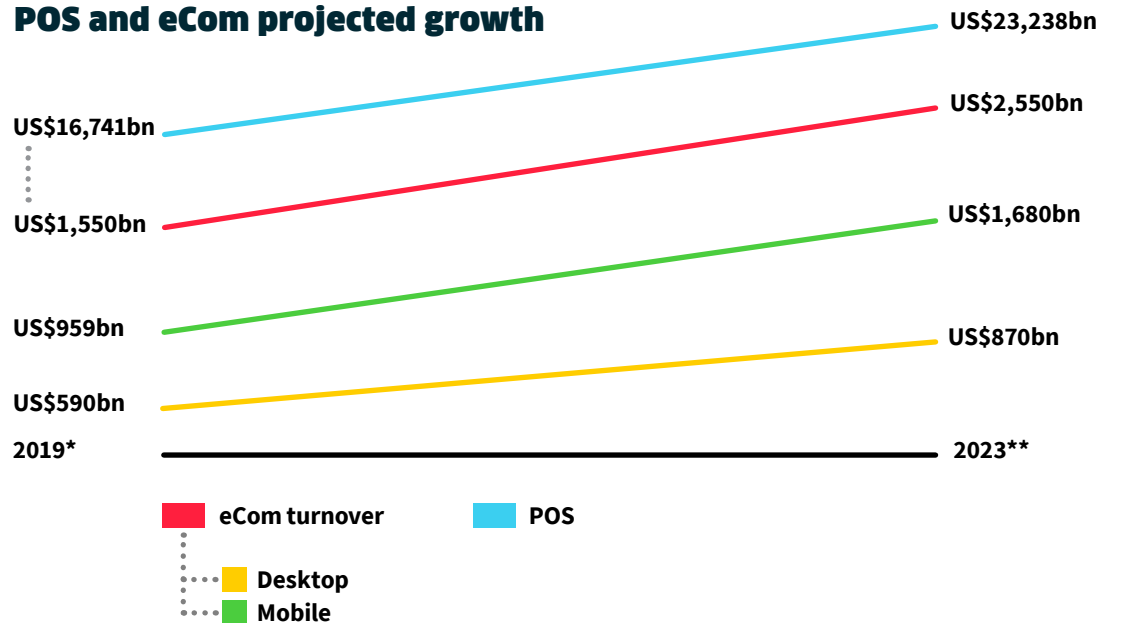


* Estimated **Forecasted
Numbers adjusted for rounding may impact totals.

2018 card brand breakdowns (eCom and POS)



POS and eCom projected growth



Popular alternative payment methods



COLOMBIA

Caffeine-drenched Colombia is also the world's leading producer of emeralds. In fact, up to 95% of world production originates from the nation's more than 150 mines generating over \$137 million in exports worldwide.¹ Rather than pay in these green gemstones, however, the majority of Colombians purchase with cash in-store (78%) over any other payment method. Credit cards continue to dominate online payments.

¹ <https://www.statista.com/statistics/807228/colombia-value-emerald-exports-region/>

FAST STATS

2019 sales %
from eCom

4%

2019* - 2023**
eCom CAGR

10%

2019 sales %
from mCom

47%

2019* - 2023**
POS CAGR

7%

2019 % eCom spend using
Digital/Mobile Wallet

12%

2019* Internet
penetration

63%

2019 % POS spend using
Digital/Mobile Wallet

2%

2019* Mobile
penetration

72%

FORECAST

2023 %**
sales from eCom

4%

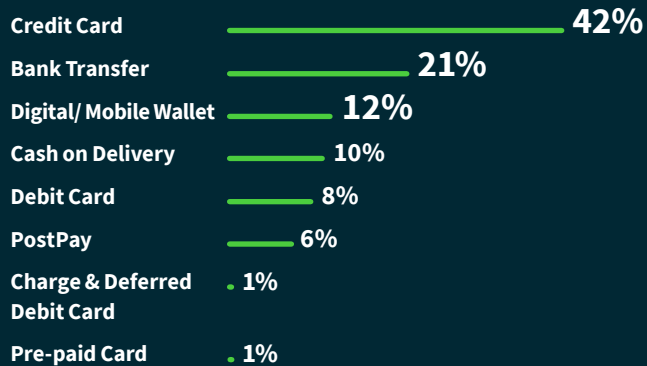
2023 %**
sales from mCom

60%

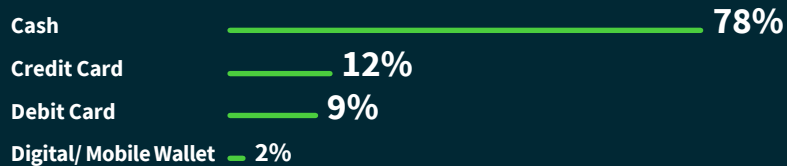
TOP TIP

Although cash still holds the top spot at the point of sale (78%), QR payments are skyrocketing, pushed ahead by digital/mobile wallets and delivery apps that support this method.

2019 eCom mix by payment method

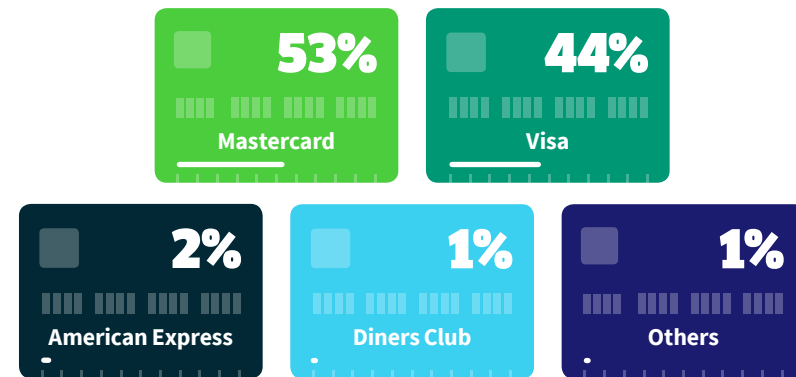


2019 point of sale mix by payment method

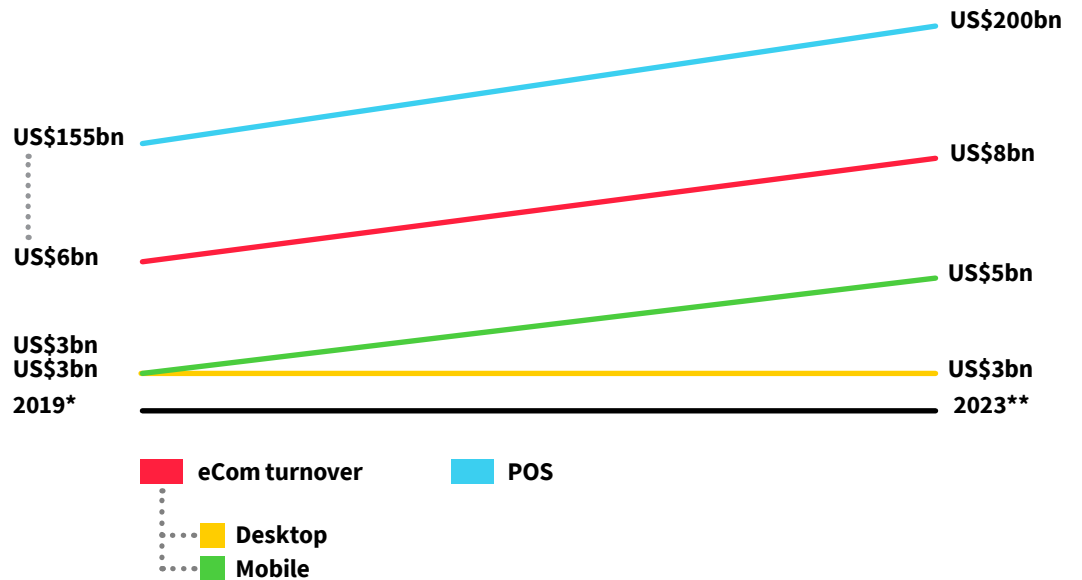


* Estimated **Forecasted
Numbers adjusted for rounding may impact totals.

2018 card brand breakdowns (eCom and POS)



POS and eCom projected growth



Popular alternative payment methods



DENMARK

In Denmark, it rains or snows every second day and can be extremely windy, averaging a speed of 13 miles per hour. Rain or shine, Danes are always looking on the bright side, however. Denmark is reported to be among the happiest countries in the world. Also consistent is their preference for Dankort, the national debit card. Typically combined with Visa, Dankort captures 68% of market share. It's the leading payment method for Danish purchases online (32%) and in-store (73%).

FAST STATS

2019 sales %
from eCom

17%

2019* - 2023**
eCom CAGR

9%

2019 sales %
from mCom

40%

2019* - 2023**
POS CAGR

4%

2019 % eCom spend using
Digital/Mobile Wallet

20%

2019* Internet
penetration

98%

2019 % POS spend using
Digital/Mobile Wallet

5%

2019* Mobile
penetration

86%

FORECAST

2023 %**
sales from eCom

19%

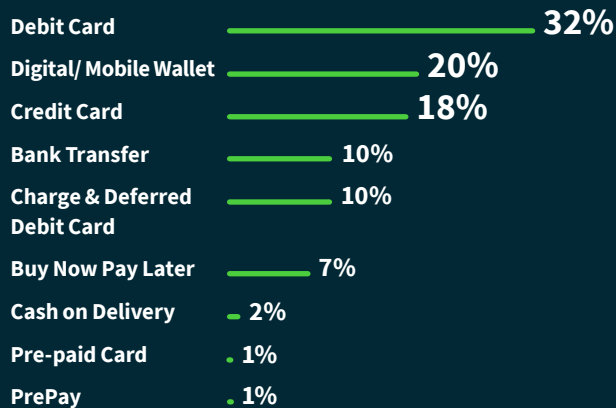
2023 %**
sales from mCom

48%

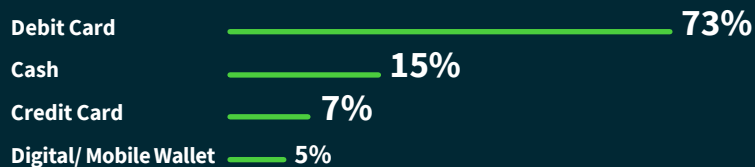
TOP TIP

Dankort is the national debit card of Denmark and has long-established patterns of use among Danish consumers. It's also combined as a Visa card and functions as such for businesses who don't already accept Dankort. Consumers prefer paying with their debit card online and at the point of sale. To capture consumer demand beyond cards, implement popular options like MobilePay and PayPal to capture digital interested customers.

2019 eCom mix by payment method



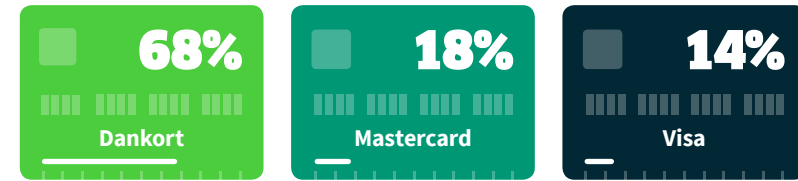
2019 point of sale mix by payment method



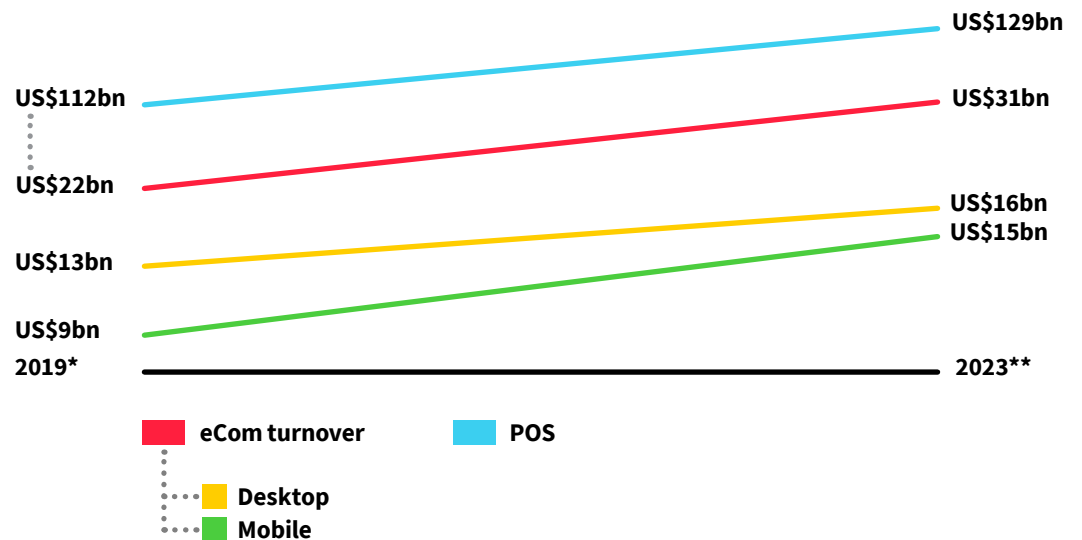
* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.

2018 card brand breakdowns (eCom and POS)



POS and eCom projected growth



Popular alternative payment methods



FINLAND

In Finland, speeding fines are based on the severity of the infraction – and the offender’s total income. For example, one Finnish businessman was fined 54,024 euros (about \$58,000) for traveling 64 miles per hour in a 50 zone.¹ No report on how he paid the ticket, but many Finns prefer to use a bank transfer when making purchases online (33%), more than any other payment method.

¹ New York Times, 2015

FAST STATS

2019 sales %
from eCom

13%

2019* - 2023**
eCom CAGR

10%

2019 sales %
from mCom

36%

2019* - 2023**
POS CAGR

3%

2019 % eCom spend using
Digital/Mobile Wallet

21%

2019* Internet
penetration

94%

2019 % POS spend using
Digital/Mobile Wallet

4%

2019* Mobile
penetration

80%

FORECAST

2023 %**
sales from eCom

17%

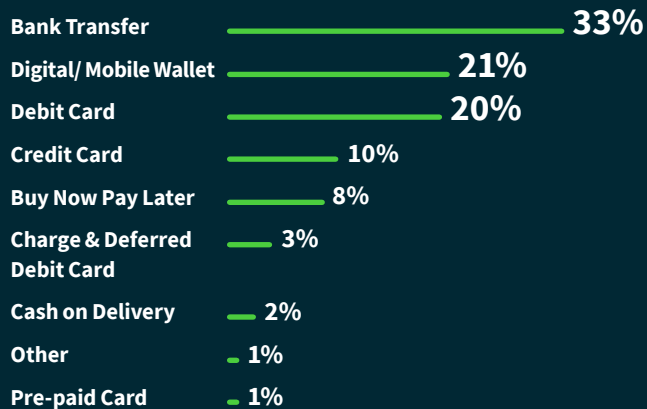
2023 %**
sales from mCom

43%

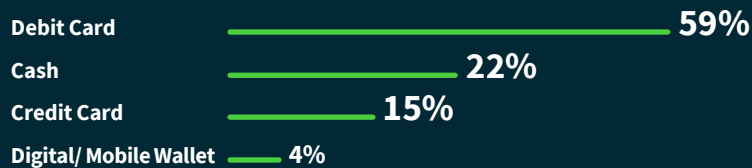
TOP TIP

Even as eCommerce influence expands in Finland, bank transfers remain the preferred online method of payment. Still, consumer interest varies so make sure online checkouts offer a variety of options: bank transfer, digital wallets, popular card brands, and buy now pay later. Mobile wallets are also being used at the point of sale as mobile penetration reaches 80% of the country, so now's the time to implement popular options like PayPal and Apple Pay.

2019 eCom mix by payment method



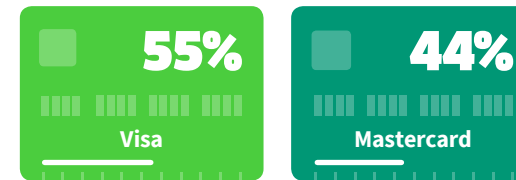
2019 point of sale mix by payment method



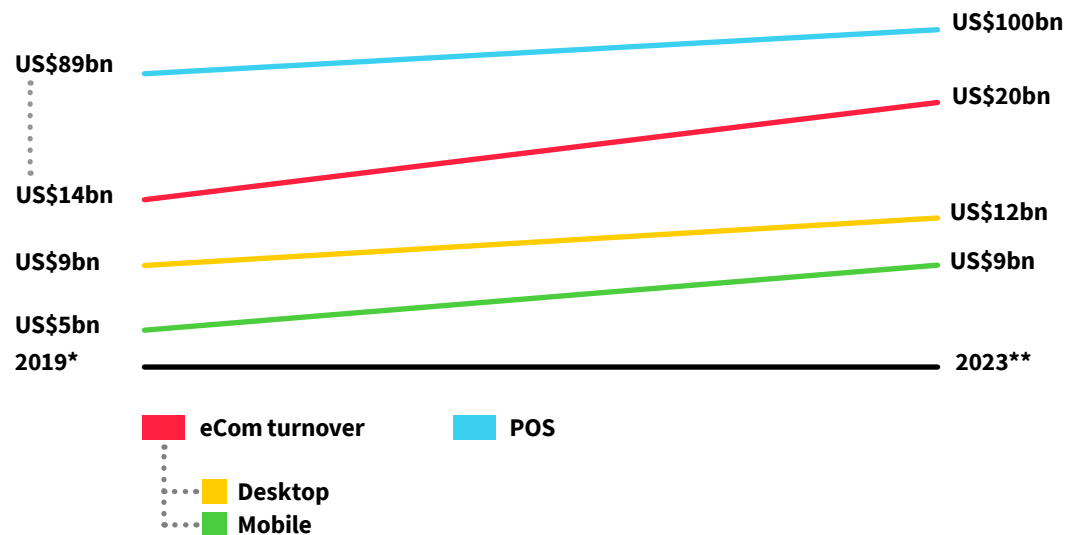
* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.

2018 card brand breakdowns (eCom and POS)



POS and eCom projected growth



Popular alternative payment methods



FRANCE

“One change pas une équipe qui gagne,” goes the French proverb. Ever loyal to a winning team perhaps, but when it comes to card brands, for any reason, the French are often open to change. Stringent credit card issuance guidelines and the abundance of private-label cards make France’s payments market highly competitive and have helped create one of the highest turnover per card rates among the nation’s international peers. While credit card usage remains low, debit cards are popular at point of sale (44%) and digital/mobile wallets are increasing as an eCommerce payment method (24%).

FAST STATS

2019 sales %
from eCom

11%

2019* - 2023**
eCom CAGR

9%

2019 sales %
from mCom

30%

2019* - 2023**
POS CAGR

3%

2019 % eCom spend using
Digital/Mobile Wallet

24%

2019* Internet
penetration

92%

2019 % POS spend using
Digital/Mobile Wallet

2%

2019* Mobile
penetration

86%

FORECAST

2023 %**
sales from eCom

13%

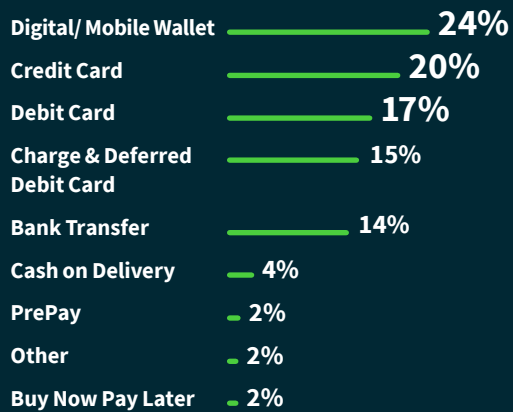
2023 %**
sales from mCom

41%

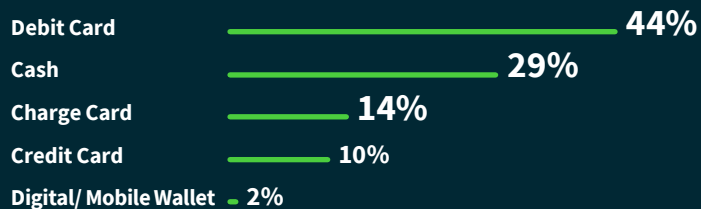
TOP TIP

Cartes Bancaires, known as CB, is France's national interbank network. As the largest card brand in France, CB comprises 85% of the market so accepting this card brand is imperative to capturing French consumer spend, online and at the point of sale. Digital wallets have become the preferred online payment method. Now is the time to implement popular options like PayPal and Amazon Pay at checkout.

2019 eCom mix by payment method



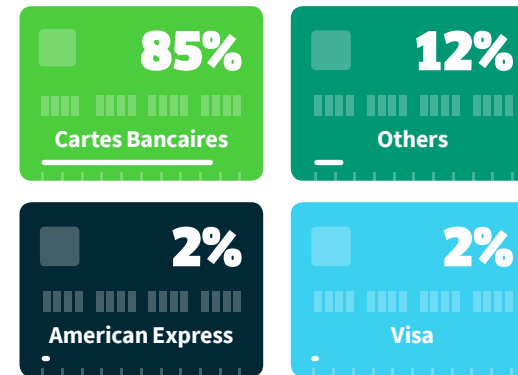
2019 point of sale mix by payment method



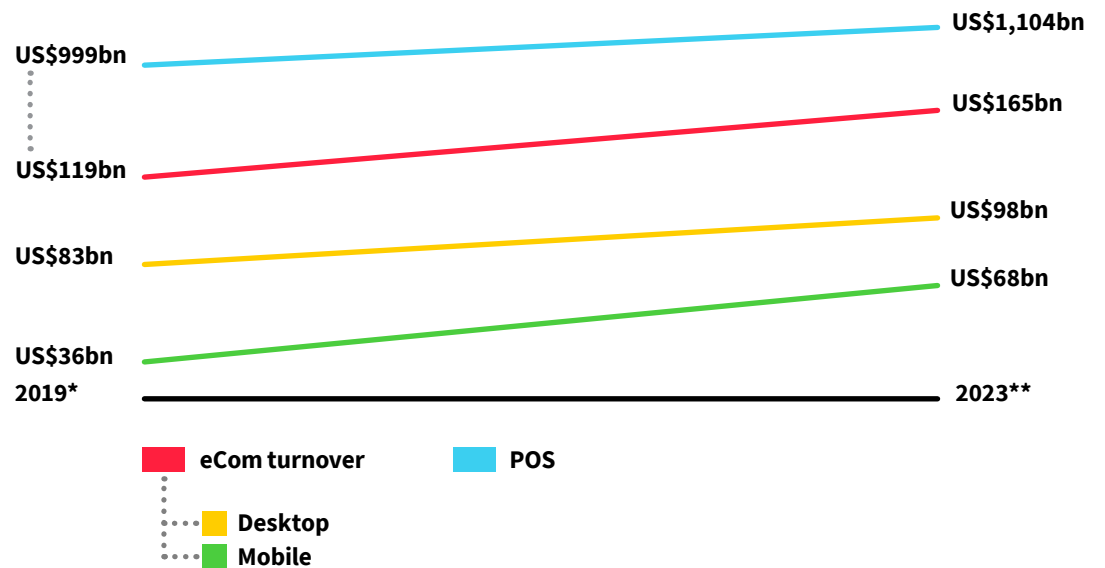
* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.

2018 card brand breakdowns (eCom and POS)



POS and eCom projected growth



Popular alternative payment methods



GERMANY

In Germany, beer has always been big business. Home to Oktoberfest, over 6,000 brands, and the world's fifth-largest market, sales have been falling steadily, however. Since the early 90s, domestic consumption has dropped by more than a quarter.¹ Experts blame the maturing population, changing tastes, and slow response to new demands by owners. Payments, on the other hand, remain mostly traditional; though adoption of digital/mobile wallet technologies for eCom transactions has been increasing (28%), Germans remain a big proponent of cash payment at point of sale (50%).

¹CNBC, 2018

FAST STATS

2019 sales %
from eCom

9%

2019* - 2023**
eCom CAGR

8%

2019 sales %
from mCom

32%

2019* - 2023**
POS CAGR

3%

2019 % eCom spend using
Digital/Mobile Wallet

25%

2019* Internet
penetration

96%

2019 % POS spend using
Digital/Mobile Wallet

5%

2019* Mobile
penetration

83%

FORECAST

2023 %**
sales from eCom

10%

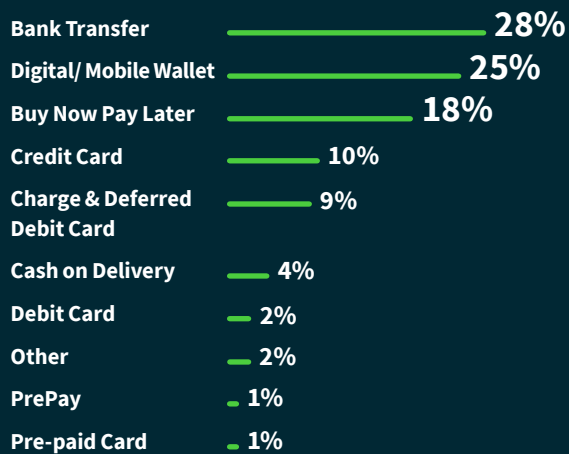
2023 %**
sales from mCom

40%

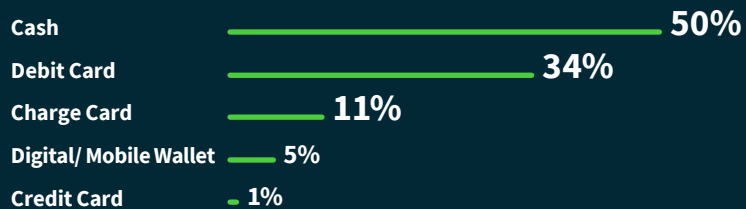
TOP TIP

Buy now pay later payments have become so popular with German consumers that they now stand as the third most preferred method of payment for online transactions. Businesses should note this convenience driven desire and implement a variety of online acceptance methods like bank transfer, digital wallets, and buy now pay later options to meet consumers checkout needs. And while cash drives 50% of point of sale purchases, the other half is card based so accepting popular card brands will help customers who leave their cash at home.

2019 eCom mix by payment method



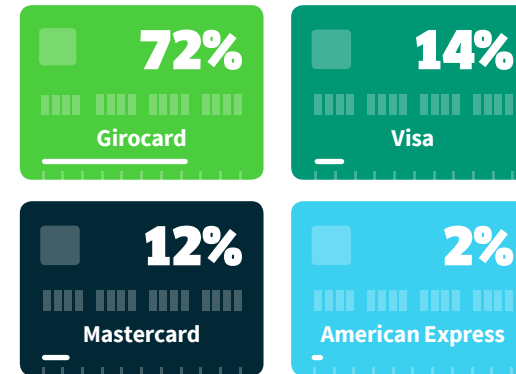
2019 point of sale mix by payment method



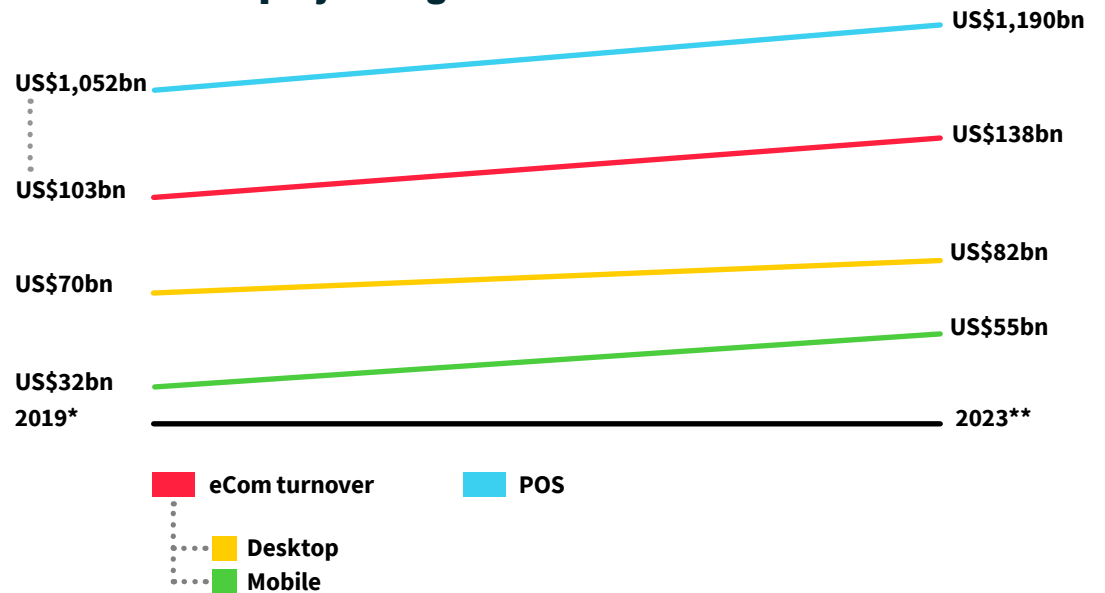
* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.

2018 card brand breakdowns (eCom and POS)



POS and eCom projected growth



Popular alternative payment methods



INVOICE PAYMENTS

CHINESE HONG KONG

Among the most densely populated countries of the world, Hong Kong packs 17,311 people per square mile.¹ In a region with precious little elbow room, Hong Kong nevertheless lays claim to having more Rolls Royce cars per person than any other region of the globe. While the majority of Hongkongers choose credit cards for both eCom and POS transactions (40% and 45%, respectively), this payment method may not be the best choice for luxury vehicles.

¹ worldpopulationreview.com, 2019

FAST STATS

2019 sales %
from eCom

9%

2019* - 2023**
eCom CAGR

9%

2019 sales %
from mCom

54%

2019* - 2023**
POS CAGR

5%

2019 % eCom spend using
Digital/Mobile Wallet

30%

2019* Internet
penetration

89%

2019 % POS spend using
Digital/Mobile Wallet

13%

2019* Mobile
penetration

86%

FORECAST

2023 %**
sales from eCom

10%

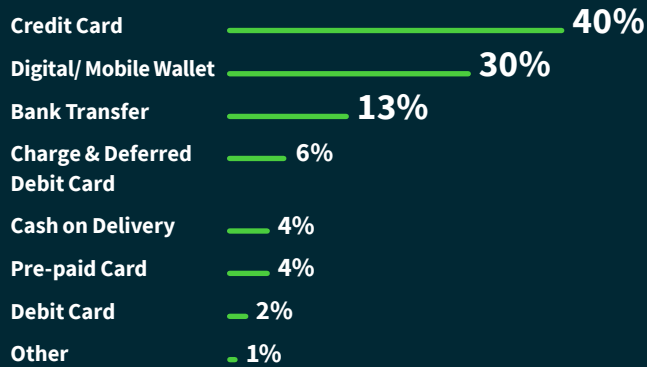
2023 %**
sales from mCom

65%

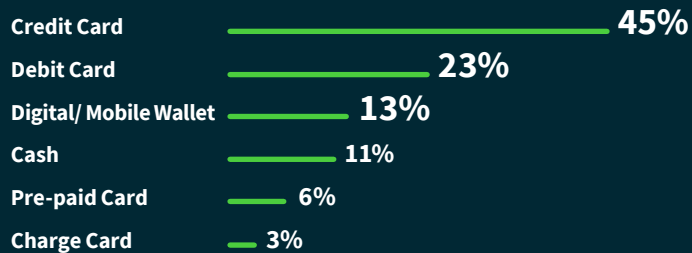
TOP TIP

Payments innovation in Hong Kong remains strong as smartphones, mobile/digital wallets, and new, innovative payment providers fuel eCommerce expansion. Alipay and WeChatPay have had significant impact on digital payments by converting cash environments such as public transport and Hawker centers to mobile wallets. PayPal and Octopus are also popular mobile wallets, but keep an eye on credit and prepaid cards too. Consumers here hold an average of eight cards each between credit and prepaid cards.

2019 eCom mix by payment method



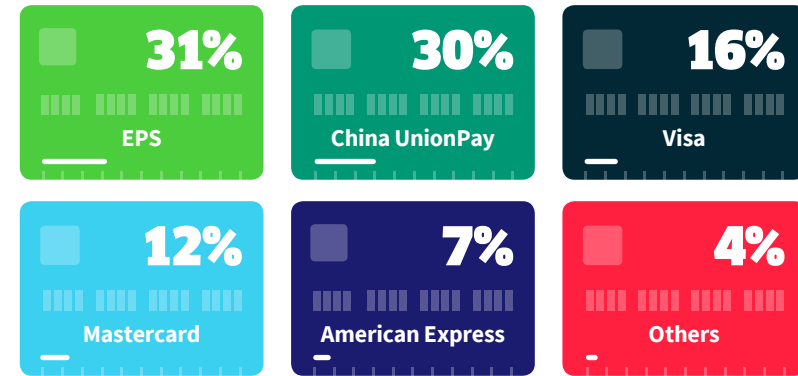
2019 point of sale mix by payment method



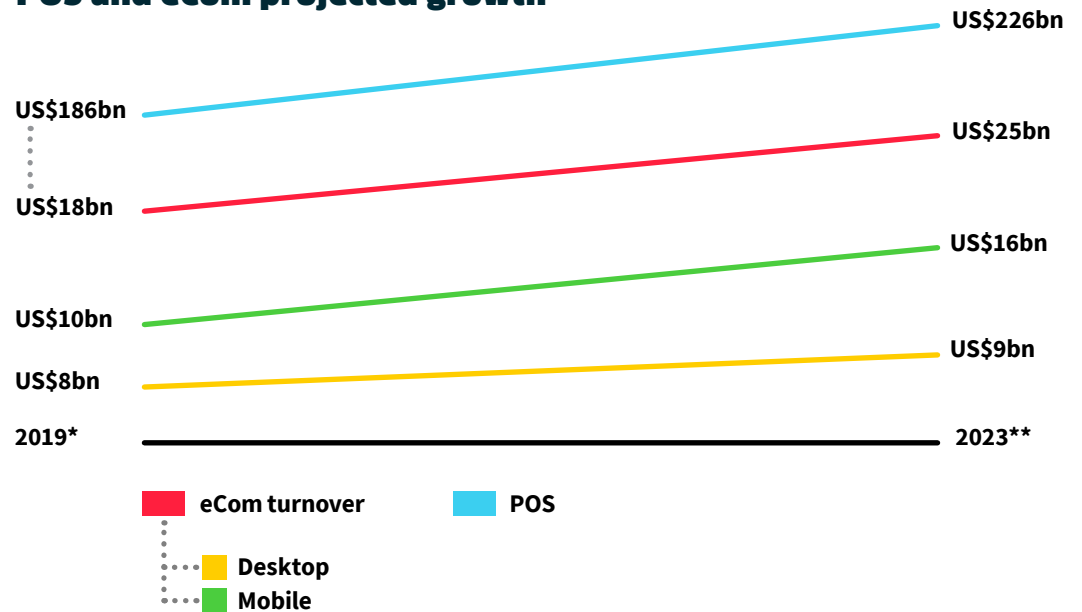
* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.

2018 card brand breakdowns (eCom and POS)



POS and eCom projected growth



Popular alternative payment methods



INDIA

Bollywood is India's Hindi film industry, formerly known as Bombay cinema. In terms of feature film output, it's the world's largest movie industry. Indians largely use their digital/mobile wallets when making eCom purchases (32%, the equivalent of the next three largest payment methods: credit, debit, and bank transfers). But when going to the movies or paying at the point of sale, India's population pays predominately with cash (71%, more than all other payment methods combined).

FAST STATS

2019 sales %
from eCom

6%

2019* - 2023**
eCom CAGR

19%

2019 sales %
from mCom

50%

2019* - 2023**
POS CAGR

11%

2019 % eCom spend using
Digital/Mobile Wallet

32%

2019* Internet
penetration

41%

2019 % POS spend using
Digital/Mobile Wallet

5%

2019* Mobile
penetration

62%

FORECAST

2023 %**
sales from eCom

7%

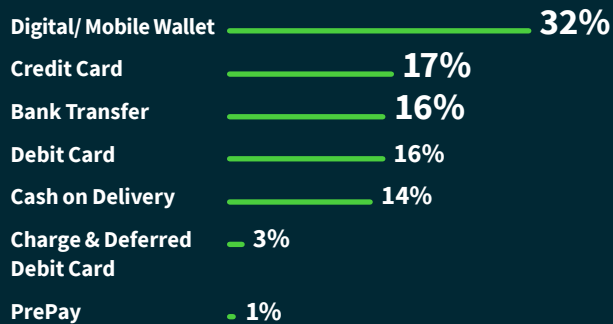
2023 %**
sales from mCom

57%

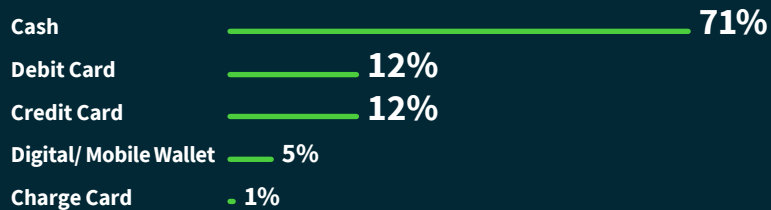
TOP TIP

While cash is still king, the effects of 2016's controversial demonetization exercise linger. One outcome has been a move toward digital payments and a sharp increase in mobile wallets like Paytm and others offered by almost every Indian bank. It's important to know regulatory requirements demand customer data be stored in India, and offering 3DS as part of the checkout flow can be valuable as banks prefer an extra layer of security be included in their cardholders' checkout process.

2019 eCom mix by payment method



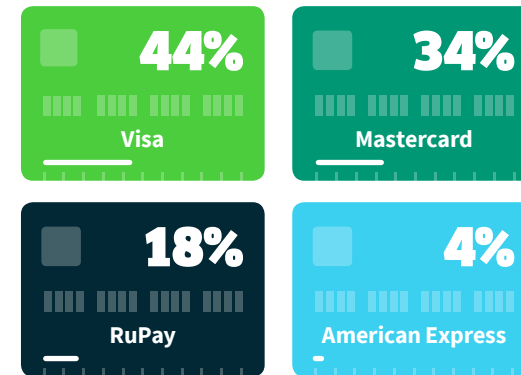
2019 point of sale mix by payment method



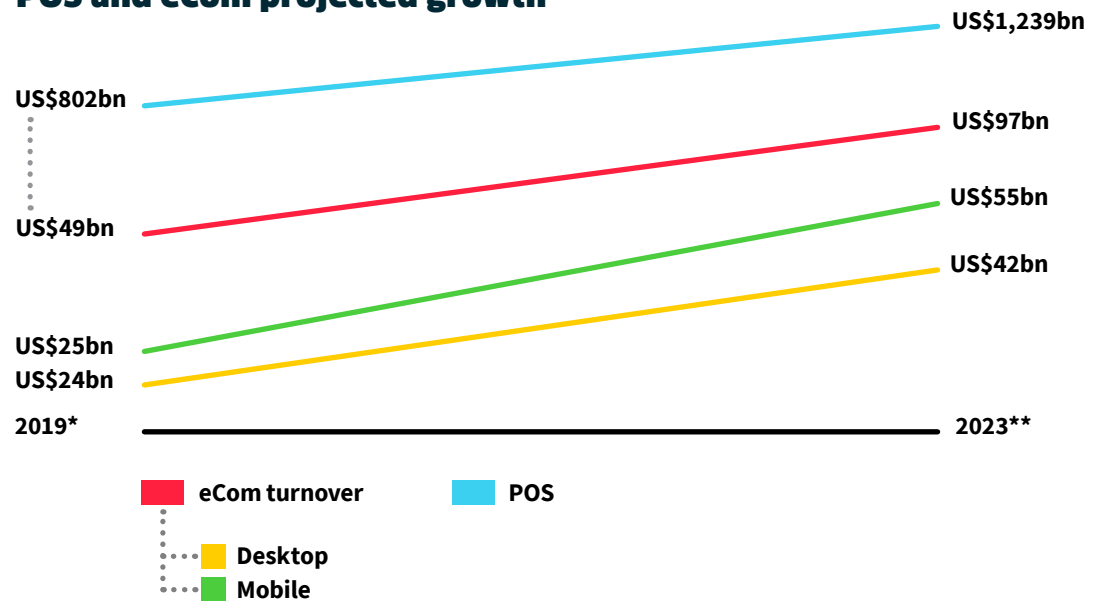
* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.

2018 card brand breakdowns (eCom and POS)



POS and eCom projected growth



Popular alternative payment methods



INDONESIA

Made up of roughly 18,000 islands (give or take several hundred – no two agencies seem to agree), Indonesia boasts some of the planet’s longest coastlines. Across this archipelago spanning nearly the width of Europe, the majority of its population uses cash at point of sale (77%) and bank transfers (29%) over digital/mobile wallets (25%) for online purchases.

FAST STATS

2019 sales %
from eCom

5%

2019* - 2023**
eCom CAGR

19%

2019 sales %
from mCom

58%

2019* - 2023**
POS CAGR

10%

2019 % eCom spend using
Digital/Mobile Wallet

25%

2019* Internet
penetration

64%

2019 % POS spend using
Digital/Mobile Wallet

6%

2019* Mobile
penetration

73%

FORECAST

2023 %**
sales from eCom

7%

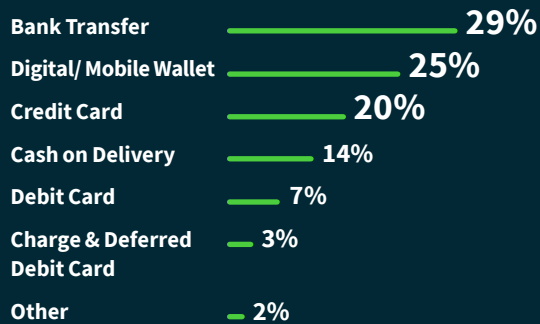
2023 %**
sales from mCom

61%

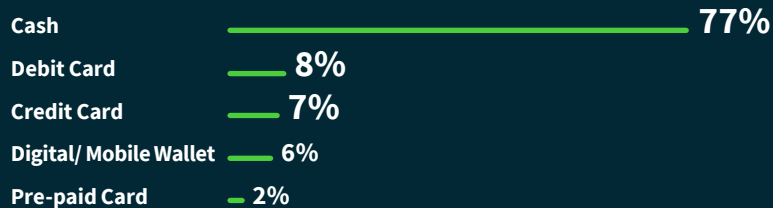
TOP TIP

Largely populated with an unbanked demographic, Indonesia has experienced a recent shift towards mobile payments and mobile/digital wallet spend, predicted to grow exponentially by the end of 2020. Go-Pay and OVO are popular payment methods you should look to offer. Additionally, the ePayments market is currently dominated by Gojek and OVO, but competition is heating up with new entrants and the Indonesian government's support to encourage more of the population to join the financial system.

2019 eCom mix by payment method



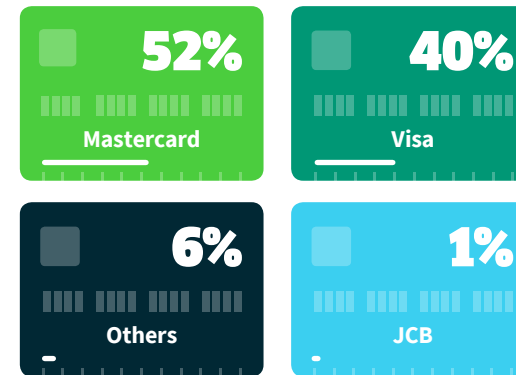
2019 point of sale mix by payment method



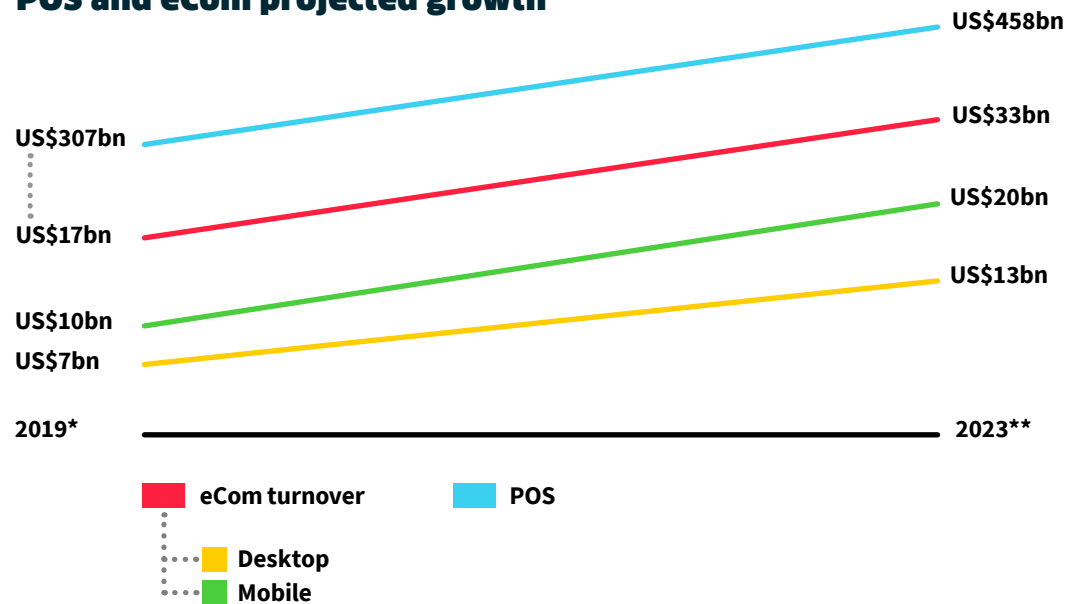
* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.

2018 card brand breakdowns (eCom and POS)



POS and eCom projected growth



Popular alternative payment methods



IRELAND

Rising from the ancient Celtic festival Samhain and further electrified by the legend of “Stingy Jack” and the literary work of author Bram Stoker, Halloween owes much of its popularity to Ireland. Although traditionally a lesser holiday – especially compared to the revelry of the US – Halloween momentum has been growing. Today, holiday confectionary, pumpkins, and costumes lead Irish sales, often with debit (31%) and credit cards (26%) online. Debit cards (49%) and cash (38%) are preferred at the point of sale.

FAST STATS

2019 sales %
from eCom

8%

2019* - 2023**
eCom CAGR

8%

2019 sales %
from mCom

37%

2019* - 2023**
POS CAGR

3%

2019 % eCom spend using
Digital/Mobile Wallet

23%

2019* Internet
penetration

93%

2019 % POS spend using
Digital/Mobile Wallet

2%

2019* Mobile
penetration

83%

FORECAST

2023 %**
sales from eCom

10%

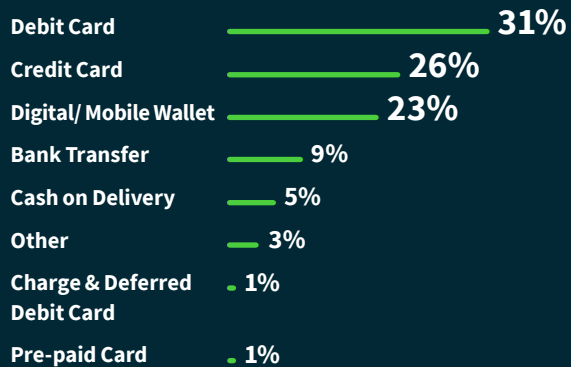
2023 %**
sales from mCom

45%

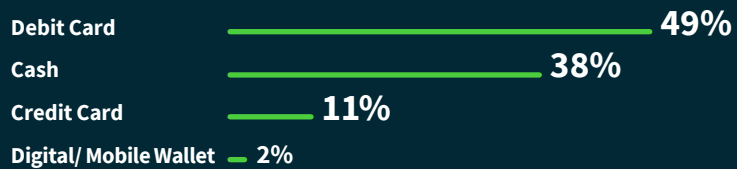
TOP TIP

The merchant opportunity for mobile engagement is big in Ireland, a country where 37% of online spend comes from mobile commerce. Debit and credit cards currently lead eCommerce payment methods, but mobile and digital wallets follow closely. Consider accepting popular options like PayPal and Visa Checkout to capture consumer interest. Enabling card acceptance at the physical point of sale is priority one in Ireland as consumers largely pay with debit and credits cards.

2019 eCom mix by payment method

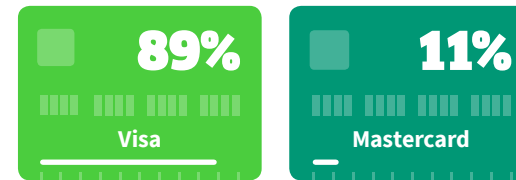


2019 point of sale mix by payment method

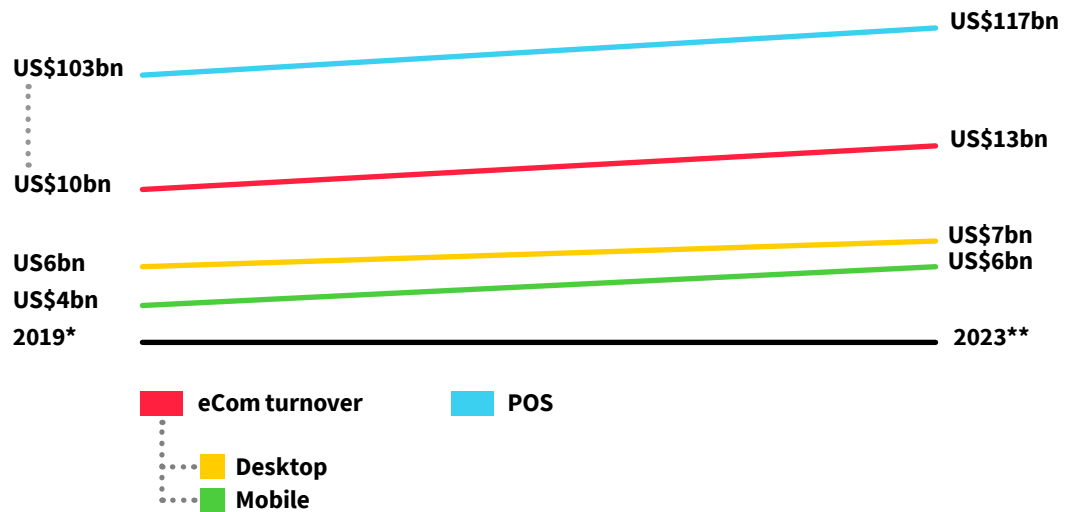


* Estimated **Forecasted
Numbers adjusted for rounding may impact totals.

2018 card brand breakdowns (eCom and POS)



POS and eCom projected growth



Popular alternative payment methods



ITALY

Unified as a country in 1861, Italy is home to the 9,000-year-old city of Matera, claimed to be the third oldest continually inhabited settlement in the world. Once containing churches that even served as dwellings to many of its inhabitants, Matera's numerous caves now host restaurants, bars, and hotels. Likely to use cash at point of sale (58%), the majority of Italians prefer digital/mobile wallets for online purchases (33%).

FAST STATS

2019 sales %
from eCom

5%

2019* - 2023**
eCom CAGR

10%

2019 sales %
from mCom

42%

2019* - 2023**
POS CAGR

2%

2019 % eCom spend using
Digital/Mobile Wallet

33%

2019* Internet
penetration

92%

2019 % POS spend using
Digital/Mobile Wallet

4%

2019* Mobile
penetration

83%

FORECAST

2023 %**
sales from eCom

7%

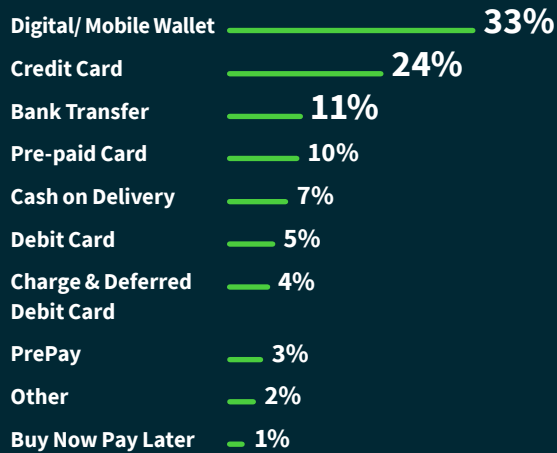
2023 %**
sales from mCom

50%

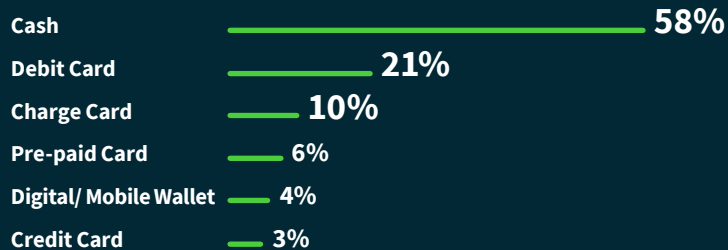
TOP TIP

Today, Italian consumers are more likely to use a digital wallet online more than any other method. If you haven't already, now's the time to implement digital wallet acceptance. Options like PayPal and Amazon Pay can work to satisfy a wider range of customers. It's also important to implement mobile wallet acceptance at the point of sale along with the card brands like Bancomat, Visa, and Mastercard to capture your customers' preferred payment methods.

2019 eCom mix by payment method

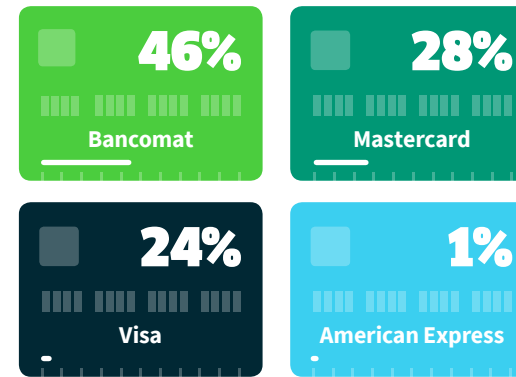


2019 point of sale mix by payment method

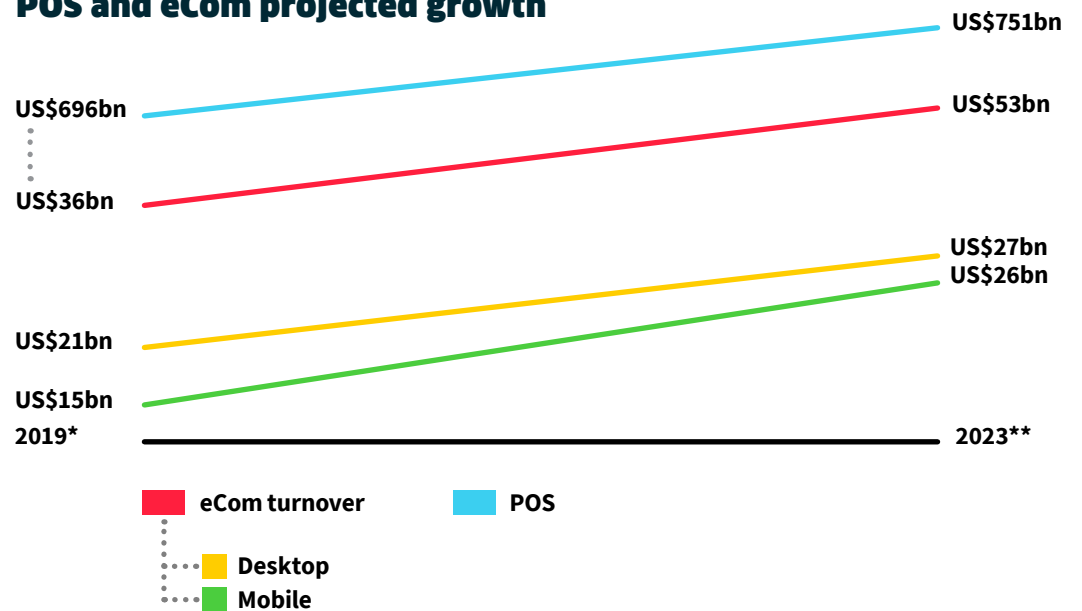


* Estimated **Forecasted
Numbers adjusted for rounding may impact totals.

2018 card brand breakdowns (eCom and POS)



POS and eCom projected growth



Popular alternative payment methods



JAPAN

Japanese life expectancy is the world's second longest: women live on average to 87 years old, men to an average age of 81; both a new record high for the country.¹ As consumers are living longer, it's putting strain on Japan's economy, currently the third largest globally. Overall, consumers are favoring cash payment at point of sale (64%), double that of credit card (31%), and using credit cards overwhelmingly in online transactions (58%).

¹ Nippon.com, 2019

FAST STATS

2019 sales %
from eCom

8%

2019* - 2023**
eCom CAGR

7%

2019 sales %
from mCom

26%

2019* - 2023**
POS CAGR

2%

2019 % eCom spend using
Digital/Mobile Wallet

7%

2019* Internet
penetration

94%

2019 % POS spend using
Digital/Mobile Wallet

1%

2019* Mobile
penetration

84%

FORECAST

2023 %**
sales from eCom

10%

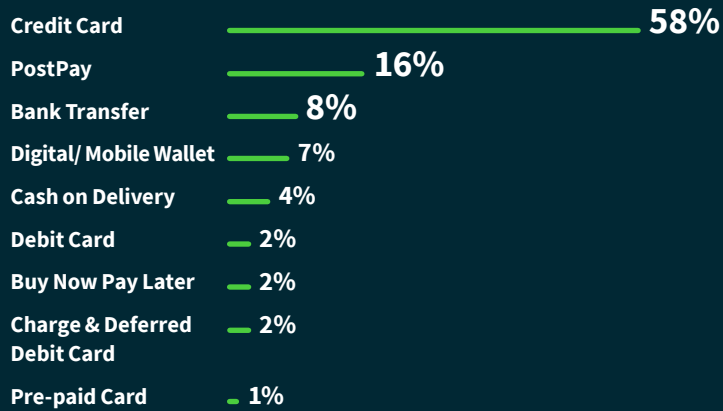
2023 %**
sales from mCom

29%

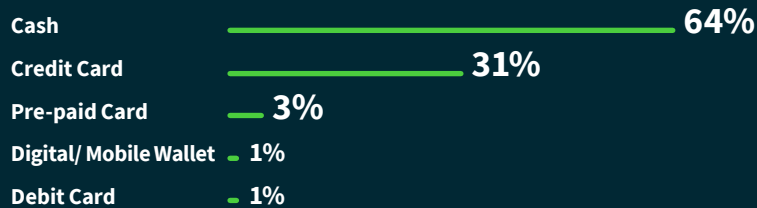
TOP TIP

Another country pushing the benefits of becoming cash-free, Japan employs QR code payments, digital wallets, crypto-currency, and more to help boost a cashless payment economy. Cater to their preferences for omncommerce – perhaps leveraging AI and big data – without neglecting the necessity of an attentive and orderly customer experience.

2019 eCom mix by payment method

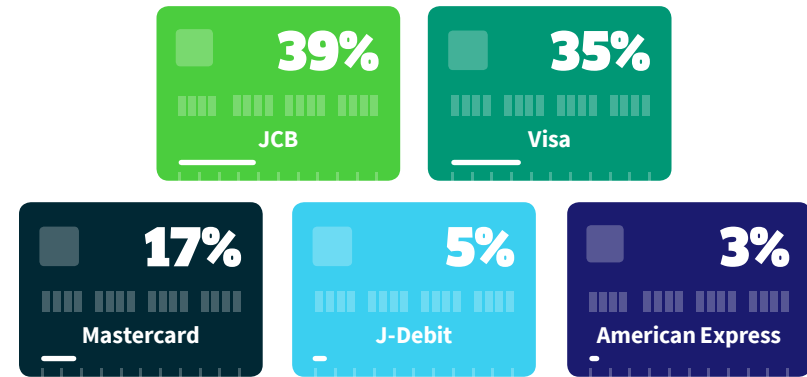


2019 point of sale mix by payment method

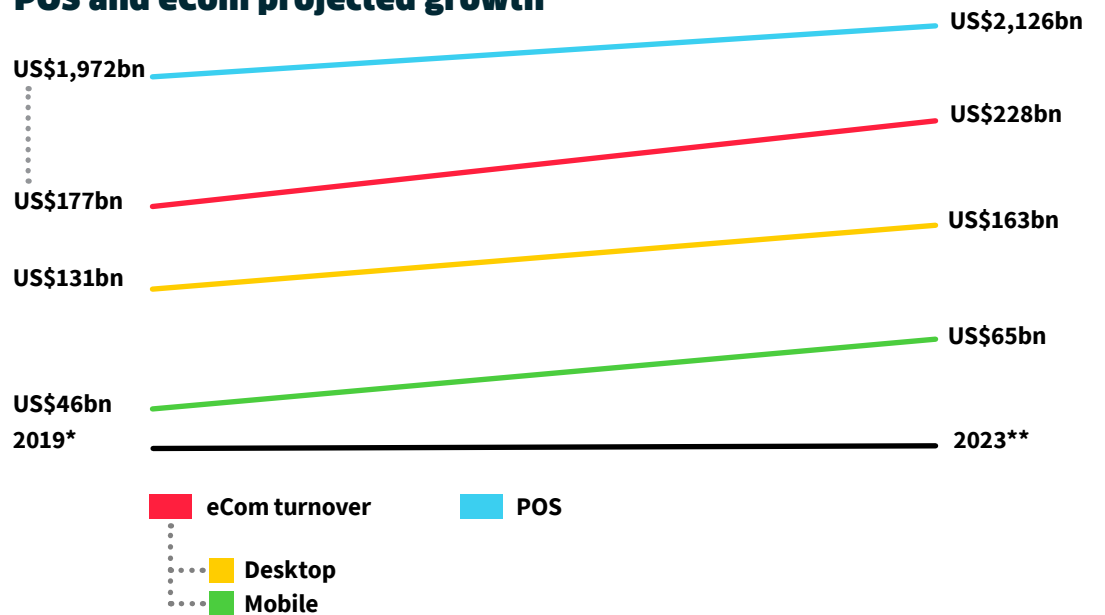


* Estimated **Forecasted
Numbers adjusted for rounding may impact totals.

2018 card brand breakdowns (eCom and POS)



POS and eCom projected growth



Popular alternative payment methods



MALAYSIA

The two main landmasses of Malaysia sit strategically along a trade route in the South China Sea. Historically a center of commerce for Southeast Asia and global enterprise, today, this nation has an open, diversified, upper-middle income economy. Its population primarily uses bank transfer for eCom payments, but relies heavily on cash transactions at point of sale (64%).

FAST STATS

2019 sales %
from eCom

4%

2019* - 2023**
eCom CAGR

16%

2019 sales %
from mCom

56%

2019* - 2023**
POS CAGR

8%

2019 % eCom spend using
Digital/Mobile Wallet

9%

2019* Internet
penetration

81%

2019 % POS spend using
Digital/Mobile Wallet

4%

2019* Mobile
penetration

78%

FORECAST

2023 %**
sales from eCom

5%

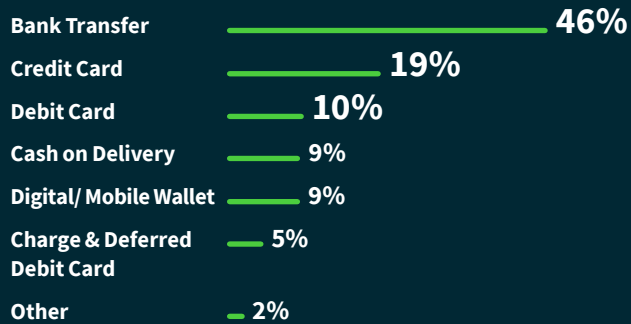
2023 %**
sales from mCom

62%

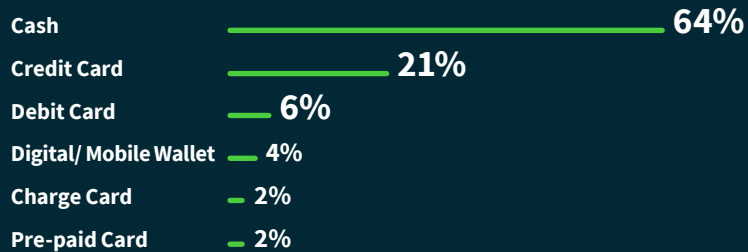
TOP TIP

Consumers are increasingly seeking faster, safer, and more convenient methods to pay for goods and services. So it's not surprising that high smartphone penetration and mobile data usage will provide a solid foundation on which mobile wallets can thrive. Explore this payment option, and keep in mind that security is the top concern for digital/mobile wallet adoption among non-users.

2019 eCom mix by payment method

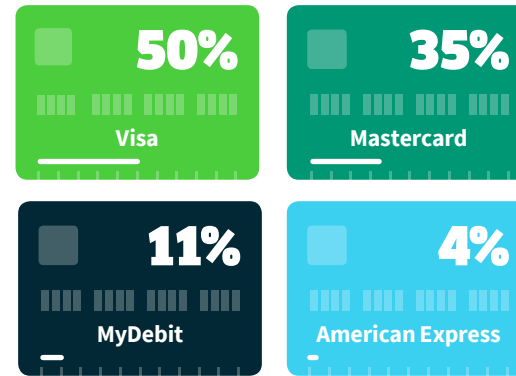


2019 point of sale mix by payment method

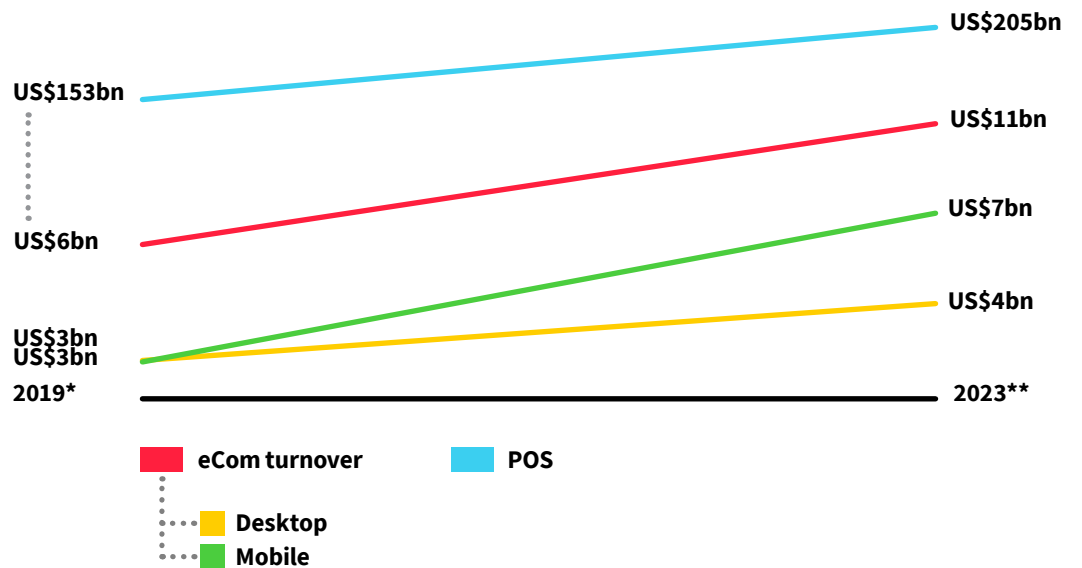


* Estimated **Forecasted
Numbers adjusted for rounding may impact totals.

2018 card brand breakdowns (eCom and POS)



POS and eCom projected growth



Popular alternative payment methods



CIMB Clicks

MEXICO

With a population now over 21 million¹, Mexico City is the most populated city in all of North America and one of the largest in the Western Hemisphere. And as a global financial center, it's among the wealthiest in the world. The capital city's economic growth has helped place the Mexican economy 11th worldwide.² Relying heavily on cash for point of sale payment (71%), its population prefers credit (33%) and debit (20%) cards for eCommerce purchases.

¹ PopulationStat, 2019

² The World Bank, 2019

FAST STATS

2019 sales %
from eCom

4%

2019* - 2023**
eCom CAGR

12%

2019 sales %
from mCom

49%

2019* - 2023**
POS CAGR

7%

2019 % eCom spend using
Digital/Mobile Wallet

20%

2019* Internet
penetration

65%

2019 % POS spend using
Digital/Mobile Wallet

2%

2019* Mobile
penetration

66%

FORECAST

2023 %**
sales from eCom

5%

2023 %**
sales from mCom

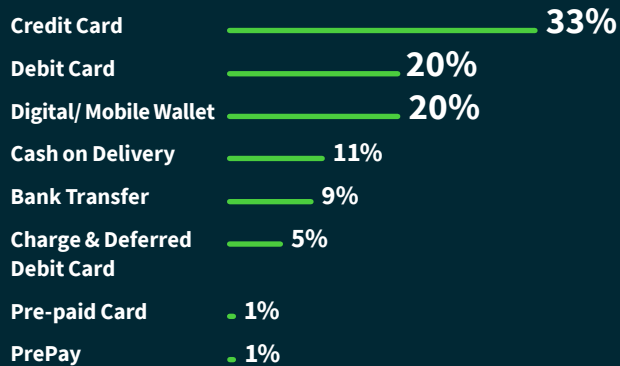
61%

TOP TIP

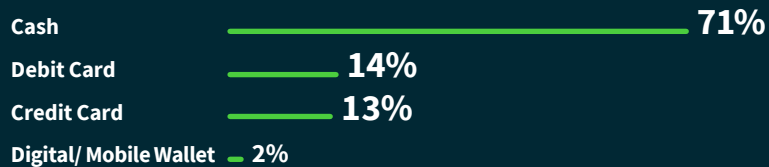
Retail websites in Mexico received the highest share of mobile-only visits in the region: 63% – followed by Brazil (61%) and Argentina (46%).³ Consider how mobile purchases can be made easy by allowing for local digital and mobile wallets such as PayPal and Mercado Pago.

³ Comscore

2019 eCom mix by payment method



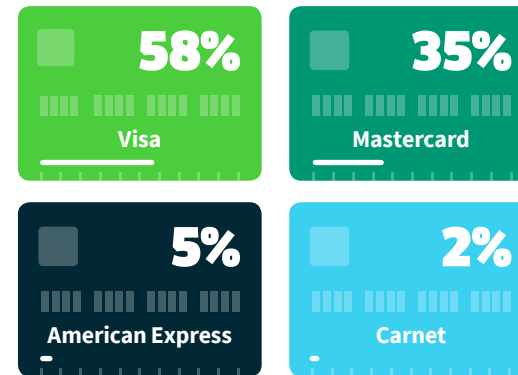
2019 point of sale mix by payment method



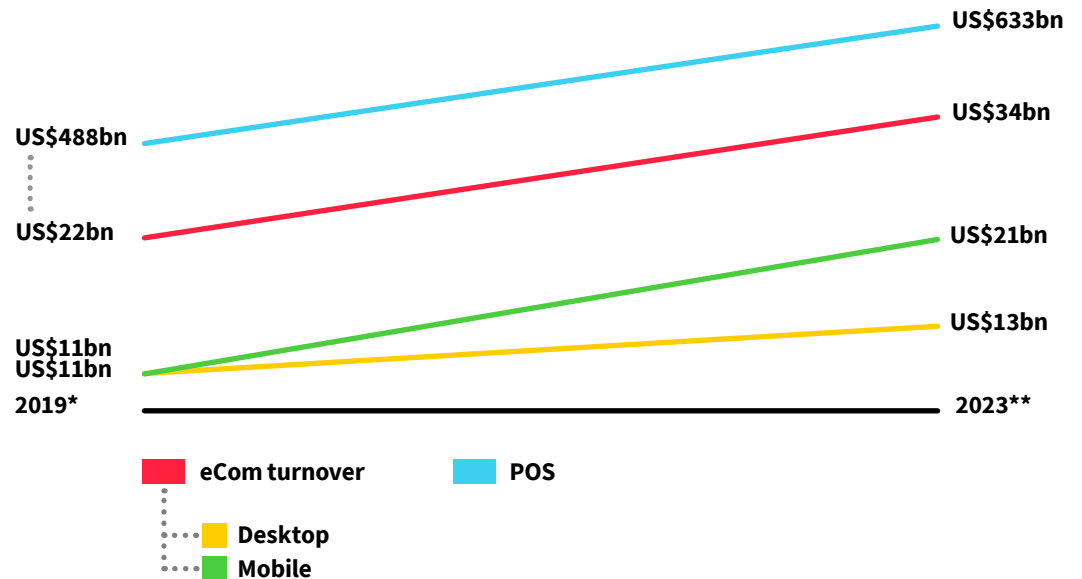
* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.

2018 card brand breakdowns (eCom and POS)



POS and eCom projected growth



Popular alternative payment methods



NETHERLANDS

A leader of European commerce, the Netherlands has the world's oldest formal stock exchange and on Jan. 1, 1999, was among the first to adopt the euro. Bank transfers are currently the preferred method of payment among the Dutch for eCommerce transactions (59%), and debit cards have a strong lead at point of sale payment (64%) over credit cards (5%).

FAST STATS

2019 sales %
from eCom

12%

2019* - 2023**
eCom CAGR

8%

2019 sales %
from mCom

27%

2019* - 2023**
POS CAGR

3%

2019 % eCom spend using
Digital/Mobile Wallet

10%

2019* Internet
penetration

96%

2019 % POS spend using
Digital/Mobile Wallet

9%

2019* Mobile
penetration

84%

FORECAST

2023 %**
sales from eCom

14%

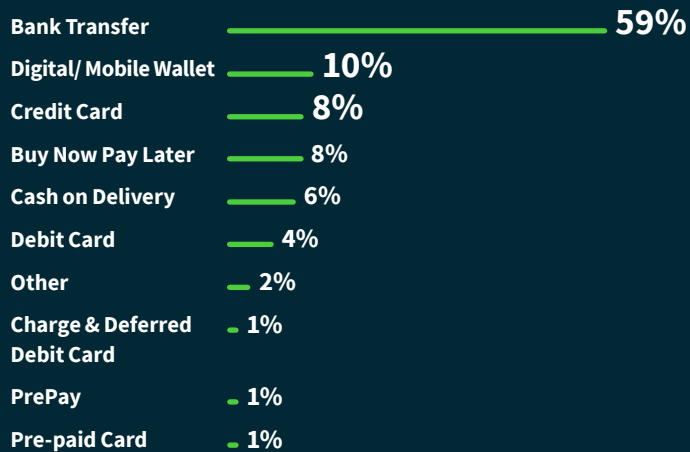
2023 %**
sales from mCom

35%

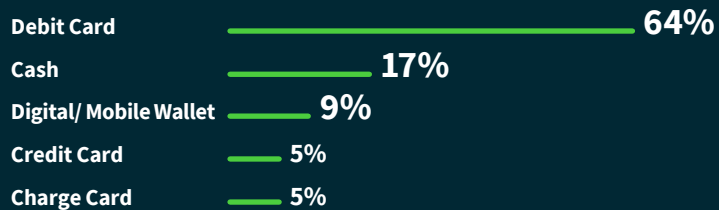
TOP TIP

A hub of commerce, the Netherlands has experienced rapid eCommerce expansion in recent years while consumers' payment preferences have reached a plateau. Bank transfers, often through iDEAL, are still the leading payment method online. Mobile and digital wallet use continues to gain traction with some consumers. So you should consider adding additional payment acceptance methods like PayPal and Payconiq to account for growing adoption.

2019 eCom mix by payment method

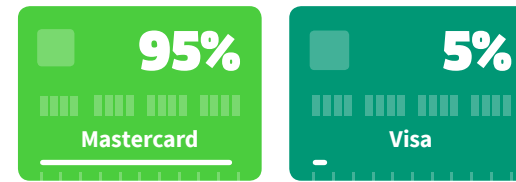


2019 point of sale mix by payment method

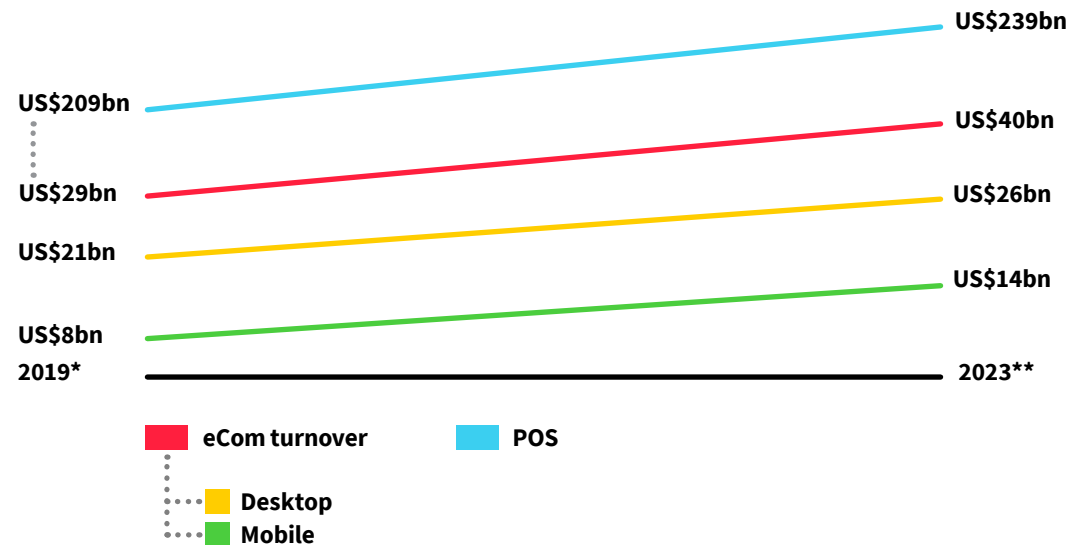


* Estimated **Forecasted
Numbers adjusted for rounding may impact totals.

2018 card brand breakdowns (eCom and POS)



POS and eCom projected growth



Popular alternative payment methods



NEW ZEALAND

In 1893, New Zealand gave women the right to vote – the first country to do so. It's also the only country in the world to have all of its highest government positions simultaneously held by women: the Queen, the Governor-General, the PM, the Speaker of the House of Representatives, and the Chief Justice. With an interest toward technology advancement, the government established a digital advisory board to further the development of a digital nation. Citizens use credit and debit almost equally at point of sale (38% and 37%, respectively), but credit cards are the frontrunner online (38%), topping digital/mobile wallets (19%), bank transfers (17%), and debit (16%).

FAST STATS

2019 sales %
from eCom

7%

2019* - 2023**
eCom CAGR

8%

2019 sales %
from mCom

42%

2019* - 2023**
POS CAGR

1%

2019 % eCom spend using
Digital/Mobile Wallet

19%

2019* Internet
penetration

91%

2019 % POS spend using
Digital/Mobile Wallet

3%

2019* Mobile
penetration

83%

FORECAST

2023 %**
sales from eCom

9%

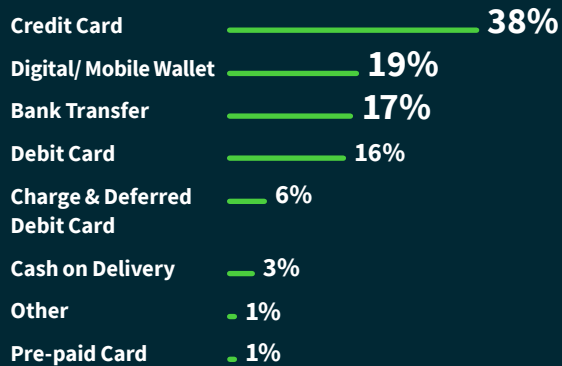
2023 %**
sales from mCom

59%

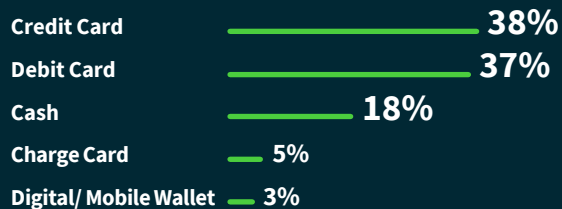
TOP TIP

Understanding customers' payment preferences is important to New Zealanders. Their payment habits are fairly defined to card-based payments. Make sure you accept the top card brands, but don't forget that bank transfers are also preferred by some consumers for online purchases. Consumers gravitate towards shopping on their phones with mobile commerce accounting for 42% of online sales. Digital wallets are the second payment preference online, so consider adding digital wallets like PayPal to make online checkout easy. Buy now pay later are also on the rise so now's the time to implement these options to satisfy shopper expectations.

2019 eCom mix by payment method

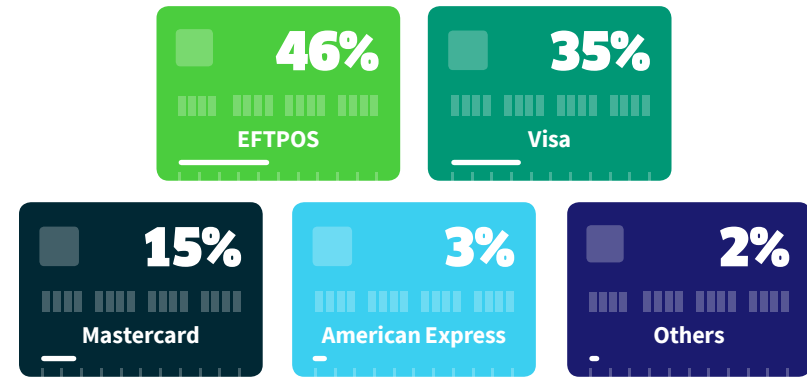


2019 point of sale mix by payment method

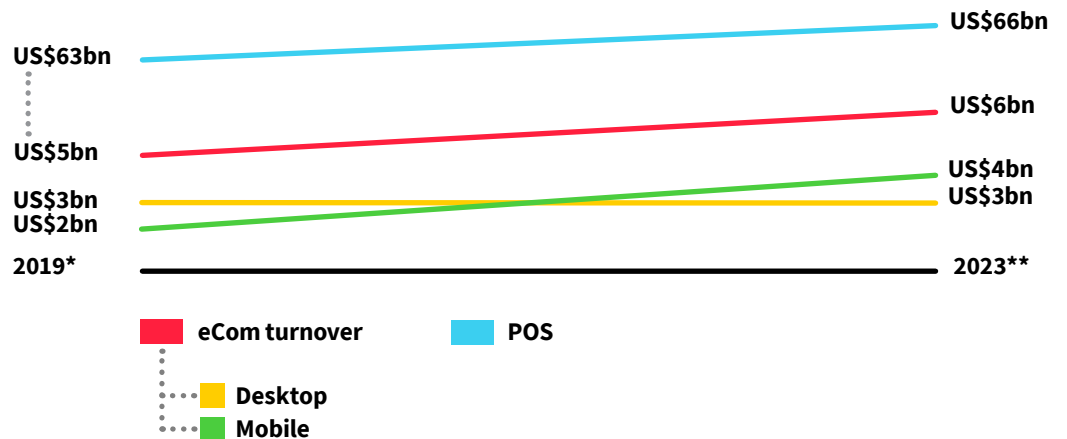


* Estimated **Forecasted
Numbers adjusted for rounding may impact totals.

2018 card brand breakdowns (eCom and POS)



POS and eCom projected growth



Popular alternative payment methods



Online EFTPOS

NIGERIA

Nearly 70% of Nigeria's workforce is rooted in agriculture. But due to its large production of petroleum products, which account for more than 90%¹ of its exports, the Nigerian economy is the largest in Africa. Bank transfers and cash on delivery top the country's methods of eCom payment (25% and 24%, respectively), and cash is overwhelmingly used at point of sale (91%).

¹ US News, 2019

FAST STATS

2019 sales %
from eCom

2%

2019 sales %
from mCom

60%

2019 % eCom spend using
Digital/Mobile Wallet

10%

2019 % POS spend using
Digital/Mobile Wallet

2%

2019* - 2023**
eCom CAGR

26%

2019* - 2023**
POS CAGR

-2%

2019* Internet
penetration

61%

2019* Mobile
penetration

49%

FORECAST

2023 %**
sales from eCom

5%

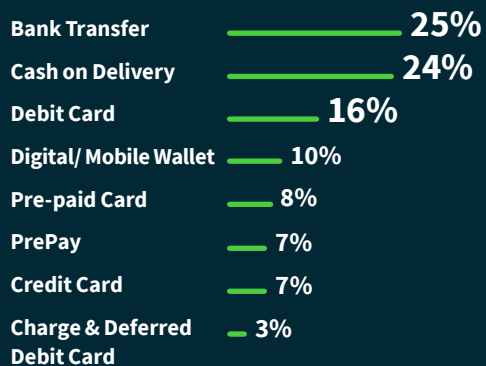
2023 %**
sales from mCom

51%

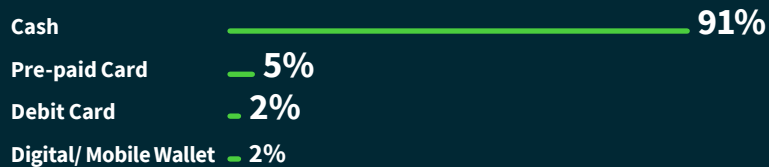
TOP TIP

Cash still rules commerce in Nigeria. It's the top method of payment at the point of sale. Bank transfers slightly edge out cash on delivery as most preferred payment forms for eCommerce transactions. Still, as debit and prepaid card use steadily increase, it's important to be mindful of card payment options. Nigerian consumers shop online through their mobile phone far more than traditional desktops so make sure your checkout experience is mobile friendly and has options to checkout through the most preferred methods.

2019 eCom mix by payment method



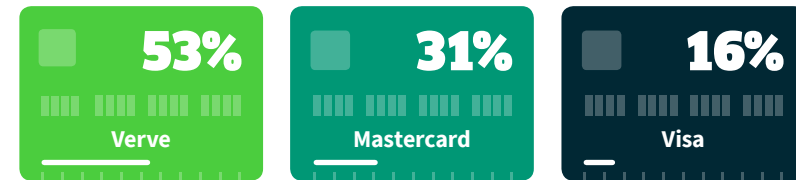
2019 point of sale mix by payment method



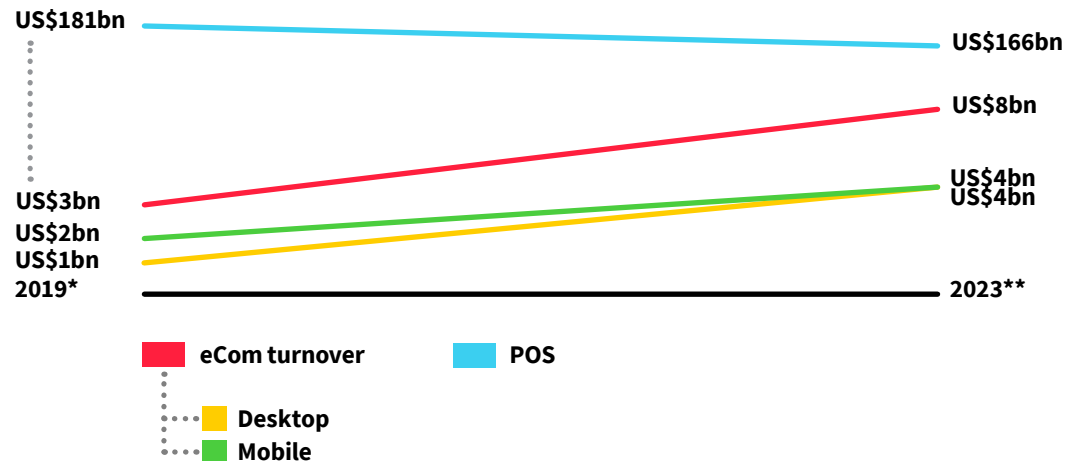
* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.

2018 card brand breakdowns (eCom and POS)



POS and eCom projected growth



Popular alternative payment methods



NORWAY

Evidence of skiing goes back nearly 4,000 years – to Norway. Ancient rock carvings in northern Norway depict humans using a form of skis to traverse the snow-covered mountains. In addition to words like “ski” and “slalom” originating from the norsk language, the country is also home to the oldest preserved ski ever discovered, dating 2,300 years old. Off the slopes, Norwegians prefer debit cards for in-store transactions (66%), but use credit cards most often for online purchases (29%).

FAST STATS

2019 sales %
from eCom

15%

2019* - 2023**
eCom CAGR

10%

2019 sales %
from mCom

40%

2019* - 2023**
POS CAGR

5%

2019 % eCom spend using
Digital/Mobile Wallet

18%

2019* Internet
penetration

98%

2019 % POS spend using
Digital/Mobile Wallet

5%

2019* Mobile
penetration

86%

FORECAST

2023 %**
sales from eCom

18%

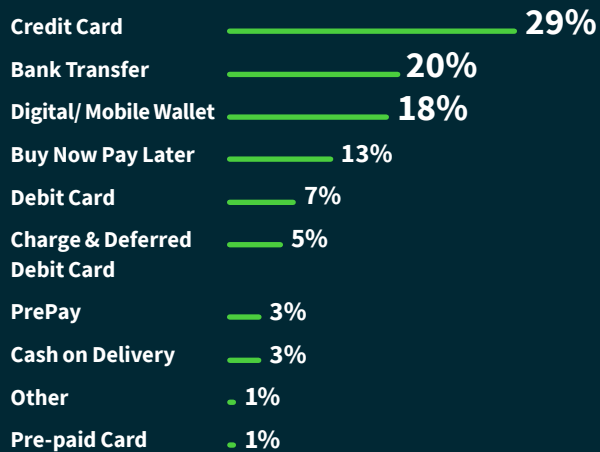
2023 %**
sales from mCom

49%

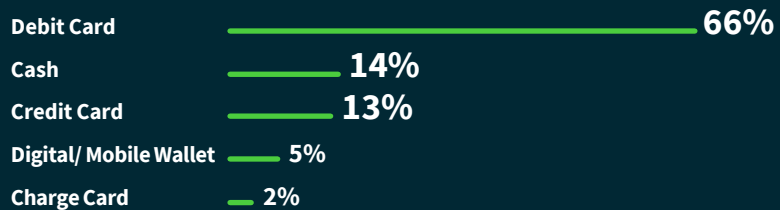
TOP TIP

As Norwegians stay open to a multitude of payment options, convenience is key for them – and for you. Here, credit and debit, cash, and digital wallets all have their place. Accepting local brands like BankAxept is important to affect higher online conversion rates but don't disregard having other options at checkout. Bank transfer, digital wallet options like PayPal or Vipps, and buy now pay later options such as Klarna, are also important to conversion.

2019 eCom mix by payment method

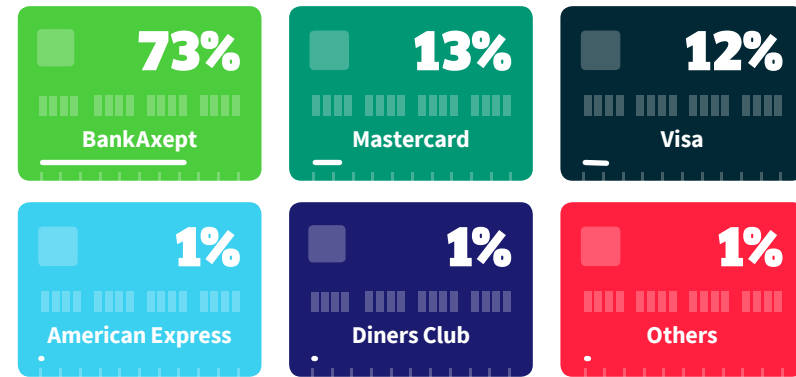


2019 point of sale mix by payment method

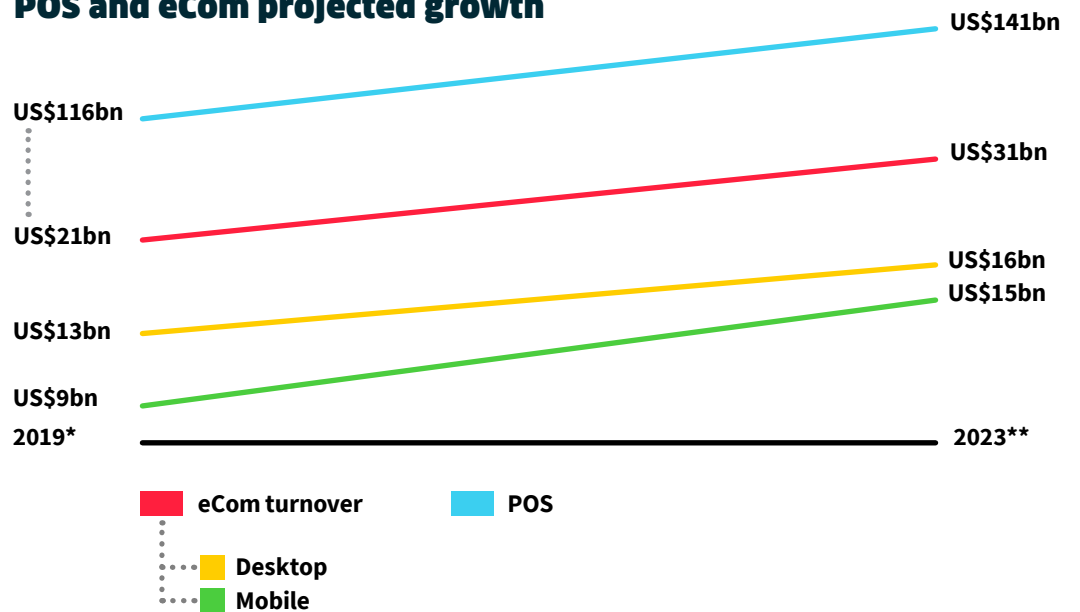


* Estimated **Forecasted
Numbers adjusted for rounding may impact totals.

2018 card brand breakdowns (eCom and POS)



POS and eCom projected growth



Popular alternative payment methods



Klarna.

INVOICE PAYMENTS

PERU

In Peru, Spanish is the predominant language, although Quechua, the indigenous language of the Incan empire, is still spoken with regional dialects in many parts of the country. Spoken by nearly 13%¹ of the Peruvian population, a number of Quechua words have entered the English vocabulary including condor, jerky, llama, and poncho. Upon checkout you can use *sulpayki*, which means thank you. Among its citizens, most use cash at point of sale (60%), and for eCommerce transactions credit cards and cash on delivery are prominent (35% and 20%, respectively).

¹ The Guardian, 2016

FAST STATS

2019 sales %
from eCom

12%

2019* - 2023**
eCom CAGR

10%

2019 sales %
from mCom

35%

2019* - 2023**
POS CAGR

9%

2019 % eCom spend using
Digital/Mobile Wallet

3%

2019* Internet
penetration

68%

2019 % POS spend using
Digital/Mobile Wallet

4%

2019* Mobile
penetration

69%

FORECAST

2023 %**
sales from eCom

12%

2023 %**
sales from mCom

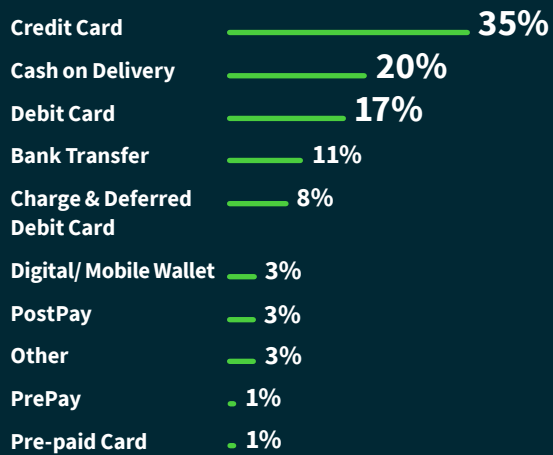
48%

TOP TIP

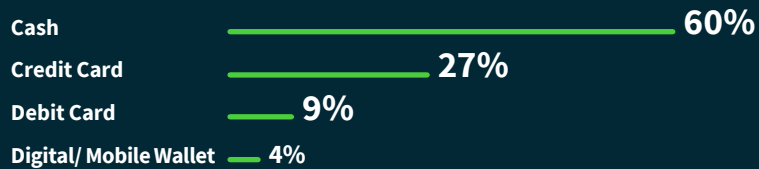
Although retail mCommerce is expected to have a fast growth here, Peru is the only country in the region where digital buyers feel less safe when making digital purchases.² eMarketer Spending the money to give website checkout a strong, secure makeover could be a worthwhile investment.

²eMarketer

2019 eCom mix by payment method



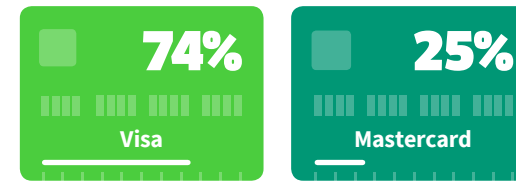
2019 point of sale mix by payment method



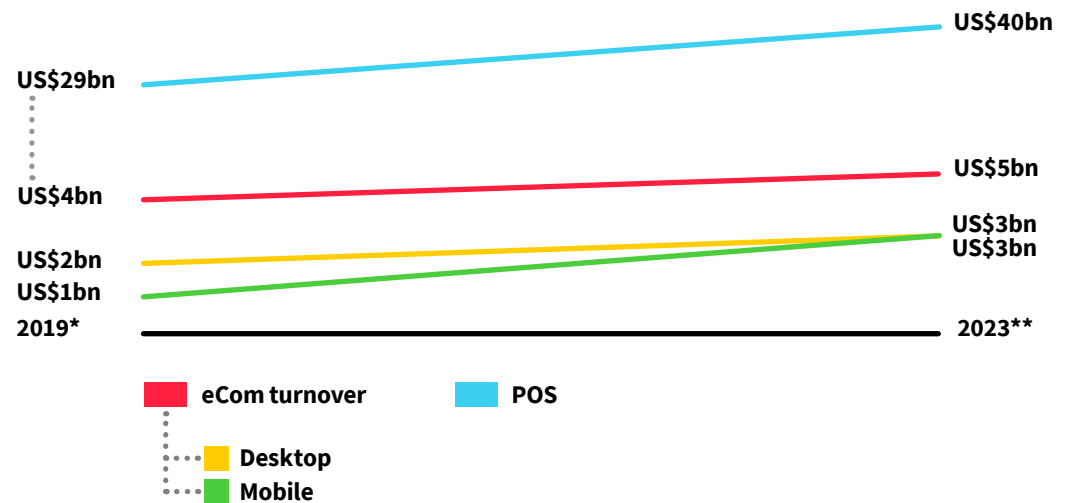
* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.

2018 card brand breakdowns (eCom and POS)



POS and eCom projected growth



Popular alternative payment methods



PHILIPPINES

Want to get in touch with Filipinos? Try online messaging. Once known as the “texting capital of the world,” many Filipinos now prefer online chats and messenger communications as a result of wider availability and increased services. Despite still having one of the slowest internet connections in the world, the country is one of the largest social media users globally. Cash payments remain popular, however; it’s used most frequently for point of sale purchases (66%), and cash on delivery is the preferred method for eCommerce transactions (27%).

FAST STATS

2019 sales %
from eCom

2%

2019* - 2023**
eCom CAGR

16%

2019 sales %
from mCom

56%

2019* - 2023**
POS CAGR

4%

2019 % eCom spend using
Digital/Mobile Wallet

16%

2019* Internet
penetration

73%

2019 % POS spend using
Digital/Mobile Wallet

5%

2019* Mobile
penetration

69%

FORECAST

2023 %**
sales from eCom

3%

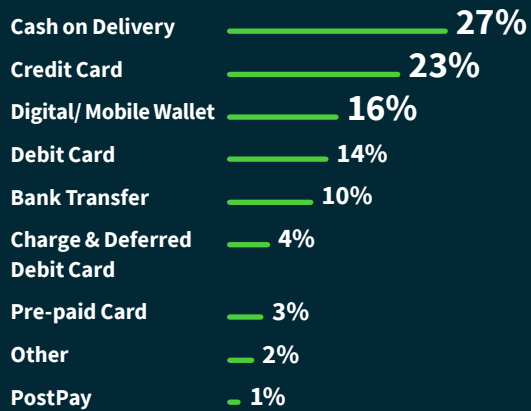
2023 %**
sales from mCom

63%

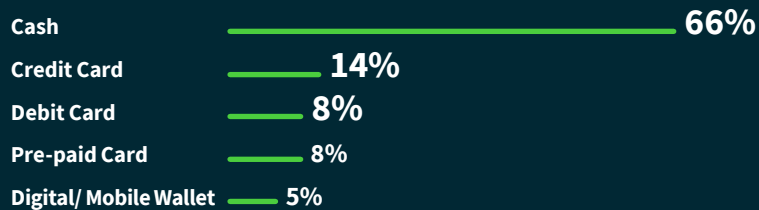
TOP TIP

Cash remains the most popular consumer payment instrument in the Philippines. This is due to the high unbanked population, inadequate banking infrastructure, limited public awareness of electronic payments, and low acceptance of payment cards at merchant outlets. However, with concentrated efforts by the Filipino government and its central bank, the cash share of purchase is expected to decline. Be prepared for an influx of mobile options in this highly mobile-dependent country.

2019 eCom mix by payment method

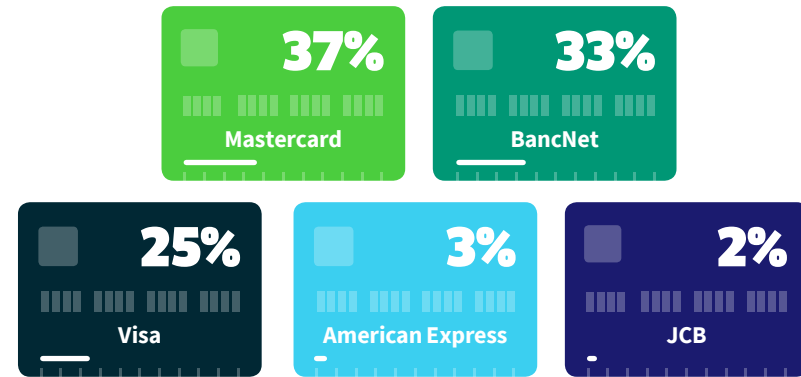


2019 point of sale mix by payment method

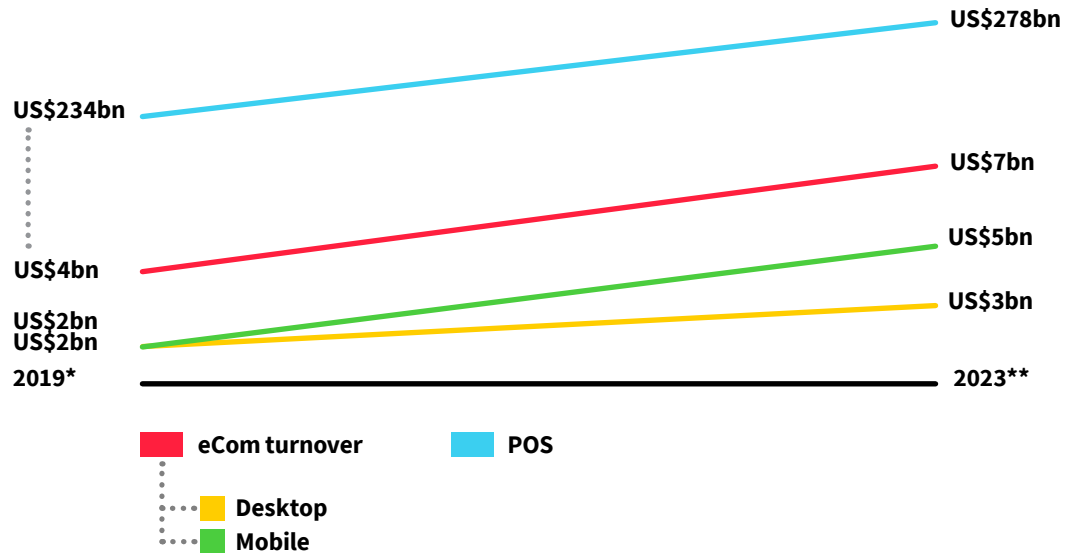


* Estimated **Forecasted
Numbers adjusted for rounding may impact totals.

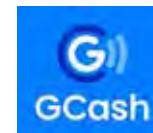
2018 card brand breakdowns (eCom and POS)



POS and eCom projected growth



Popular alternative payment methods



POLAND

A total of 18 Nobel Prizes have been awarded to Poles, two of which went to Maria Skłodowska – better known as Marie Curie. She was the first woman to win a Nobel Prize, the first person to win two Nobel Prizes, the only woman to win in two fields, and the only person to win in multiple sciences (Physics and Chemistry). Her portrait was featured on the Polish 20,000-złoty, Poland's currency and preferred method of payment at the point of sale (58%). For eCommerce transactions, bank transfers are favored (52%).

FAST STATS

2019 sales %
from eCom

5%

2019* - 2023**
eCom CAGR

9%

2019 sales %
from mCom

23%

2019* - 2023**
POS CAGR

5%

2019 % eCom spend using
Digital/Mobile Wallet

17%

2019* Internet
penetration

78%

2019 % POS spend using
Digital/Mobile Wallet

3%

2019* Mobile
penetration

78%

FORECAST

2023 %**
sales from eCom

6%

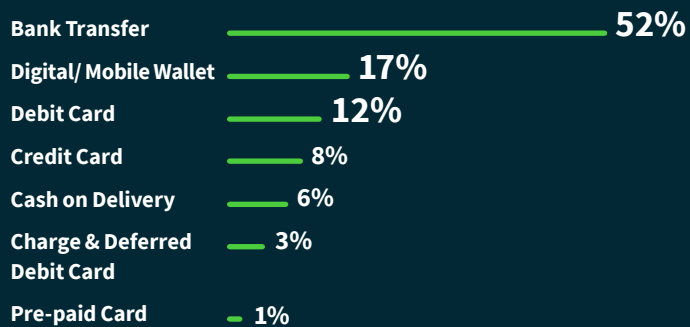
2023 %**
sales from mCom

33%

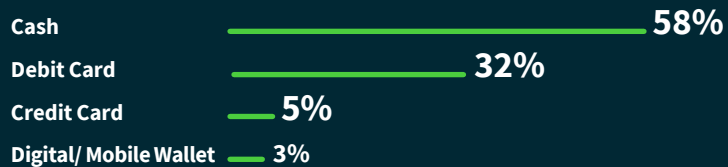
TOP TIP

Polish consumers are still generally conservative when it comes to using credit-based payment methods, but they are adopting digital wallets for online checkout. They're the second most preferred payment method online behind bank transfers. Enabling online checkout to accommodate a few options such as bank transfers through PayU and Przelewy24, digital wallets like PayPal, and the top card brands for debit cards will help ease consumers through checkout.

2019 eCom mix by payment method



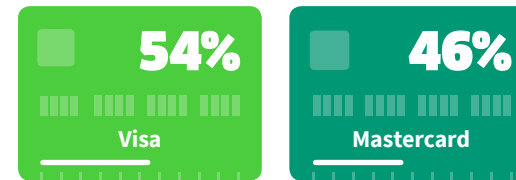
2019 point of sale mix by payment method



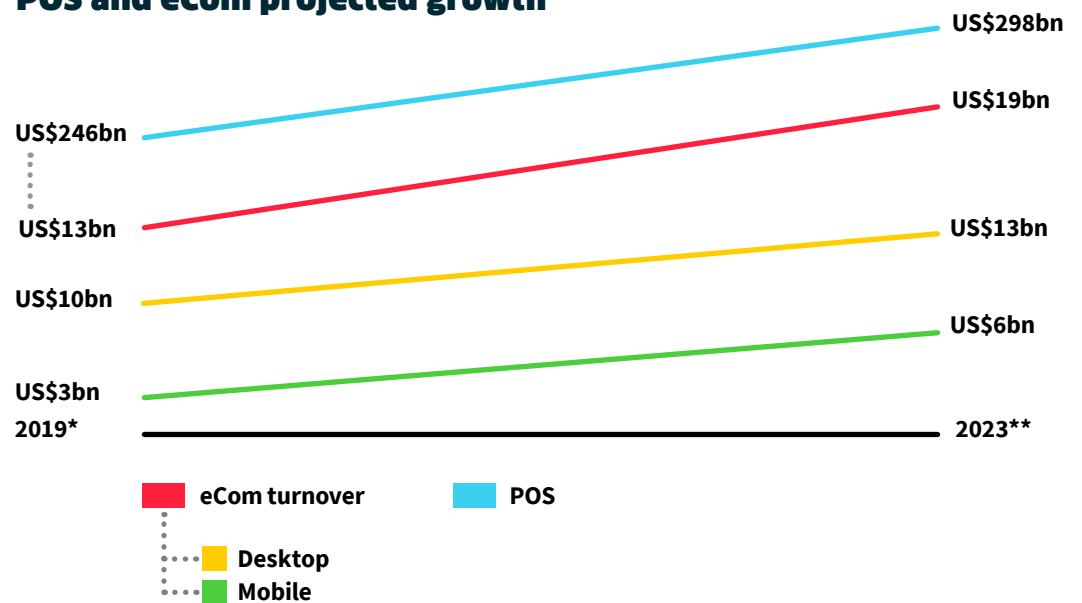
* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.

2018 card brand breakdowns (eCom and POS)



POS and eCom projected growth



Popular alternative payment methods



RUSSIA

With territory on both the European and Asian continents, Russia is the world's largest country by area, claiming nearly one ninth of the terrestrial globe. The country is so big, it's nearly the size of the dwarf planet Pluto – 17.6 million sq km compared to Russia's surface area of 17 million sq km.¹ Across the world's largest country, debit cards and digital/mobile wallets compete for eCom transactions (28% and 25%, respectively), and cash and debit cards remain closely matched (48% and 43%, respectively) at point of sale.

¹ NASA, 2015

FAST STATS

2019 sales %
from eCom

2%

2019 sales %
from mCom

32%

2019 % eCom spend using
Digital/Mobile Wallet

25%

2019 % POS spend using
Digital/Mobile Wallet

6%

2019* - 2023**
eCom CAGR

11%

2019* - 2023**
POS CAGR

8%

2019* Internet
penetration

76%

2019* Mobile
penetration

73%

FORECAST

2023 %**
sales from eCom

2%

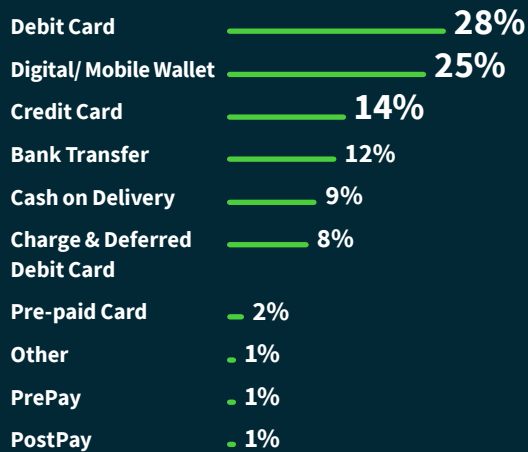
2023 %**
sales from mCom

38%

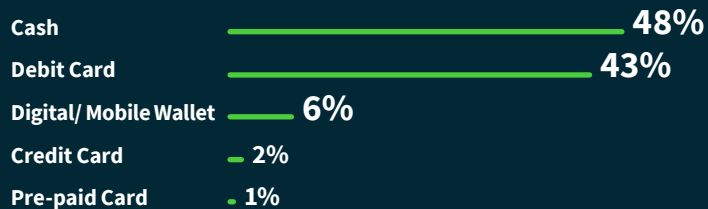
TOP TIP

Debit and credit card payments along with digital wallets have solidified their popularity across eCommerce transactions. As the pace of adoption quickens, be ready to accommodate more spend from familiar digital/mobile wallet brands like WebMoney and Visa QIWI in addition to Apple Pay, now a popular digital/mobile wallet for Russian consumers. Now's also a good time to implement mobile wallet checkout at the point of sale for consumers who prefer to carry their debit cards in a digital format.

2019 eCom mix by payment method

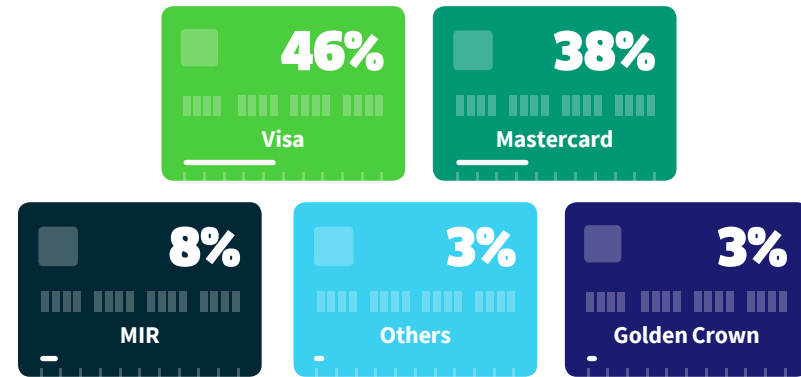


2019 point of sale mix by payment method

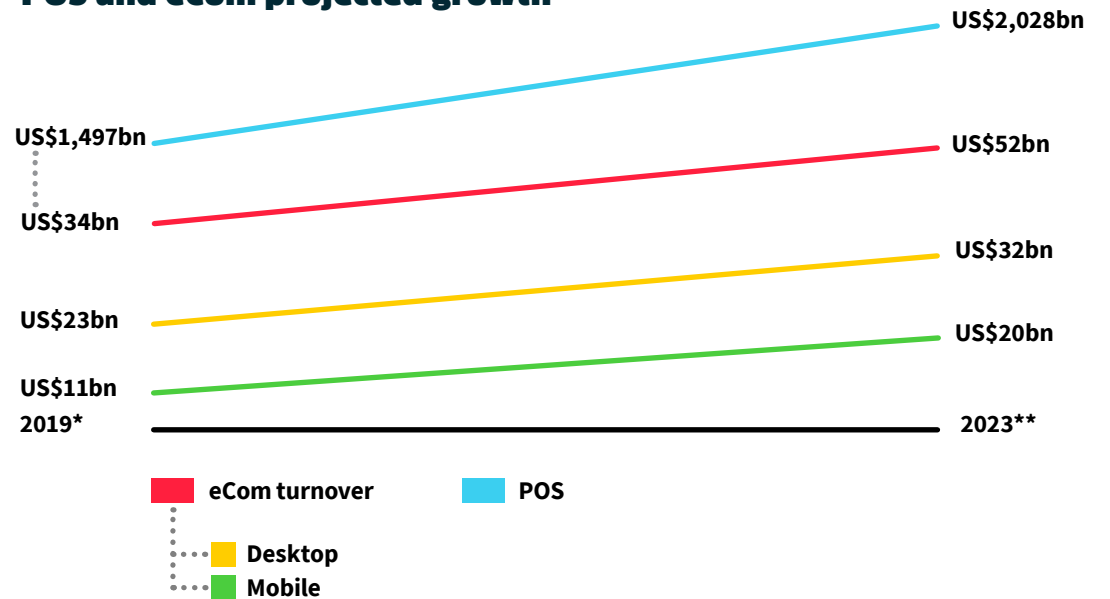


* Estimated **Forecasted
Numbers adjusted for rounding may impact totals.

2018 card brand breakdowns (eCom and POS)



POS and eCom projected growth



Popular alternative payment methods



SINGAPORE

One of only three surviving city-states including Monaco and Vatican City, Singapore is a relatively small country. It has emerged, however, as one of the world's most prosperous, achieving status as a financial center and model for developing nations. Credit cards are the preferred method of eCommerce payment (56%), though cash remains the most often used form at point of sale (37%).

FAST STATS

2019 sales %
from eCom

5%

2019* - 2023**
eCom CAGR

8%

2019 sales %
from mCom

52%

2019* - 2023**
POS CAGR

4%

2019 % eCom spend using
Digital/Mobile Wallet

18%

2019* Internet
penetration

88%

2019 % POS spend using
Digital/Mobile Wallet

7%

2019* Mobile
penetration

84%

FORECAST

2023 %**
sales from eCom

5%

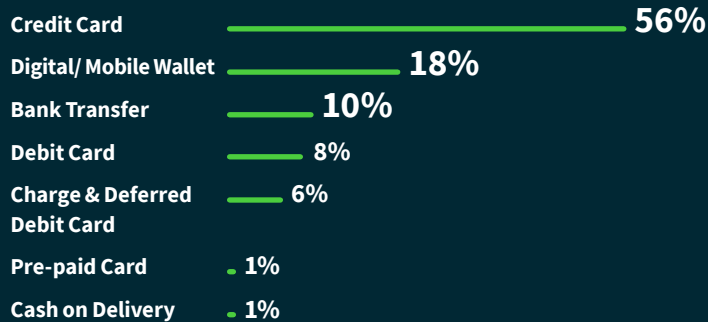
2023 %**
sales from mCom

62%

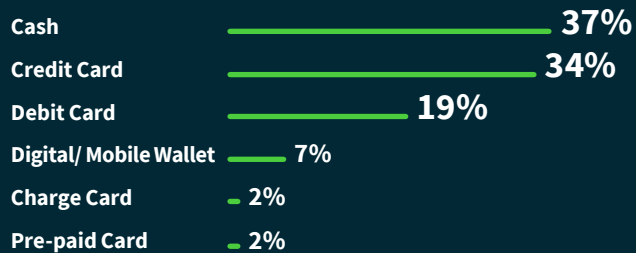
TOP TIP

Singapore is well on its way to becoming a cashless society. The local network, eNETS, is a popular choice. However, mobile payments and mobile/digital wallets such as Apple Pay, Samsung Pay, and PayPal have been the preferred payment options. GrabPay, SE Asia's largest super app, has also started to gain traction with consumers and should be enabled where possible. Singaporeans also enjoy loyalty programs such as cash back and discounted promotions – you should consider offering these to entice more spend through your business.

2019 eCom mix by payment method



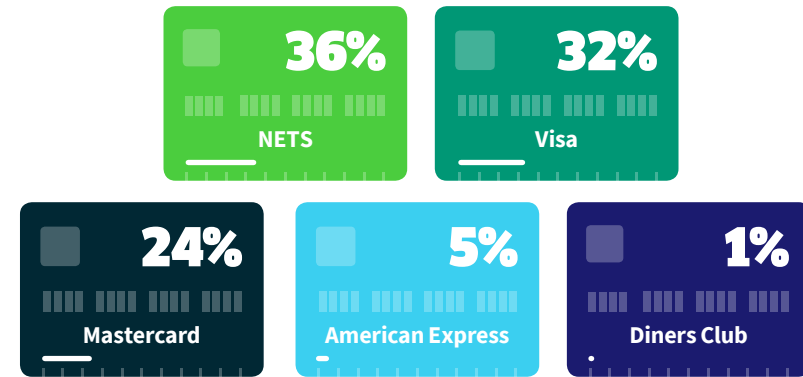
2019 point of sale mix by payment method



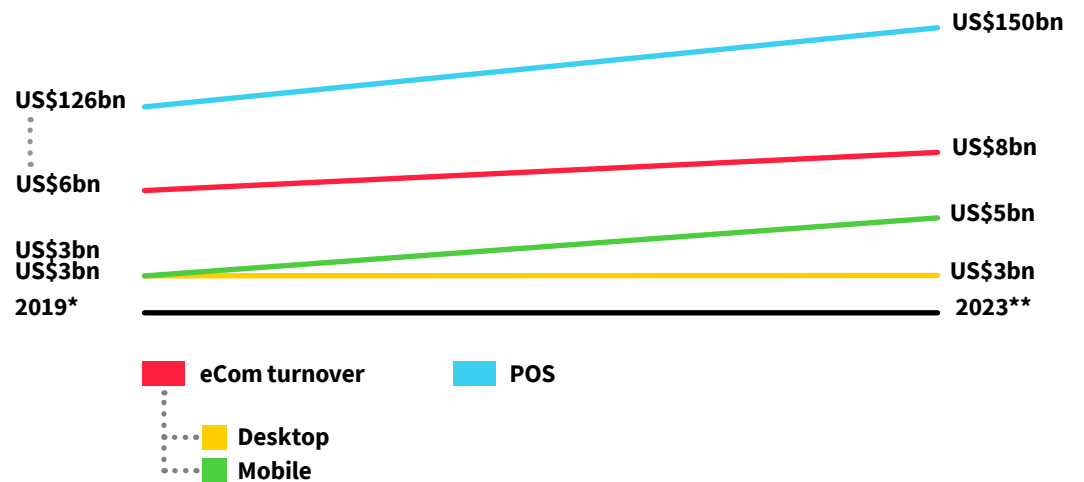
* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.

2018 card brand breakdowns (eCom and POS)



POS and eCom projected growth



Popular alternative payment methods



SOUTH AFRICA



Deriving its name from its geographic location at the southern tip of the continent, the nation of South Africa has an official name in each of its 11 official languages. The most widely spoken are the ancestral Zulu and Xhosa languages, and Afrikaans and English represent its history of colonization. When it comes to payments, South Africans choose cash primarily for point of sale purchases (53%), although eCom shares a preference for credit cards (23%), debit cards (19%), digital/mobile wallets (18%), and bank transfers (17%).

FAST STATS

2019 sales %
from eCom

2%

2019* - 2023**
eCom CAGR

18%

2019 sales %
from mCom

57%

2019* - 2023**
POS CAGR

10%

2019 % eCom spend using
Digital/Mobile Wallet

18%

2019* Internet
penetration

56%

2019 % POS spend using
Digital/Mobile Wallet

2%

2019* Mobile
penetration

76%

FORECAST

2023 %**
sales from eCom

2%

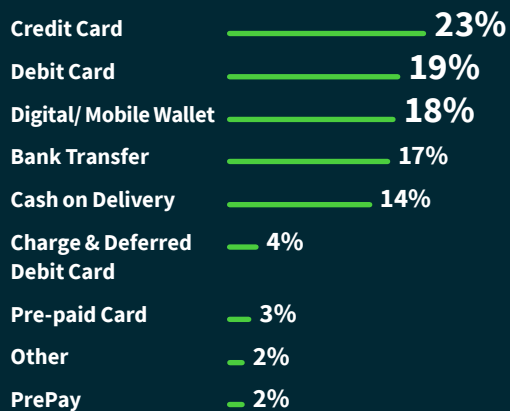
2023 %**
sales from mCom

61%

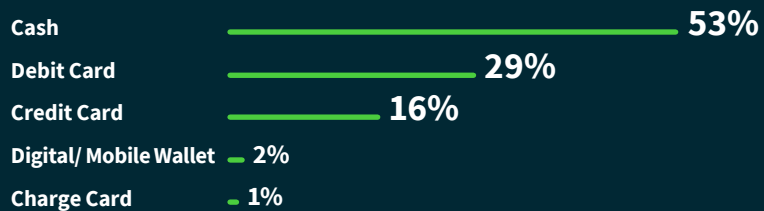
TOP TIP

South Africans are most comfortable with traditional payment methods: cash and debit at point of sale; and credit and debit online. However, when it comes to shopping online South Africans are comfortable shopping through mobile devices and some prefer to checkout through digital wallets. Implement popular digital options like PayPal and Masterpass in addition to traditional checkout methods, but don't forget to maintain a secure, convenient, and efficient payment experience.

2019 eCom mix by payment method



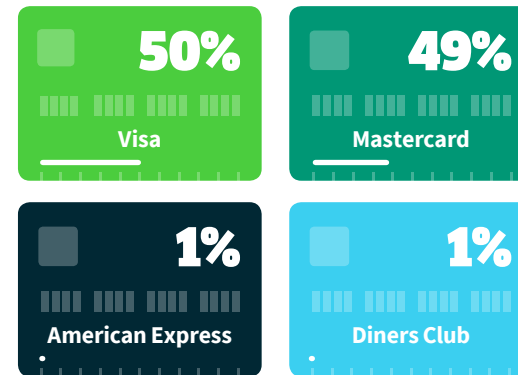
2019 point of sale mix by payment method



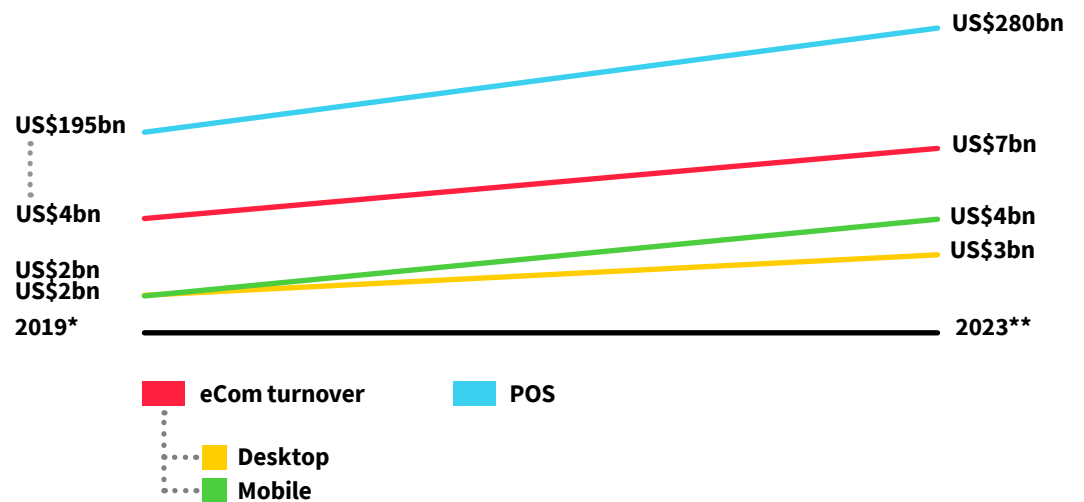
* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.

2018 card brand breakdowns (eCom and POS)



POS and eCom projected growth



Popular alternative payment methods



SOUTH KOREA

South Korea is one connected country. Boasting the world's fastest average internet connection speed, South Korea's internet penetration is 100%, which 88.3% of its population accesses via mobile device. Digital/mobile wallets have yet to gain widespread use, however – accounting for just 16% of eCommerce transactions and 5% of point of sale payments. Currently, credit cards are the preferred method of payment for both eCom and POS (65% and 60%, respectively).

FAST STATS

2019 sales %
from eCom

7%

2019* - 2023**
eCom CAGR

12%

2019 sales %
from mCom

63%

2019* - 2023**
POS CAGR

4%

2019 % eCom spend using
Digital/Mobile Wallet

16%

2019* Internet
penetration

96%

2019 % POS spend using
Digital/Mobile Wallet

5%

2019* Mobile
penetration

88%

FORECAST

2023 %**
sales from eCom

9%

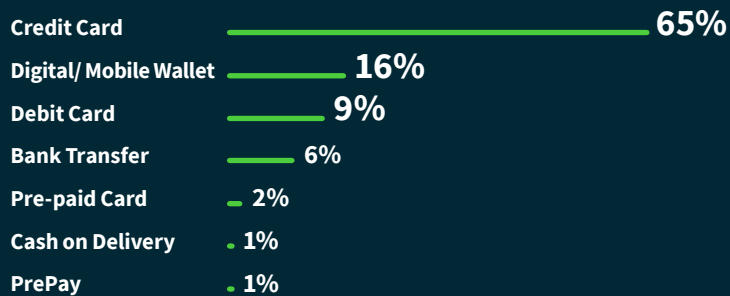
2023 %**
sales from mCom

70%

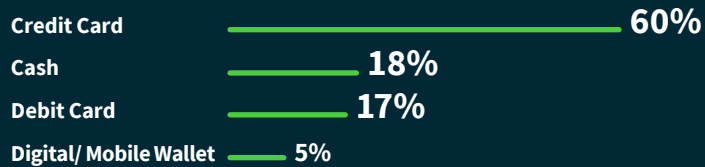
TOP TIP

South Korea is a relatively closed-loop country when it comes to how consumers prefer – or are required – to pay. Local debit cards, financial cards, and cash are the most preferred, although more consumers are going mobile, adopting services that allow payments to be made with a smart device. Additionally, since 2018, mobile payments have evolved and consumers are embracing a new form of mobile payment: the QR code payment system. Consumers pay for goods by scanning barcodes at the point of sale; the customer authenticates the amount and funds are withdrawn directly from their bank account. Consider implementing QR code payments as a mobile wallet option in addition to alternatives like Samsung Pay and Naver Pay.

2019 eCom mix by payment method

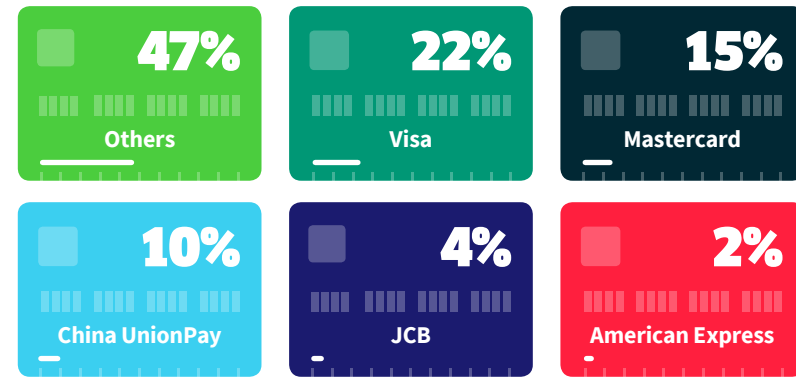


2019 point of sale mix by payment method

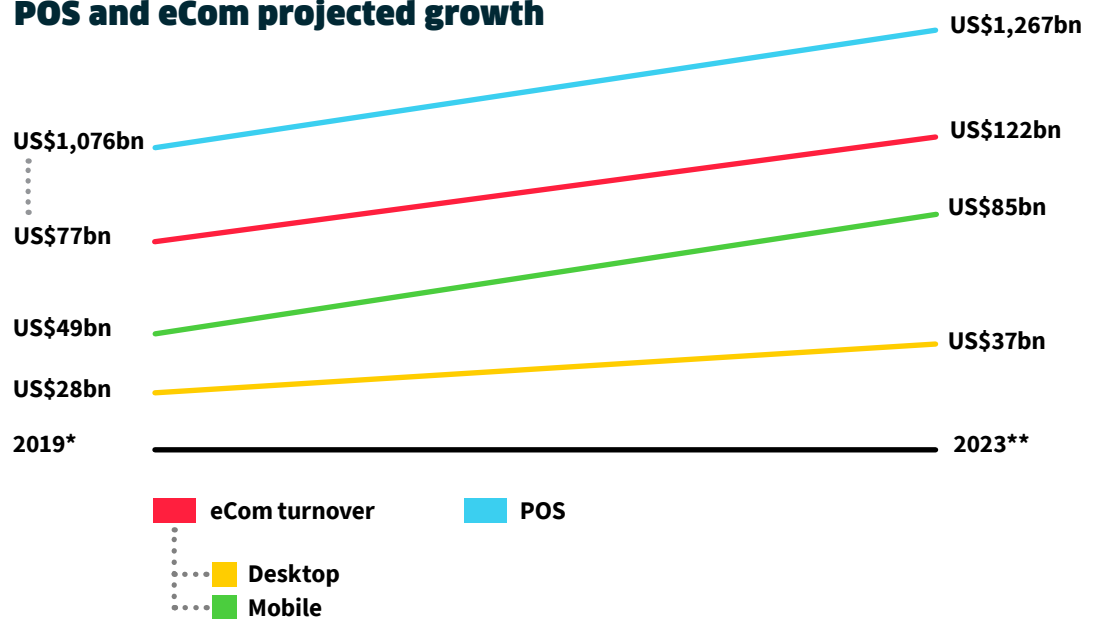


* Estimated **Forecasted
Numbers adjusted for rounding may impact totals.

2018 card brand breakdowns (eCom and POS)



POS and eCom projected growth



Popular alternative payment methods



SPAIN

Although Mandarin Chinese and English are the world's two most spoken languages, the number of countries that speak Spanish make it the second biggest language in the world. Originating in the Castile region of Spain, Spanish is spoken natively across South and Central America, the Caribbean, in regions of Southeast Asia, and even Africa – Equatorial Guinea is the only country in Africa to have it as an official language. In Spain, consumers primarily use cash for point of sale payment (58%), and open their digital/mobile wallets to complete eCommerce transactions (30%).

FAST STATS

2019 sales %
from eCom

8%

2019* - 2023**
eCom CAGR

11%

2019 sales %
from mCom

42%

2019* - 2023**
POS CAGR

3%

2019 % eCom spend using
Digital/Mobile Wallet

30%

2019* Internet
penetration

93%

2019 % POS spend using
Digital/Mobile Wallet

2%

2019* Mobile
penetration

84%

FORECAST

2023 %**
sales from eCom

10%

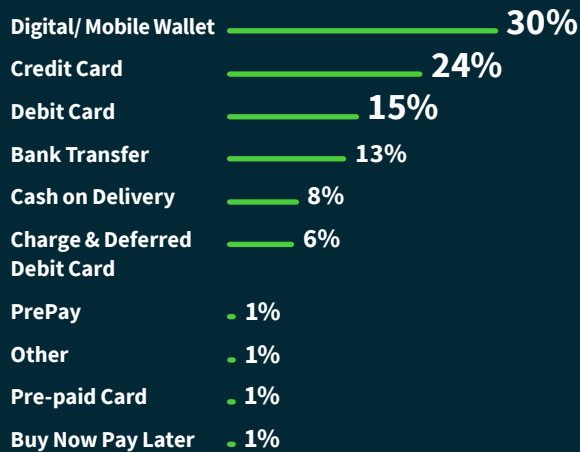
2023 %**
sales from mCom

48%

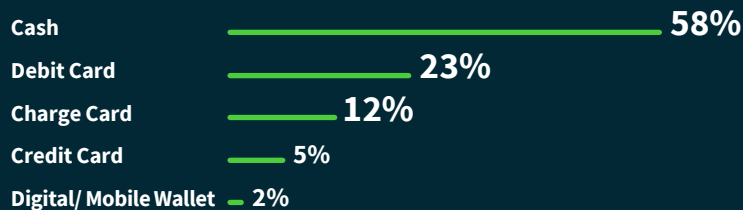
TOP TIP

Spain is one of the highest adopters of mobile and digital wallets, which account for 30% of its eCommerce market. Currently, 42% of online sales come from mobile commerce – a percentage that is forecasted to grow with market expansion. Businesses should prepare for this expansion by enabling digital wallets to make online checkout easier. Also consider implementing mobile wallet acceptance at the point of sale as consumers move physical cards into their mobile wallets.

2019 eCom mix by payment method



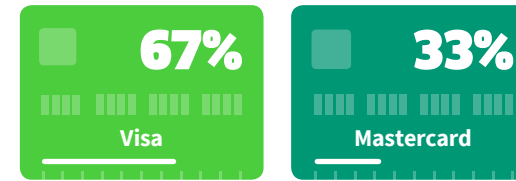
2019 point of sale mix by payment method



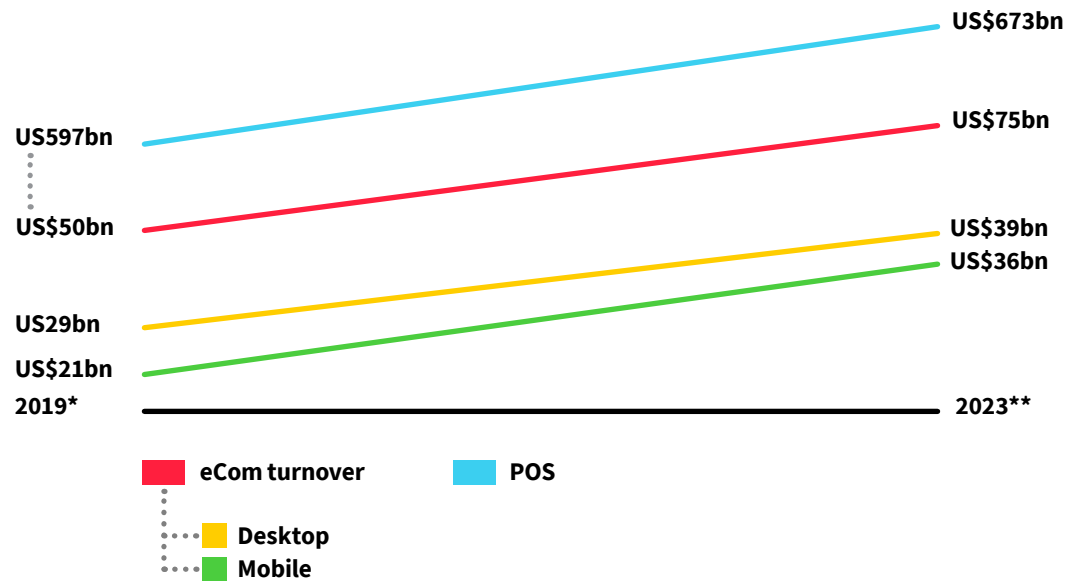
* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.

2018 card brand breakdowns (eCom and POS)



POS and eCom projected growth



Popular alternative payment methods



SWEDEN

Swedish Vikings of the 8-10th centuries were some of Europe's most fearsome warriors, invading and settling throughout Northern and Eastern Europe. Modern day Swedes enjoy one of the highest living standards in the world due to minimal unemployment, long life expectancy, and a highly developed welfare system. They choose buy now pay later (25%) and bank transfers (20%) for online purchases, and debit cards are their preferred method for point of sale payment (56%).

FAST STATS

2019 sales %
from eCom

17%

2019* - 2023**
eCom CAGR

10%

2019 sales %
from mCom

40%

2019* - 2023**
POS CAGR

4%

2019 % eCom spend using
Digital/Mobile Wallet

18%

2019* Internet
penetration

96%

2019 % POS spend using
Digital/Mobile Wallet

9%

2019* Mobile
penetration

84%

FORECAST

2023 %**
sales from eCom

19%

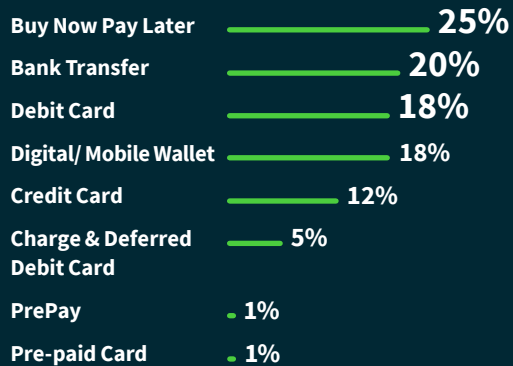
2023 %**
sales from mCom

48%

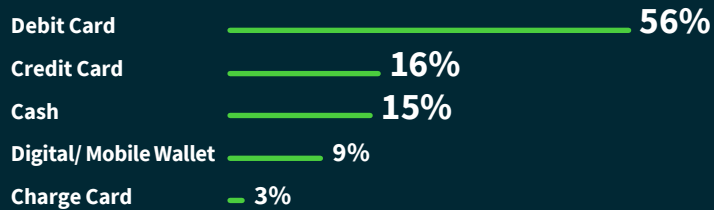
TOP TIP

Swedish consumers gravitate to buy now pay later options more than any other country. Klarna, one popular option, is driving change online and at the point of sale by letting consumers shop now and pay later. Swedes carry less cash than almost any other country, so accepting a variety of digital forms of payment such as credit cards, debit cards, and mobile and digital wallets are important to satisfy these consumers.

2019 eCom mix by payment method



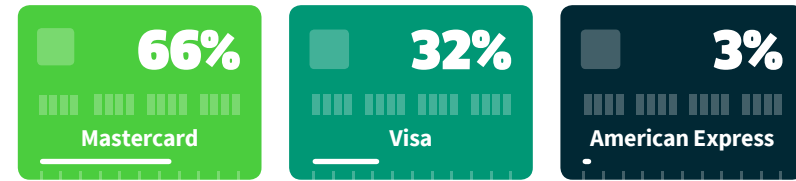
2019 point of sale mix by payment method



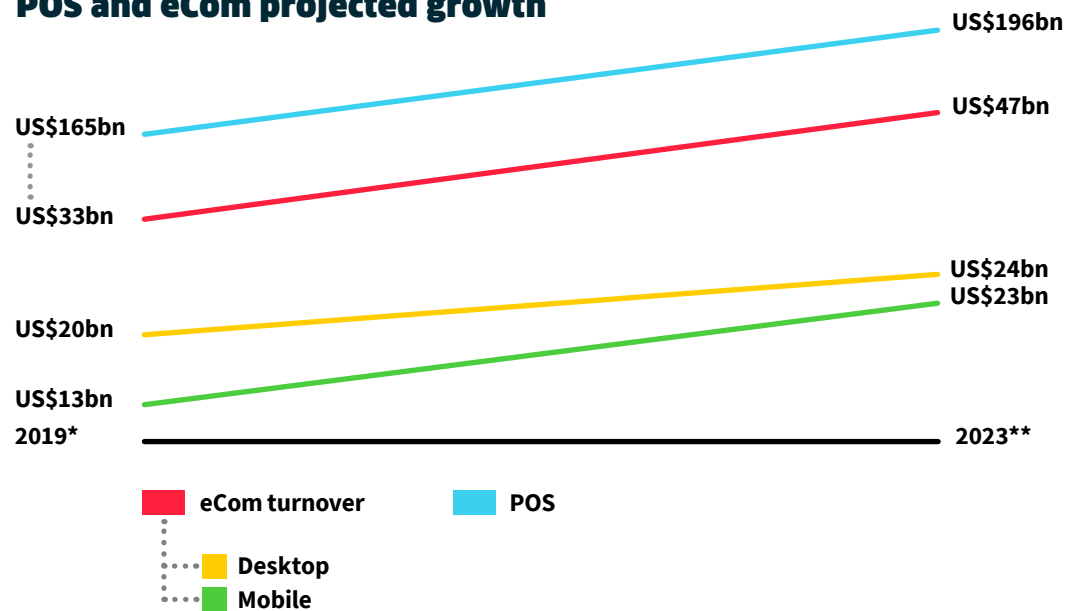
* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.

2018 card brand breakdowns (eCom and POS)



POS and eCom projected growth



Popular alternative payment methods

Klarna



TAIWAN (CHINA)

Taiwan is one of the most densely populated areas of the world. Roughly the size of Belgium, Taiwan has over 23 million citizens¹ – a population that outnumbers the Belgians by more than 12 million people. One can see why efficient waste management would be a priority, which is why the Taiwanese get proactive about their trash. There, garbage trucks play music – often Beethoven’s Für Elise – to alert people to bring their garbage to the trucks. When it comes to moving money, consumers’ tastes trend towards credit cards (36%) for making eCommerce transactions and cash (48%) at point of sale purchases.

¹ UN, 2019

FAST STATS

2019 sales %
from eCom

9%

2019* - 2023**
eCom CAGR

8%

2019 sales %
from mCom

48%

2019* - 2023**
POS CAGR

3%

2019 % eCom spend using
Digital/Mobile Wallet

15%

2019* Internet
penetration

93%

2019 % POS spend using
Digital/Mobile Wallet

6%

2019* Mobile
penetration

85%

FORECAST

2023 %**
sales from eCom

11%

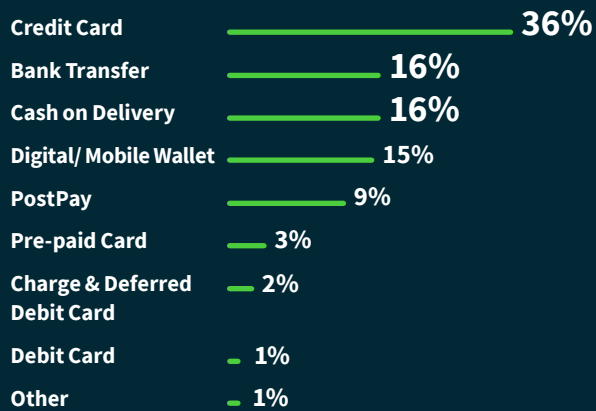
2023 %**
sales from mCom

57%

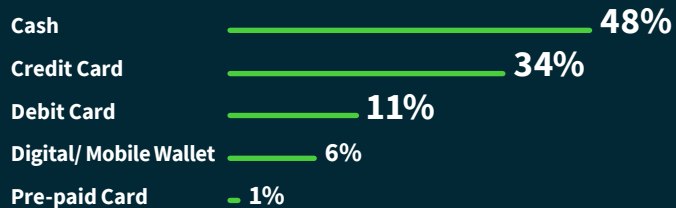
TOP TIP

Consumers in Taiwan have a strong inclination towards cash despite the gradual rise in digital payments. This is compounded by the fact that many small merchants in Taiwan do not accept card payments. Still, Taiwanese consumers have shown a willingness to use cards if there are incentives to do so. Use card rewards to court these knowledgeable consumers who are willing to test new payment methods.

2019 eCom mix by payment method

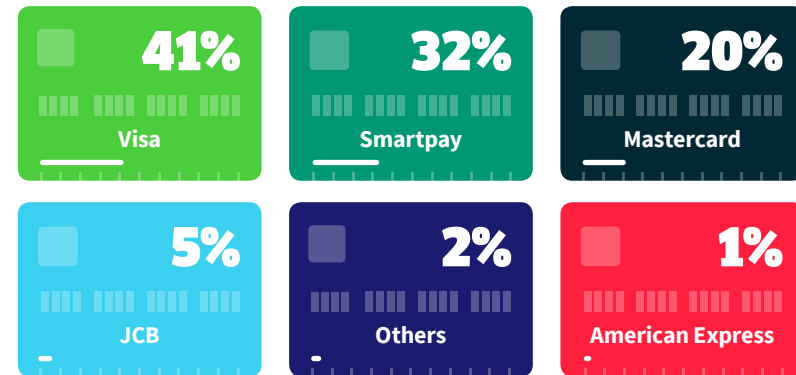


2019 point of sale mix by payment method

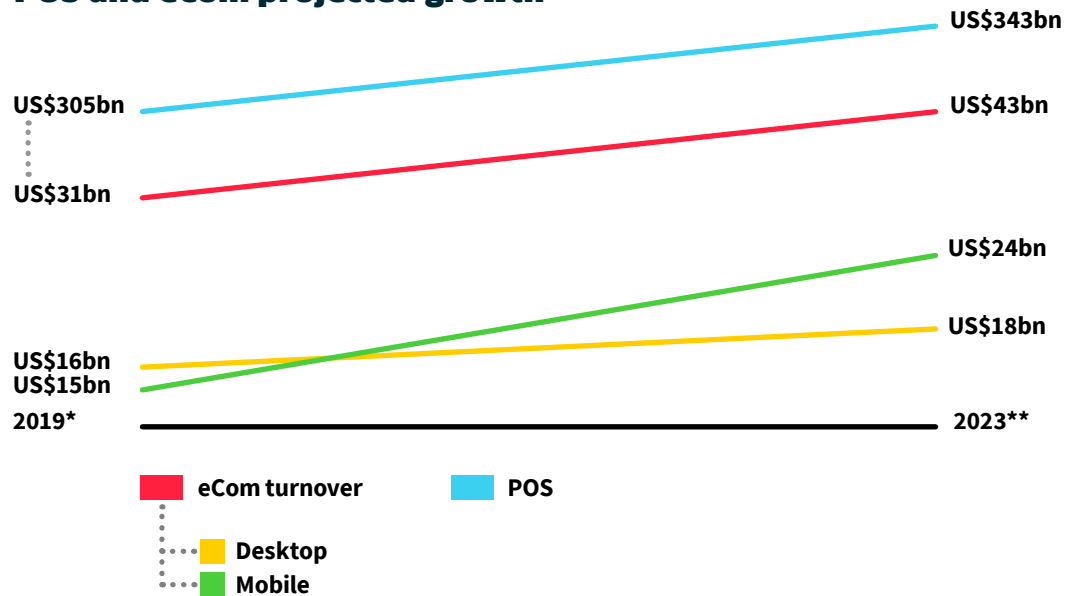


* Estimated **Forecasted
Numbers adjusted for rounding may impact totals.

2018 card brand breakdowns (eCom and POS)



POS and eCom projected growth



Popular alternative payment methods



THAILAND

Once known as Siam, Thailand today retains its monarch system of governance that has ruled since the 12th century. A popular tourist destination, this country welcomes more than six million visitors annually¹ to experience its diverse flora and fauna, famous bridge over the River Kwai, and capital city Bangkok, home to one-tenth of the Thai population. Country-wide, citizens use bank transfers to complete online transactions (26%), and cash is preferred at point of sale (68%).

¹worldatlas.com, 2018

FAST STATS

2019 sales %
from eCom

10%

2019* - 2023**
eCom CAGR

10%

2019 sales %
from mCom

57%

2019* - 2023**
POS CAGR

4%

2019 % eCom spend using
Digital/Mobile Wallet

19%

2019* Internet
penetration

82%

2019 % POS spend using
Digital/Mobile Wallet

7%

2019* Mobile
penetration

75%

FORECAST

2023 %**
sales from eCom

12%

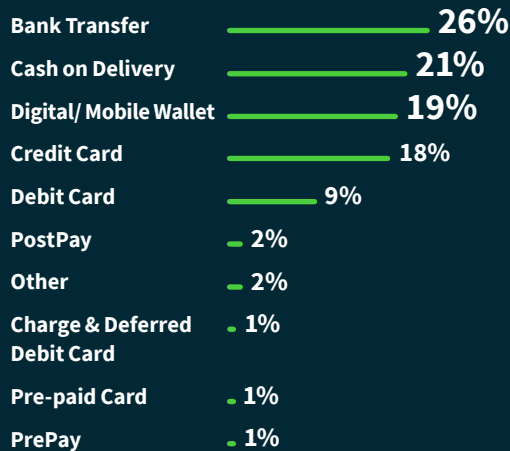
2023 %**
sales from mCom

63%

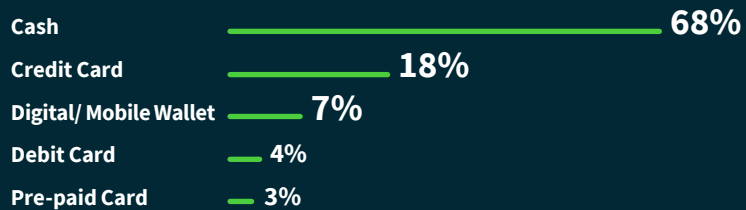
TOP TIP

Local consumers largely believe that Thailand will become a cashless society in the next seven years as shown by improved prospects for cashless payment, Visa Thailand reports. This is supported by the government's national ePayment scheme and collaboration among financial institutions, merchants, and consumers.

2019 eCom mix by payment method



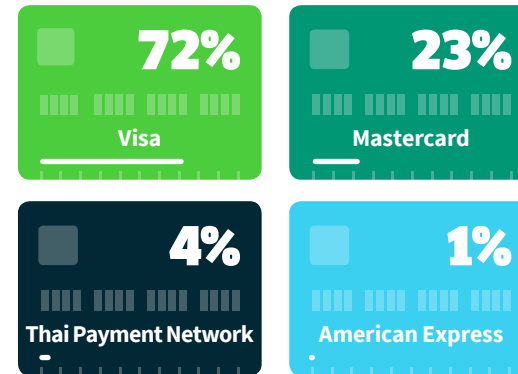
2019 point of sale mix by payment method



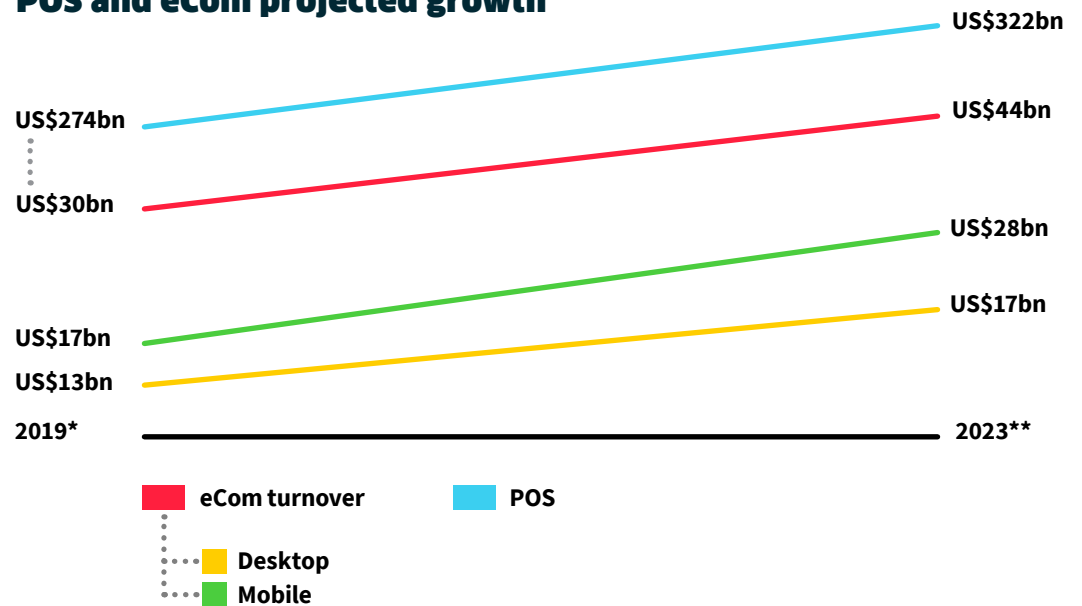
* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.

2018 card brand breakdowns (eCom and POS)



POS and eCom projected growth



Popular alternative payment methods



TURKEY

Probably no other Turk has had more effect on modern day commerce – or the souls of sailors – than Saint Nicholas. Born approximately 300 AD in the Turkish city of Patara, tales of his generosity, secret gift-giving, and ability to save sailors from sinking ships would help transform him into the figure better known today as Santa Claus and earn him veneration as the patron saint of sailors. While the rest of the world uses a number of payment methods for their holiday shopping, the Turkish population chooses credit cards for everyday eCommerce transactions (56%) and cash for payment at point of sale (66%).

FAST STATS

2019 sales %
from eCom

8%

2019* - 2023**
eCom CAGR

19%

2019 sales %
from mCom

29%

2019* - 2023**
POS CAGR

12%

2019 % eCom spend using
Digital/Mobile Wallet

6%

2019* Internet
penetration

83%

2019 % POS spend using
Digital/Mobile Wallet

8%

2019* Mobile
penetration

76%

FORECAST

2023 %**
sales from eCom

9%

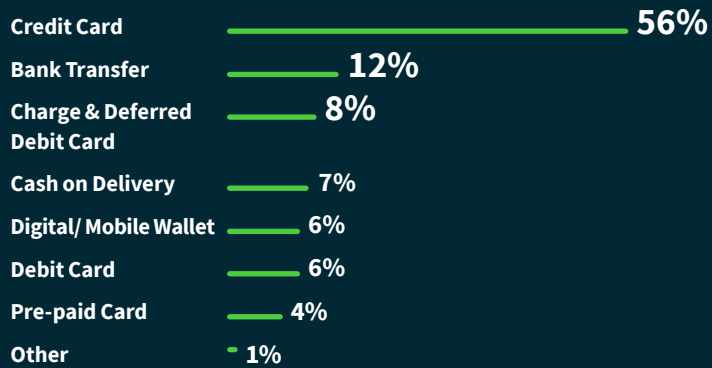
2023 %**
sales from mCom

43%

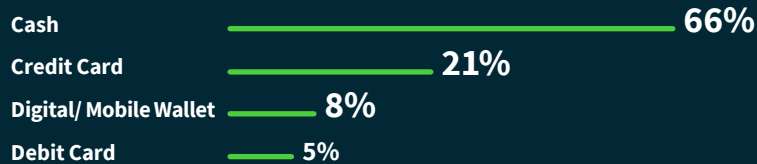
TOP TIP

With a growing population of mobile-connected consumers, Turkey is experiencing growth in new online payment options, such as pre-paid cards and charge/deferred debit cards. Online shopping is made more convenient with the popular local digital wallet, BKM Express. Consumers are also starting to reach for their phones over their physical wallets at the point of sale. Implementing a variety of payment acceptance options online and at the point of sale will help businesses stay on top of changing consumer preferences.

2019 eCom mix by payment method

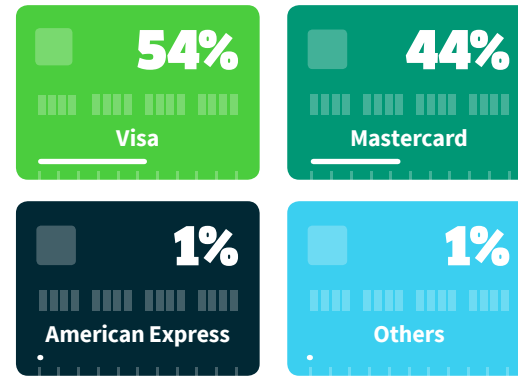


2019 point of sale mix by payment method

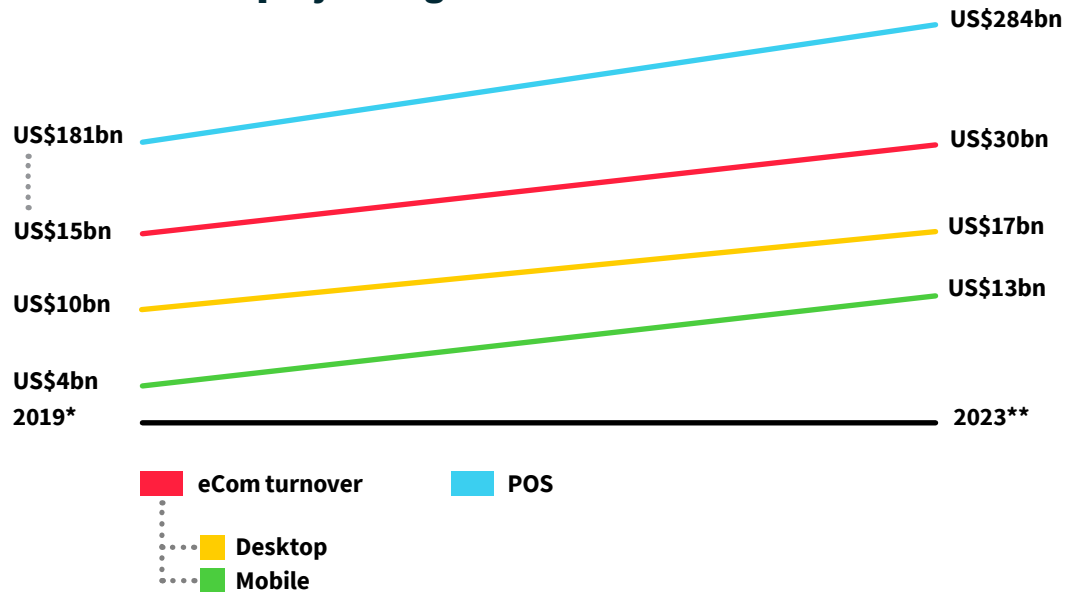


* Estimated **Forecasted
Numbers adjusted for rounding may impact totals.

2018 card brand breakdowns (eCom and POS)



POS and eCom projected growth



Popular alternative payment methods



UAE

United Arab Emirates is home to the world's tallest free-standing structure, the Burj Khalifa, which measures 2,717 feet – twice the height of the Empire State Building. With 163 floors, the skyscraper contains a hotel, corporate suites and offices, residential apartments, and a restaurant. From checking in at the ground floor lobby to dining in the world's highest restaurant, UAE's population regularly chooses to pay at point of sale with cash (67%). For eCommerce, they most often use their credit cards (29%), although digital/mobile wallets are beginning to gain favor (19%).

FAST STATS

2019 sales %
from eCom

5%

2019* - 2023**
eCom CAGR

14%

2019 sales %
from mCom

54%

2019* - 2023**
POS CAGR

7%

2019 % eCom spend using
Digital/Mobile Wallet

19%

2019* Internet
penetration

99%

2019 % POS spend using
Digital/Mobile Wallet

8%

2019* Mobile
penetration

83%

FORECAST

2023 %**
sales from eCom

6%

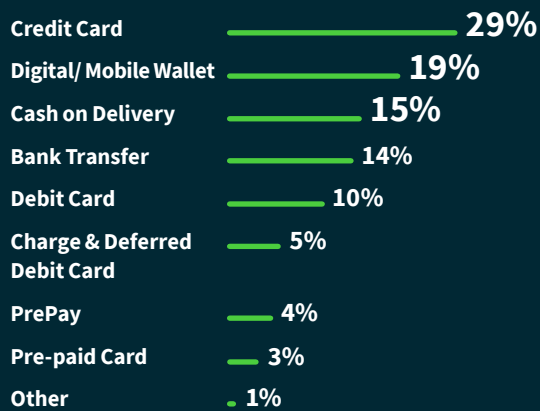
2023 %**
sales from mCom

55%

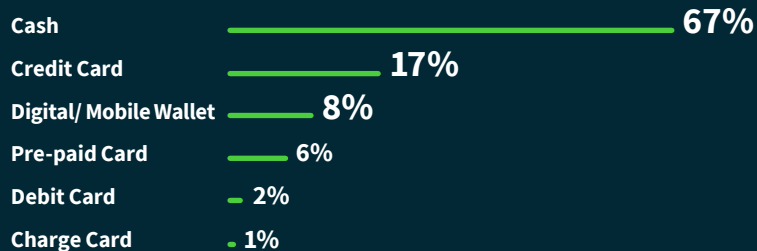
TOP TIP

UAE consumers are incredibly active on their smartphones with 54% of online sales coming from mobile commerce. In general, online shopping is on the rise, so accepting popular digital/mobile wallets like PayPal will help meet consumer demand. And while cash still dominates the point of sale, it's important to accept popular card brands like Visa and Mastercard for consumers who prefer their credit cards. Mobile wallet use is also gaining adoption so implementing the acceptance of mobile wallets at the point of sale will put you ahead of the curve.

2019 eCom mix by payment method

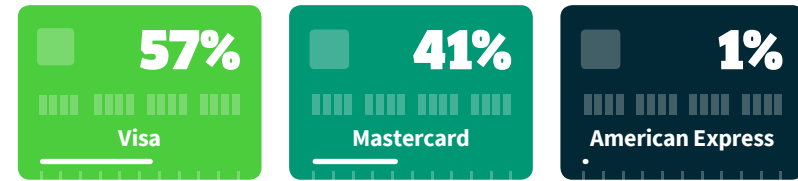


2019 point of sale mix by payment method

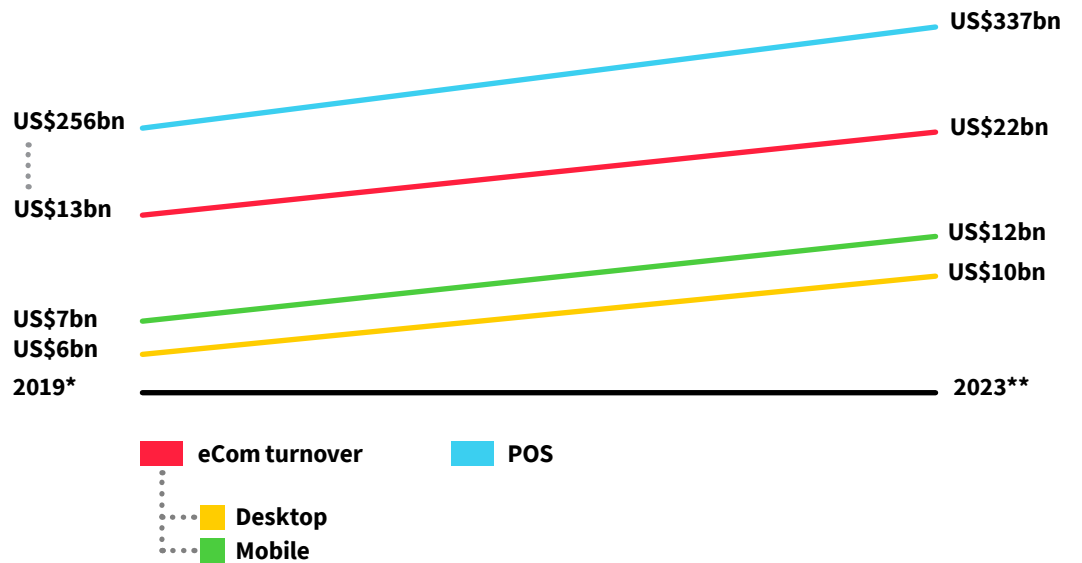


* Estimated **Forecasted
Numbers adjusted for rounding may impact totals.

2018 card brand breakdowns (eCom and POS)



POS and eCom projected growth



Popular alternative payment methods



UK

The first ever observed and unassisted swim of the English Channel took place in 1875 and took nearly 22 hours to complete. The fastest verified swim was in 2012, taking just 6 hours, 55 minutes. If swimming's not your thing, you can always take the Channel Tunnel train, running the 23.5 miles from Dover to Calais, France, in about 35 minutes. The UK population typically reaches for debit cards to pay fares and for other point of sale purchases (48%), but is split between debit and digital/mobile wallets when it comes to online transactions (both 29%).

FAST STATS

2019 sales %
from eCom

15%

2019* - 2023**
eCom CAGR

8%

2019 sales %
from mCom

31%

2019* - 2023**
POS CAGR

3%

2019 % eCom spend using
Digital/Mobile Wallet

29%

2019* Internet
penetration

95%

2019 % POS spend using
Digital/Mobile Wallet

4%

2019* Mobile
penetration

82%

FORECAST

2023 %**
sales from eCom

18%

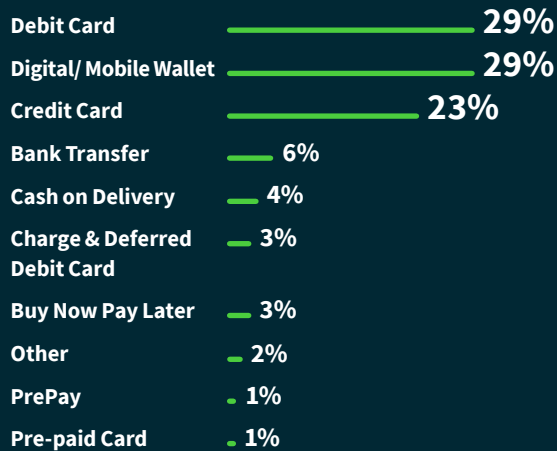
2023 %**
sales from mCom

36%

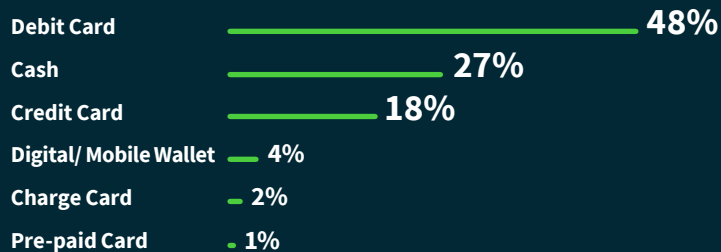
TOP TIP

The UK remains a leader in European eCommerce. A confident adopter of digital and mobile wallet innovation, consumers now equally use digital wallets and debit cards as the preferred methods of payment for online transactions. Make sure your online checkout experience is easy and enables popular options like PayPal, Apple Pay, and Visa Checkout. Consumers have adopted well established patterns at the point of sale so enabling all forms of card acceptance will meet their needs.

2019 eCom mix by payment method



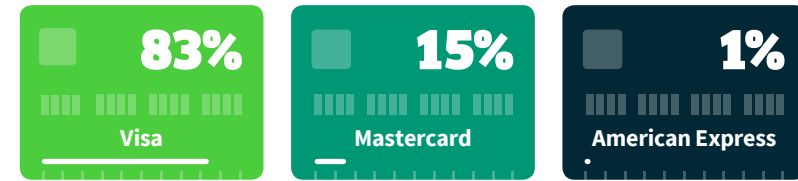
2019 point of sale mix by payment method



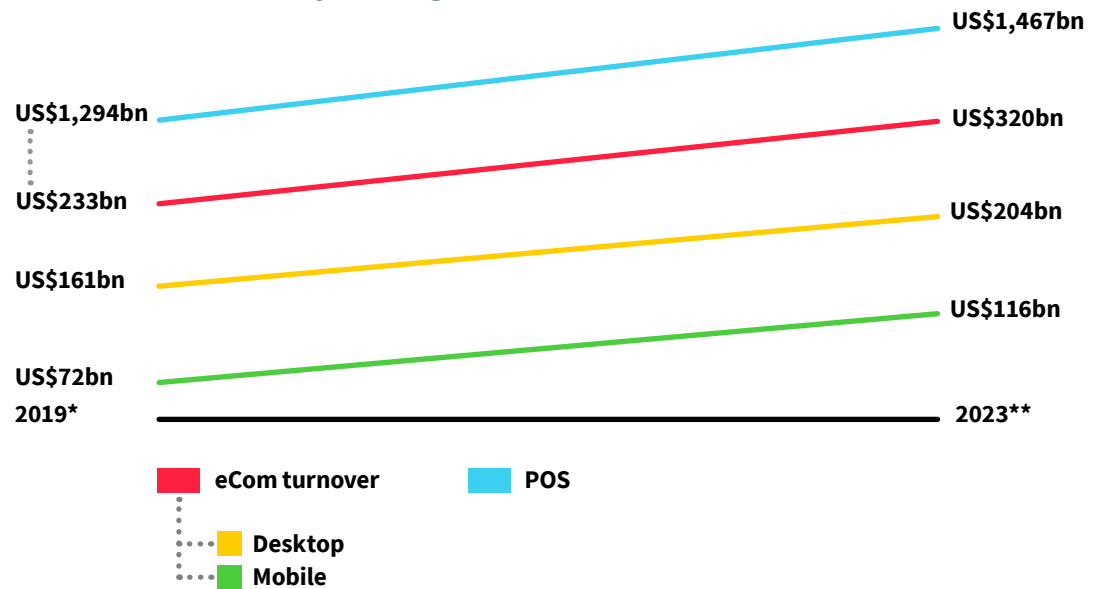
* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.

2018 card brand breakdowns (eCom and POS)



POS and eCom projected growth



Popular alternative payment methods



USA

In 2018, approximately 41 million US citizens went traveling abroad,¹ and spent more than \$135 billion on overseas tourism the year before.² The most popular destinations include Mexico, Canada, the UK, the Dominican Republic, and France. Wherever Americans find themselves, credit cards are their preferred method of payment. At both point of sale (39%) and for eCommerce purchases (33%), the US population uses credit over any other form.

FAST STATS

2019 sales %
from eCom

9%

2019* - 2023**
eCom CAGR

9%

2019 sales %
from mCom

27%

2019* - 2023**
POS CAGR

4%

2019 % eCom spend using
Digital/Mobile Wallet

24%

2019* Internet
penetration

89%

2019 % POS spend using
Digital/Mobile Wallet

6%

2019* Mobile
penetration

83%

FORECAST

2023 %**
sales from eCom

11%

2023 %**
sales from mCom

31%

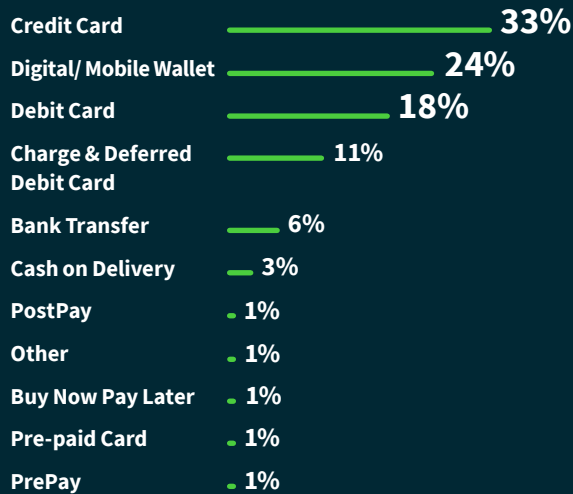
¹ Statista.com, 2019

² Newsweek, 2019

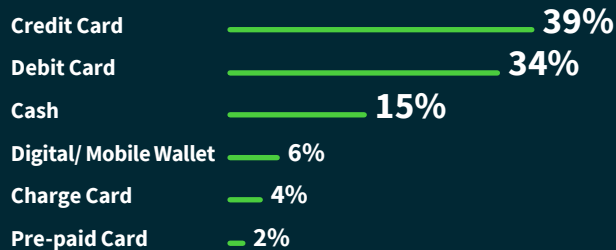
TOP TIP

Chip card implementation in the US still lags behind other countries. As fraud remains an ever-present issue, it's important to implement chip card acceptance at the point of sale to help protect your business and your customers. Mobile and digital wallets are also continuing to gain adoption. Accepting the most popular mobile wallets like Apple Pay, Samsung Pay, PayPal, Amazon Pay, and Google Pay will satisfy the majority of consumers who are foregoing carrying around their physical credit and debit cards.

2019 eCom mix by payment method



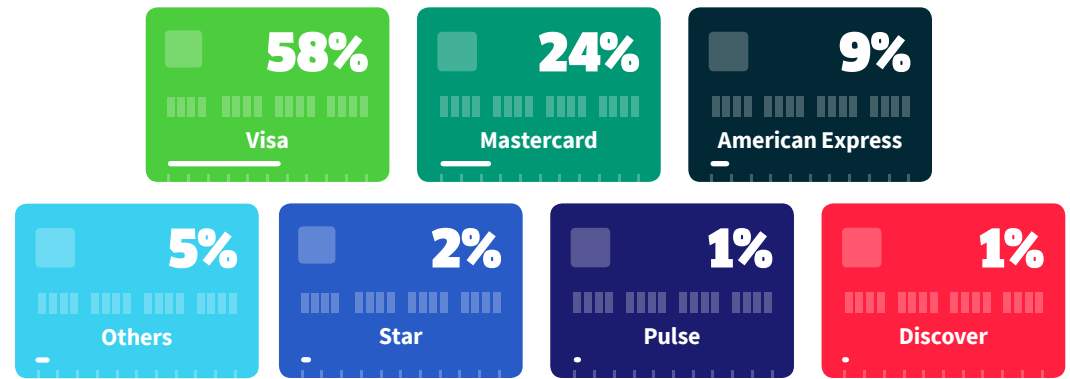
2019 point of sale mix by payment method



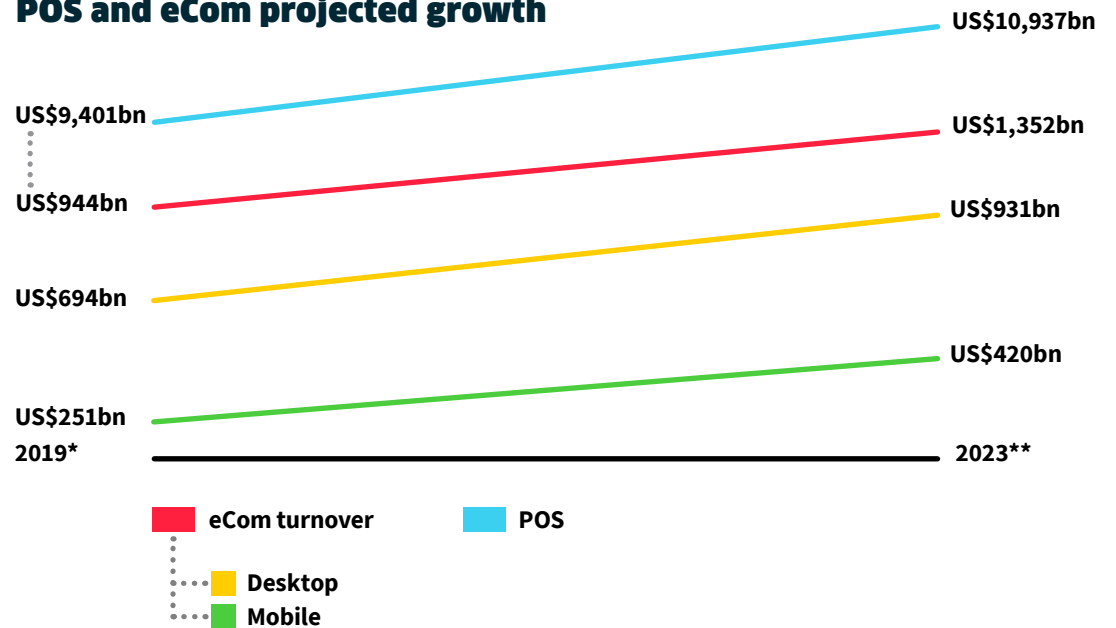
* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.

2018 card brand breakdowns (eCom and POS)



POS and eCom projected growth



Popular alternative payment methods



VIETNAM

Freedom of the open road? In Vietnam, roads are teeming with motorbikes, the preferred mode of transportation. With a population of over 96 million¹, more than 45 million bikes are registered in this country. When it comes to payments, the Vietnamese prefer cash. Cash on delivery is used most often for eCommerce transactions (29%), and cash payment is used primarily at the point of sale (85%).

¹ UN, 2019

FAST STATS

2019 sales %
from eCom

6%

2019* - 2023**
eCom CAGR

17%

2019 sales %
from mCom

57%

2019* - 2023**
POS CAGR

7%

2019 % eCom spend using
Digital/Mobile Wallet

18%

2019* Internet
penetration

70%

2019 % POS spend using
Digital/Mobile Wallet

4%

2019* Mobile
penetration

71%

FORECAST

2023 %**
sales from eCom

8%

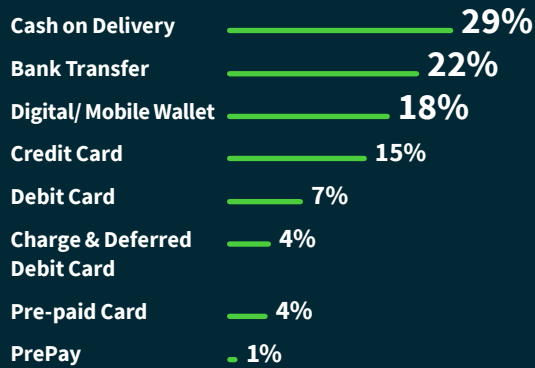
2023 %**
sales from mCom

64%

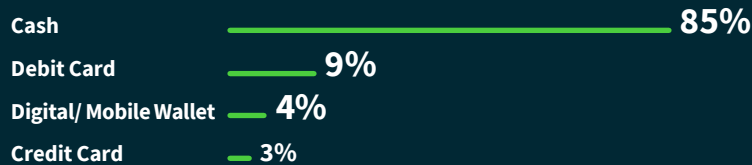
TOP TIP

Vietnam is poised to be the next payments and eCommerce frontier. The acceptance of new technology backed by high penetration of smart devices among the young population and an extremely supportive government create an environment perfect for growth in cashless digital payments.

2019 eCom mix by payment method

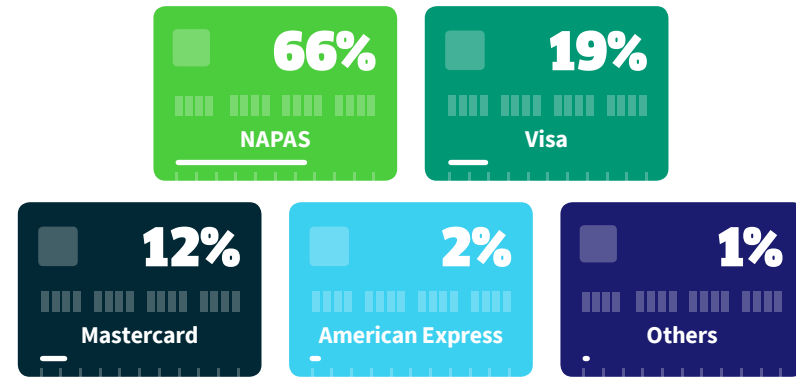


2019 point of sale mix by payment method

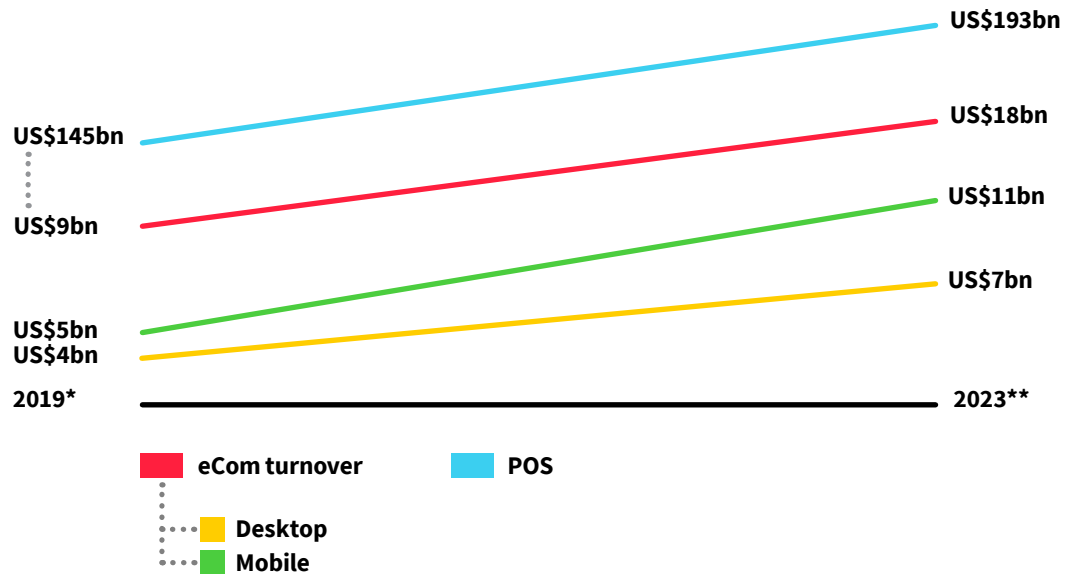


* Estimated **Forecasted
Numbers adjusted for rounding may impact totals.

2018 card brand breakdowns (eCom and POS)



POS and eCom projected growth



Popular alternative payment methods





METHODOLOGY

The Global Payments Report offers a snapshot of the current payment landscape: globally, by region, and in 40 select countries. The report includes projected scenarios and trends over the next five years. In addition, we offer a series of trends with Worldpay's perspectives on key issues in the payments world.

The online and offline payment worlds continue to converge. Serving the channel-agnostic needs of merchants and consumers starts with a holistic understanding of payments. Accordingly, this report evolved in 2018 to include analysis of payment methods used at the physical point of sale (POS). Previous Global Payments Reports focused exclusively on eCommerce payment methods. This expanded report offers a broader and more complete view of today's global payment methods.

This report asserts Worldpay's own view of the market, based on internal expertise, our own research, and third-party vendor data. Worldpay's Market Intelligence team compiles the Global Payments Report using a mixture of third party vendors and other publicly available data. This data is analyzed using Worldpay's proprietary data model and categorization scheme developed in cooperation with a leading management consultancy. The resulting data is rigorously tested and validated by external experts as well as Worldpay's product and regional commercial teams.

eCommerce market size and forecast data were sourced from GlobalData's *E-Commerce Analytics* database based on data updated in Q3 2019. GlobalData collected this information using consumer surveys, B2B surveys, and desk research and have also developed a proprietary forecast model for eCommerce market size growth.

Historical point of sale market size data was sourced from GlobalData by aggregating value spending at POS for all payment methods. POS growth figures by country are calculated based on total household consumption growth rates. We also used McKinsey's Global Payments Map database to triangulate POS results. McKinsey has been

continuously maintaining its payments database from more than 200 sources globally, including public sources, consumer surveys, and local research team inputs. All market size data relate to the industry, not Worldpay's business.

Individual payment methods actual shares by country and region are calculated using the aforementioned data model. Worldpay's model contains a detailed breakdown of payment methods used when shopping online and at point of sale, which were sourced from a variety of data sources including GlobalData's *2019 Consumer Payments Insights Survey*.

Forecast breakdown by payment method for each region is calculated using historical % share growth trend (in CAGR) supplemented by payments knowledge and expertise of Worldpay and external experts.

Mobile penetration figures were sourced from eMarketer and internet penetration from Internet World Stats.

Additional secondary sources for this report include Euromonitor, Statista and yStats; data from local card, banking and payments associations; card scheme and payment providers; eCommerce industry reports and studies; news articles; and international organizations including the World Bank and International Monetary Fund. Card scheme figures were sourced from Euromonitor and GlobalData with further analysis from our joint research team with one of the leading consultancies; these are representative of all payments including eCommerce and point of sale.

Any indicative predictions based on the data we have used should be treated as such. All projections are subject to changes in world events, market dynamics, and other forces over the period concerned (to 2023).

PAYMENT TERMS



Alternative payment methods

“Alternative” used to mean any payment method other than cash or cards linked to the global card brand networks. Today these once-alternative payment methods—like bank transfers and mobile wallets—account for nearly a quarter of POS and over half of eCommerce payment volume.

eCom as % of sales

eCommerce as a percentage of overall sales transactions.

mCom as % of eCom

Mobile commerce as a percentage of eCommerce transactions.

eCom CAGR / POS CAGR

Compound annual growth rates for eCommerce and POS payment volume projected through 2023.

eCom turnover

eCom turnover is the sum of desktop payment volume and mobile payment volume.

Internet penetration

The percentage of a population with current capacity to use the Internet.

Mobile penetration

The percentage of a population of any age who own at least one mobile phone and use the phone(s) at least once per month.

eCommerce

eCommerce includes all commercial transactions that occur over the internet including via websites, apps, the Internet of Things (IoT) and a constantly unfolding array of new platforms, devices and experiences.

Point of Sale (POS)

All transactions that occur at the physical point of sale. Includes all in-person transactions regardless of where they take place in addition to traditional “in-store.”

PAYMENT METHODS

Bank Transfer

Bank transfers allow consumers to make eCommerce purchases by paying merchants directly from their bank account. Bank transfers take place within retail banking applications, in dedicated bank transfer apps like iDEAL or SOFORT Banking, and directly via eCommerce sites and apps.

Cash

Cash is in retreat globally: accounting for 29% of POS spend in 2019, we project cash will represent only 16% of POS spend by 2023. Yet cash is far from dead—cash remains vital to the healthy functioning of virtually every economy in the world.

Cash on Delivery

Cash on Delivery (COD) transactions feature payment for goods at the time of delivery. COD is an important modern payment method that accounts for 5% of global eCommerce, offering an essential link for unbanked consumers.

Charge & Deferred Debit Card

Made popular worldwide by American Express charge cards and deferred debit cards are “pay-later” cards that typically charge no interest, but require the cardholder to pay the outstanding balance in full at fixed intervals, typically monthly.

Credit Card

Credit cards allow consumers to make purchases via an extension of credit. Credit cards are issued by financial institutions affiliated with a global card brand network such as Mastercard, Visa or UnionPay. In 2019, credit cards accounted for 24% of eCommerce and 22% of POS globally. The physical card is forecast to decline but this doesn't spell the end of credit cards; they are just becoming invisible as they migrate to mobile and digital wallets

Debit Card

Debit cards allow consumers to make purchases with funds directly debited from accounts held at their financial institution. Debit cards are issued by financial institutions affiliated with a global card brand network. In 2019, debit cards accounted for 11% of eCommerce and 24% of POS globally.

Buy Now Pay Later

Buy now pay later are post-purchase payments allowing consumers to make payments in free-interest installments or pay off the invoice after a determined period. A growing eCommerce payment method, popular buy now pay later services include Affirm, Afterpay, and Klarna.

Digital/Mobile Wallet

“Digital wallets” and “mobile wallets” are modern payment methods that allow consumers to securely store payment credentials to pay for purchases. Mobile wallets work with mobile devices for both POS and eCommerce. Digital wallets serve the same functions virtually in eCommerce and are used in desktop websites, third-party eCommerce and with new technologies like voice. Many popular wallets are both “digital” and “mobile” and are accepted virtually everywhere commerce takes place: online, in-app, or in-store. Examples of leaders in this space globally include Apple Pay, Google Pay, Samsung Pay, Alipay, WeChat Pay, Paytm, and Amazon Pay.

PostPay

PostPay allows consumers to order products and pay for them later at an affiliated physical store or ATM. PostPay accounts for 8% of eCommerce spend in Latin America, led by Boleto Bancário in Brazil. PostPay thrives in Japan where payments made at “Konbini” stores drive 16% of eCommerce spend.

Pre-Paid Card

Pre-Paid Cards are issued by a wide variety of financial institutions that run scheme networks such as Visa and Mastercard. Pre-Paid Cards can be funded one-time or be reloaded and can be used to make purchases as easily as using debit or credit cards.

PrePay

PrePay services help consumers make eCommerce purchases without a card account and without the need to provide any personal information. Services such as paysafecard and Neosurf offer flexible and secure payments via vouchers redeemable at participating merchants.

Others

We continue to track other merging payment methods—like mobile carrier billing and cryptocurrencies—that currently account for less than 1% of global eCommerce spend combined.

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About Worldpay from FIS

Worldpay from FIS (NYSE:FIS) is a leading payments technology company that powers global commerce for merchants, banks, and capital markets. Processing 75 billion transactions topping \$9T for 20,000+ clients annually, Worldpay lifts economies and communities by advancing the way the world pays, banks, and invests.

We create secure and scalable innovations that connect commerce across all geographies and sales channels. The company's integrated technology platform offers a unified and comprehensive solution set to help clients run, grow, and achieve more for their business.

With a 50+ year history in financial services, we remain ahead of the curve to outpace today's competitive economic landscape. By delivering simple, streamlined, and secure experiences for all of our clients and their customers, we embody commitment to every aspect of the financial services industry.

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