



worldpay
from FIS

THE GLOBAL PAYMENTS REPORT

Rebuilding payments **for a smarter world**

LET'S
REINVENT
SMARTER

at [fisglobal.com](https://www.fisglobal.com)

2021



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A man with short brown hair and a beard, wearing a dark blue button-down shirt and a light-colored tie, is looking intently at a smartphone held in his hands. The background is blurred, showing what appears to be an indoor setting with warm lighting and a window with a view of a city at night. The overall mood is professional and focused.

REBUILDING PAYMENTS FOR A SMARTER WORLD

2020 changed our world and how we interact within it more than any other year in recent history. For the first time, no matter where we were, we experienced something together. We've experienced emotional lows and hoped for our future. We've had to alter our daily habits and adjust future engagements. We've learned about new technology and services that help us deal with being at home more often.

We're connected by more than just commerce. We're connected by a shared experience. That has inevitably altered our connections to commerce.

As businesses began to reopen and we learned how to navigate the world amidst the pandemic, it became clear that rebuilding economies was essential. Doing it the right way will allow for smarter experiences and smarter interactions.

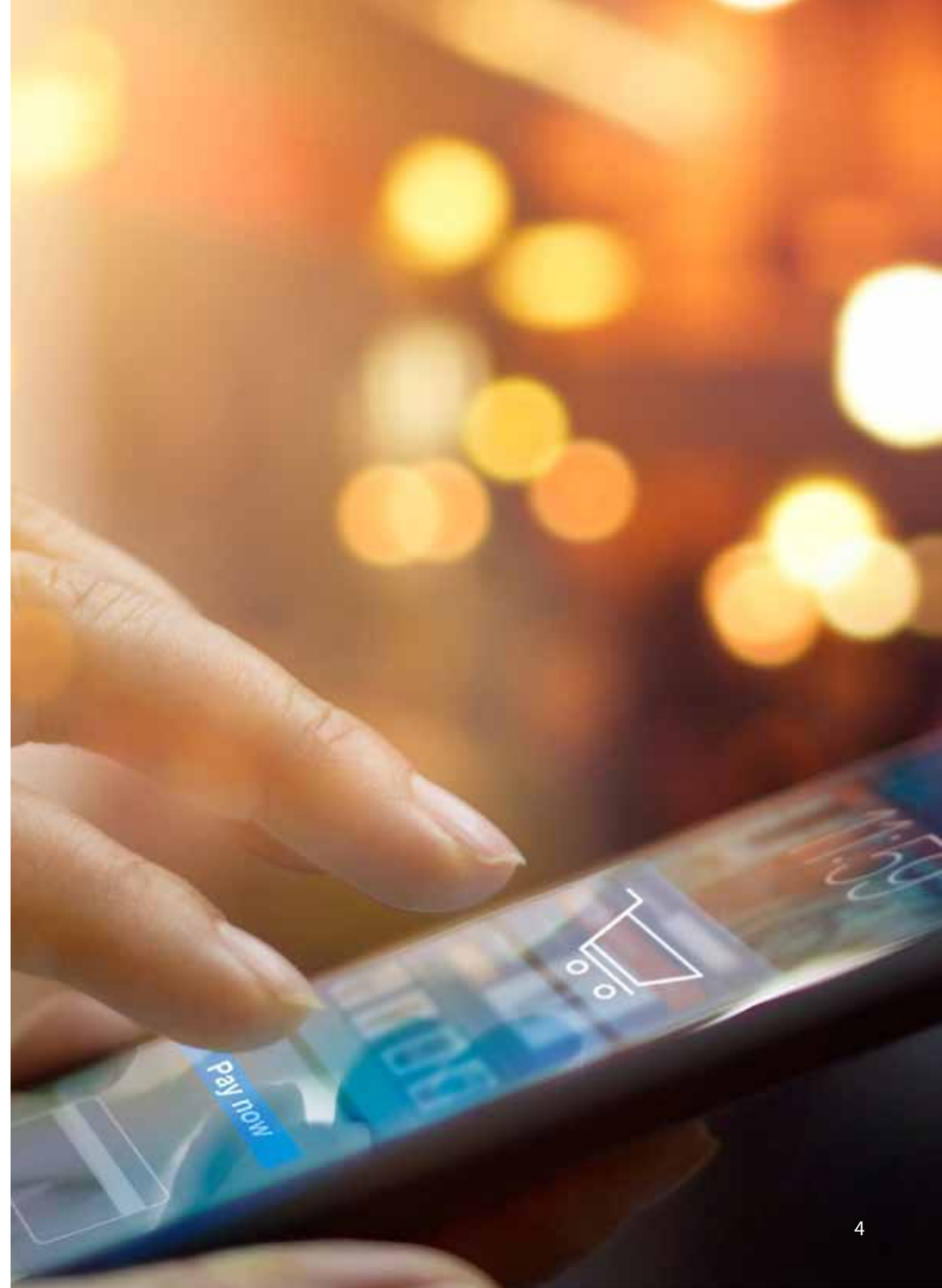
That's the foundation of The 2021 Global Payments Report by Worldpay from FIS.

We'll explore how 2020 catapulted payments years ahead of where they were projected to be and we'll dive into what commerce will look like post pandemic. Beyond just payments, we'll highlight the newest modern currency and considerations for entering different markets. You'll get the smarter insights you need to build a true omnichannel experience.

We've seen the rapid change that can occur in a digital world. Payment options are frequently evolving and competition over payment market share continues to increase. We'll help you create smarter customer experiences by helping you understand which payment methods are popular and which new ones are on the rise.

Rebuilding our economies and businesses lies with all of us. It starts with understanding where change occurred and applying those insights to create the smarter checkout experiences consumers have come to expect. While there wasn't a guidebook for navigating a pandemic, we can give you a solid, smarter payments roadmap to the future.

Let's start by rebuilding businesses and rethinking smarter about commerce.





GLOBAL PAYMENT TRENDS

Rebuilding payments **for a smarter world**

A close-up photograph of a person's hand holding a white smartphone over a black payment terminal. The hand is wearing a gold ring on the ring finger. The background is blurred, showing other people in a retail or public setting.

GLOBAL PAYMENT TRENDS

Consumer payment preferences vary considerably around the world, reflecting an infinite diversity of historical, technical, cultural, economic and regulatory factors. Alternative payment methods like digital wallets and bank transfers are now in the mainstream, if not in the outright majority, and legacy methods like credit cards and cash continue to decline.

Widespread disruptions created a profound shift in commerce and payments, accelerating the adoption of digital wallets in e-commerce while hastening the decline of cash at the point of sale.

Digital wallets thrive as e-commerce surges

E-commerce exploded in 2020 to post the highest growth rate in five years as home-bound consumers sought alternatives to shuttered brick-and-mortar stores. Global e-commerce growth accelerated in 2020 despite recessionary headwinds, posting U.S.\$4.6 trillion in transactions, a 19%

increase from 2019. This growth accelerated the rate of e-commerce penetration by almost three years, with total transactions jumping from 8% in 2019 to 10% in 2020.

Digital wallets remain the payment method of choice among global e-commerce consumers, accounting for 44.5% of e-commerce transaction volume in 2020, up 6.5% from 2019. Chinese consumers lead the way with digital wallets, accounting for 72.1% of e-commerce purchases. In the U.S. – where digital/mobile wallet adoption lagged global averages – digital wallets grew to represent 29.8% of e-commerce transactions, up 23.7% over 2019 levels.

Digital wallet gains in e-commerce came largely at the expense of credit cards, bank transfers and cash on delivery (COD). Our projections expect digital wallets to account for 51.7% of e-commerce payment volumes by 2024 with slight declines in credit cards (to 20.8%) and debit cards

(to 12%). By 2024, digital wallets, credit and debit cards will account for 84.5% of e-commerce spend. Buy now, pay later (BNPL) continues to earn market share, expecting to double from 2.1% in 2020 to 4.2% by 2024.

One new component of our 2020 e-commerce analysis is direct debit. Direct debit is a form of bank transfer where a retailer withdraws funds directly from a consumer's bank account on a specified date after the purchase. Most popular in Europe where it earned 4% of share, direct debit was used for 1.2% of global e-commerce payments in 2020.

Cash bids a hasty retreat amid POS contraction

Point-of-sale felt the impact of COVID-19 most directly, with 2020 global transaction volume falling 4.4% from 2019. Projections see recovery from the global recession transaction volumes taking 18-24 months, returning to 6.5% global growth rates in 2022, and then 3.3% growth in 2023 and 3.5% in 2024.

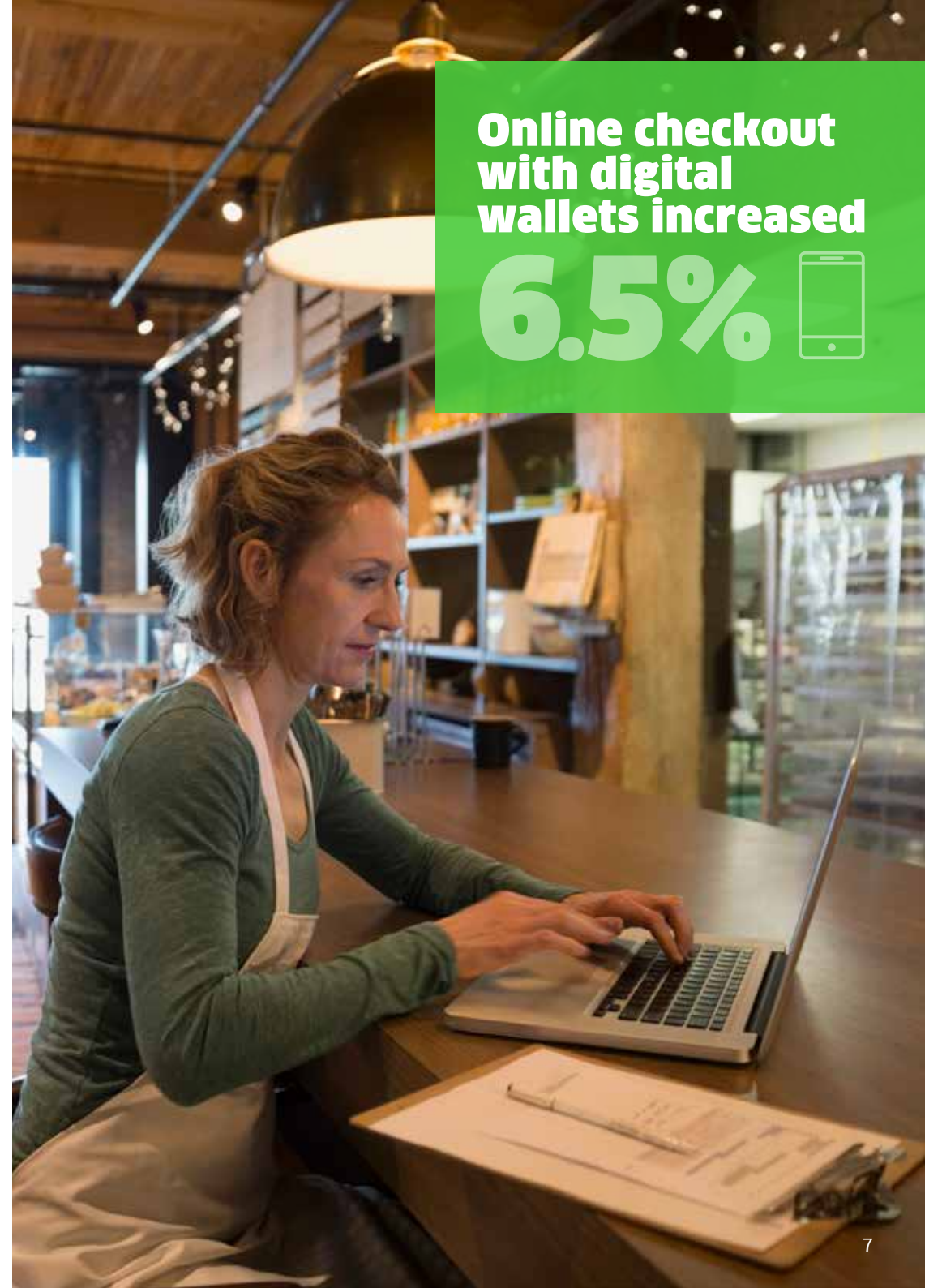
Disruptions in payment types were as equally dramatic as the reductions in total volume. COVID-19 is accelerating the pace of cash's decline faster than even the most bullish projections. The pandemic accelerated the decline of cash by over three years, exceeding in 2020 our previous projection for 2023. Cash was used for 20.5% of global POS volume in 2020, a 32.1% reduction from 2019.

Cash transaction values fell steeply around the world in 2020: by 21.9% in North America, 33.6% in Europe, 34.7% in Latin America and 36.6% in APAC. Cash has fallen to historically low usage around the world, representing only 5.4% of POS transaction volume in Canada, 4.5% in Norway, 11.9% in the U.S. and less than 10% in markets as diverse as Australia, Hong Kong and Sweden.

Mobile wallets gained much of cash's share loss at the point of sale, rising 19.5% over 2019 to represent 25.7% of 2020 POS transactions. The pandemic ushered in a wave of interest in contactless payment methods, accelerating already growing interest in mobile wallets.

**Online checkout
with digital
wallets increased**

6.5% 



Credit cards (22.4%) and debit cards (22.3%) continue to earn majority shares of POS payments in Europe, Latin America and North America, while seeing comparatively less use in APAC and MEA.

A new category in our POS 2020 analysis is POS financing, which represents a mix of legacy and emerging payments that extend consumer credit at the point of sale. This includes credit offered by retailers, financial institutions, marketplaces and BNPL services. The spectrum of POS financing is broadening consumer payment choices while boosting merchant conversions. POS financing represents 3.5% of global 2020 POS share, projected to maintain fairly steady share at 3.3% in 2024.

Looking ahead to 2024, we expect the trend away from cash to continue as consumers cement their preferences of more convenient, contactless payment methods at the point of sale. While accelerating cash's decline, we do not expect a significant cash bounce-back – regardless of COVID-19's ultimate trajectory. We project cash will decline an additional 38% from 2020 to represent just 12.7% of global POS volume by 2024.

The loss of cash will be absorbed by mobile wallets with expectations they will rise an additional 30% from 2020 to account for 33.4% of global POS spend by 2024. Mobile wallets will earn shares in the mid-teens across all global regions by 2024, led by the outlier of APAC where mobile wallets will achieve majority status, earning 47.9% of POS share by 2024. Though shifting within regions, card shares will hold steady through 2024 at roughly 50% of global POS transaction values.

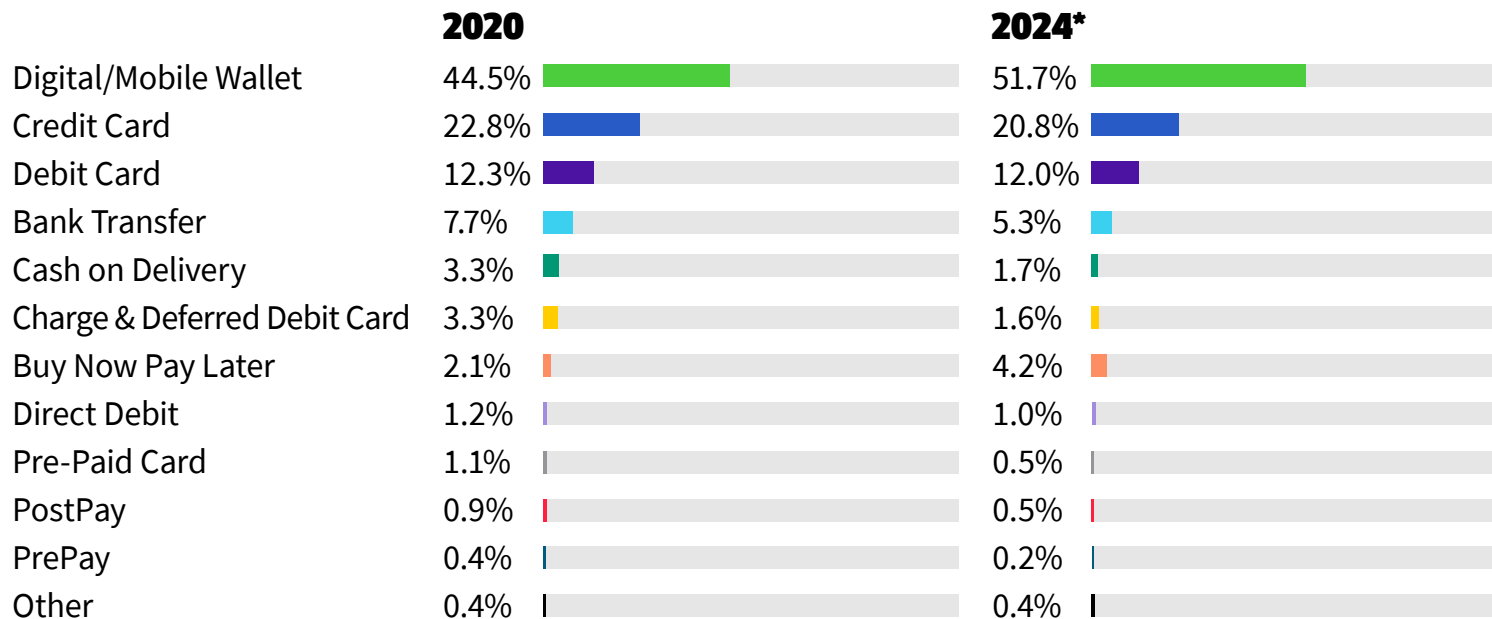
*Percentage changes are calculated as rates of change rather than raw changes in percentages year-over-year

**At the POS,
cash dropped**

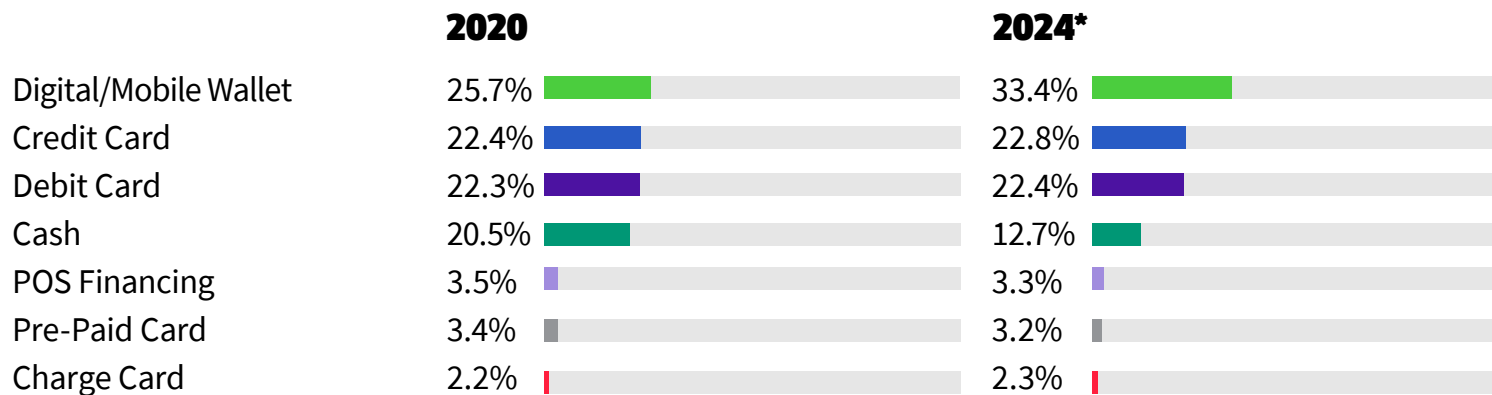
32% 

in the last year

Global e-com payment methods



Global POS payment methods



Numbers adjusted for rounding may impact totals.

*Forecasted





EUROPE PAYMENT TRENDS

COVID-19 caused profound disruptions to commerce throughout Europe. Lockdowns and operating restrictions on physical businesses helped e-commerce volumes surge. Face-to-face businesses bore the heaviest economic burdens, striving to survive and thrive even in the face of recessionary headwinds and evolving regulations.

Payment methods accelerated toward digital solutions in 2020. Digital wallets and buy now, pay later (BNPL) services continue to absorb share amid a balanced e-commerce payments landscape from bank transfers, credit cards and debit cards. More significant disruption was seen at the point of sale, where contactless forms of commerce suddenly rose to prominence to accelerate the decline of cash.

Sustained, diverse e-commerce growth

European e-commerce continued to grow through the pandemic, as consumers sought to bridge the gaps created by closures of in-person

commerce. Europe's e-commerce market grew 14% annually on average between 2016 and 2020; we project the 15 European countries in our survey will sustain average annual growth of 10.1% through 2024.

Though the digital gap is rapidly closing, economies within Europe reflect great diversity. There are e-com markets with high internet penetration and high growth (Spain and Sweden), high internet penetration with moderate growth (U.K. and Scandinavian countries), low internet penetration but high-growth (Russia and Turkey), and low internet penetration, lower growth countries (Poland, Belgium and Ireland). European e-commerce projects robust overall expansion through 2024: from a low of 7.4% CAGR in Belgium to a high of 22% in Turkey.

European payment methods are diverse, with five different methods ranking highest in at least one country surveyed. Digital wallets are the leading e-commerce payment method in Europe, accounting for 26.4% of payments.

Digital wallets are now the leading payment method in the five largest European e-commerce markets: France, Germany, Russia, Spain and the U.K.

Debit and credit cards both capture nearly 19% of payments for e-commerce in Europe, contending for a second-place ranking of European payment preferences. Debit cards are the e-com payment method of choice in Belgium, Denmark and Ireland, while credit cards reign in countries as diverse as Norway and Turkey. BNPL is the leading e-com payment method in Sweden, helping boost the 7.4% share of regional transaction value for buy now, pay later.

Bank transfers represent a robust 13% of regional transactions, sharing strong leadership positions in The Netherlands and Finland. The popularity of bank transfer among European consumers goes beyond even the strong direct share of payments, as digital wallets linked to bank accounts continue to gain share. An emerging variant on bank transfers, direct debit is broken out capturing 4% of European e-commerce payments, mainly driven by Germany.

Looking ahead through 2024, we see a market that continues to reflect Europe's diversity, with digital wallets, credit and debit cards, bank transfers and BNPL all earning double-digital share of e-com payments. Digital wallets and BNPL will gain additional share, with digital wallets rising 13.3% to maintain the category lead, approaching 30% by 2024.

The popularity of BNPL will make the largest gains, nearly doubling its share by 2024 to account for 13.6% of e-com spend. Advances by digital wallets and BNPL options will come at the expense of more traditional payment methods, with charge cards, cash on delivery and pre-paid services seeing steady declines through 2024.

Cash rapidly declines amid POS contraction

As was the case globally, European point-of-sale merchants felt the impact of COVID-19's economic challenges most directly. 2020 POS transaction volume fell 10.2% across the region to U.S.\$6.76 trillion. Modest annual growth of 4.2% is forecast for POS transaction volume through 2024. European POS volumes are expected to expand sufficiently to regain 2019 levels during 2022.



**Europeans checkout
online using debit
and credit cards
equally at**

19% 

Cash use declined at the POS in Europe by more than a third (33.6%). The decline in consumers' use of cash represents among the most dramatic payment method shifts in modern times. Cash volumes dropped by more than half in France (59.6%) and the U.K. (51.1%). Although still considered a significant drop, Germany saw the least drastic declines, falling only 12.5% in 2020 to account for 43.5% of POS transaction volume.

Though the greatly accelerated pace of cash's decline in 2020 was directly attributable to the pandemic, our forecasts see additional retreats independent of COVID-19's path. Europe will see the use of cash declining 9.9% annually through 2024, when it will represent just 15.4% of POS transaction volume. By 2024, we project cash will capture 15.4% of POS spend in Europe. Denmark, Sweden and Norway are expected to be nearly cashless within five years, while above average cash use will persist in Germany, Italy, Spain and Poland.

Cards accounted for most European POS payments in 2020, increasingly of the contactless variety. Cash's loss is translating to wins for cards at the POS: 41% share for debit, 11.5% for credit cards, 6% for charge cards and 2.6% for prepaid cards. Our forecast projects debit cards expanding their share lead through 2024, reaching 43.9% of POS spend.

Mobile wallets are also gaining significant POS share. Contactless mobile wallets surged over 63% in 2020 to capture 7.2% of POS spend. Sustained compound annual growth of 22.9% will see mobile wallets rise to earn 13.9% of POS spend by 2024.

New to the 2021 GPR is POS financing. Created to properly capture and categorize the full range of instant financing options at the point of sale, POS financing encompasses BNPL, direct merchant financing and other marketplace solutions. POS financing represented 4.3% of regional 2020 POS volume. Led by Denmark and The Netherlands, POS financing projects to maintain that share of regional POS spend through 2024.

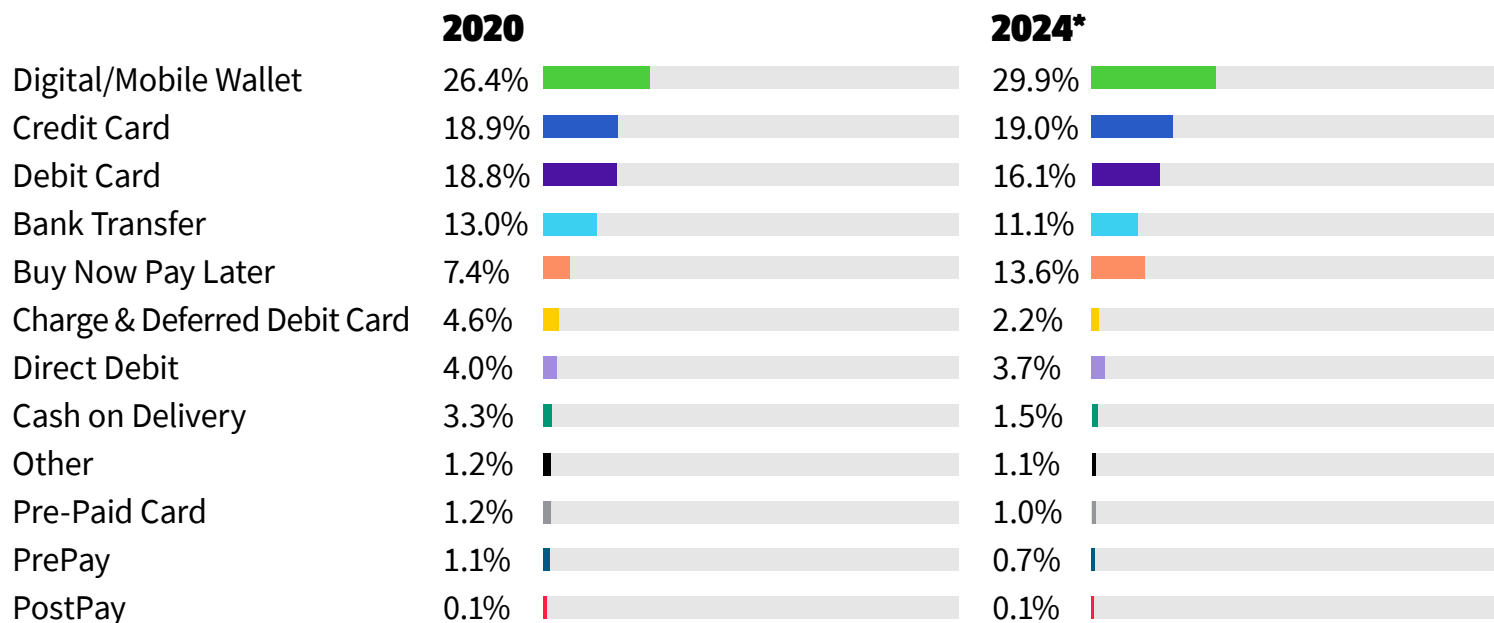
Footnote: For 2021, we've added additional breadth and detail by breaking out Europe to provide separate in-depth analysis. Previous Global Payment Reports aggregated Europe, Middle East and Africa (EMEA).



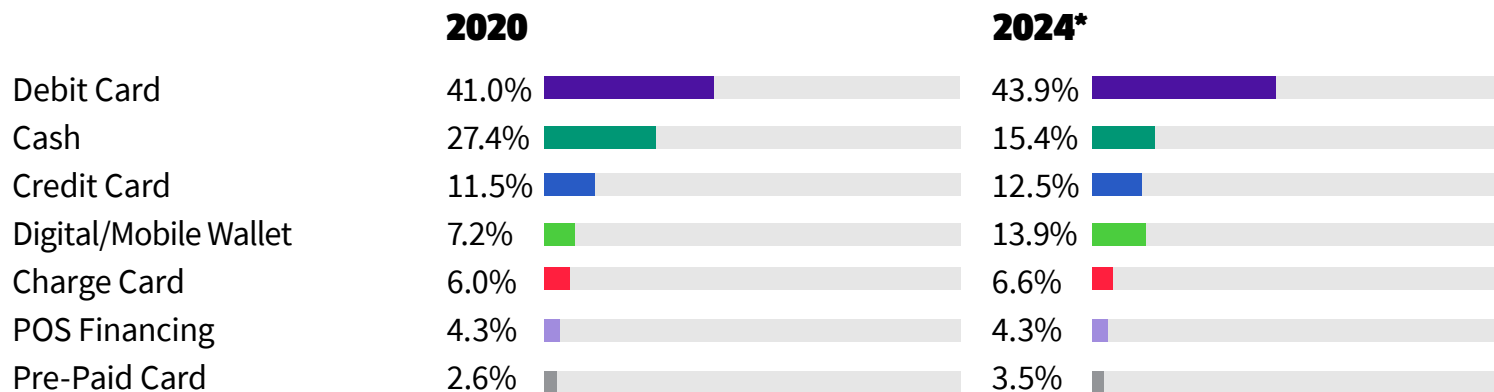
Denmark, Sweden and Norway are expected to be nearly cashless within five years



Europe e-com payment methods



Europe POS payment methods



Numbers adjusted for rounding may impact totals.

*Forecasted





ASIA-PACIFIC PAYMENT TRENDS

COVID-19 caused disruptions to commerce across Asia-Pacific (APAC) in 2020. It imposed compound shocks to the economy: the direct costs of pandemic management, substantial costs resulting from lockdowns and other containment measures, and reverberations from a recession of global scope.

Payment method trends accelerated toward digital solutions throughout APAC in 2020. As commerce shifted from the point of sale to e-commerce, consumers shifted payment preferences to digital methods. Digital and mobile wallets continued to gain in popularity as consumers turned away from cash at historic rates.

APAC e-commerce: Today's window into a global digital future

E-commerce is projected to grow 13% annually through 2024. In 2020, APAC e-commerce transaction value exceeded U.S.\$2.4 trillion and is projected to exceed U.S.\$3.9 trillion by 2024. Expansion will be driven largely by mobile commerce, growing from 59.3% of regional e-com in 2020 to 64.1% by 2024.

Growth in China's e-commerce market will continue through 2024 with 14.1% projected annual growth. By 2024, China's e-commerce transaction value will exceed U.S. \$3.1 trillion, larger than the rest of APAC combined. APAC e-com growth rates through 2024 will range from a high of 19.1% in Indonesia to a low of 7.5% in Japan. Indonesia, Vietnam, The Philippines and India will all see e-com growth rates above 15% through 2024, with less than 10% growth projected for the more mature economies of Australia, Japan, New Zealand and Singapore.

Digital wallets continued to dominate APAC e-commerce payments. In 2020, digital wallets exceeded 60% of APAC e-com payment methods, increasing slightly from 58.4% in 2019. China continues to lead globally in digital wallet use accounting for 72.1% of 2020 e-com payments. Driven by local brands, digital wallets have ascended to be the leading e-com payment method in India (39.7%) and Indonesia (29.3%), while approaching the lead in Australia (24.1%), Hong Kong (28.9%) and New Zealand (20%).

Credit cards maintained a strong second place position with 19.1% of e-com payments, despite falling slightly from 20.1% in 2019. They remain the leading payment method in half of the APAC countries included in our report, including dominant positions in Japan (58.2%), South Korea (57.4%) and Singapore (45.3%). Debit card use in APAC jumped 38.1% in 2020, rising from 4.2% in 2019 to 5.8% of 2020 e-com payments, with consumers using debit more often to pay for smaller value purchases due to the pandemic.

2024 projections include further increases for digital wallets in APAC e-com payments. Digital wallets will increase their dominant lead in e-commerce to 65.4% by 2024, rising to category-leading positions in Australia, Malaysia and The Philippines. Debit cards will also rise from 5.8% of e-commerce payments in 2020 to 7.1% in 2024 on strength in Australia (21.3%), South Korea (20%) and India (18%). Buy now, pay later (BNPL) services will more than double from 2020 to 2024, from 0.6% to 1.3%. These share gains will come largely at the expense of credit cards, bank transfers, cash on delivery (COD) and prepaid cards, all of which will lose share through 2024.

Changing POS preferences

As was the case throughout the world, the economic impacts of COVID-19 were felt most acutely at the point of sale. The pandemic contributed to significant drops in POS transaction values in India (-8.1%), Singapore (-10.4%), Thailand (-9.2%) and Japan (-7.4%).

While the ultimate path of the pandemic globally adds additional uncertainties, strong growth is projected to a recovery of 2019 POS volumes by late 2021 or 2022. China projects 6.2% growth from 2020 through 2024 – including 9.7% growth in 2021 – growing to represent over U.S.\$22 trillion in 2024. The Philippines forecasts the largest growth rate regionally through 2024 at 9.4%, followed closely by India (8.9%) and Vietnam (8.8%). The more mature economies of Japan (2.8%), South Korea (4%) and Australia (4.6%) project the lowest POS growth rates through 2024.



Credit cards are the leading online payment method in Japan, South Korea and Singapore



Payment methods at the point of sale are undergoing a dramatic change away from cash and toward mobile wallets, a global trend led by consumers in APAC with the help of some government initiatives. In Japan, the government actively offered discounts for retail purchases when consumers paid with a non-cash payment method.¹ While the shift away from cash was in motion long before 2020, the pandemic greatly accelerated the trend. 2020 witnessed large shifts in POS transactions with cash, dropping from 30.3% in 2019 to 19.2% in 2020, a decline of 36.6%. Sparked by COVID-19, the accelerated decline in the use of cash in 2020 alone exceeded our pre-pandemic projections for 2023.

Much of the POS spend previously dedicated to cash shifted to mobile wallets. Mobile wallets share increased by 12% in 2020, rising from 35.9% in 2019 to 40.2% in 2020. Mobile wallets approached a three-year acceleration in 2020, nearly reaching the 45.1% projected for 2023. Prepaid cards also gained significant POS share in 2020, rising from 0.8% in 2019 to 3.5% in 2020.

Looking ahead to 2024, we see a continuation of these trends at the point of sale, with cash continuing to decline across the region, projected to fall an additional 43.8% from 2020 to 2024, when cash will represent only 10.8% of transactions. Cash will persist as the leading POS payment method in Indonesia, The Philippines, Vietnam and Japan, yet the decline of cash will be near total in some markets, falling to 5.9% in China, 2.1% in Australia and just 1.6% in Hong Kong.

We project mobile wallets will grow to represent 47.9% of POS spend by 2024. China will continue to lead the way with mobile wallets projected at 57.1% of POS spend, while Taiwan, Thailand and The Philippines will all see mobile wallets experience dramatic growth rates of over 25%. Credit and debit cards will also see steady gains to account in aggregate for one-third of POS spend by 2024.

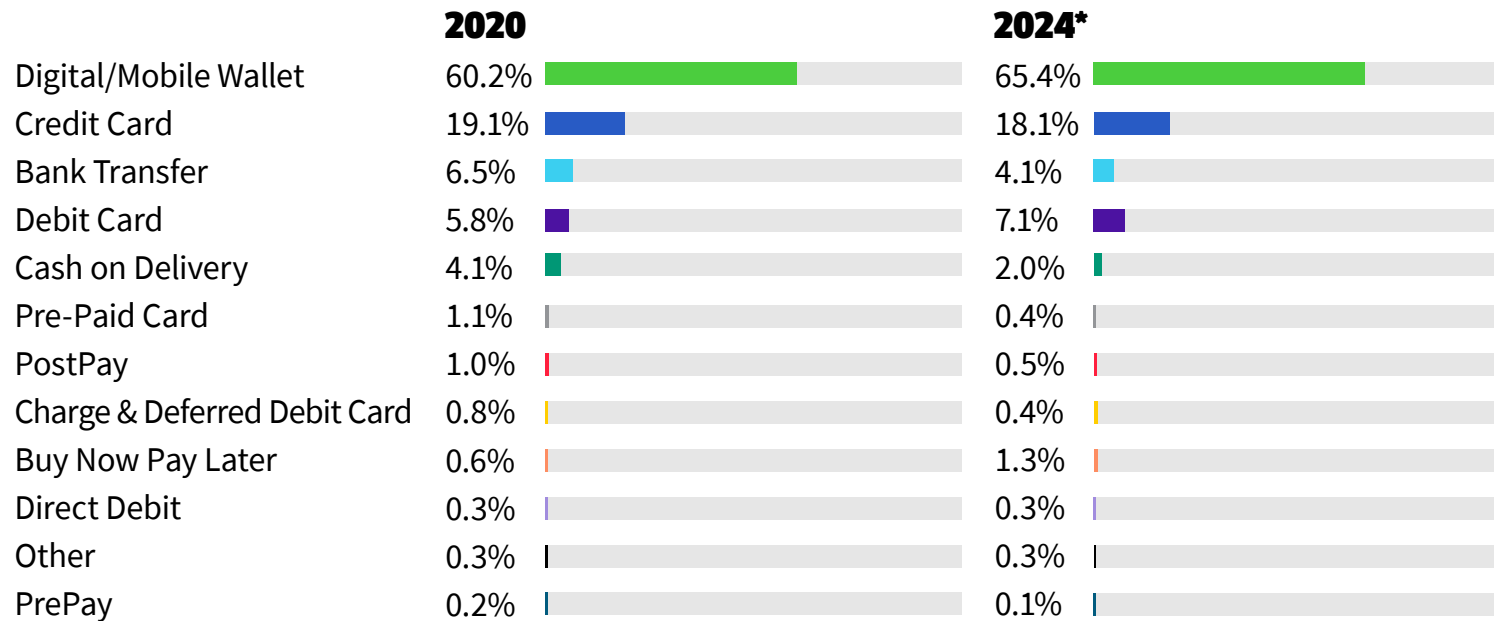
¹ NFCW, October 1, 2019. "Japanese government offers discounts to consumers making cashless payments with cards and mobile phones." <https://www.nfcw.com/2019/10/01/364568/japanese-government-offers-discounts-toconsumers-making-cashless-payments-with-cards-andmobile-phones/>



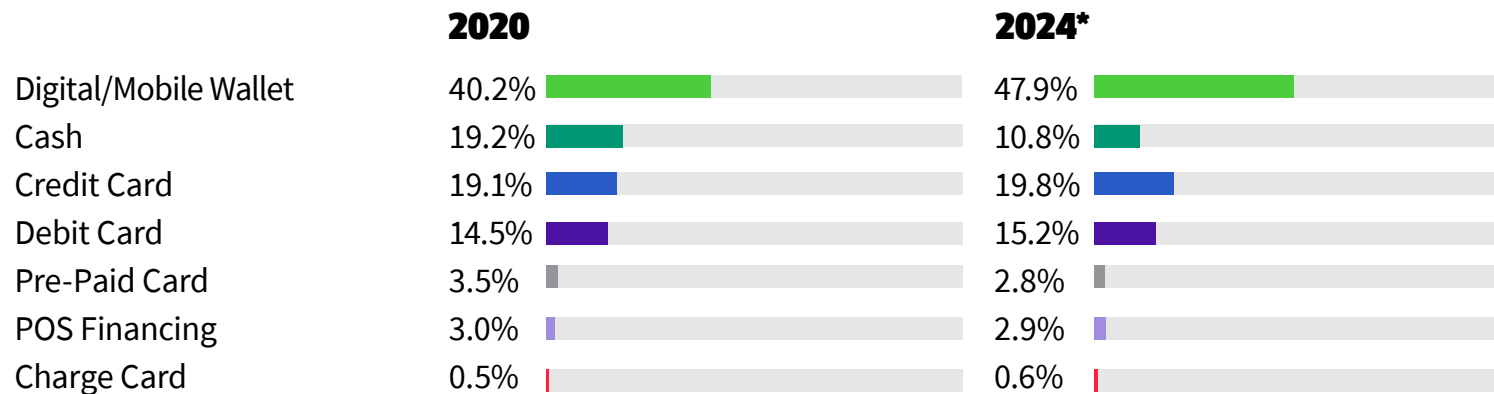
**Mobile wallets used
at the POS increased**

12% 
in 2020

APAC e-com payment methods



APAC POS payment methods



Numbers adjusted for rounding may impact totals.

*Forecasted





MIDDLE EAST AND AFRICA PAYMENT TRENDS

Our analysis of payment trends from a cross-section of countries in the Middle East and Africa finds economies and citizens facing a critical juncture as common challenges converge.

The economies of the Middle East and Africa navigated a tumultuous and recessionary global economy. E-commerce grew as face-to-face businesses shuttered, accelerating fundamental shifts that were underway prior to the pandemic. A diverse mix of traditional and contemporary payment methods vied for e-com supremacy, while at the point of sale, substantial cracks appeared in the longstanding dominance of cash.

MEA e-commerce poised for explosive growth

The Middle East and Africa (MEA) remain among the last frontiers of under-tapped e-commerce potential. MEA consumers turned to e-commerce during the pandemic as demand for groceries, household supplies and

personal care soared. Saudi Arabia and the UAE saw among the highest rates of new or increased users for online ordering of restaurant and online grocery deliveries.

As MEA consumers turn to e-commerce, they're being met by a sophisticated ecosystem of homegrown e-com services. Nigeria is emerging as a regional center for digital modernization, host to both Jumia, a leading pan-African e-commerce platform, and Flutterwave, a payment innovator expanding digital opportunities for small businesses.

Middle East and African economies included in our analysis were experiencing rapid e-com growth prior to COVID-19: 35% CAGR from 2016 through 2020. Yet digital penetration remained low, reflecting early stage emerging economies. The necessities of the pandemic proved an accelerant for digital adoption, offering a tipping point among previously reluctant consumers.

On the strength of accelerated momentum in 2020, MEA e-commerce is projected to see 18.8% annual growth through 2024, nearly doubling from U.S.\$55 billion in 2020 to U.S.\$109 billion in 2024. Nigeria will see the fastest growth at 24% and Saudi Arabia the slowest at 8% CAGR. The UAE and South Africa are expected to grow at 20% and 16%, respectively.

MEA e-com payment methods reflect the diversity of the region. Credit cards gain the greatest regional share at 28%, with all cards combined 49% of e-com spend. Cash on delivery (COD) remains a vital link to e-commerce for large segments of regional consumers that are underbanked.

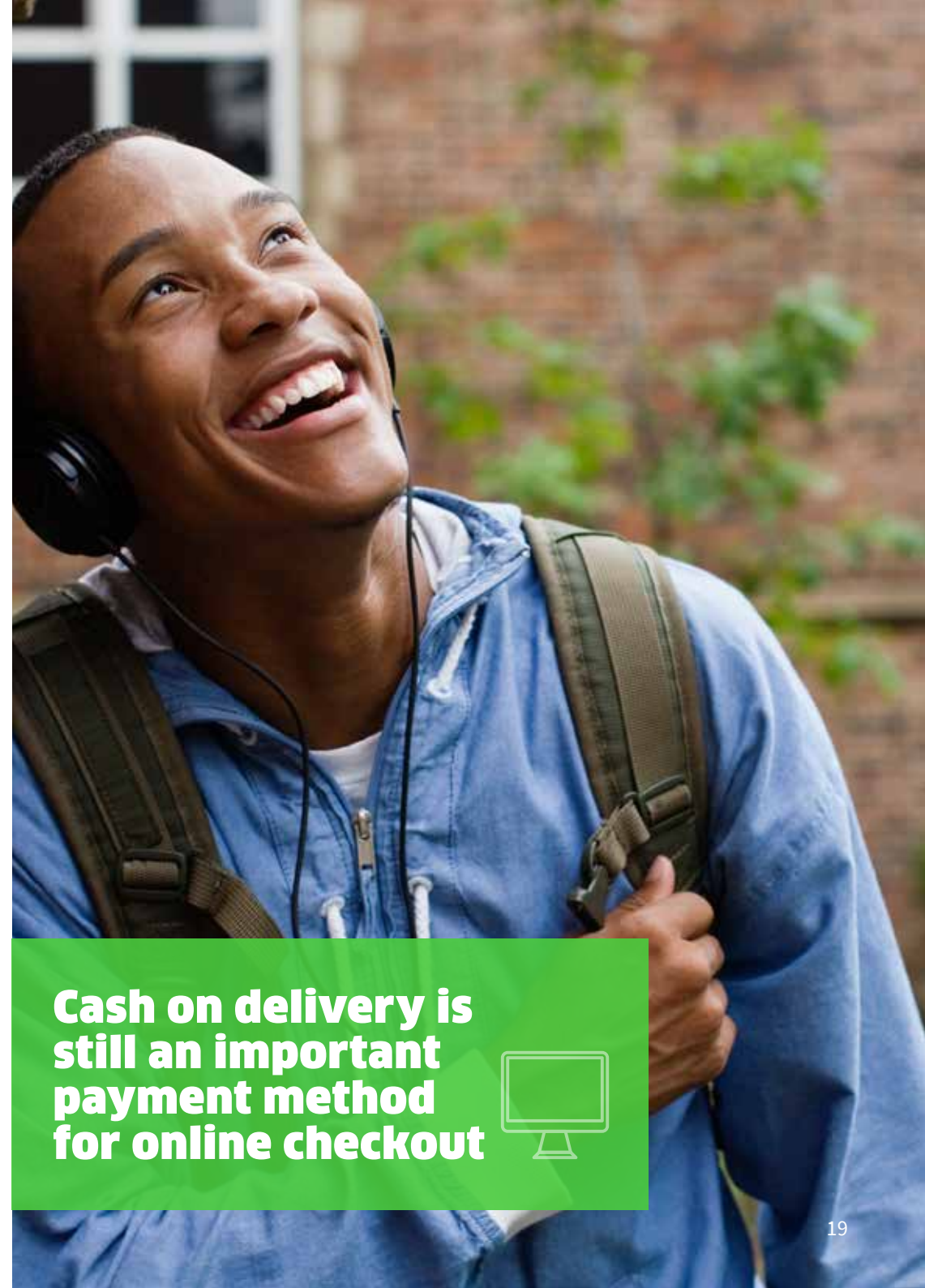
COD was the second-leading payment method regionally in 2020, with 16.4% of regional share, and representing the most popular e-com payment method in Nigeria with 23.2% share. The region's varied e-com payment landscape is balanced by increasing strength from bank transfers with 15% of spend and digital wallets with 14.4%.

Looking ahead through 2024, we project digital wallets will gain the most ground, growing 45% to account for over a fifth of e-com spend by 2024. Those gains will come largely at the expense of COD, which is projected to lose over 28%. Cards look to maintain their share dominance, with credit cards making steady gains against other card types and projected to earn more than a third of e-com payment volume by 2024.

The last stronghold of cash's point of sale dominance

Despite more rapid retreat in other regions, cash retains its prominence at the point of sale in MEA. Cash accounted for more than half (52.6%) of 2020 POS transactions across the region. Cash holds its dominant position despite the pandemic causing a dramatic 25.5% reduction in 2020, falling from 70.6% in 2019.

In Nigeria, cash's 2020 retreat was especially impactful, falling from 91% of POS transactions in 2019 to 69% in 2020. We expect cash will rebound at the Nigerian POS slightly in 2021 before resuming a gradual decline to 62.9% by 2024. The region's steepest declines are



Cash on delivery is still an important payment method for online checkout



projected for South Africa, where cash use dropped below 50% amid the pandemic in 2020, and is projected to account for 30.3% of POS volumes by 2024.

Replacing cash at the point of sale brought a diverse balance of legacy and contemporary payment methods. Cards combined earned 34.3% of POS spend in 2020, led by credit cards that surged 47% over 2019 to account for 16.6% of 2020 transaction volume.

Mobile wallets made the biggest gains in regional POS share, more than doubling from 3.6% in 2019 to 8.3% in 2020. Consumers in Nigeria and Saudi Arabia led regional adoption of mobile wallets, each surpassing 10% of share in 2020.

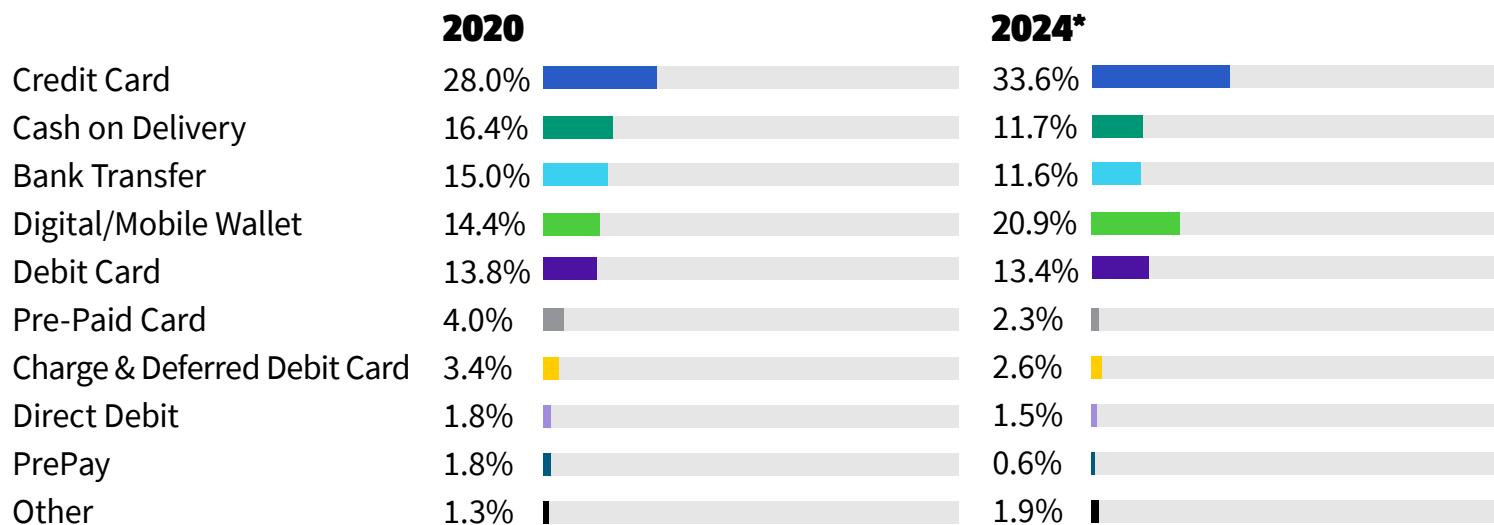
By 2024, mobile/digital wallets are the only payment method category to gain regional POS share. Led by high sustained growth in Nigeria and Saudi Arabia, mobile wallets will more than double from 2020, growing from 8.3% to account for 16.8% of POS transaction share in 2024.

Footnote: For 2021, we've added additional breadth and detail by breaking out the Middle East and Africa (MEA) from Europe to provide more extensive in-depth analysis. MEA covers payment trends spanning Nigeria, Republic of South Africa (RSA), Kingdom of Saudi Arabia (KSA) and the United Arab Emirates (UAE).

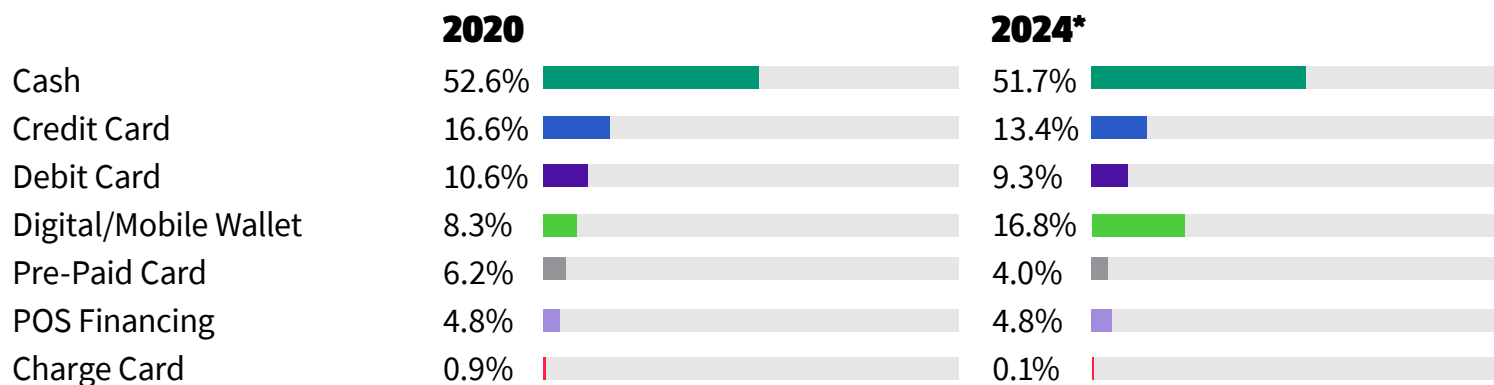
Nigeria and Saudi Arabia lead POS adoption of mobile wallets



MEA e-com payment methods



MEA POS payment methods



Numbers adjusted for rounding may impact totals.

*Forecasted





NORTH AMERICA PAYMENT TRENDS

The payment landscape across North America in 2020 was subject to dramatic upheavals that mirrored the disruptions of global commerce.

The pandemic forced significant change in what we bought and sold, how those purchases were made, and how goods and services traveled to their destinations. Pandemic-related disruption propelled e-commerce to the forefront as remote commerce became the lifeline to an economy disrupted by the need for physical distance. Point-of-sale merchants faced unprecedented challenges as commerce began to change overnight.

Payments provided an anchor of stability amid economic disruption. The pandemic accelerated the decline in the use of cash while more spend than ever before was driven by digital and mobile wallets. Digital payments helped maintain the fast, secure, convenient exchange of funds.

Digital wallets ride a rising e-commerce wave

2020 saw significant changes to online commerce. The pandemic shifted consumer spend from the point of sale to online, projecting e-commerce growth in the face of recessionary headwinds: 19.3% in Canada to reach over U.S.\$77 billion and 15.4% in the U.S. to exceed U.S.\$1.1 trillion in 2020 e-commerce sales. That growth is expected to continue, with North American aggregate e-commerce volumes rising 11% CAGR through 2024 to exceed U.S.\$1.78 trillion.

E-commerce growth shifted as travel and hospitality spending gave way to online groceries, digital services and a growing array of delivery platforms. In payment methods, the historical preference of credit cards showed signs of receding as debit cards, digital wallets and buy now, pay later (BNPL) services surged in popularity.

Dropping 7% from 2019, credit cards remained the leading e-commerce payment method among North American consumers, accounting for 32% of 2020 payments. Credit cards are still the choice for Canadians shopping online, accounting for 54.9% of 2020 transaction volume, down from 60% in 2019. Credit cards maintained a slimmer lead in the U.S. just ahead of mobile/digital wallets, making up 30.4% of 2020 online payments. The shift away from credit is driven by the pandemic as fears of a recession and unemployment continue to grow.

Other payment methods gaining a share of North American e-commerce spend in 2020 are debit cards, digital wallets and BNPL. Debit cards rose 14.2% from 2019 to account for 20.1% of 2020 e-commerce spend.

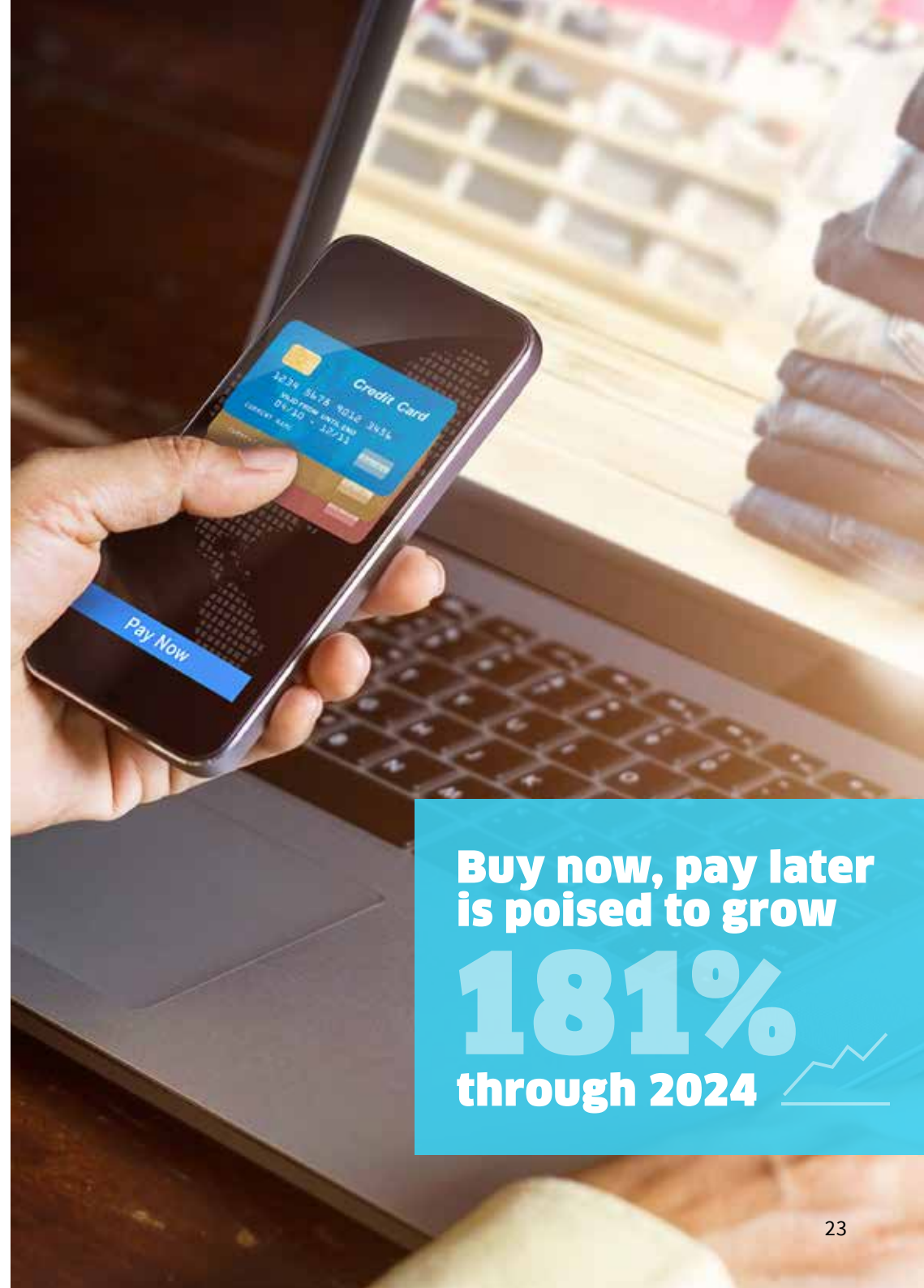
Digital wallets continued to accelerate growth through the pandemic, rising over 23.6% from 23.7% in 2019 to 29.3% of 2020 e-com spend. Buy now, pay later services made the biggest percentage leap in 2020, rising nearly 78% to account for 1.6% of e-com spend. Charge cards, cash on delivery and pre-paid services all fell in 2020 e-com payment share.

By 2024, digital wallets are projected to grow an additional 38.2% over 2020 levels to account for 40.5% of North American e-commerce payment volume. Falling to second position, credit cards will still account for 26.7% of e-com payments, while debit cards will retain nearly one fifth (19.5%) of share.

Our projections find BNPL poised for explosive growth to jump 181% from 1.6% in 2020 to 4.5% by 2024. Providers are rapidly expanding into the checkout carts and consumers see BNPL as a safe way to spread out interest-free payments. Bank transfers, charge cards, cash on delivery and other services are expected to decline.

The decline of cash at the POS

Point-of-sale merchants faced the 2020 economic challenges of the pandemic most directly. Physical businesses navigated challenges ranging from mandatory closures to a variety of ongoing operating restrictions. The gains in e-commerce came at the direct expense of POS merchants. POS volume dropped 8.8% in the U.S. from 2019, a reduction of approximately U.S.\$825 billion. Canadian POS volume



**Buy now, pay later
is poised to grow**

181%
through 2024

fell U.S.\$77 billion from 2019, a 10.2% reduction. Modest growth will see POS volume regain 2019 levels by 2022, with compound annual growth rates for Canada projected to 5% and 4% for the U.S. through 2024.

When commerce occurred at the point of sale, safety concerns brought about a desire for contactless transactions, resulting in considerably less cash use. Cash fell by 21.9% across North America as a percentage of POS payments, to 11.4% of transactions.

Cash's decline was absorbed by mobile wallets, prepaid cards and a new category to our 2020 point of sale analysis: POS financing. Mobile wallets gained popularity at the point of sale in 2020 as a contactless payment method, though we expect the growth of mobile wallets at the point of sale to continue well beyond the pandemic. Mobile wallets surged 60% in 2020, growing from 6.0% in 2019 to 9.6% of POS spend in 2020.

Prepaid cards more than doubled as a percentage of POS volume – from 1.9% in 2019 to 3.9% in 2020 – owing largely to their use as a disbursement method for pandemic-related relief funds. The ongoing use of open-loop prepaid cards for public entitlements and increasing use for corporate expenses and real-time gig economy payments will result in continued strength in prepaid card segments. Point-of-sale financing is broken out as a distinct segment capturing 3.9% of North American POS payments, largely based on the growing strength of BNPL services.

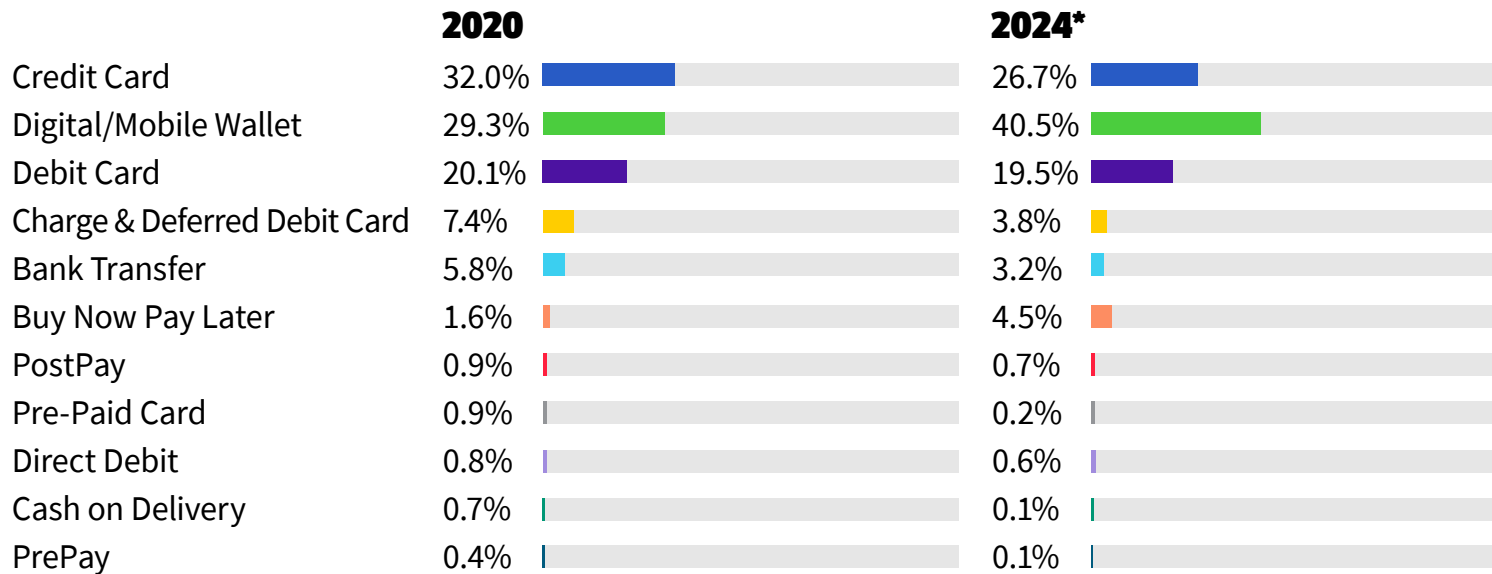
Looking ahead to 2024, cash will continue to recede, falling an additional 23.7% from 2020 levels to account for 8.7% of North American POS payments. Credit cards will hold mostly stable, retaining its top position with 38.4% of 2024 POS spend, while debit cards will decline to 25.8% of 2024 POS spend. Aside from a marginal uptick in prepaid card volume, the totality of losses from all other POS payment methods will be gained by mobile wallets. We project the acceleration in mobile wallet adoption will continue through 2024, rising from 9.6% in 2020 to 15.5% of POS transaction volume in 2024.



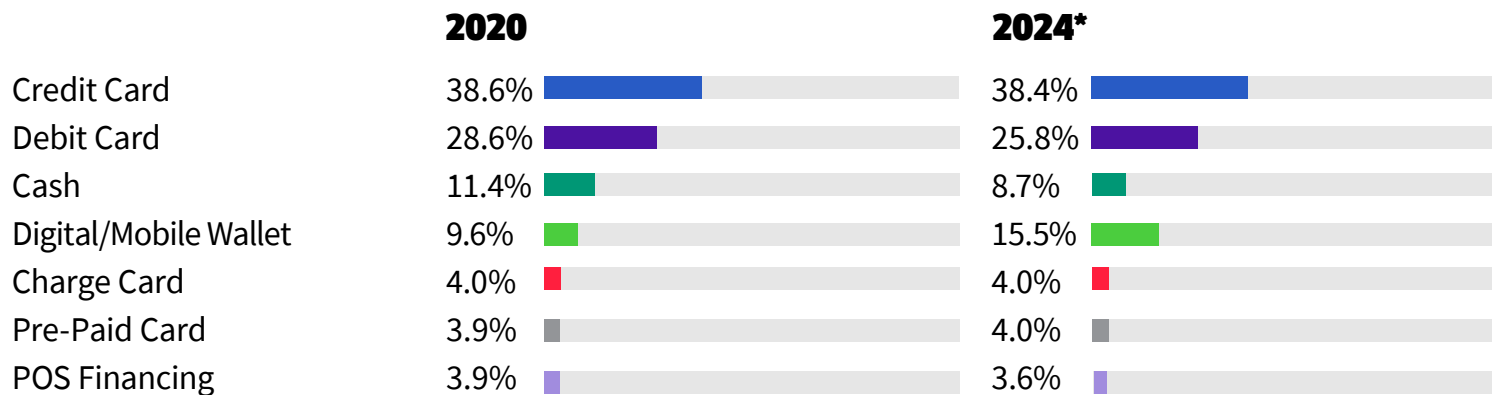
**Point of sale
checkout using
mobile wallets grew**

60% 

North America e-com payment methods



North America POS payment methods



Numbers adjusted for rounding may impact totals.

*Forecasted





LATIN AMERICA PAYMENT TRENDS

Latin America saw impactful changes in payments amid the pandemic in 2020. Comparably low rates of e-commerce penetration coupled with a cash-dominated point-of-sale market produced widespread disruption across Latin America. COVID-19 exposed cash's drawbacks and forced millions of businesses and consumers to turn to available payment alternatives.

Robust e-commerce growth accelerates amid pandemic

Regional e-commerce transaction volumes soared in 2020 despite recessionary headwinds contracting the overall size of the economy. Many Latin Americans turned to e-commerce for the first time during COVID-19, with over ten million regional consumers making their first digital purchase due to the necessity of the pandemic.¹

Regional e-commerce growth accelerated in 2020, with transaction volume growth of 22.2% in Brazil, 24.4% in Mexico and 29.8% in Chile. Growth in mobile commerce posted even greater gains, rising by 33.9%

in Mexico, 41.6% in Brazil and 77.5% in Argentina. Latin American e-commerce is expected to experience 15% compound annual growth through 2024, driven by 20% growth in mobile commerce.

Latin American e-com transactions are projected to exceed U.S.\$160 billion by 2024 with continued double-digit growth rates in the region's largest economies: Brazil (11.9%), Mexico (15.8%) and Argentina (22.3%). Low e-commerce penetration across the region suggests Latin America will offer strong growth potential throughout the current decade.

The benefit of installment payments keeps credit cards as the most popular payment method for e-commerce in Latin America. They still led e-com payment methods – capturing 36.5% of 2020 regional e-com spend – despite falling from 43.8% in 2019. Credit cards also lead e-com payment methods in each of the six Latin American countries in our report, from a regional low of 29.1% in Mexico to a high of 43.2% in Brazil.

Debit cards grew 37% over the same period, rising from 11.9% in 2019 to 16.3% in 2020. The rise of debit cards in 2020 was attributable to more small-value purchases, as everyday spend typically made at the point of sale shifted online due to COVID-19. Governments and banks also promoted their use as an alternative to cash. PostPay services lost 31.6% of regional share in 2020, falling to 5.4% of e-com spend as funding e-com purchases with cash became less practical in 2020 due to the pandemic.

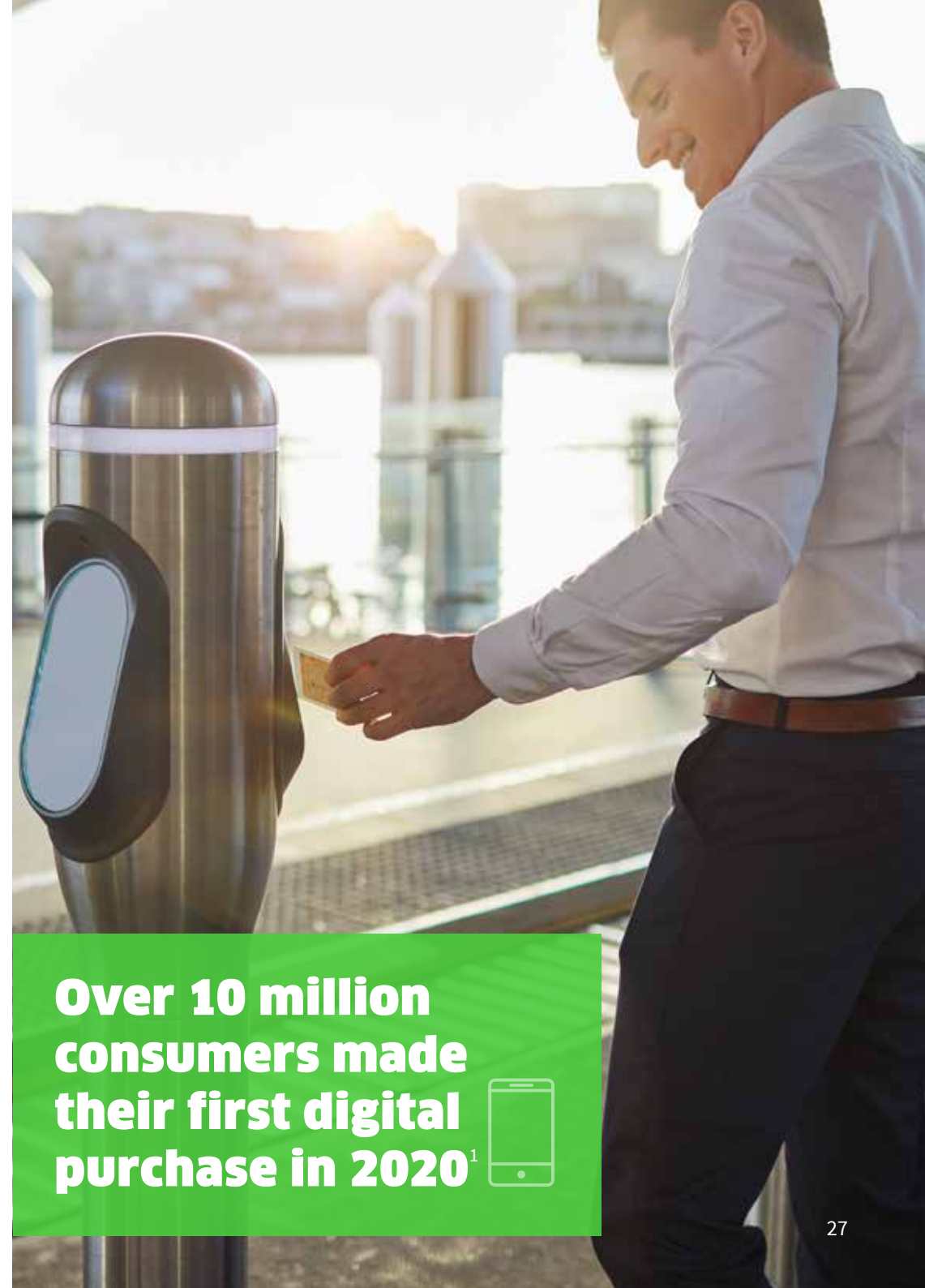
Digital wallets experienced the largest growth in Latin American e-commerce payments in 2020. They grew 43.5%, from 13.8% in 2019 to 19.8% in 2020. Digital wallet growth was accelerated by three years due to the pandemic, exceeding our pre-COVID projection for 2023. Robust growth for digital wallets is expected to continue, surpassing credit cards to become the leading regional e-com payment method by 2024 when they're projected to capture 31.2% of e-com transactions.

Digital wallets and debit cards are the only e-com payment methods projecting growth through 2024. Credit cards, charge cards, bank transfers, cash on delivery (COD) and PostPay services will all sustain gradual declines in share of e-com payments.

Cash faces tough test for supremacy at POS

In 2020, point of sale payments in Latin America witnessed some of the most abrupt shifts in global commerce. COVID-19 unleashed a level of economic disruption unprecedented in modern times. Lockdown measures and social distancing requirements resulted in region-wide economic contraction and a net reduction in point of sale transaction volumes: down 13.2% in Argentina, 12.6% in Colombia, 9.8% in Mexico and 8.8% in Brazil.

The use of cash at the Latin American point of sale fell 34.7% as a result of the pandemic, from 58.2% in 2019 to 38% in 2020. Cash was the foundation of Latin American commerce, capturing an outright majority of regional POS spend as recently as 2019. Cash use fell across the region: by 31.3% in Argentina, 24.9% in Brazil and 36.8% in Mexico. The pandemic accelerated cash's decline by more than three years, far surpassing in 2020 the 43.2% we had previously projected for 2023.



Over 10 million consumers made their first digital purchase in 2020¹



The dramatic decline of cash at the point of sale in Latin America was absorbed by cards, point-of-sale financing and, most of all, mobile wallets. Every manner of card-based payment increased regional POS payment share in 2020: credit cards gained 17% over 2019 to account for 26.1% of 2020 spend, while debit gained 37.3% over 2019 to account for 23.2%.

Charge cards and prepaid cards each gained a greater foothold in the region, in each case exceeding 1% of POS spend in 2020 for the first time. Point of sale financing options tap into a comfort level among Latin American consumers for installment plans, including marketplace solutions, buy now, pay later (BNPL) services and merchant finance offerings. A new category to our analysis this year, point of sale financing, captured 3.7% of regional POS spend in 2020.

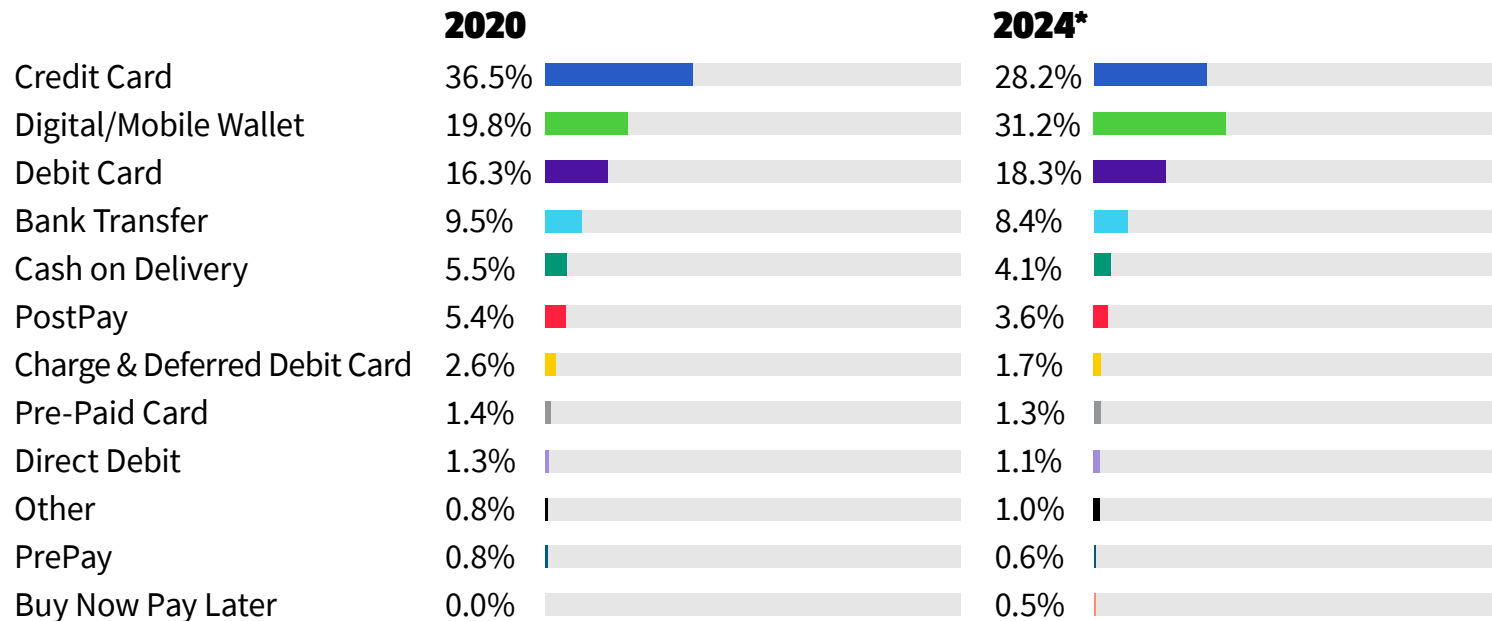
Looking ahead to 2024, the decline of cash will continue with no significant rebound regardless of the pandemic's path. Our projections see cash dropping an additional 36.1% from 2020 levels, finally dropping from the top spot in POS payment methods with 24.3% of 2024 POS spend. In the place of cash, we'll see debit cards (28.8%) edging out credit cards (27.6%) for POS payment supremacy. Mobile wallets will make the largest percentage gain by 2024, though they'll still fall fourth in POS payments, rising from 6.4% in 2020 POS spend to 12.4% in 2024.

**The use of cash
at the POS fell**

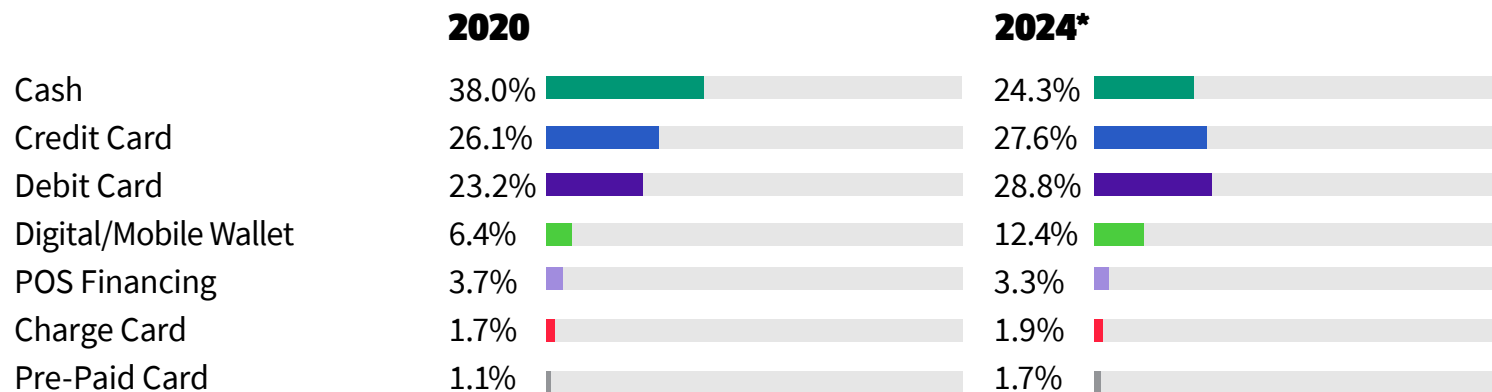
35% 

¹ Matteo Ceurvels, eMarketer, June 17, 2020. "Latin America Ecommerce 2020: How COVID-19 Will Affect Growth and Sales in Argentina, Brazil and Mexico." <https://www.emarketer.com/content/latin-america-ecommerce-2020>

Latin America e-com payment methods



Latin America POS payment methods



Numbers adjusted for rounding may impact totals.

*Forecasted



KEY INSIGHTS

Rebuilding payments **for a smarter world**



THE NEW VELOCITY OF COMMERCE

In 2020, commerce began accelerating at a new velocity. For commerce to continue, it required even more focused direction, minimum friction at checkout and new development that felt instantaneous. Yet providing consumers with experiences that exceed persistently elevating expectations poses challenges as well as opportunities. Navigating these challenges requires innovation, adaptability and a sense of timing and urgency to not get left behind.

Cash began heading towards obsolescence, contactless payment popularity skyrocketed, while business-to-business exchange quickly shed its legacy past. Technology companies, retailers and institutions from banking to the public sector are all racing to satisfy a new generation of expectations for commerce at vast scale and great speed.

The sun is setting faster on cash

The increasing velocity of commerce leaves little room for slow legacy systems. The need for speed is coming largely at the expense of cash.

Cards, mobile wallets and other digital alternatives were already catching up to or exceeding cash at the point of sale. With the pandemic, safety concerns around cash combined with physical distancing suddenly rendered it impractical. Though not inherently high risk as a virus transmitter¹, consumer perceptions about safety persist. More than half (53%) of global consumers surveyed by Worldpay from FIS said the coronavirus made them more hesitant to use cash.² The FIS' annual global real-time payment trends report, Flavors of Fast 2020, recently predicted that traditional payment mechanisms like paper checks have also begun their march to a permanent end, as the pandemic has highlighted how laborious and cumbersome checks and physical payments, in general, can be.³

The potential sunset of cash will look different around the world, reflecting unique blends of local regulations, technical infrastructure and consumer preferences. Sometimes the sunset of cash is encouraged, so ensuring accessibility to commerce for groups like the unbanked needs to be considered in any plan. As part of the government of Ghana's Digital Financial Services (DFS) policy, regulatory efforts seek to reduce the use of cash by promoting digital payments in the form of mobile money accounts.⁴ Mixed signals are heard in the U.S., where concerns over inequitable access have produced local ordinances that mandate cash acceptance at retail outlets.⁵

Consumer payments at the speed of bytes

Entering 2020, many businesses were ahead of the curve and connecting the digital dots, while others were left scrambling to catch up. 2020 brought digital transformation and rapid adaptability front and center. A new level of consumer expectations is rising, accelerating the need for speed and pulling the future faster into today.

Contactless took on a much broader meaning in 2020. As the pandemic suddenly demanded sustained social distancing, the common use of contactless expanded to any exchange that minimized contact between people. Almost overnight, contactless was not just a way to describe proximity payments, but an understood approach to social distancing best practices. At the forefront, the goal was fast digital payments in pursuit of efficient real-time exchange.

Nowhere is that more crucial than retail. Brands have had to completely rethink how they're reaching the everyday consumer. The platforms and technology were already there just waiting for the right time and the right strategy. 2020 catapulted retailers' collaboration with influencers in order to encourage sales. It's become the ultimate curation experience for shoppers to get a first-hand look at products that are of interest with a simple, easy path to purchase.

The last gasps of legacy B2B payments

The pandemic accelerated the need to manage cashflow even more efficiently under unprecedented economic stress. Once a matter of convenience, exchanging payments quickly became a matter of survival.



**Retail success
means crafting
the ultimate
curation
experience**



Despite successfully digitizing B2B payments prior to the pandemic, many accounting departments were ill-prepared for the sudden shift to remote work. Checks still accounted for 29% of B2B transactions in 2019, with two-thirds of those checks issued by SMBs.⁶

The need for speed and flexibility in everyday B2B spend is elevating the profile of virtual cards. Juniper Research estimates global transaction value of virtual cards increased 11% as a result of COVID-19 to \$1.6 trillion in 2020, while projecting that number will more than triple between 2020 and 2025.⁷

Estimated to represent in excess of U.S.\$125 trillion globally, the B2B payment market is the subject of intense competition from real-time payment rail providers both domestic and cross-border. The infrastructure for faster B2B payments is increasingly in place, from Faster Payments in the U.K., to SEPA Instant Credit Transfer for payments within the European Union. A critical mass for faster B2B payments seems soon at hand.

Adjusting for payments acceleration throughout the economy

The new velocity of commerce isn't limited by geography, commercial sector or proximity to consumers. The value in fast, safe and efficient movement of money is universal and COVID-19 made fast delivery of economic relief an urgent necessity. Digital payments proved essential in distributing relief funds quickly for maximum impact. In the Dominican Republic, the Solidaridad program helped turn national identity cards into payment mechanisms loaded with government aid, while in Guatemala, Bono Familia allowed emergency funds to be deposited instantly to beneficiaries.⁸

The pandemic accelerated interest in several countries adopting digital fiat currencies.⁹ In 2020, China began a pilot of the world's first digital fiat currency. In the U.S., the Federal Reserve continued its research into a U.S. Central Bank Digital Currency (CBDC), though plan details for the "Digital Dollar" remain unclear.¹⁰ Meanwhile, NACHA's ACH network helped deliver unemployment benefits, small business assistance and U.S. CARES Act stimulus payments, pushing same-day ACH volume up 37% in Q2 2020 over Q2 2019.¹¹



Shedding reputations of previous generations for being slow to change, the banking sector is among those witnessing the most profound transformations since the onset of the pandemic. The velocity of commerce is accelerating the move from physical to virtual banking. In Australia, the pandemic is accelerating the pace of bank branch closures as well as the removal of thousands of ATMs.¹² Unable to leverage the power of the branch, the pandemic offers financial institutions a perfect opportunity to reassess their state of digital transformation and how they can properly position themselves for the demands of speed for today's velocity of commerce.

Payments of the future at the speed of now

The pandemic brings digital transformation and rapid adaptability front and center. It made getting paid faster, authenticating faster and adapting technology faster an imperative.

Governments, businesses, consumers, financial institutions and the financial technology companies that connect them are devoting significant time and resources to adjust to the new expectations for speed. To achieve success, it won't just be about getting everything done faster. It will require innovation that's also smarter.

¹ Meera Jagannathan, MarketWatch, March 9, 2020. "World Health Organization: 'We did NOT say that cash was transmitting coronavirus'" <https://www.marketwatch.com/story/who-we-did-not-say-that-cash-was-transmitting-coronavirus-2020-03-06>

² Worldpay from FIS, November 2020. "Generation Pay." <https://www.fisglobal.com/en-gb/generationpay>

³ Worldpay from FIS, June 2020. "Flavors of Fast 2020." <https://www.fisglobal.com/flavors-of-fast>

⁴ Buddy Buruku, CGAP (Consultative Group to Assist the Poor), May 21, 2020. "Ghana Launches World's First Digital Finance Policy Amid COVID-19." <https://www.cgap.org/blog/ghana-launches-worlds-first-digital-finance-policy-amid-covid-19>

⁵ Ann Carrns, The New York Times, Sept. 11, 2020. "Who Gets Hurt When the World Stops Using Cash." <https://www.nytimes.com/2020/09/11/your-money/cash-credit-cards-coronavirus.html>

⁶ Erin McCune, Glenbrook Partners, July 16, 2020. "COVID-19 Will (Finally!) Force B2B Digital Adoption." <https://px.glenbrook.com/covid-19-will-finally-force-b2b-digital-adoption/>

⁷ Juniper Research, June 29, 2020. "Virtual Card Adoption Accelerates to Over \$5 Trillion in Transaction Value by 2025." <https://www.businesswire.com/news/home/20200628005002/en/Juniper-Research-Virtual-Card-Adoption-Accelerates-5>

⁸ Visa, Nov 2, 2020. "A COVID silver lining in Latin America: digital payments surge: E-commerce, contactless and P2P take off in cash-driven economies during the pandemic." <https://usa.visa.com/visa-everywhere/blog/bdp/2020/10/09/a-covid-silver-1602273015995.html>

⁹ Andy Mukherjee, Bloomberg, May 23, 2020. "China's Crypto Is All About Tracing — and Power." <https://www.bloomberg.com/opinion/articles/2020-05-24/china-s-yuan-will-exit-covid-19-with-a-big-digital-currency-lead>

¹⁰ U.S. Congressman French Hill, August 13, 2020. "Federal Reserve Reveals Research Plans For Digital Dollar." <https://hill.house.gov/news/documentsingle.aspx?DocumentID=7649>

¹¹ Payments Journal, September 17, 2020. "Same Day ACH in 2020: Constant Growth & Continued Improvements." <https://www.paymentsjournal.com/same-day-ach-in-2020-constant-growth-continued-improvements-2/>

¹² Philip Bruno, Olivier Denecker, and Marc Niederkorn, McKinsey, October 1, 2020. "Accelerating winds of change in global payments." <https://www.mckinsey.com/industries/financial-services/our-insights/accelerating-winds-of-change-in-global-payments>



**Brands need
smart innovation
to propel
further faster**





ALL FOR OMNI

The digital and the physical were converging long before 2020 as businesses strove to create seamless customer experiences across every customer journey. Inspired by the global consumer's insatiable thirst for convenience, connected via ubiquitous smartphones, businesses were realizing the urgency of digital transformation.

COVID-19 is accelerating this momentum toward omnichannel experiences with the pandemic being the ultimate stress test of business resiliency.

Unification is happening in the digital transformation of physical retail, the increasing accessibility of digital tools for even the smallest business and the continued convergence of e-commerce and social media. Secure payment innovations that transcend channel are helping lay that foundation and bridge the future of commerce. 2020 has brought commerce to the tipping point for omnichannel experiences that propel brands forward while satisfying consumer need.

Unifying commerce at (small) scale

Prior to the pandemic, digital engagement strategies, channel-agnostic payments and flexible delivery methods all sounded great. But for many businesses, development efforts could wait. The pandemic changed that equation overnight. Nice-to-haves instantly became must-haves. Adaptability became a core competency. Embracing digital transformation became a matter of survival.

Omnichannel approaches were around and well underway prior to 2020 but the pandemic propelled them into the forefront of development. Buy online, pickup in store (BOPIS) – and its variants like order online and pickup curbside, car delivery, or pickup in drive-throughs – were innovations popularized by the necessity of the pandemic and will remain conveniences that consumers will continue to embrace. Omnichannel technology levels the playing field and makes change accessible for a business of any size.

Even microbusinesses are embracing digitization in the form of cashless payments. In Singapore the government's Hawker Go Digital campaign incentivizes businesses with sign-on bonuses to encourage greater use of digital payments that also help protect public health. Hawkers – small merchants operating in food courts – can use simple Singapore Quick Response (SGQR) codes to accept payments through the most used payment schemes.¹ Transformation and technological advances are no longer restricted to businesses that have large investments to make.

Unity through payment experiences

Subscription-based businesses introduced a new mindset on how to serve consumers in a new way. Some of the central tenets making up omnichannel experiences today were built on a foundation set by subscription services – customer-centric, personalized and designed for resilience.

These services brought a variety of items right to our door – coffee pods, toilet paper, cleaning products and even clothes. Now brands are taking it one step further and bringing the physical straight to our devices using artificial intelligence. Shopping is becoming as simple as uploading a photo and letting AI technology find just the right item to buy.²

The nearly universal success of subscriptions, and any payment experience, starts with simple, secure, reliable payments. Payments were redesigned to meet the needs of subscription businesses and consumers. A legacy rooted in tradition evolved seemingly overnight to meet consumer demand and 2020 introduced a new catalyst for change requiring the same type of innovation.

Unifying commerce with its social roots

Social commerce was already influential before the pandemic, as brands sought not just to reach their audience, but to do so in ways that mimicked the best elements of face-to-face retail.

As global consumers found themselves separated from friends, they sought ways to fill their time and ease the burdens of isolation through social media. Brands had new opportunities to build more momentum through product discovery via friends' feeds, getting product



**The omnichannel
tipping point
has arrived**



recommendations from friends and influencers, and the ability to engage brands directly.

Social commerce efforts in China are engaging tens of millions of consumers daily with innovations like livestreaming that features wildly popular social influencers.³ Livestreaming is combining social influence with media and layers on the fear of missing out with limited-time offers resulting in big success for brands and influencers.

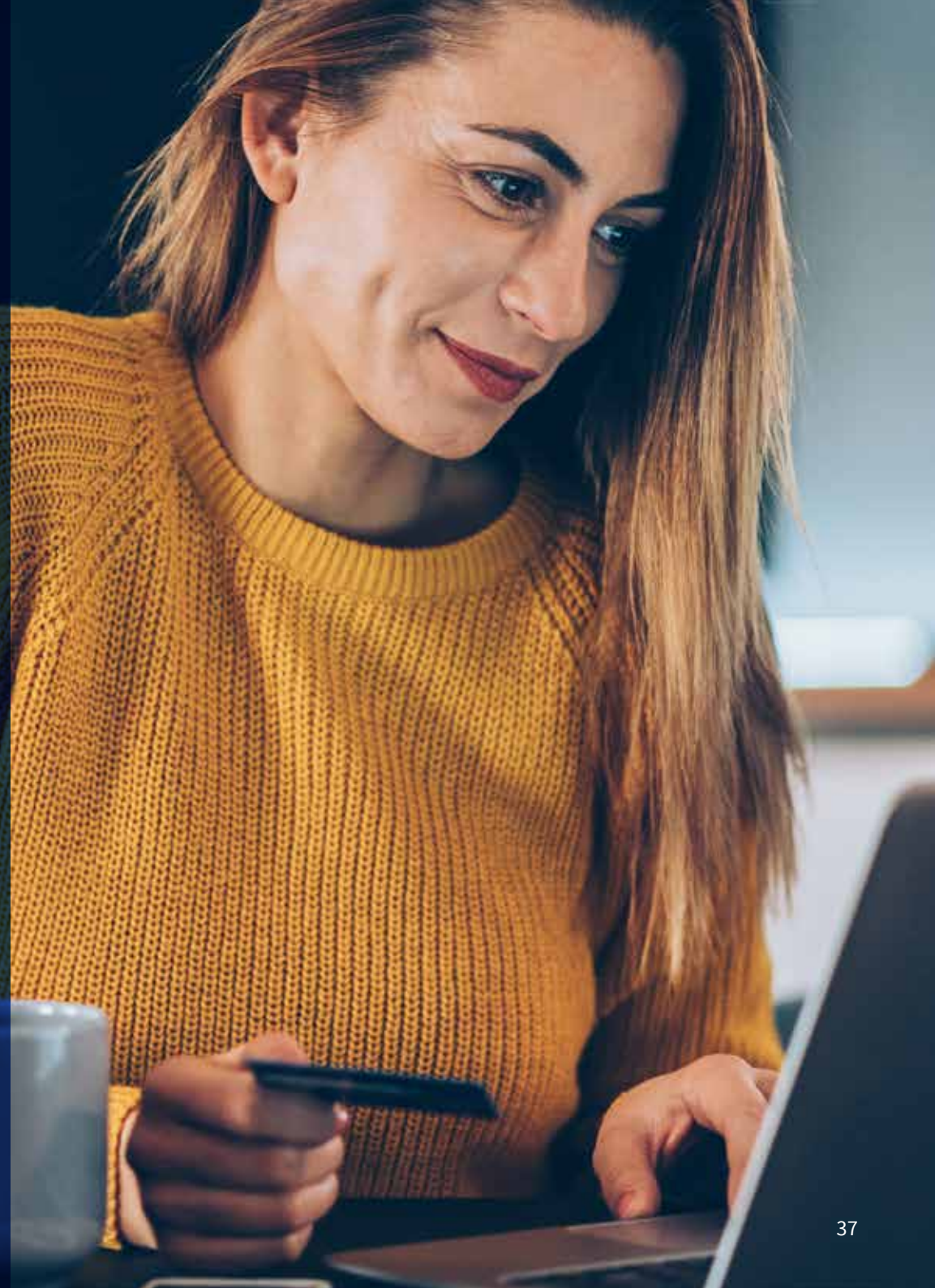
Tencent's WeChat embodies the future of unified commerce now with a tightly integrated meta-app that unifies the experience for over 1.2 billion global consumers. Seamless payments effortlessly connect consumers to curated brand experiences mixed with highly evolved native sharing apps that unify the experience.⁴

The pandemic combined more online shopping with social media engagement and it's ultimately boosting social commerce efforts on major global social platforms. Facebook and Instagram offer fully contained, data-rich, highly personalized unified experiences that seamlessly recreate much of what made in-store shopping so popular.⁵

Unifying the circle: Transforming physical stores

The immediate impacts of COVID-19 were felt most directly by physical retailers. The first wave of innovations solved problems of physical store closures, but the physical and virtual are converging from every direction.

As customers continue to return to stores in person, they're seeing digital assuming a more prominent position in the overall shopping experience. But retailers have an important role. The focus is ultimately on the consumer experience and creating a destination they want to revisit time after time. The digital tools, designed for convenience and efficiency, should free staff up to focus on service. The next wave of innovation will be focused on creating an essentially invisible payment checkout giving the consumer a unique experience from start to finish.



- U.S.-based Walmart is experimenting with replacing checkout lanes with checkout areas, making every POS terminal flexible for self-checkout or assisted checkout.⁶
- SoftPOS technology, turning smartphones into point of sale devices with no additional equipment, is being piloted around the world as a new innovation for changing the payments acceptance landscape.
- The U.K.'s largest grocery chain, Tesco, has partnered with Israeli startup, Trigo, to implement cashier-less checkout technology that competes with similar offerings from Amazon.⁷

Amazon is expanding its cashier-less, just-walk-out checkout technology, and will reportedly introduce the innovative digital technology to Whole Foods outlets beginning in Q2 2021.⁸

The necessity of digital transformation

Digital transformation isn't an end in and of itself for businesses. Digital transformation coupled with sophisticated omnichannel strategies can't attract or retain customers without products and services those customers want. As the pandemic made clear, not being able to engage customers digitally meant not being in business at all. Yet in a world of increasingly unified commerce, digital transformation is an essential starting point to rebuilding payments for a smarter future.

¹ Singapore Infocom Media Development Authority, "Hawkers Go Digital." <https://www.imda.gov.sg/hawkersgodigital>

² <https://www.cnet.com/news/amazon-stylesnap-uses-ai-to-help-you-shop-for-clothes/>

³ Vogue Business, March 5, 2020. "China's live streaming boom." <https://www.voguebusiness.com/consumers/live-streaming-china-shopping-kim-kardashian>

⁴ Dan Berthiaume, Chain Store Age, April 29, 2020. "WeChat assists retailers in face of COVID-19." <https://chainstoreage.com/wechat-assists-retailers-face-covid-19>

⁵ Anthony Svirskis, Forbes, May 26, 2020. "Instagram Shopping - A New Dawn for Social Commerce." <https://www.forbes.com/sites/anthonysvirskis/2020/05/26/instagram-shopping-a-new-dawn-for-social-commerce/#327153e83637>

⁶ TMatt Smith, Walmart, June 30, 2020. "New Checkout Experience Seeks to Eliminate the Wait and Add Options at the Register." <https://corporate.walmart.com/newsroom/2020/06/30/new-checkout-experience-seeks-to-eliminate-the-wait-and-add-options-at-the-register>

⁷ Bryan Wassel, Retail TouchPoints, October 3, 2019, "Tesco Signs Agreement to Add Cashierless Checkout." <https://retailtouchpoints.com/topics/customer-experience/tesco-pilots-cashierless-checkout-technology-at-innovation-center>

⁸ Nicolas Vega, New York Post, August 21, 2020. "Top Amazon exec takes aim at Whole Foods cashiers ahead of retirement." <https://nypost.com/2020/08/21/jeff-bezos-no-2-executive-at-amazon-will-retire-next-year/>

**Invisible payments
are the next
wave of
innovation**





THE NEW MODERN CURRENCY: LOYALTY

Customer loyalty has long been the goal of brands worldwide, but the key to achieving that goal has remained elusive. Recent events are hastening the evolution of the loyalty ecosystem as interest in traditional programs declines. Consumers are looking to embrace reward programs more in sync with their current shopping patterns and expectations.

With the digital technology available in today's age, can brands migrate to accepting loyalty points as actual currency? With the transition to digital payments hastened by COVID-19, merchants and consumers alike have the opportunity to come together to embrace modern loyalty in new ways to ultimately create smarter experiences at checkout.

Traditional loyalty programs often award points based on each individual purchase with a merchant. But new programs are emerging that allow consumers to convert points into a cash balance.

Revamping how loyalty pays out is especially important with the dominant Millennial generation and Gen Z that follows. The World Data Lab projected global Millennial spending power would overtake Gen X spending in 2020.¹ To meet Millennial and Gen Z expectations, brands will need to incorporate the benefits of convenience, immediacy and digital access into their loyalty programs. Recent research by Worldpay from FIS reveals 42% of Millennials want brands to actively track their spend for them and 47% are encouraged to join a loyalty program if they can use technology like an app to collect points and rewards.²

The shift from pure rewards

Loyalty as currency is surfacing as a powerful vehicle to revitalize existing programs. Points are used as currency to offset purchases at point-of-sale or, in some cases, can be redeemed as vouchers, thereby reducing the hurdles associated with rewards redemption.



42% 
**of Millennials want
brands to actively
track their spend**

- Designer Shoe Warehouse (DSW) automatically rewards consumers with points for each purchase, creating a tier system customers can unlock as they spend more
- Sephora Beauty Insiders earn points for each purchase which can then be redeemed as cash discounts on future purchases
- Shell Fuel Rewards® program members can swipe their payment card or enter their phone number or a code number from their Shell mobile app at the pump to redeem fuel reward points in real time

Loyalty programs have appeared in traditional retail for decades but are also taking off in non-traditional lines of trade. For example, e-sports merchant Razer's Insider Rewards awards perks such as game credits to members to splurge on their favorite console games.³ Online retailer Inkbox offers temporary tattoos, and its loyalty program boasts over two million members who earn inkbucks for future purchases and exclusive deals.⁴ Even the familiar punch cards offered by small merchants ranging from barbershops to veterinarians clipping pooches' nails are migrating to digital apps.

Transforming loyalty into currency isn't the only path available. Brands like Singapore's CapitaStar and FavePay are providing a single platform with thousands of deals consumers can choose from. Merchants are gaining the ability to capture potential new consumers with greater visibility while giving consumers the digital experience they desire.

In a recent Worldpay from FIS survey, 81% of consumers around the world stated it would be helpful to have the ability to earn points and redeem those points at multiple types of retailers.⁵ Consumers want the ability to expand where they use rewards beyond the original retailer where they were earned. While merchants must decide if this is a good course of action for their business, it falls to these platforms to bring together the right mix of brands and the consumers to adopt the program.

When evaluating programs, merchants must marry generational and geographical digital usage trends with appropriate loyalty-as-currency applications.

Transitioning to a new world of loyalty

Other platforms are embracing the loyalty experience beginning with the form of payment. Singapore's Grabpay allows consumers to pay via QR code, earning points for the purchase using this particular payment method. Consumers can then use those points to checkout at any other participating Grabpay merchant. Brands have multiple options when deciding which is the right path to loyalty. From development to integrating with existing platforms, there are a variety of factors to consider.

- Building an in-house platform provides maximum control over the brand and data, but the merchant bears all of the costs of development and implementation. Data analytics are limited to what the merchant collects from customers' buying habits, redemption behaviors and signup information
- Partnering with one's payment provider offers some cost savings, greater depth of data and some administrative outsourcing
- Integrating with a commercial provider's platform allows for cost-sharing across participating merchants, fully outsourcing the administrative burden, marketing and advertising support, and richer data analytics, but the provider owns the data

Central to effective loyalty rewards platforms is product design informed by the customer UX at all stages of their customer journey – awareness ignition, evaluation of alternatives, motivation to sign up, user experience – at point of sale (POS) and redemption – and repeat-purchase behavior. Brands that understand their customer and embrace a digital-first mindset have the capability to tap into the right experience to benefit their business, while not requiring actionable steps from their customers.



Embracing a digital-first mindset is the first step towards rebuilding





Merchants considering existing loyalty apps have an increasing set of choices. Apps range from ones that generate loyalty through dynamic mobile games to others that directly connect to customers' payment cards, track spending in real time and push offers to offset payments to consumers at point-of-sale when customers have accumulated enough points.

- NBCUniversal encourages viewers to watch featured episodes that earn them points which can be redeemed at a variety of retailers
- Victoria's Secret uses their loyalty app to facilitate trivia games and social media sharing among participants. Participation points allow for the opportunity to win a trip to the company's fashion show⁶

Factors attributing to successful implementation encompass:

- Intuitive apps that provide easy enrollment, usage and redemption
- A supplier track record that proves its program motivates desired behaviors – increased patronage, higher ticket sizes, improved customer satisfaction
- High quality, actionable and user friendly data that delivers business intelligence about what their customers want and how they respond to various tactics for improving the merchant's marketing and performance
- A clear plan for evolving their loyalty program to meet customers' changing shopping and payment behaviors

Consumers have long been motivated by rewards. As our world continues to change from the physical to the digital, merchants who can embrace a new form of currency are well positioned to rebuild the future of loyalty.

¹ "The millennial moment". Financial Times, June 6, 2018, <https://www.ft.com/content/f81ac17a-68ae-11e8-b6eb-4acfcfb08c11>

² "Generation Pay", Worldpay from FIS, November 2020. <https://www.fisglobal.com/en-gb/generationpay>

³ <https://gold.razer.com/silver/earn>

⁴ <https://inkbox.com/inkfam>

⁵ "Generation Pay", Worldpay from FIS, November 2020. <https://www.fisglobal.com/en-gb/generationpay>

⁶ "Is it time to add gamification to your loyalty strategy?". Forbes, January 22, 2019. <https://www.forbes.com/sites/forbesagencycouncil/2019/01/22/is-it-time-to-add-gamification-to-your-loyalty-strategy/?sh=4aaa8cb152b3>



REBUILDING A FUTURE OF OPPORTUNITY IN LATIN AMERICA

As the economies across Latin America emerge from the fog of uncertainty imposed by COVID-19, rebuilding businesses is full of promise, hope and opportunity. Payment innovations are playing a key role in the region, helping to accelerate the ongoing transformation and modernization of commerce. The unpredictability of 2020 demonstrated that commerce can shift overnight, and to keep up, brands must build smart experiences and smart interactions with consumers.

As was the case worldwide, the coronavirus pandemic resulted in profound changes to the economy throughout Latin America. International Monetary Fund estimates regional GDP contracted 9.1% in 2020.¹ Though downside risks related to the pandemic remain, a mild recovery of 3.7% growth is projected for 2021, while the region continues to witness double-digit annual e-commerce growth.²

Yet Latin America is also a complex, demanding market for international companies, making the development of coherent regional strategies challenging. The evolution of financial infrastructure across the region has resulted in a fragmented payment landscape that varies significantly from country to country. Card processing, acquiring licenses and digital payment landscape see vast differences across borders, while meeting the needs of a large underbanked population remains difficult.

The complexities of Latin American e-commerce

Latin America is home to a large population of young consumers, a growing middle class and high internet penetration via mobile devices. Conversely, a diverse and fluid regulatory environment, complex tax implications and a unique mix of consumer payment preferences make Latin America a challenging market that requires intelligent planning and experienced partners.



Brands seeking a foothold need the right mix of payments and processing options



Reaching Latin American consumers requires offering payment methods they use and trust. That means expanding beyond just popular global payment methods. Brands will need to really understand local differences even within different countries. Domestic cards are often restricted for cross-border purchases that are viewed as involving greater risk. Cross-border purchases are especially problematic in Brazil and Argentina where consumers are often heavily surcharged when using international credit cards.

Payment processing in Latin American markets poses a web of complex challenges, each with their own operational profile, customer experience implications and tax ramifications. Through offering a better customer experience, local processing options can be significantly more complex. Cross-border processing is more familiar to global brands and thus relatively simple operationally, yet customer experience can suffer and dampen sales. Domestic hosted processing combines high authorization rates with a better customer experience, while helping merchants avoid the complexity of managing multiple legal entities across Latin America. Partnering with a payment service provider that offers local payment methods increases conversion rates, reduces fraud risks and decreases the likelihood of chargebacks.

Optimizing the right mix of payment offerings and processing options is a major determining factor of success for global brands seeking a foothold in Latin America. There's no single off-the-shelf processing solution that's optimized for every brand in every country. Establishing a strong partnership with a payment service provider experienced in major Latin American markets is essential.

The shifting role of cash

Cash continues to be a dominant payment method at the point of sale across Latin America, with the region's consumers use of cash trailing only the Middle East and Africa. Yet the undeniable prominence of cash is shifting dramatically. In response to COVID-19, the use of cash dropped by more than a third, from 58.2% in 2019 to 38% in 2020. Consumers opted to increase their use of debit cards and digital/mobile wallets.

Consumer preferences for cash in the region arise from a complex web of factors, starting with a large unbanked and underbanked population. A lack of access to credit, insufficient banking infrastructure, high rates of inflation, concerns about fraud and reluctance to pay high fees for electronic transactions all contribute to the persistence of cash.

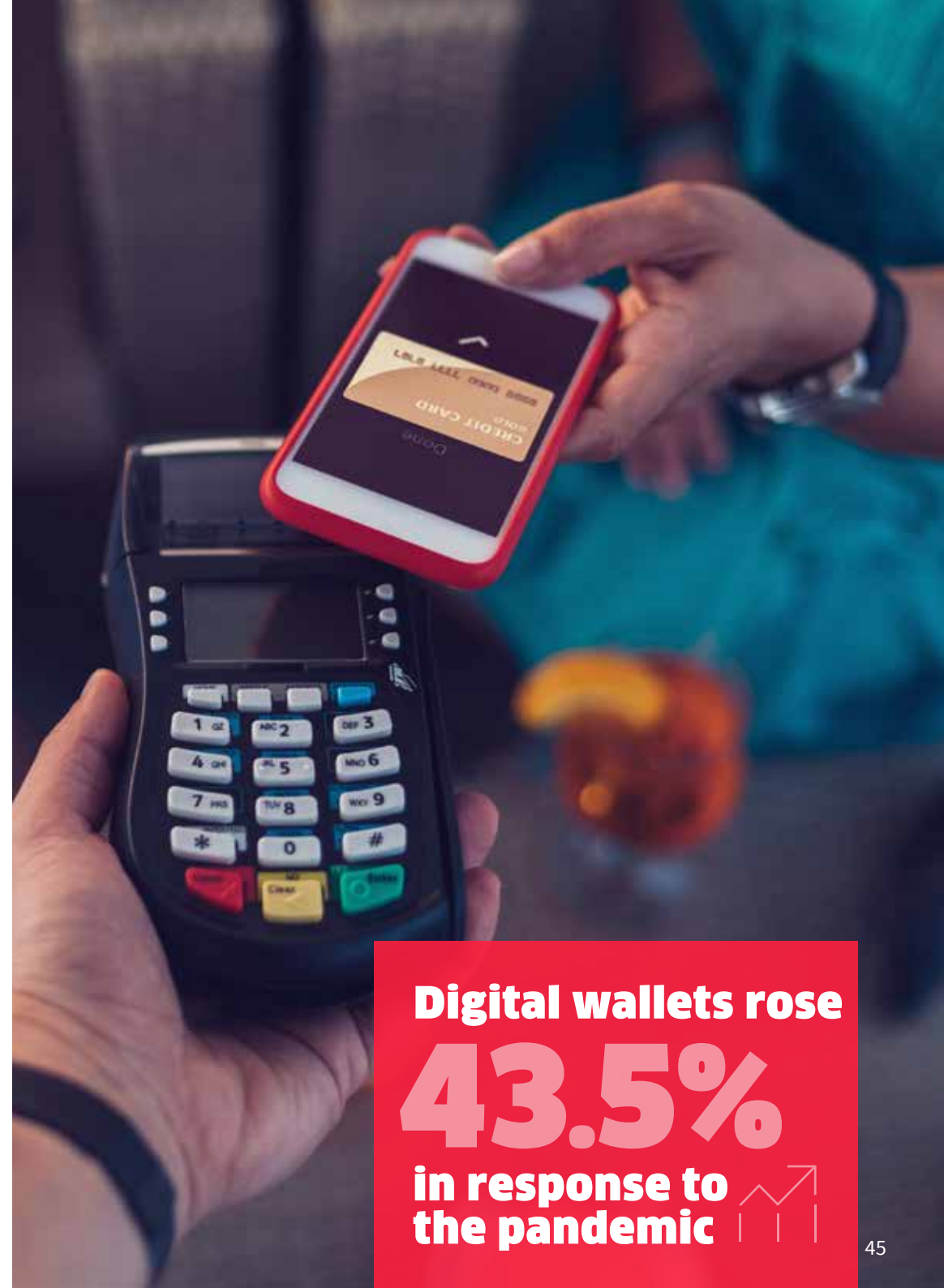
What payment methods have the most opportunity for growth?


Despite the historical persistence of cash, we expect to see a growing share of the Latin American payment market shifting to digital payment methods. COVID-19 disrupted virtually every aspect of global commerce in 2020. Mandatory closures of brick-and-mortar businesses disrupted routines and forced buyers and sellers to adjust to new realities where e-commerce was the only commerce.

The increasing shift to e-commerce and digital payment methods is likely to persist long after the pandemic subsides. A survey by Mercado Libre, the leading regional online marketplace, found that 70% of consumers will continue to use online payment methods instead of returning to cash in a post-pandemic world.³

Specifically, we project an accelerated increase in the use of digital wallets. The use of digital wallets in e-commerce spiked dramatically in response to the pandemic, rising 44% from 13.8% in 2019 to 19.8% in 2020. Our report projects rapid expansion of digital wallets to continue through 2024, growing to 31.2% of e-commerce and 12.4% of share in-store.

The ubiquity of mobile phones makes them the ideal digital passport to access Latin American consumers. Brazil's Central Bank is preparing to further revolutionize payments through PIX, an instant payments platform. PIX, launched in November 2020, is set to complete transfers and online payments within seconds instead of minutes or hours and will only require a smartphone. Digital wallets are making online commerce simpler for many consumers. OXXO Pay and PicPay are just two digital wallets vendors that encourage consumers to deposit cash to use for online shopping later, making a formal bank account unnecessary.



Digital wallets rose
43.5%
in response to
the pandemic 



Installment payments have a strong history in Latin America. They began as agreements between consumers and individual retailers to make larger purchases possible for low-income consumers and those without formal credit or bank accounts. Whether at the point of sale or online, offering installment options is essentially mandatory for global companies doing business in Latin America and will help improve conversion rates and foster greater loyalty among these consumers.

Overcoming expansion difficulties within Latin America will begin with smart insights. It also means tapping into the knowledge of where 2020 advanced necessary changes to help businesses as they rebuild and expand. Moving towards a new future will be built on a shared experienced, incorporating new consumer expectations, and brands will be challenged to create smarter checkout experiences.

¹ “The Impact of COVID-19 on Latin America and the Caribbean.” United Nations, July 2020. https://www.un.org/sites/un2.un.org/files/sg_policy_brief_covid_lac.pdf

² “Outlook for Latin America and the Caribbean: An Intensifying Pandemic.” IMF, June 26, 2020. <https://blogs.imf.org/2020/06/26/outlook-for-latin-america-and-the-caribbean-an-intensifying-pandemic/>

³ Mercado Libre, May 3, 2020. “E-commerce consumer habits evolution in time of COVID-19.” <http://investor.mercadolibre.com/static-files/7f982eeb-adce-40b4-8b98-808773c3f46c>



THE FUTURE FASTER - COMMERCE AFTER COVID-19

The pandemic introduced new challenges for commerce around the world. The ability of societies to optimize health and safety while navigating economic upheaval is the central challenge that will define our era.

However, the recovery of commerce after COVID-19 remains promising through several key advancements:

- Commerce that unites digital and physical
- Secure digital payments that bridge geography
- Collaborations that are actively crafting tomorrow's infrastructure in the present

That future of commerce exists all around us – a flexible, resilient, collaborative, secure digital framework coupled with best practices that quickly incorporate new ideas and new technologies. The pandemic beckoned our future faster, summoning tomorrow's commerce to meet today's needs.

E-commerce is the essence of commerce

The story of e-commerce growth during the pandemic goes far beyond numbers. COVID-19 shifted traditional face-to-face commerce and altered the world of commerce forever.

Salesforce estimates that global online sales spiked 71% YoY in Q2 2020.¹ In Brazil, the size of e-commerce nearly doubled during the pandemic, rising over 98% in April 2020 versus April 2019.² In the U.S., a dramatic second quarter surge saw consumers spend 30.1% more on e-commerce in the first six months of 2020 over the same period in 2019.³



74%
of consumers
will continue to use
contactless payments⁷

In India, online penetration is projected to double by 2024 to account for 11% of all retail.⁴ Goldman Sachs estimates compound annual growth of 81% for online grocery in India through 2024 as the pandemic accelerated three years of growth in only three months.⁵

In Europe, a McKinsey study found that average digital adoption rates across the continent rose from 81% to 94% during the pandemic, accounting for up to three years of growth. Grocery, social media, banking and OTT entertainment saw the strongest growth as Europeans began isolation. Upwards of 25% of consumers used these services for the first time during the pandemic. Global consumers consistently signal that the surge in digital adoption is here to stay. McKinsey also found more than 70% of European consumers plan to use digital services as much or more after the pandemic subsides.⁶

As lockdown orders and operating restrictions spread, e-commerce was commerce. Traditional modes of commerce began to rapidly adapt. Commerce after the pandemic will prioritize flexibility and ingenuity over the physical, and consumer experience over legacy channels.

Digital payments unify tomorrow's commerce

Safety considerations amid COVID-19 proved the tipping point for acceleration of contactless, digital-first payment methods at the point of sale. A 2020 Mastercard study found 79% of people worldwide and 91% in APAC used contactless tap-and-go payments at the point of sale; 74% of global consumers said they would keep using contactless beyond the pandemic.⁷

Consumers are making their voices heard and merchants are meeting their needs with digital payment options that emphasize safety. Visa's 2020 Back to Business study found that 78% of consumers worldwide changed payment methods to reduce contact, while 67% of small businesses have adopted new payment technologies to keep their business on track.⁸

Cash, paper, manual processes and other legacies persisted because of habit and because, at the most basic level, they worked. Until the pandemic hit, when suddenly, everything became much more complex. Digital payments enable the future of commerce faster: the simplicity of QR codes, the security of biometrics, the efficiency of the digital device as the center of consumer gravity, the seamless magic of invisible payments. Yesterday's science fiction is becoming the future of commerce.

Building the future's infrastructure faster

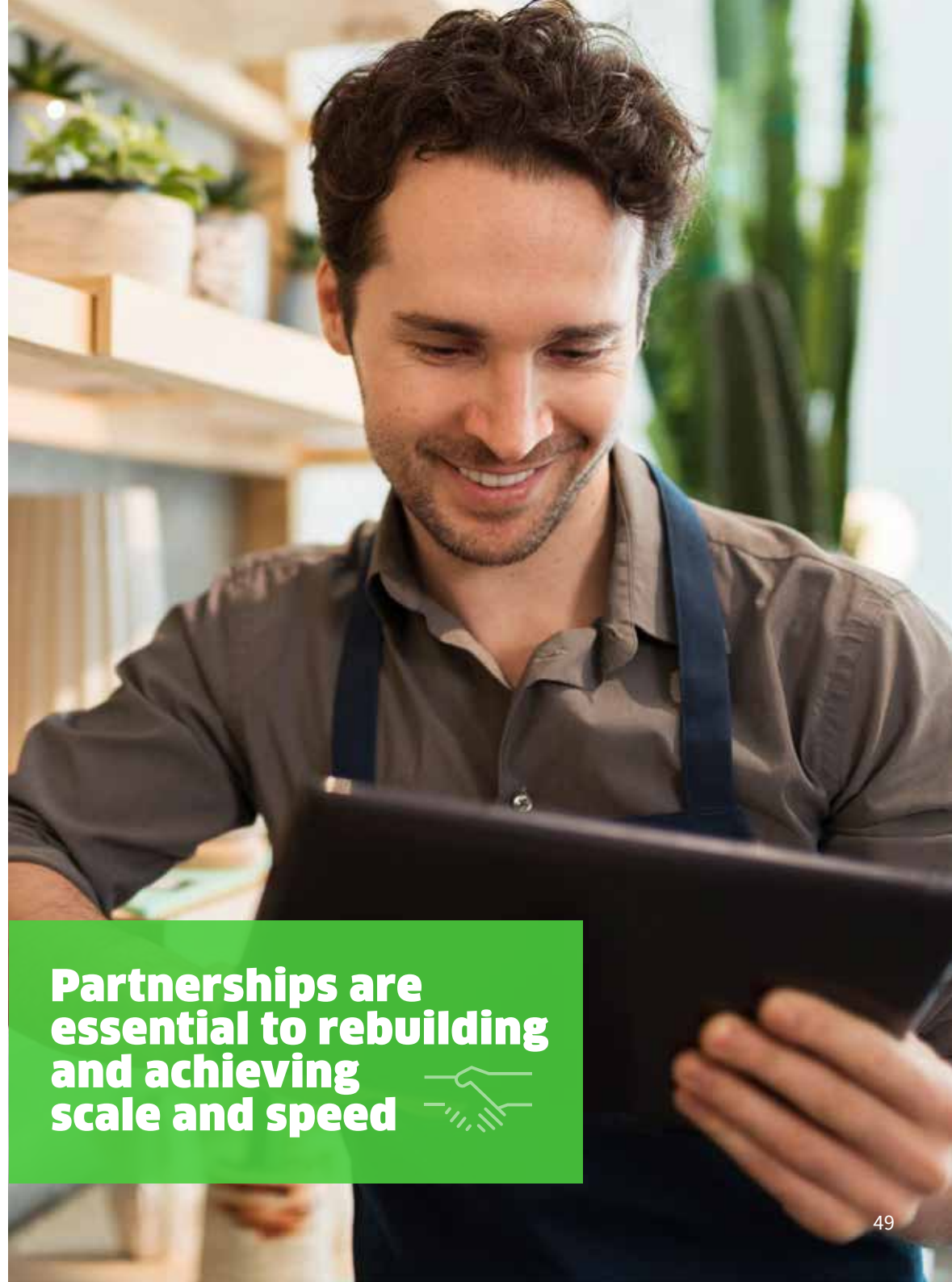
Creating infinitely flexible, fault-tolerant digital and physical infrastructure is hard work. The complexity of digital transformation makes going it alone impractical if not impossible. Partnerships with technology and logistics providers make digital transformation possible and those partnerships are essential to achieving scale, speed and tackling complexity.

Consider the role of e-commerce platforms during the pandemic. Platforms helped businesses enable and extend their digital infrastructure to maintain engagement with customers when no other commerce was possible.

Governments play a central collaborative role in developing the future's infrastructure. South Korea is pursuing a Digital New Deal collaboration that integrates public and private sector information to share across 5G networks. The infrastructure initiative was specifically designed in response to the acceleration of digitization and to mitigate future risks highlighted by the pandemic.⁹

The World Bank is assisting countries throughout the world with its GovTech Global Initiative. GovTech promotes simple, accessible and efficient government through digital transformation. From Albania to Djibouti, GovTech initiatives promote broadband connectivity, digital ID, electronic payments and national data registries to help governments meet the essential needs of citizens.¹⁰

COVID-19 changed virtually everything about commerce. Marketers need the ability to pivot quickly and adapt appropriate tone considerations for the context of their audience. Logistics managers must plan for unprecedented risks, developing contingencies to withstand disruptions



Partnerships are essential to rebuilding and achieving scale and speed





of ever greater depth and scope. New technologies and governmental regulations change the investments businesses must make to keep commerce moving forward.

Digital transformation as the essential service

Commerce after the pandemic may still sound futuristic. But as societies emerge from the fog of disruption brought by COVID-19, we're living the future each day.

Our future requires flexible infrastructure built in the cloud, digital payments that allow the instant, safe, convenient settlement of payments, and alliances between technology, supply and logistics partners. The future of commerce demands businesses develop infrastructure that elevates health and safety to the highest priority for all face-to-face contact. And ultimately for commerce, our future means engaging consumers at scale with smart technology and smarter consumer experiences.

¹ Lucy Handley, CNBC, August 25, 2020, "E-commerce experts on how the industry can capitalize from a coronavirus-led boom in online sales." <https://www.cnbc.com/2020/08/25/how-e-commerce-can-capitalize-from-a-coronavirus-led-boom-in-online-sales.html>

² Angelica Mari, ZDNet, June 1, 2020, "E-commerce sales reach all-time high in Brazil." <https://www.zdnet.com/article/e-commerce-sales-reach-all-time-high-in-brazil/>

³ U.S. Census Bureau, Department of Commerce, August 18, 2020, "Quarterly Retail E-Commerce Sales, 2nd Quarter 2020." https://www.census.gov/retail/mrts/www/data/pdf/ec_current.pdf

⁴ yStats.com, "COVID-19 Impact on E-Commerce, July 23 -August 5, 2020." <http://ystats.com/>

⁵ Outlook India, July 21, 2020, "India e-commerce to grow 27%; Reliance to capture half of online grocery sales: Goldman." <https://www.outlookindia.com/newscroll/india-e-commerce-to-grow-27-reliance-to-capture-half-of-online-grocery-sales-goldman/1899640>

⁶ Santiago Fernandez, Paul Jenkins, and Benjamin Vieira, McKinsey, July 24, 2020, "Europe's digital migration during COVID-19: Getting past the broad trends and averages." <https://www.mckinsey.com/business-functions/mckinsey-digital/our-insights/europes-digital-migration-during-covid-19-getting-past-the-broad-trends-and-averages>

⁷ Mastercard, April 20, 2020, "Mastercard study shows consumers moving to contactless payments for everyday purchases as they seek cleaner, touch-free options." <https://newsroom.mastercard.com/asia-pacific/press-releases/mastercard-study-shows-consumers-moving-to-contactless-payments-for-everyday-purchases-as-they-seek-cleaner-touch-free-options/>

⁸ Visa, August 4, 2020, "Global Visa Study Finds 67% of Small Businesses and 78% of Consumers Have Adopted New Behaviors to Adjust to COVID-19." https://usa.visa.com/about-visa/newsroom/press-releases/releaseid_17246.html

⁹ Jung Min-kyung, The Korea Herald, Sept 11, 2020, "S. Korea to focus on digital infrastructure investment, 'Data Dam' project: minister." <http://www.koreaherald.com/view.php?ud=20200911000726>

¹⁰ The World Bank, "GovTech: Putting people first." <https://www.worldbank.org/en/topic/governance/brief/govtech-putting-people-first>



MARKET GUIDES

Rebuilding payments **for a smarter world**



ARGENTINA

On the 29th of each month, Argentines eat gnocchi. They often put money under their plates in hopes of attracting good fortune and luck for the next month. Even restaurants participate in the tradition and serve gnocchi on the menu. After consumers place money under the plate, they most often pull out cash as their primary method for paying in person. Cash preferences declined dramatically in 2020 as more consumers opted to use debit cards and digital/mobile wallets, but online, they still prefer credit cards. It's unlikely those plastic forms of payment will help attract fortune, but it couldn't hurt to try.

FAST STATS

2020 sales %
from e-com

10%

2020* - 2024**
e-com CAGR

22%

2020 sales %
from m-com

50%

2020* - 2024**
POS CAGR

5%

2020 % e-com spend using
Digital/Mobile Wallet

25%

2020* Internet
penetration

93%

2020 % POS spend using
Digital/Mobile Wallet

11%

2020* Mobile
penetration

75%

FORECAST

2024 %**
sales from e-com

17%

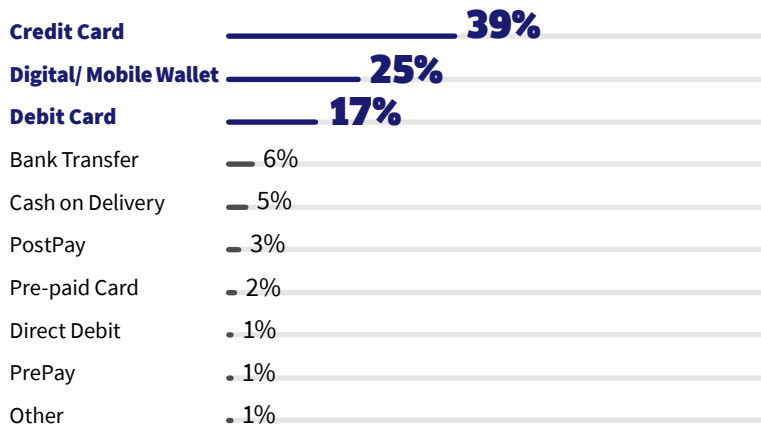
2024 %**
sales from m-com

61%

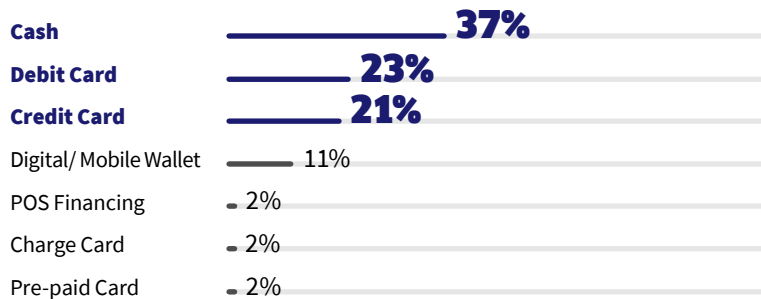
TOP TIP

Competition for payment market share is heating up. The Argentinean Central Bank launched a new instant payment solution, Pagos Electrónicos Inmediatos (PEI), allowing for smoother transaction flows. The Central Bank also passed new regulations creating a friendlier regulatory framework for fintechs and payment service providers helping to spur additional innovation.

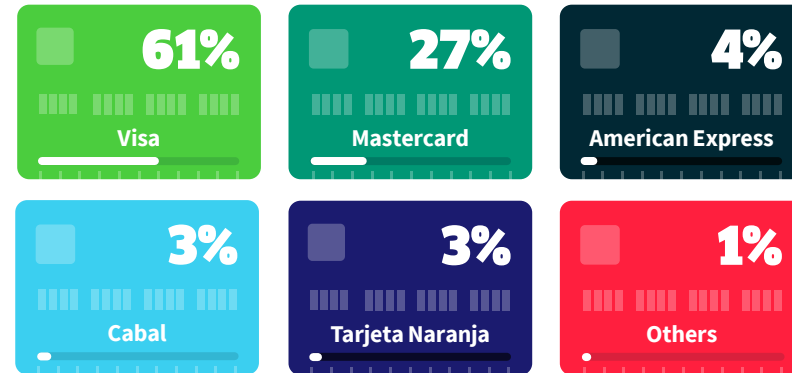
2020 e-com mix by payment method



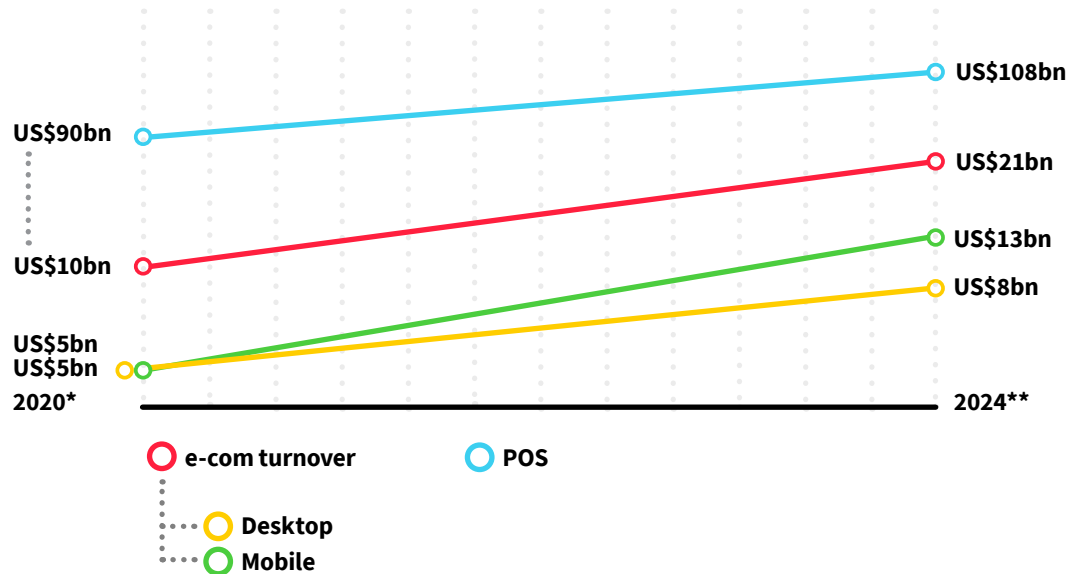
2020 point of sale mix by payment method



2019 card brand breakdowns (e-com and POS)



POS and e-com projected growth



Popular alternative payment methods



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



AUSTRALIA

When visiting the land Down Under, purchasing Tim Tams is a must for any visitor. Tourists are likely paying with their local payment preferences, but locals have opted to use less cash in 2020 when making purchases in person. Australians typically prefer to do their online shopping in the evenings.¹ When checking out, credit cards and mobile/digital wallets continue to be the most popular and most convenient.

¹<https://www.businessnewsaus.com.au/articles/new-data-reveals-surprising-facts-about-aussie-online-shoppers.html>

FAST STATS

2020 sales %
from e-com

6%

2020* - 2024**
e-com CAGR

10%

2020 sales %
from m-com

56%

2020* - 2024**
POS CAGR

5%

2020 % e-com spend using
Digital/Mobile Wallet

24%

2019* Internet
penetration

87%

2020 % POS spend using
Digital/Mobile Wallet

8%

2020* Mobile
penetration

84%

FORECAST

2024 %**
sales from e-com

7%

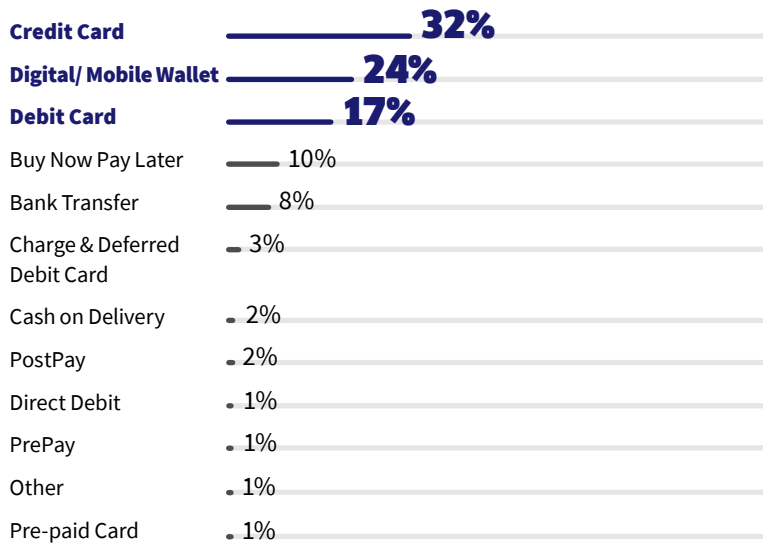
2024 %**
sales from m-com

65%

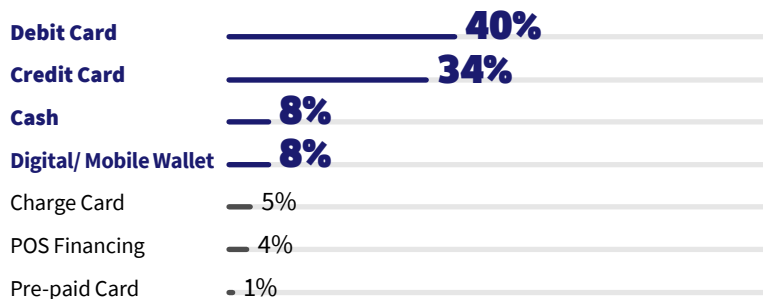
TOP TIP

The pandemic has driven a range of behavior changes, from what consumers buy to how they prefer to pay. A preference for debit payments has increased as consumers begin to think about the best ways to manage funds. The different buy now, pay later (BNPL) offerings have also expanded to meet this need, with new offers seeking to align to specific purchase types, consumers and budgeting preferences.

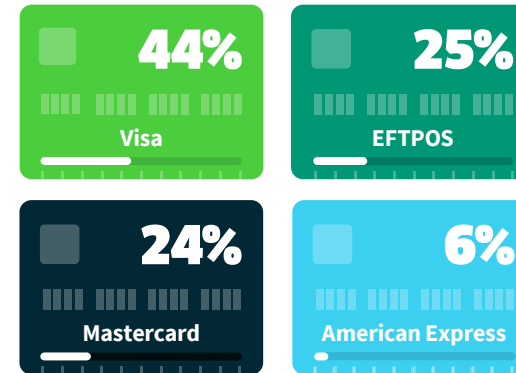
2020 e-com mix by payment method



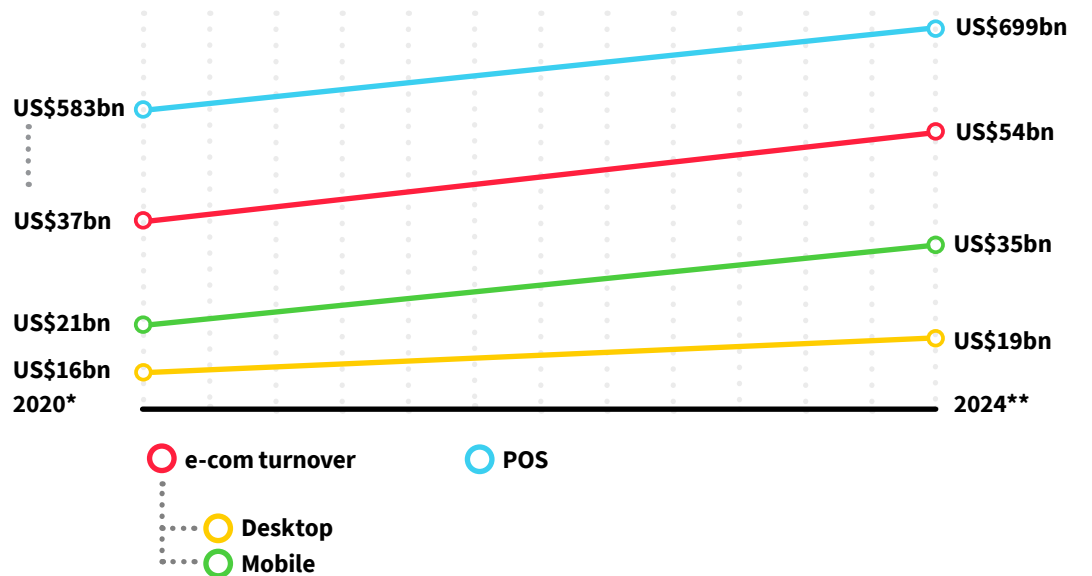
2020 point of sale mix by payment method



2019 card brand breakdowns (e-com and POS)



POS and e-com projected growth



Popular alternative payment methods



* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.



BELGIUM

Belgium has influenced the world through a variety of inventions - inline skates, the saxophone, asphalt and even plastic. The first plastic isn't the same version we currently use today but without it, we may never have developed credit and debit cards. These were an important discovery considering cards account for 49% of online purchases and 67% at the point of sale. Belgians aren't moving away from plastic yet, but digital forms of payment are continuing to gain in popularity.

FAST STATS

2020 sales %
from e-com

8%

2020* - 2024**
e-com CAGR

7%

2020 sales %
from m-com

25%

2020* - 2024**
POS CAGR

4%

2020 % e-com spend using
Digital/Mobile Wallet

14%

2019* Internet
penetration

94%

2020 % POS spend using
Digital/Mobile Wallet

7%

2020* Mobile
penetration

82%

FORECAST

2024 %**
sales from e-com

9%

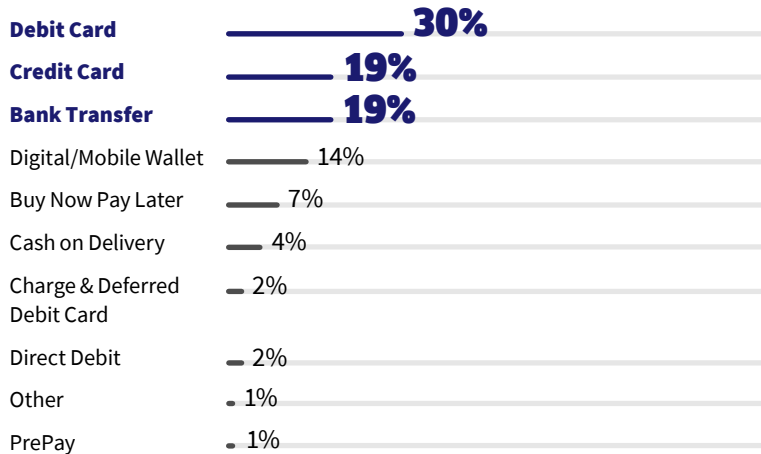
2024 %**
sales from m-com

36%

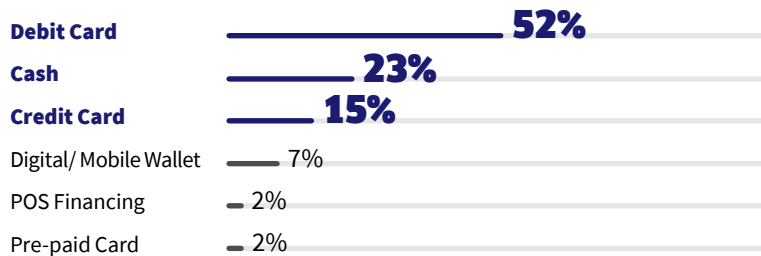
TOP TIP

Point of sale payments experienced a slight shift in 2020. Debit cards remain the leading way to checkout, but cash declined as consumers shifted to using mobile/digital wallets. Online, consumers are using a debit card, but alternative payments like buy now, pay later (BNPL) and mobile/digital wallets continue to gain market share. Merchants looking to accept digital payment options will want to consider alternatives such as PayPal, KBC and Afterpay.

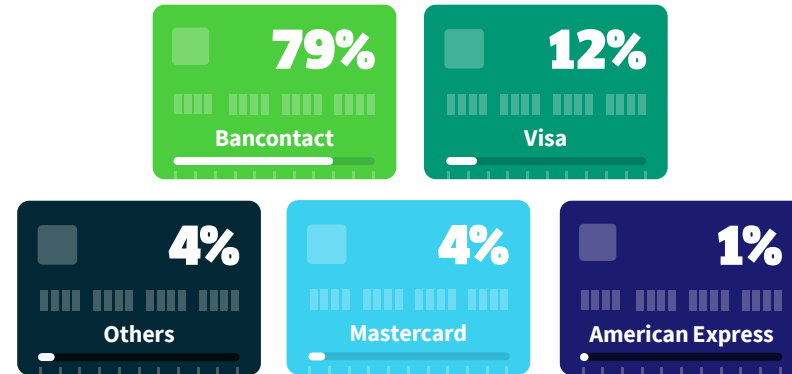
2020 e-com mix by payment method



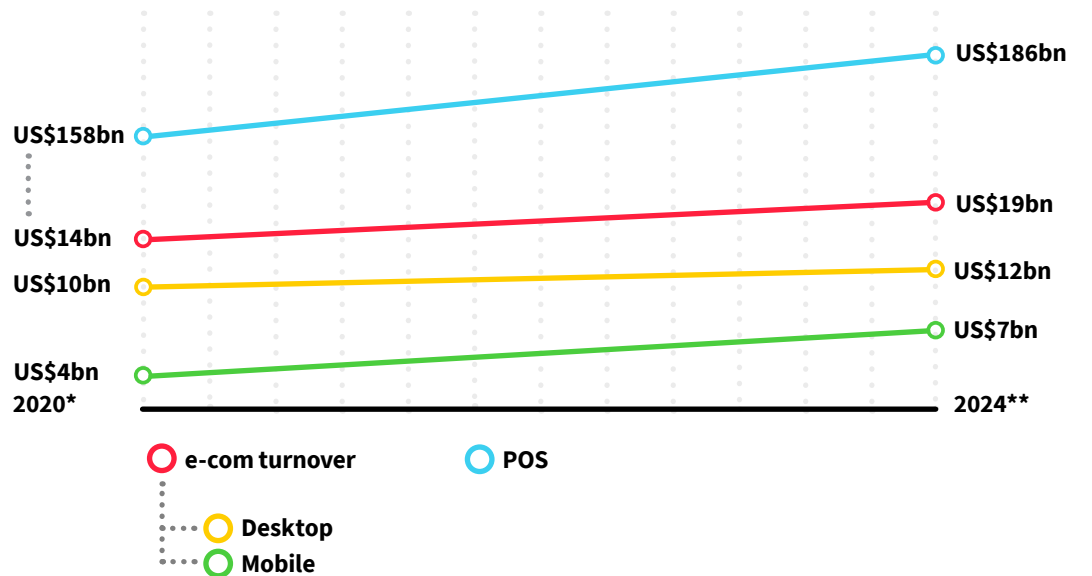
2020 point of sale mix by payment method



2019 card brand breakdowns (e-com and POS)



POS and e-com projected growth



Popular alternative payment methods



* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.

BRAZIL

As the fifth largest country in the world, Brazil's borders touch all but two countries in South America. Similarly, their online payment preferences touch on all options available at checkout. Credit cards remain the top checkout method but digital/mobile wallets, debit cards and PostPay together make up the majority of other preferences. 2020 saw a sharp rise in the use of digital and mobile wallets at the point of sale with a decrease in cash as a way to limit contact at checkout.

FAST STATS

2020 sales %
from e-com

5%

2020* - 2024**
e-com CAGR

12%

2020 sales %
from m-com

51%

2020* - 2024**
POS CAGR

4%

2020 % e-com spend using
Digital/Mobile Wallet

17%

2020* Internet
penetration

71%

2020 % POS spend using
Digital/Mobile Wallet

8%

2020* Mobile
penetration

66%

FORECAST

2024 %**
sales from e-com

6%

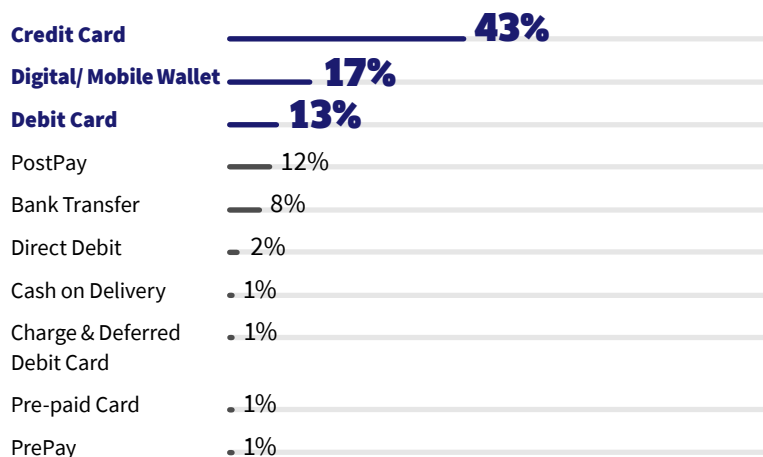
2024 %**
sales from m-com

61%

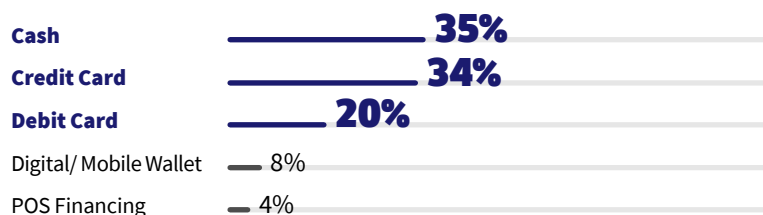
TOP TIP

A new instant payment infrastructure, PIX, from Brazil's Central Bank, went live in 2020, bringing more competition to the payments landscape. Enabling the acceptance of PIX will help merchants offer convenient and seamless checkout for consumers while speeding up cash flow for the merchant. The arrival of 3DS2 is also adding change to the payment ecosystem. Not only will it foster online debit payments, it will also enable a more frictionless e-commerce experience while creating a safe checkout environment, protecting the merchant and the consumer.

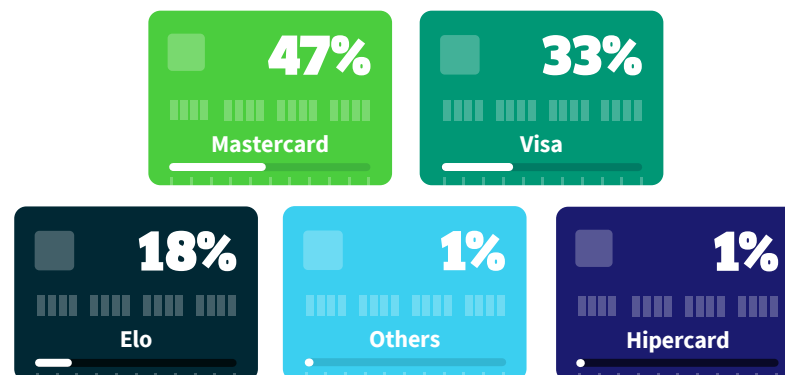
2020 e-com mix by payment method



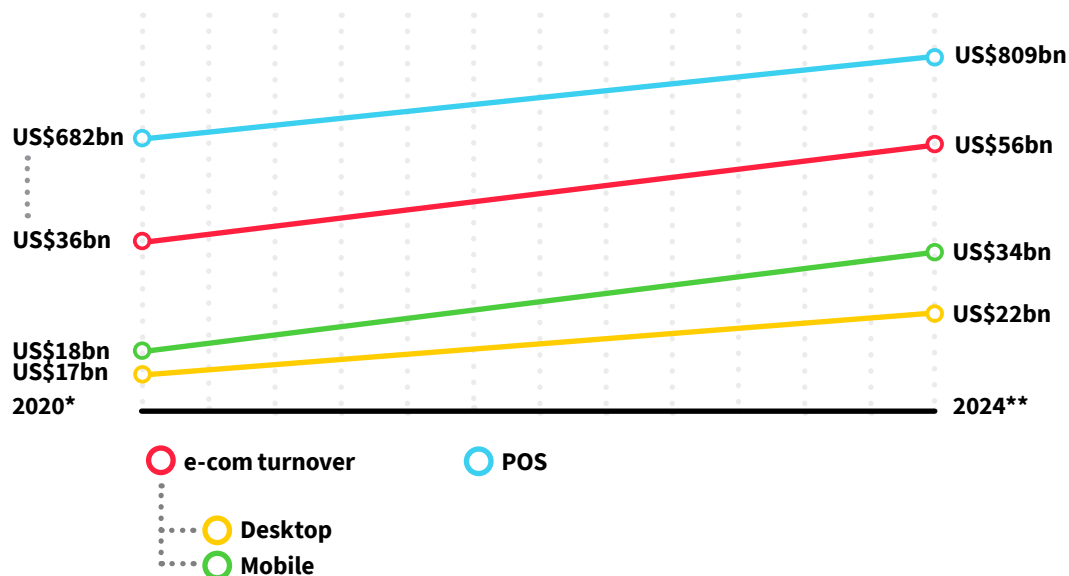
2020 point of sale mix by payment method



2019 card brand breakdowns (e-com and POS)



POS and e-com projected growth



Popular alternative payment methods



* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.



CANADA

Canadians buy their milk by the bag instead of a carton. And when it comes to paying for milk or any other item, whether checking out online or purchasing in-store, they're most often paying with a credit card. Their online habits continue to be rooted in tradition with card payments. But in-store, digital and mobile wallets are continuing to gain in popularity, especially after the COVID-19 pandemic.

FAST STATS

2020 sales %
from e-com

10%

2020* - 2024**
e-com CAGR

13%

2020 sales %
from m-com

26%

2020* - 2024**
POS CAGR

5%

2020 % e-com spend using
Digital/Mobile Wallet

23%

2020* Internet
penetration

90%

2020 % POS spend using
Digital/Mobile Wallet

7%

2020* Mobile
penetration

83%

FORECAST

2024 %**
sales from e-com

14%

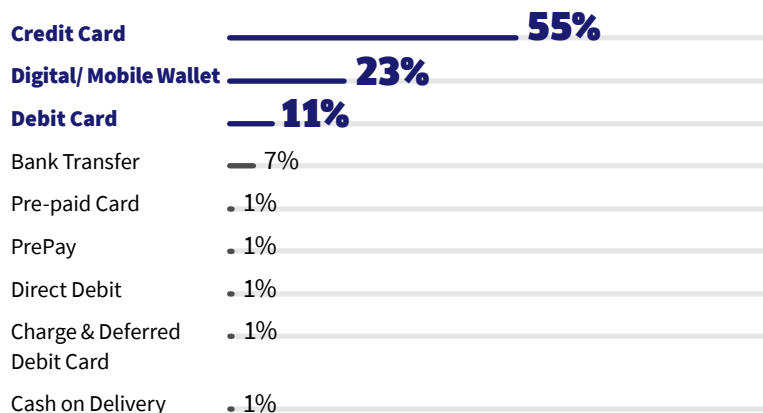
2024 %**
sales from m-com

29%

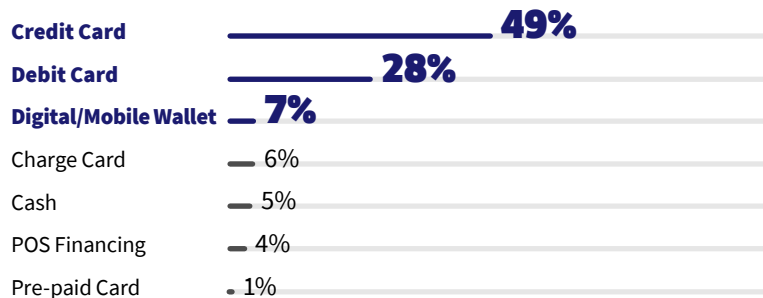
TOP TIP

2020 was no exception to Canadians' preferences for credit cards and as online commerce continues its growth trajectory, merchants need a renewed focus on security. Multi-factor authentication and biometrics continue to gain traction as an added layer of security to the checkout process. As Canada prepares to launch real-time payments in 2022, in-store merchants will need to consider modernizing payment terminals. Integrated payments will help merchants with security as well as assist with reconciliation and settlement.

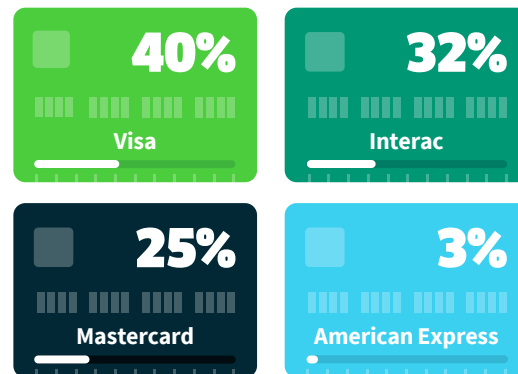
2020 e-com mix by payment method



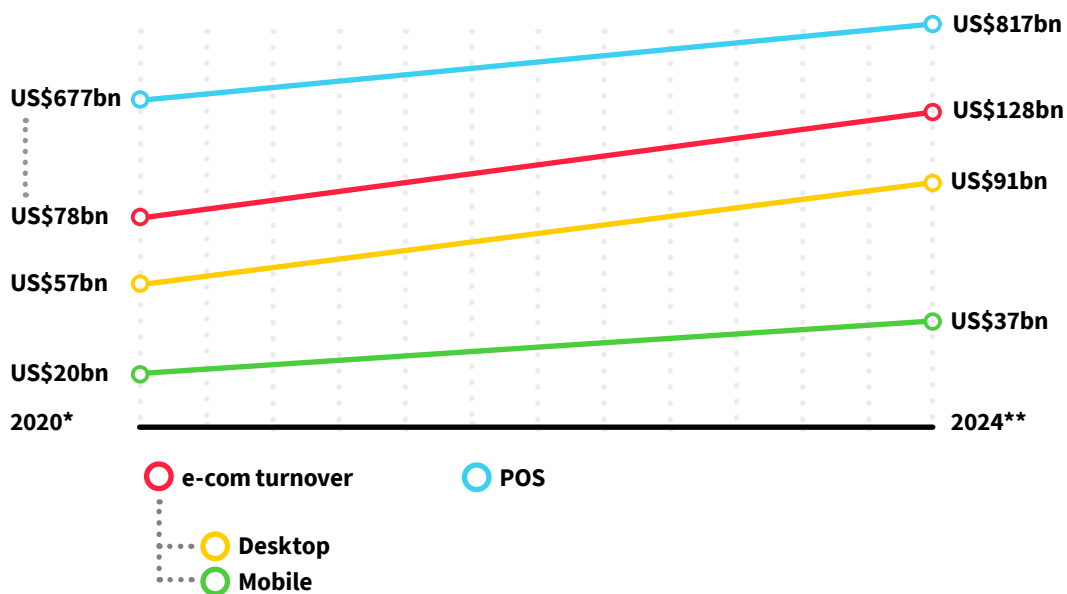
2020 point of sale mix by payment method



2019 card brand breakdowns (e-com and POS)



POS and e-com projected growth



Popular alternative payment methods



* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.

CHILE

Home to the largest swimming pool in the world (holding over 66 million gallons of water) Chile is also one of the best places in the world for astronomical research due to its arid climate. When consumers are drifting through the world of online commerce, cards remain the dominant choice. At the point of sale, cash is no longer king due to the pandemic. The debit card has inched ahead as the checkout preference.

FAST STATS

2020 sales %
from e-com

6%

2020* - 2024**
e-com CAGR

17%

2020 sales %
from m-com

28%

2020* - 2024**
POS CAGR

5%

2020 % e-com spend using
Digital/Mobile Wallet

10%

2020* Internet
penetration

78%

2020 % POS spend using
Digital/Mobile Wallet

5%

2020* Mobile
penetration

75%

FORECAST

2024 %**
sales from e-com

9%

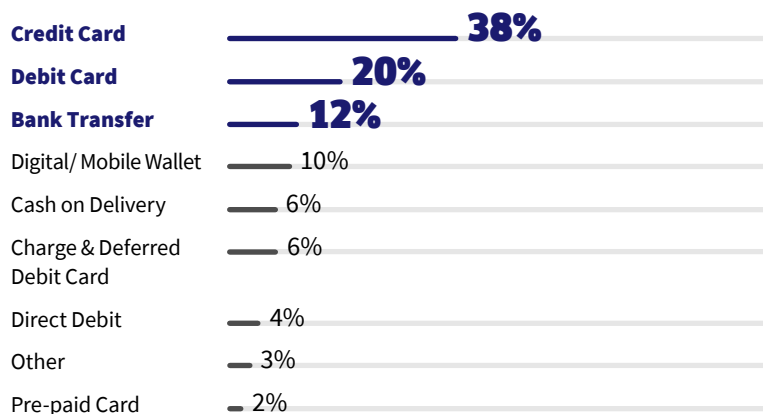
2024 %**
sales from m-com

41%

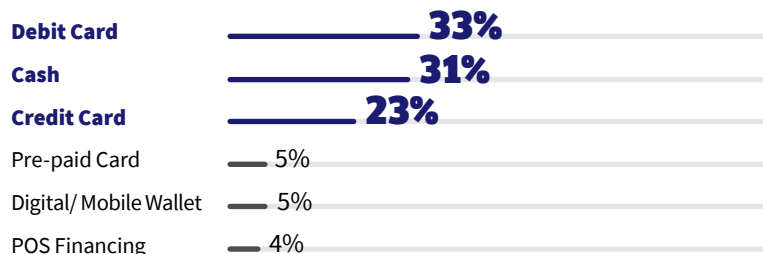
TOP TIP

Chilean payment rails are beginning to move towards the international model of merchant, acquirer, network and issuer. As competition increases, local acquirers are looking to improve the online checkout experience. Hosted checkout solutions are being implemented to reduce friction and improve conversion. Cyber events, such as Cyber Monday and Cyber Day, have rapidly increased the performance of e-commerce. Driven by sales and promotions, these types of events have become extremely popular as consumers postpone purchases to take advantage of better deals.

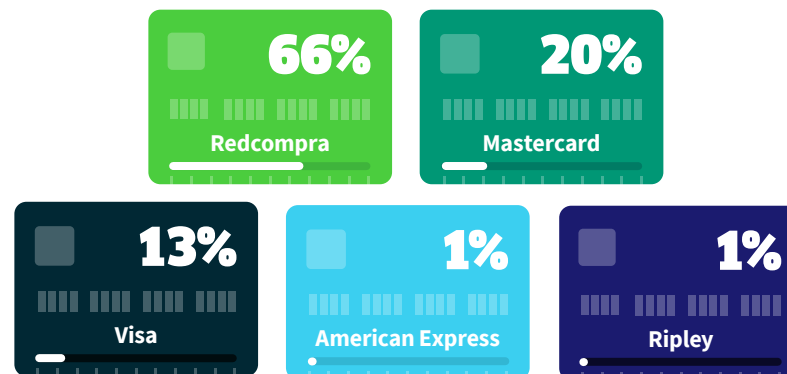
2020 e-com mix by payment method



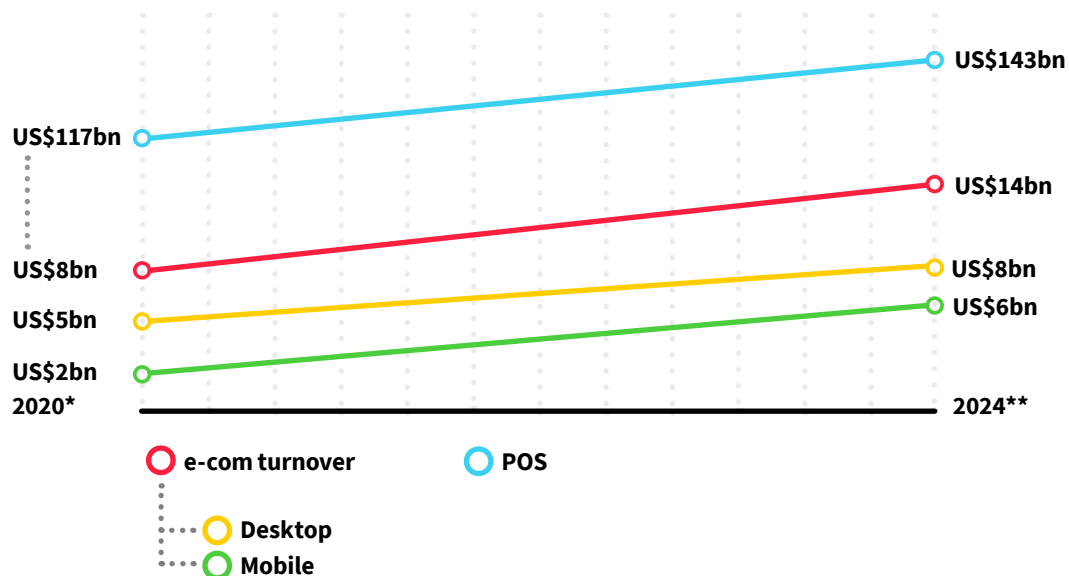
2020 point of sale mix by payment method



2019 card brand breakdowns (e-com and POS)



POS and e-com projected growth



Popular alternative payment methods



* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.



CHINA

Home to the second-largest number of billionaires, China has the largest market size in the world and Chinese consumers spend \$73 billion on luxury goods alone every year.¹ Billionaire or not, these consumers pay for most goods and services with digital and mobile wallets, leading the world in adoption. Due to the pandemic, their use of cash at the point of sale dropped dramatically in 2020.

¹<https://markets.businessinsider.com/news/stocks/china-economy-facts-2019-5-1028172022#>

FAST STATS

2020 sales %
from e-com

9%

2020* - 2024**
e-com CAGR

14%

2020 sales %
from m-com

63%

2020* - 2024**
POS CAGR

6%

2020 % e-com spend using
Digital/Mobile Wallet

72%

2020* Internet
penetration

59%

2020 % POS spend using
Digital/Mobile Wallet

50%

2020* Mobile
penetration

74%

FORECAST

2024 %**
sales from e-com

12%

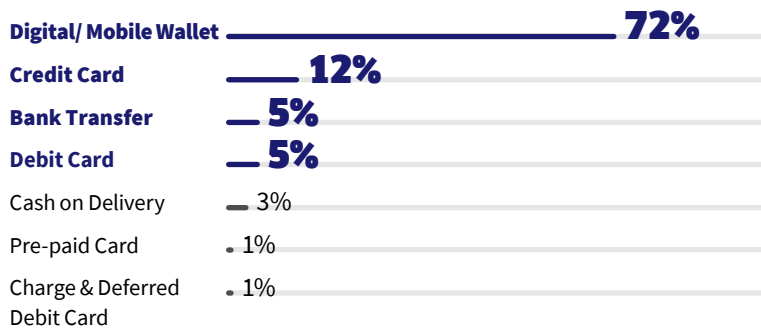
2024 %**
sales from m-com

67%

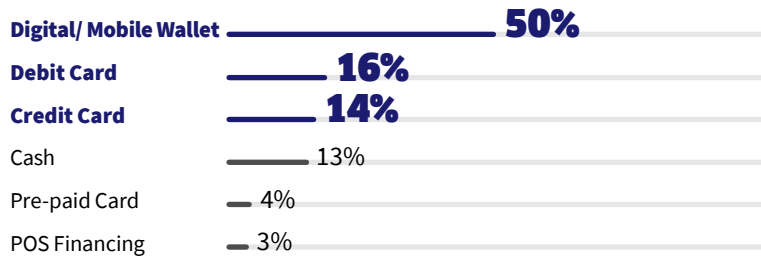
TOP TIP

Payment services are diversifying with the approval for American Express and Mastercard to now process cards in China. Businesses may need to work with their payment providers to ensure they can accept payments under these new card brands. In order to advance towards a cashless society, the Chinese government has also launched a national digital currency (DCEP). This digital currency is projected to boost e-commerce development in the coming years, so partnering with a knowledgeable payment processor will help brands build a smooth checkout process for the consumer.

2020 e-com mix by payment method



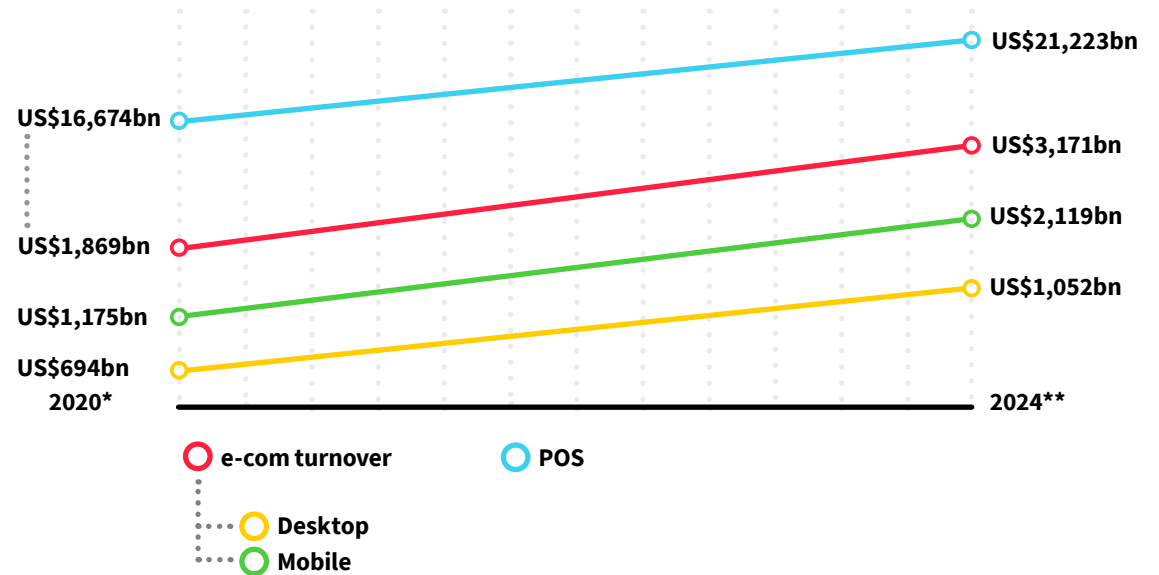
2020 point of sale mix by payment method



2019 card brand breakdowns (e-com and POS)



POS and e-com projected growth



Popular alternative payment methods



* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.

COLOMBIA

As one of the most biodiverse countries in the world, Colombia is home to Cano Cristales – the “Liquid Rainbow,” named for the changing of the riverbed colors during parts of the year. Consumer payment choices are also diverse. The top 5 online payment preferences all capture double-digit market share. Point of sale checkout now splits cash and debit cards almost evenly while credit cards are a close third option.

FAST STATS

2020 sales %
from e-com

5%

2020* - 2024**
e-com CAGR

10%

2020 sales %
from m-com

53%

2020* - 2024**
POS CAGR

7%

2020 % e-com spend using
Digital/Mobile Wallet

13%

2020* Internet
penetration

63%

2020 % POS spend using
Digital/Mobile Wallet

5%

2020* Mobile
penetration

72%

FORECAST

2024 %**
sales from e-com

5%

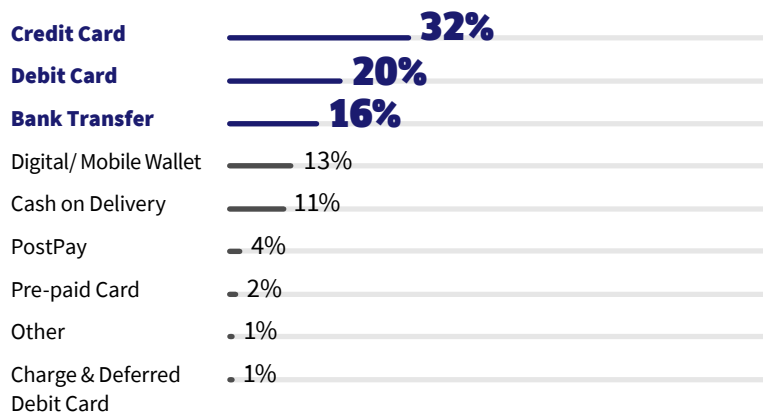
2024 %**
sales from m-com

63%

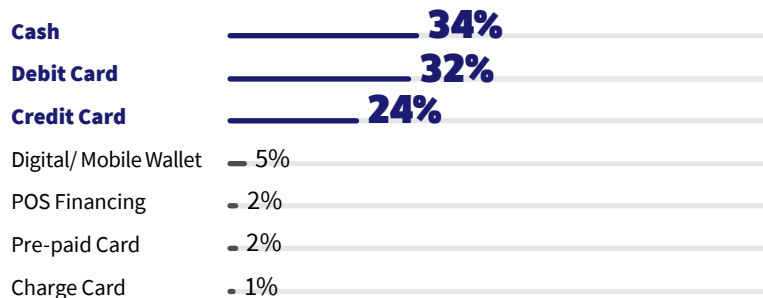
TOP TIP

E-commerce continues to grow, with consumers increasingly using their mobile phones to shop. However, in a move towards omnichannel retailing once the pandemic passes, outlets in urban centers have become places where consumers can try products, such as apparel and footwear, that they will ultimately purchase online. Rappi is on its way to becoming the super app of Latin America, giving consumers a one-stop shop. Marketplaces such as Linio and MercadoLibre are showing important growth by strengthening their products and services.

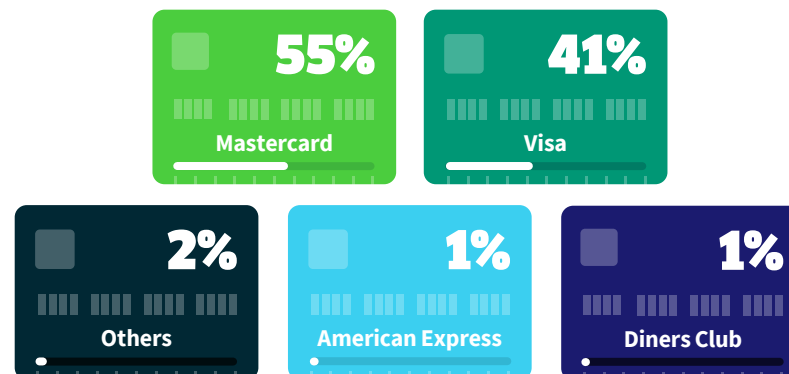
2020 e-com mix by payment method



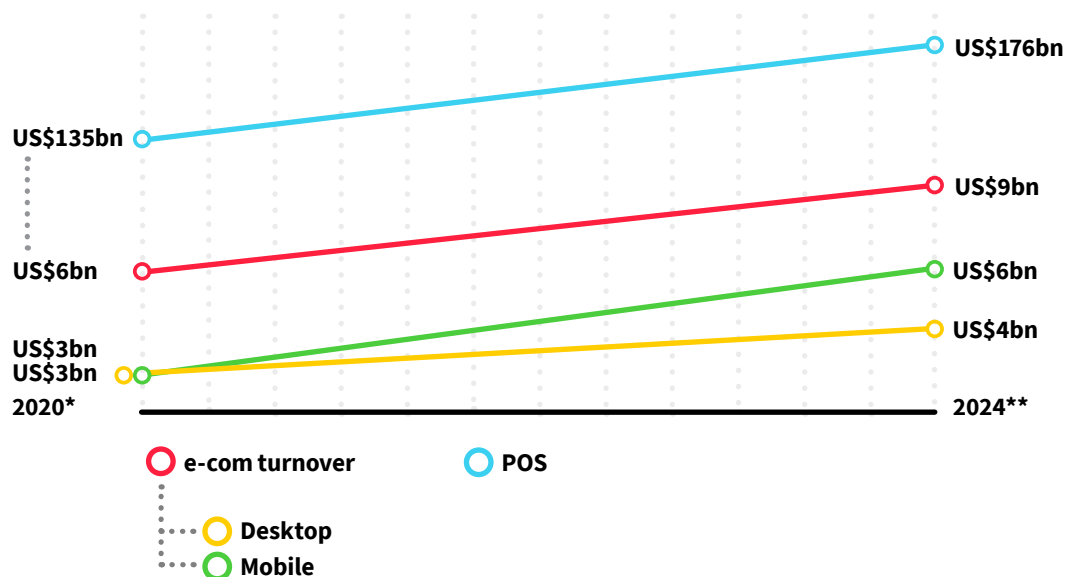
2020 point of sale mix by payment method



2019 card brand breakdowns (e-com and POS)



POS and e-com projected growth



Popular alternative payment methods



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



DENMARK

Made up of 444 islands, only 76 are actually inhabited. Those who inhabit Copenhagen typically cycle to and from work each day. As they're traveling around the city, they're often carrying around cards and a mobile device for when they need to make a purchase. Debit cards are the preferred online checkout method with credit cards topping the list at the point of sale. This represents a big change at the point of sale compared to the previous year where debit cards were the preference for both.

FAST STATS

2020 sales %
from e-com

19%

2020* - 2024**
e-com CAGR

10%

2020 sales %
from m-com

49%

2020* - 2024**
POS CAGR

4%

2020 % e-com spend using
Digital/Mobile Wallet

22%

2019* Internet
penetration

98%

2020 % POS spend using
Digital/Mobile Wallet

7%

2020* Mobile
penetration

87%

FORECAST

2024 %**
sales from e-com

23%

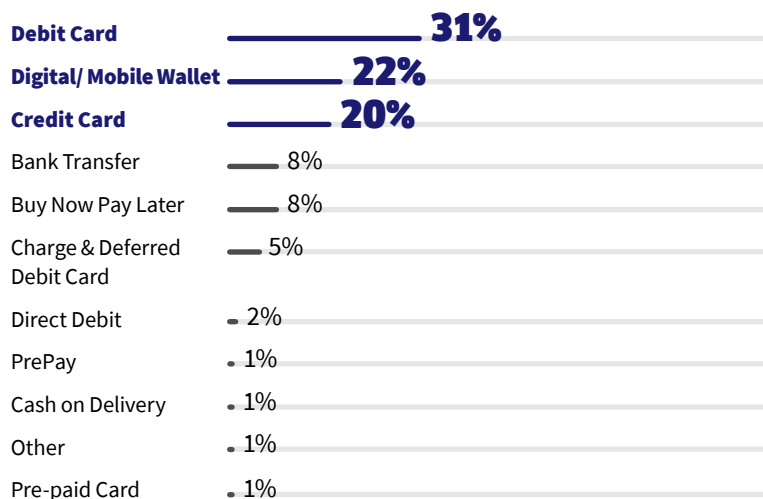
2024 %**
sales from m-com

57%

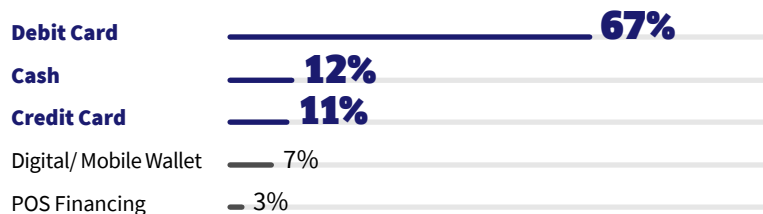
TOP TIP

As the national debit card, Dankort is the most widely accepted card brand in Denmark. Many merchants only accept Dankort since other card brands may be recognized as foreign cards and potentially affect merchant fees. As consumers continue to migrate to digital payments and use their Dankort card digitally, it's important for merchants to enable acceptance of mobile and digital wallets like MobilePay and PayPal.

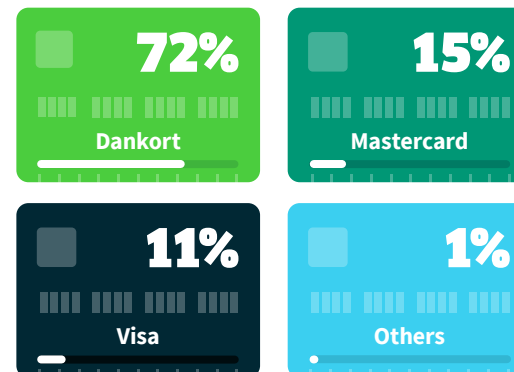
2020 e-com mix by payment method



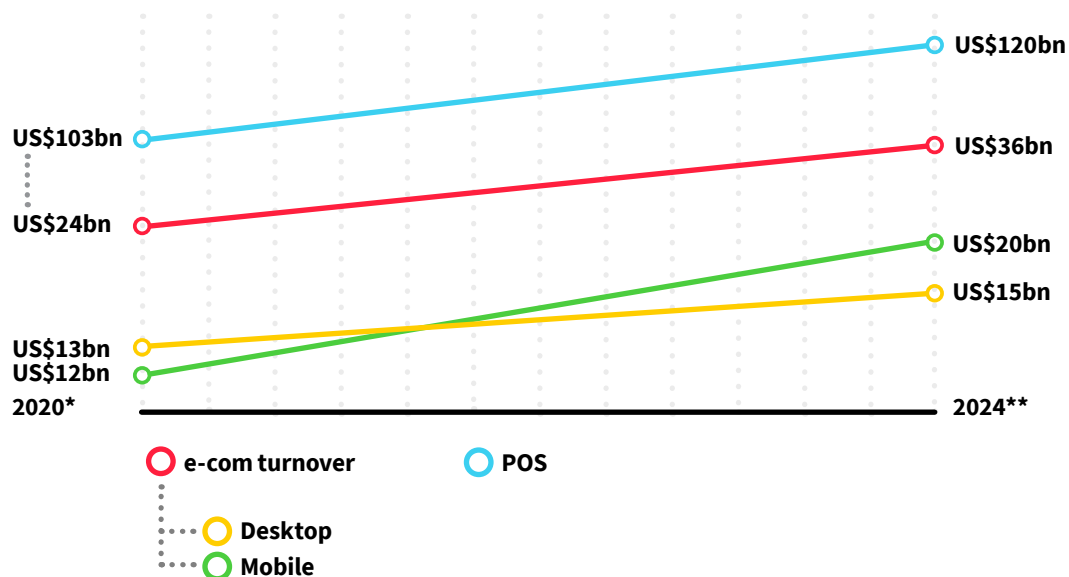
2020 point of sale mix by payment method



2019 card brand breakdowns (e-com and POS)



POS and e-com projected growth



Popular alternative payment methods



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

FINLAND

Known for the Northern Lights and the ability to visit Santa Clause's village, Finland is also known to provide free education all the way through university. For goods and services that aren't free, consumers prefer debit cards at the point of sale and bank transfer for online commerce. Finnish consumers are also on top as frequent users of buy now, pay later (BNPL).

FAST STATS

2020 sales %
from e-com

17%

2020* - 2024**
e-com CAGR

11%

2020 sales %
from m-com

38%

2020* - 2024**
POS CAGR

3%

2020 % e-com spend using
Digital/Mobile Wallet

19%

2019* Internet
penetration

94%

2020 % POS spend using
Digital/Mobile Wallet

6%

2020* Mobile
penetration

86%

FORECAST

2024%**
sales from e-com

21%

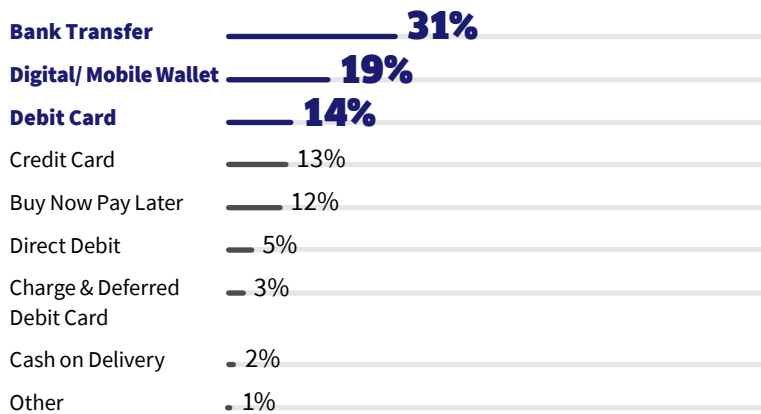
2024%**
sales from m-com

45%

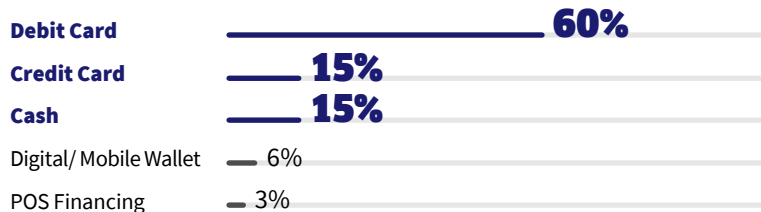
TOP TIP

Like most countries in 2020, spending changes occurred more with what consumers paid for than how they paid. Taxi services, restaurants and clothing purchases all experienced a decline once stay-in-place measures were ordered. When consumers turned to online shopping, bank transfers remained the top preference, but buy now, pay later (BNPL) services experienced a 50% increase from 2019. At the point of sale, consumers shifted away from cash and toward digital and mobile wallets. Merchants looking to offer options should consider alternatives like Klarna, PayPal and Apple Pay.

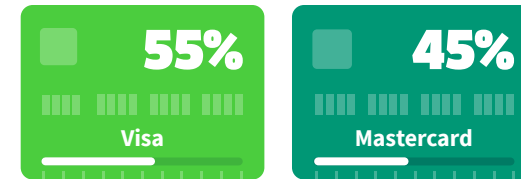
2020 e-com mix by payment method



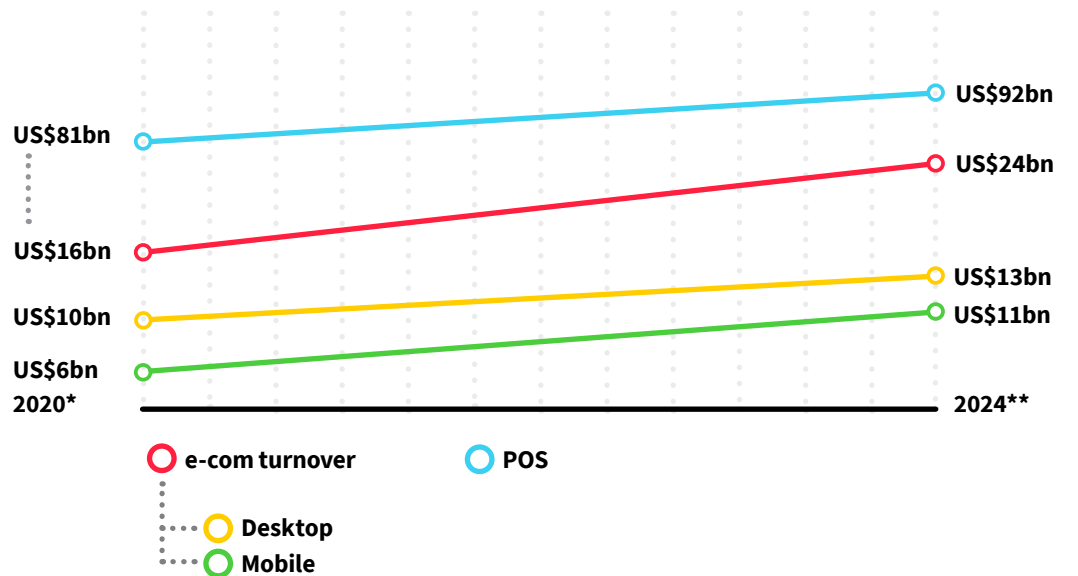
2020 point of sale mix by payment method



2019 card brand breakdowns (e-com and POS)



POS and e-com projected growth



Popular alternative payment methods



* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.



FRANCE

The Guinness World Record for shortest reign was held by King Louis XIX at just 20 minutes when he abdicated the throne.¹ Digital/mobile wallets have also reigned for a short time as the top online payment method but are forecasted to ultimately reign long-term as digital forms of payment are becoming more mainstream. At the point of sale, debit cards continue their reign while cash continues its pattern of decline.

¹<https://www.guinnessworldrecords.com/world-records/shortest-reign-of-a-monarch/>

FAST STATS

2020 sales %
from e-com

13%

2020* - 2024**
e-com CAGR

9%

2020 sales %
from m-com

30%

2020* - 2024**
POS CAGR

4%

2020 % e-com spend using
Digital/Mobile Wallet

25%

2019* Internet
penetration

92%

2020 % POS spend using
Digital/Mobile Wallet

7%

2020* Mobile
penetration

80%

FORECAST

2024 %**
sales from e-com

15%

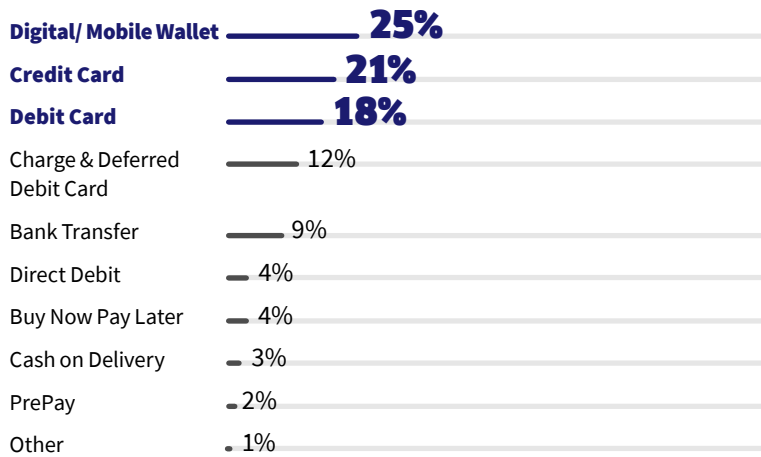
2024 %**
sales from m-com

42%

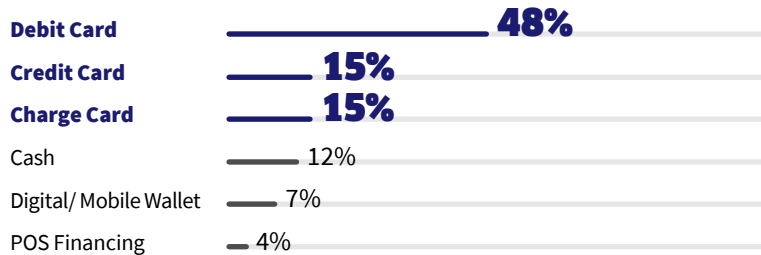
TOP TIP

As cash drops dramatically at the point of sale, adaptability is key. Retailers that embrace omnichannel are more prepared for unexpected turns in the economy as payments and commerce continue to migrate to digital. New tools such as email invoicing, call and collect, or click and collect are helping merchants of all sizes and are fairly simple to implement into current platforms.

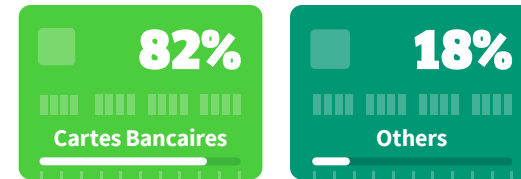
2020 e-com mix by payment method



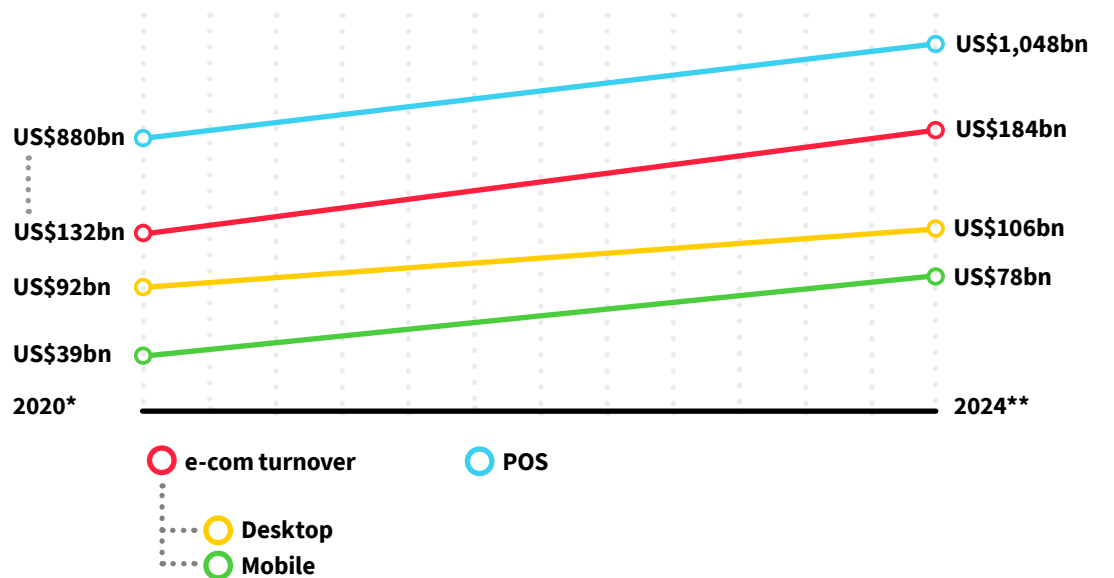
2020 point of sale mix by payment method



2019 card brand breakdowns (e-com and POS)



POS and e-com projected growth



Popular alternative payment methods



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



Dating back to 1956, German shop hours were regulated by law. While the law has since been updated, Germany still has limited shopping hours compared to the rest of Europe. When consumers do head out to shop, they're bringing cash, although the preference for cash continues to decline and credit card use is on the rise. When shopping online, Germans are now using their mobile/digital wallets most often but they're also fond of direct debit. They have the highest use of direct debit in the world.

FAST STATS

2020 sales %
from e-com

11%

2020* - 2024**
e-com CAGR

10%

2020 sales %
from m-com

37%

2020* - 2024**
POS CAGR

4%

2020 % e-com spend using
Digital/Mobile Wallet

26%

2019* Internet
penetration

96%

2020 % POS spend using
Digital/Mobile Wallet

7%

2020* Mobile
penetration

83%

FORECAST

2024 %**
sales from e-com

14%

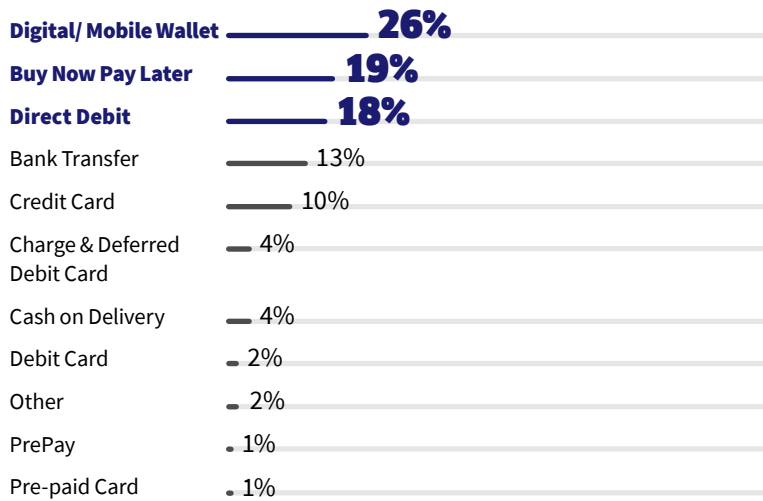
2024 %**
sales from m-com

45%

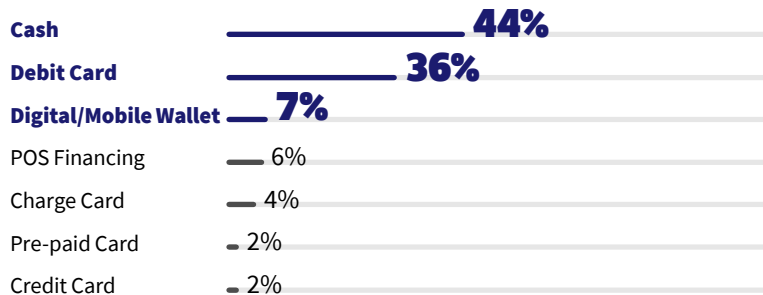
TOP TIP

Similar to many countries, COVID-19 has spurred additional online growth. Buy now, pay later (BNPL) options continue to grow online and at the POS. They are now the second most popular way to checkout online. Retailers looking to provide checkout options will want to enable acceptance of options like Klarna and Afterpay. The increase in mobile e-commerce continues to push growth with mobile and digital wallets, which are the number one method for online checkout.

2020 e-com mix by payment method

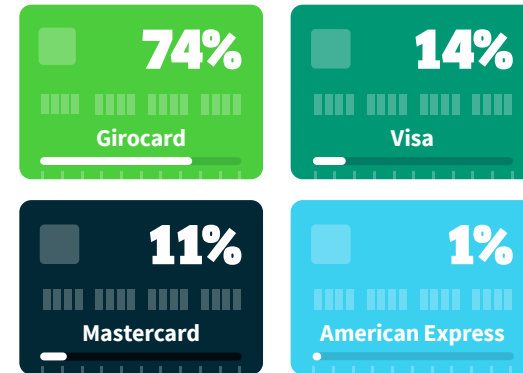


2020 point of sale mix by payment method

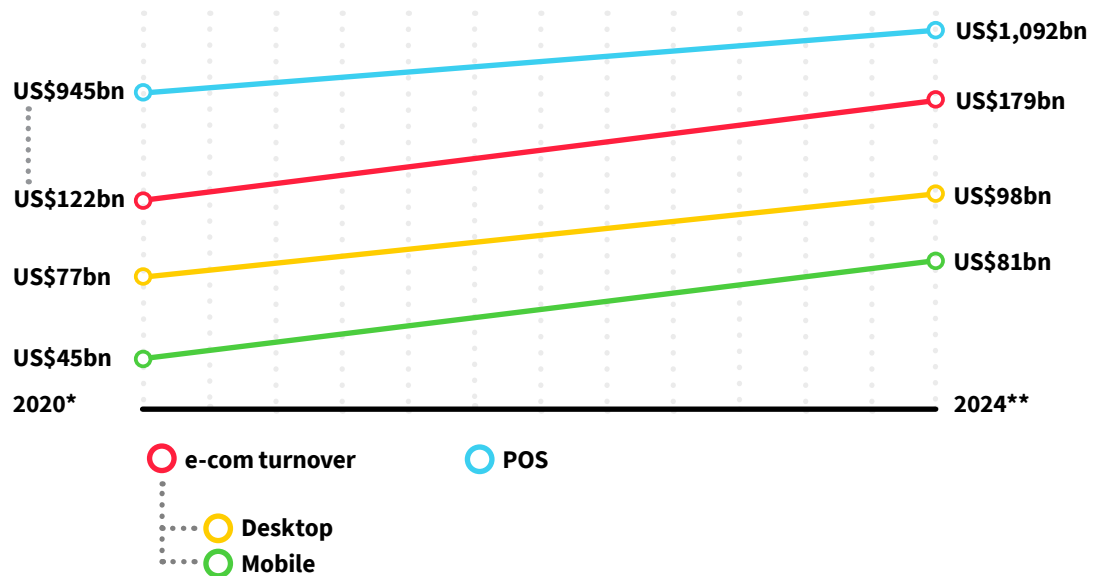


* Estimated **Forecasted
Numbers adjusted for rounding may impact totals.

2019 card brand breakdowns (e-com and POS)



POS and e-com projected growth



Popular alternative payment methods



Direct Debit



Invoice Payments

HONG KONG

Hong Kong is a food lover's paradise with more restaurants per capita than any other market in the world.¹ 2020 marked the year for Hong Kong consumers to transfer their debit card into a mobile/digital wallet to take advantage of a contactless experience when dining out or shopping in person. Consumers lean heavily toward card usage when checking out online, but in order to get high conversion rates, businesses need to localize the online experience by language and currency.

¹<https://expatliving.hk/25-fun-facts-about-hong-kong/>

FAST STATS

2020 sales %
from e-com

10%

2020* - 2024**
e-com CAGR

9%

2020 sales %
from m-com

57%

2020* - 2024**
POS CAGR

6%

2020 % e-com spend using
Digital/Mobile Wallet

29%

2020* Internet
penetration

89%

2020 % POS spend using
Digital/Mobile Wallet

22%

2020* Mobile
penetration

86%

FORECAST

2024 %**
sales from e-com

11%

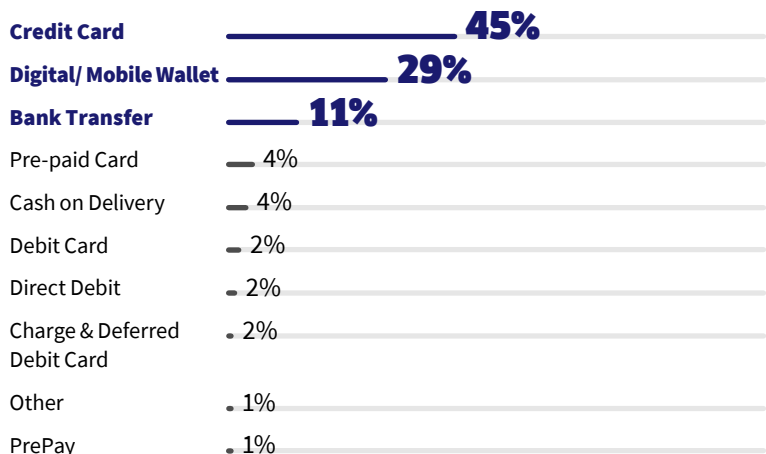
2024 %**
sales from m-com

66%

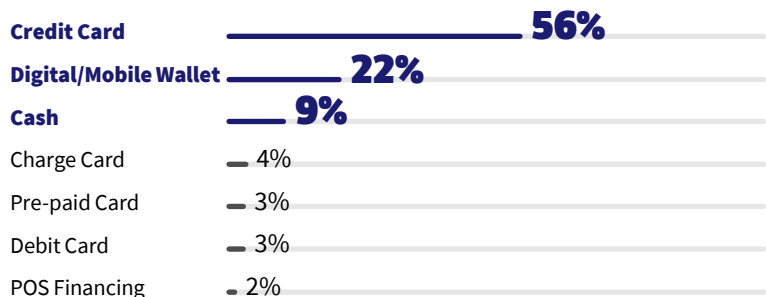
TOP TIP

Already a society that relies very little on cash, digital/mobile wallets are in the top checkout preferences for consumers, lagging only behind credit cards. Hong Kong is aiming to make payments simpler and faster through the Hong Kong Monetary Authority Faster Payment System by connecting those in the payments ecosystem. Merchants looking to take advantage of digital acceleration will want to focus efforts on accepting the largest digital wallets, Alipay and WeChat Pay.

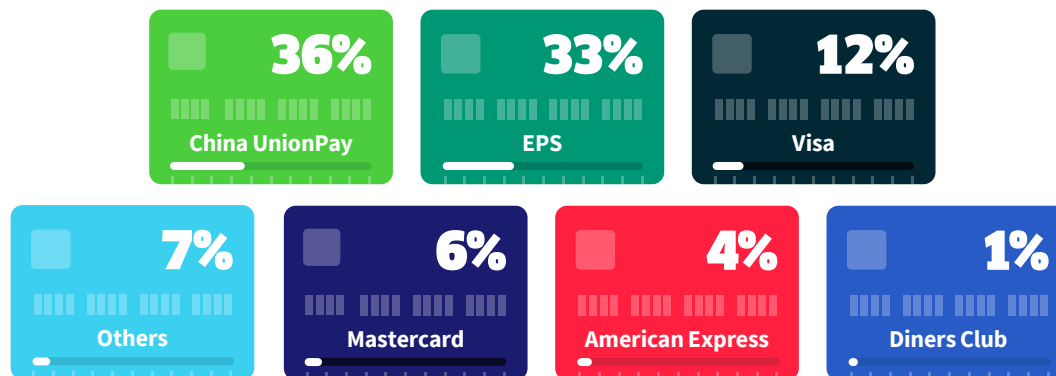
2020 e-com mix by payment method



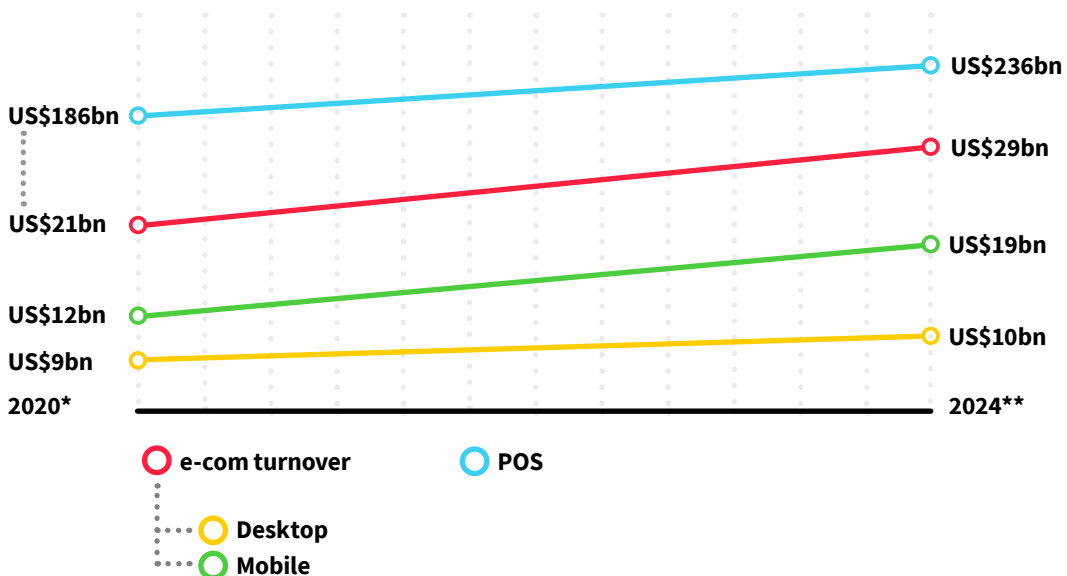
2020 point of sale mix by payment method



2019 card brand breakdowns (e-com and POS)



POS and e-com projected growth



Popular alternative payment methods



* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.

INDIA

Physical retail is alive and well in India, where consumers prefer to touch and feel products before they buy. Until 2020, cash was used to pay more than 70% of the time. The pandemic has started to change those habits and while cash still tops the preference list at 34%, many consumers are shifting to mobile/digital wallets and debit cards. It's more gratifying for Indian consumers to shop physically, but online retail also continues to increase as infrastructure and technology advancements are made.

FAST STATS

2020 sales %
from e-com

8%

2020* - 2024**
e-com CAGR

16%

2020 sales %
from m-com

53%

2020* - 2024**
POS CAGR

9%

2020 % e-com spend using
Digital/Mobile Wallet

40%

2020* Internet
penetration

41%

2020 % POS spend using
Digital/Mobile Wallet

22%

2020* Mobile
penetration

64%

FORECAST

2024 %**
sales from e-com

10%

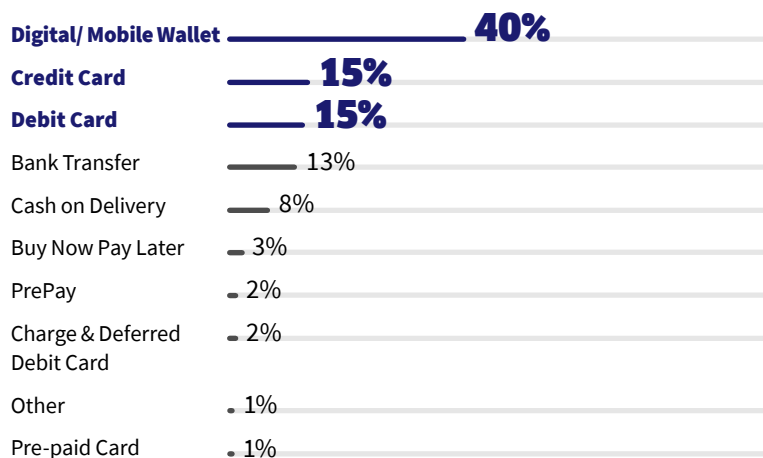
2024 %**
sales from m-com

62%

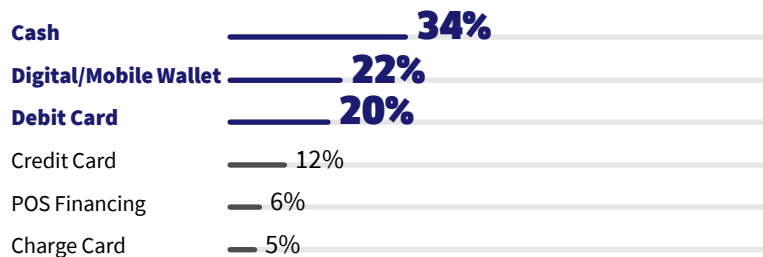
TOP TIP

The pandemic has accelerated the drive towards a cashless society with cash declining 36% at the point of sale in 2020. As a result, digital wallet companies like Paytm are experiencing strong growth. For businesses that haven't yet incorporated digital/mobile wallet acceptance at checkout, the time is now. WhatsApp Pay was also recently launched in India, giving consumers an additional option to pay seamlessly.

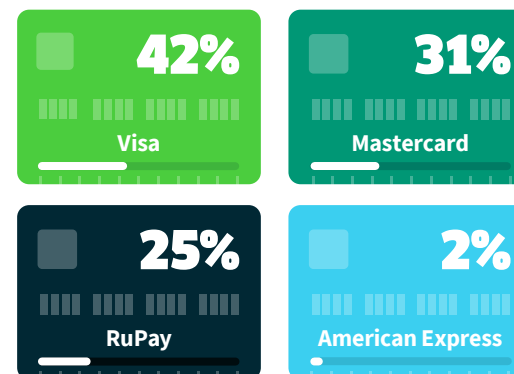
2020 e-com mix by payment method



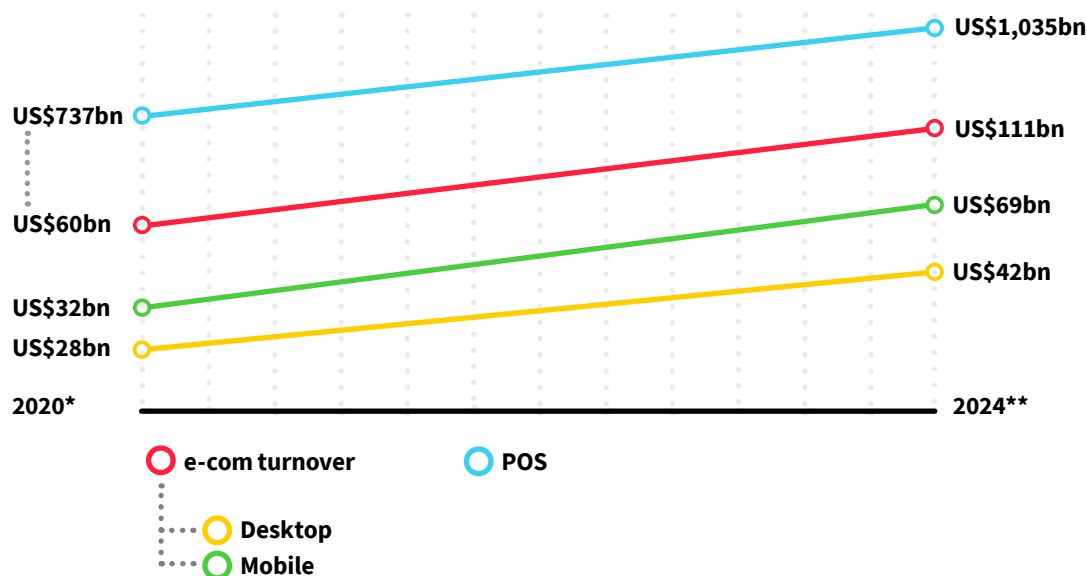
2020 point of sale mix by payment method



2019 card brand breakdowns (e-com and POS)



POS and e-com projected growth



Popular alternative payment methods



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

INDONESIA

Jakarta, the Big Apple of Southeast Asia, is a shopper's paradise containing one of the world's largest shopping malls. Due to the global pandemic, consumers in Indonesia greatly reduced their use of cash in 2020 and migrated to digital/mobile wallets when heading out to shop. Digital/mobile wallets also rose to the top preference for online checkout, which comes in handy when consumers participate in major shopping days, often coinciding with holidays popular in China.

FAST STATS

2020 sales %
from e-com

8%

2020 sales %
from m-com

61%

2020 % e-com spend using
Digital/Mobile Wallet

29%

2020 % POS spend using
Digital/Mobile Wallet

17%

2020* - 2024**
e-com CAGR

19%

2020* - 2024**
POS CAGR

7%

2020* Internet
penetration

63%

2020* Mobile
penetration

75%

FORECAST

2024 %**
sales from e-com

12%

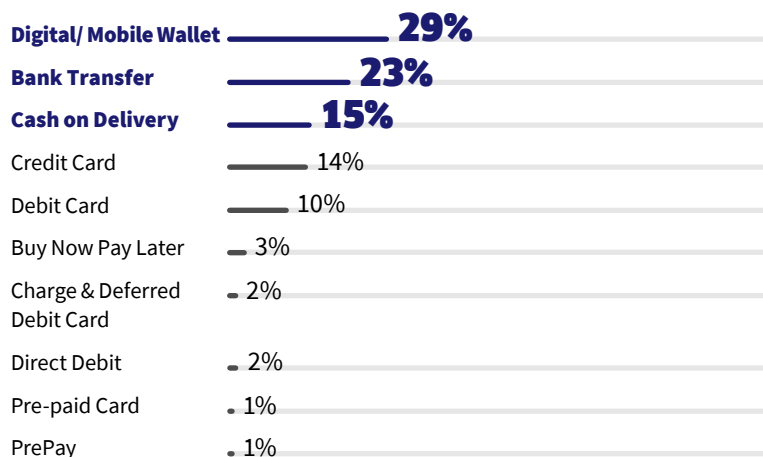
2024 %**
sales from m-com

68%

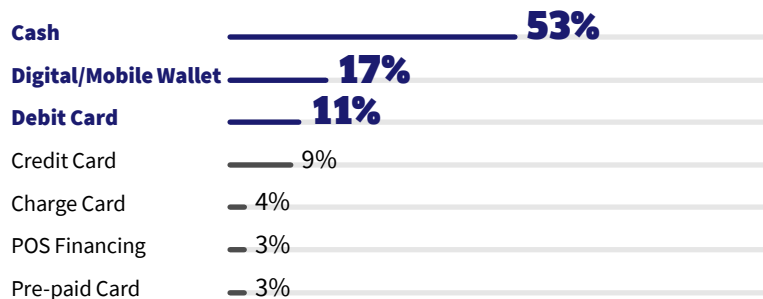
TOP TIP

Indonesian e-commerce is considered to have one of the highest growth rates in Asia-Pacific. Due to restricted travel throughout the pandemic, many consumers increased their purchasing of items like clothes or gadgets. These shifts have shined new light on logistics and delivery challenges, especially in more rural areas. Merchants who can make the delivery experience more seamless will be prepared for future growth.

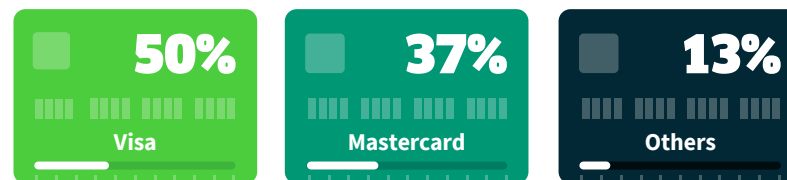
2020 e-com mix by payment method



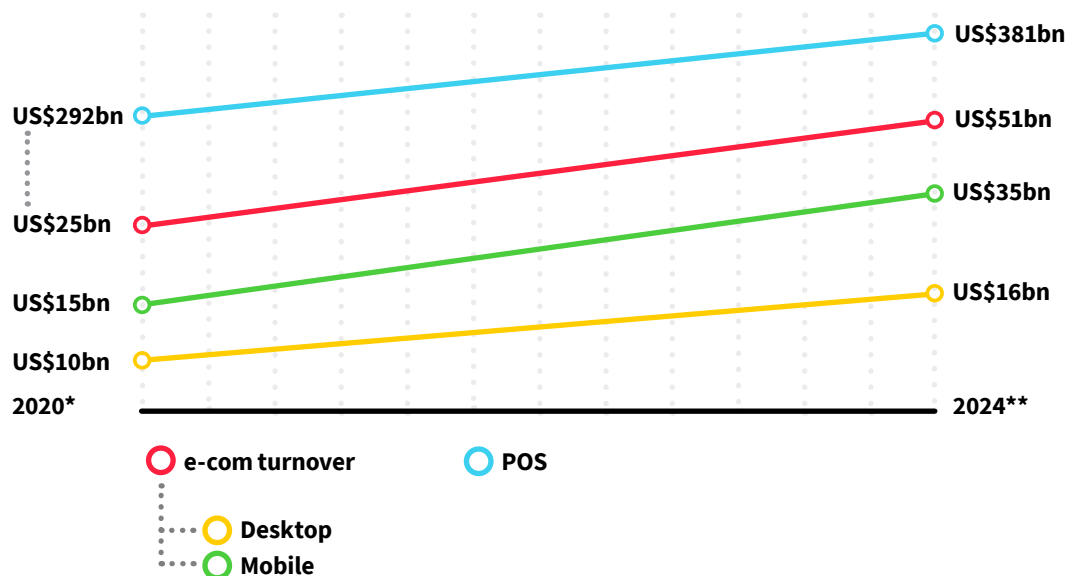
2020 point of sale mix by payment method



2019 card brand breakdowns (e-com and POS)



POS and e-com projected growth



Popular alternative payment methods



* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.



IRELAND

St. Patrick's Day is celebrated as a national holiday. In fact, it's the only national holiday that people wear green for patriotic reasons. Green is also not the most popular choice at checkout. Debit cards are the most preferred method for paying online and at the point of sale, in whatever color the card happens to be.

FAST STATS

2020 sales %
from e-com

10%

2020* - 2024**
e-com CAGR

8%

2020 sales %
from m-com

40%

2020* - 2024**
POS CAGR

4%

2020 % e-com spend using
Digital/Mobile Wallet

22%

2019* Internet
penetration

92%

2020 % POS spend using
Digital/Mobile Wallet

2%

2020* Mobile
penetration

79%

FORECAST

2024 %**
sales from e-com

11%

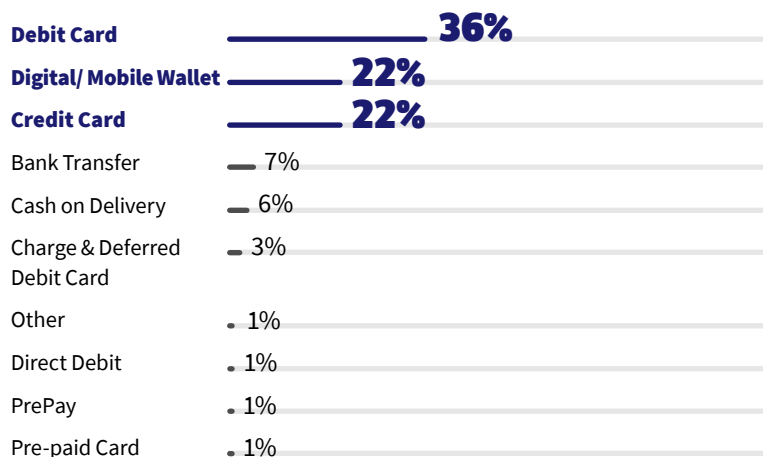
2024 %**
sales from m-com

47%

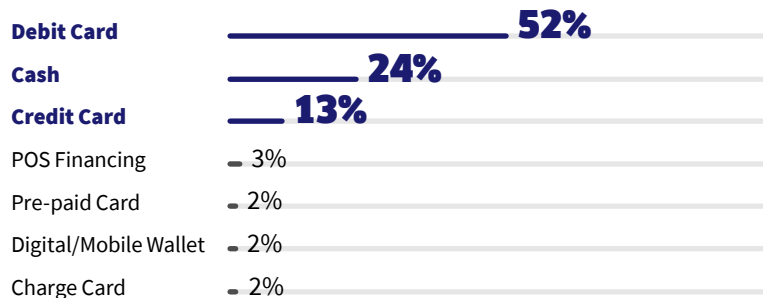
TOP TIP

Ireland experienced a 26.6% increase in the volume of contactless transactions since the limit increase from €30 to €50 was implemented in March 2020 to encourage more contactless payments and help curb the spread of COVID-19.¹ The National Transport Authority (NTA) has stated that it wants to introduce a tap on, tap off single transaction solution across, rail, bus, tram and taxi modes of transport by Q2 2022.

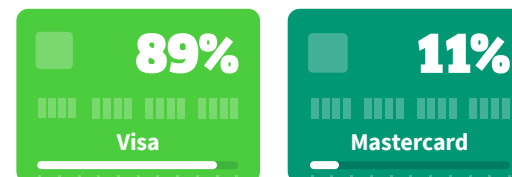
2020 e-com mix by payment method



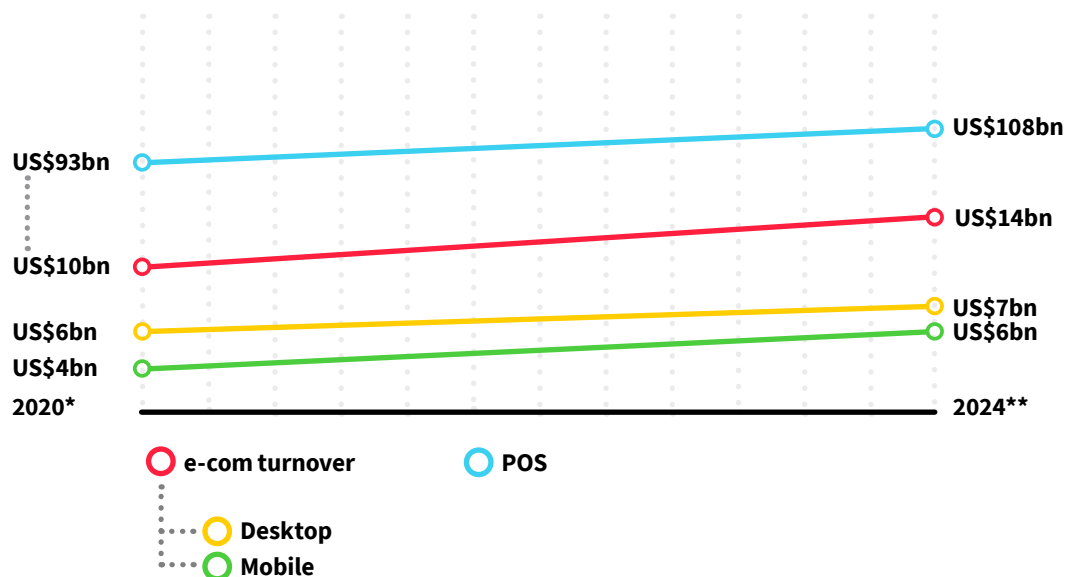
2020 point of sale mix by payment method



2019 card brand breakdowns (e-com and POS)



POS and e-com projected growth



Popular alternative payment methods



* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.

¹ Worldpay from FIS data



ITALY

Known for food, fashion and fine art, Italy also provided the foundation for all legal systems established throughout Europe. Payment foundations were originally built on cash at the point of sale and are still the preferred method today, although cash preferences are declining in favor of cards. As online commerce continues to grow at 10% CAGR, digital/mobile wallets have risen to the top of the preference list, taking a solid lead ahead of credit cards.

FAST STATS

2020 sales %
from e-com

6%

2020* - 2024**
e-com CAGR

10%

2020 sales %
from m-com

49%

2020* - 2024**
POS CAGR

4%

2020 % e-com spend using
Digital/Mobile Wallet

36%

2019* Internet
penetration

93%

2020 % POS spend using
Digital/Mobile Wallet

8%

2020* Mobile
penetration

83%

FORECAST

2024 %**
sales from e-com

8%

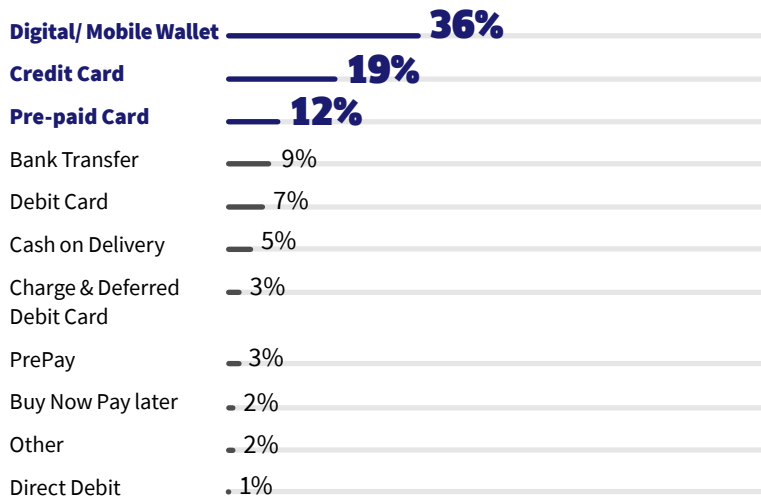
2024 %**
sales from m-com

61%

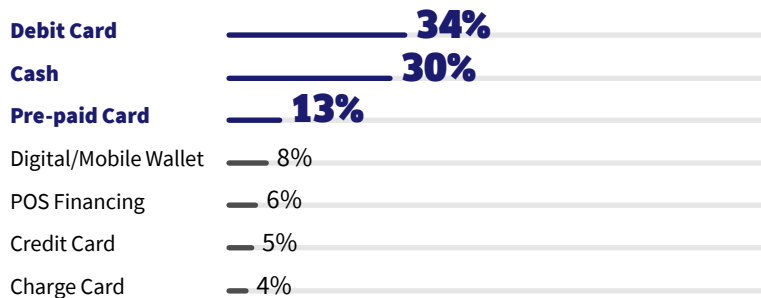
TOP TIP

The move to more digital payments is being fast tracked in part due to COVID-19 and the economic upheaval Italians have experienced. At the POS, cash declined 48% as consumers were forced to shift to other payment methods. The use of prepaid cards and digital/mobile wallets experienced the largest growth, doubling at the POS. The government is expected to implement a series of measures to become a cashless society starting with refunding customers a percentage of card payment transactions.

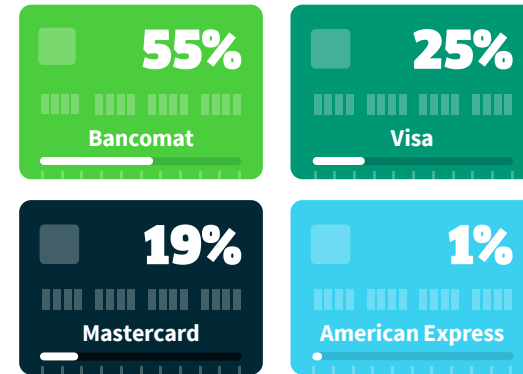
2020 e-com mix by payment method



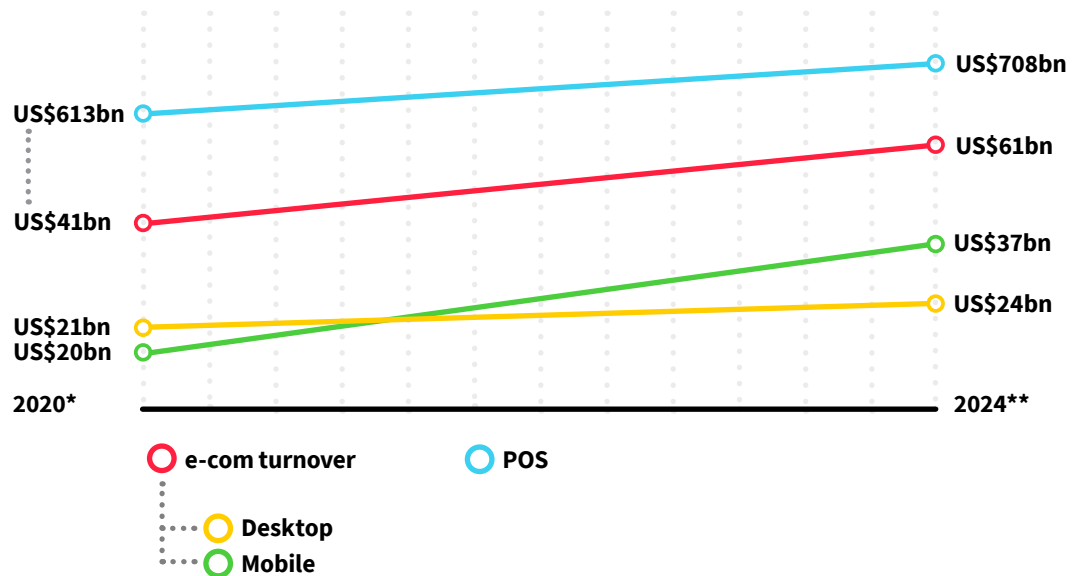
2020 point of sale mix by payment method



2019 card brand breakdowns (e-com and POS)



POS and e-com projected growth



Popular alternative payment methods



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



JAPAN

Japan is a leader in integrating artificial intelligence into their daily lives and Tokyo ranks as the third most expensive city to live in the world.¹ Despite their technological advances, Japanese consumers still prefer to pay with cash when checking out at the point of sale. When shopping online, credit cards top the list at nearly 60%. Their preferences for cash and credit cards likely make it easier to manage a budget when living in expensive markets.

¹<https://www.mercer.com/newsroom/2020-cost-of-living.html>

FAST STATS

2020 sales % from e-com	2020 sales % from m-com	2020 % e-com spend using Digital/Mobile Wallet	2020 % POS spend using Digital/Mobile Wallet
10%	27%	11%	4%
2020* - 2024** e-com CAGR	2020* - 2024** POS CAGR	2020* Internet penetration	2020* Mobile penetration
8%	3%	94%	84%

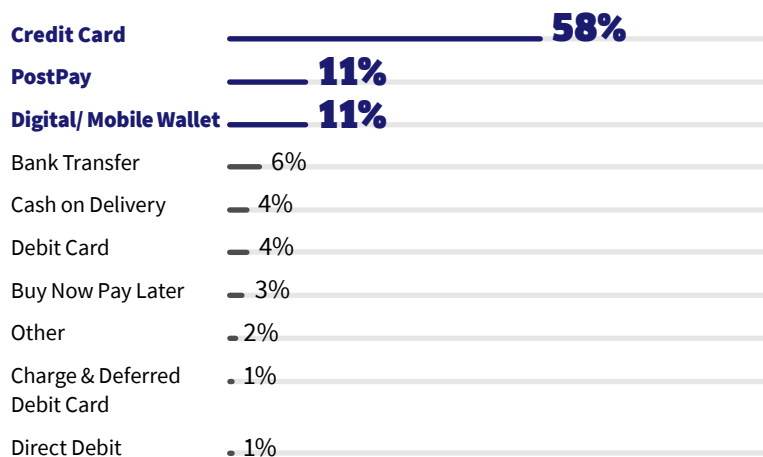
FORECAST

2024 %** sales from e-com	2024 %** sales from m-com
11%	29%

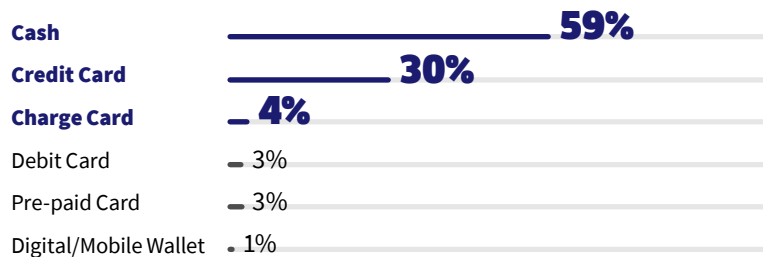
TOP TIP

QR-code payments continue to be popular among the Japanese, in part supported by a government initiative to go cashless. The program covers a rebate scheme where shoppers earn points that can be redeemed at participating stores. Many e-commerce merchants are also beginning to incorporate QR codes into their checkout process to engage participating consumers.

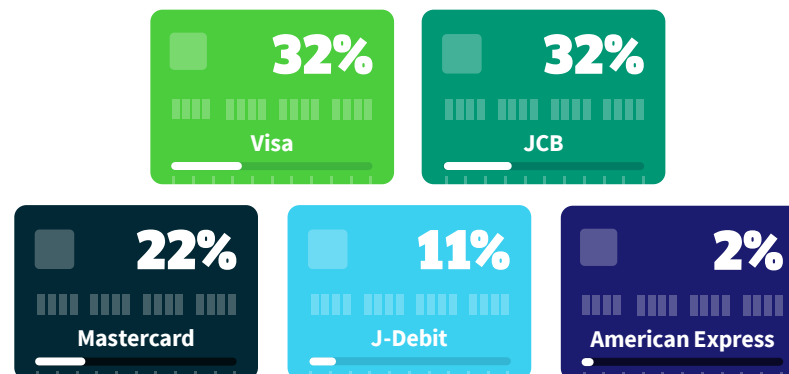
2020 e-com mix by payment method



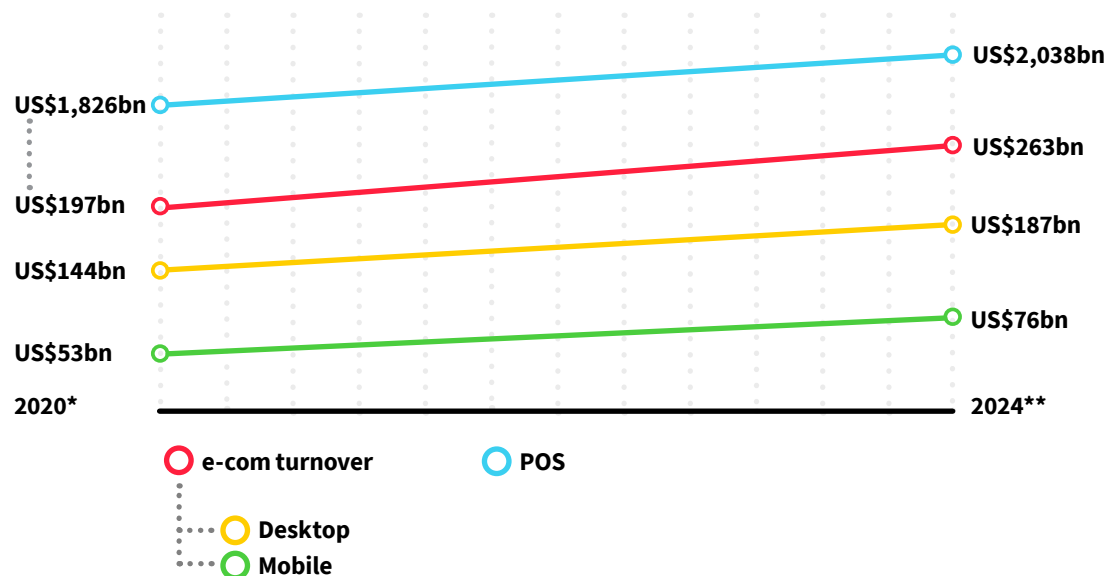
2020 point of sale mix by payment method



2019 card brand breakdowns (e-com and POS)



POS and e-com projected growth



Popular alternative payment methods



* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.



MALAYSIA

Malaysia's thriving retail scene includes a growing number of shopping malls and specialty centers. While shopping, it's digital forms of payment that lead for consumers. Cash is still the preference for point of sale checkout but they're adopting more contactless experiences using credit cards and digital/mobile wallets. These options are also gaining in popularity online and beginning to catch up to bank transfers.

FAST STATS

2020 sales %
from e-com

5%

2020* - 2024**
e-com CAGR

14%

2020 sales %
from m-com

59%

2020* - 2024**
POS CAGR

6%

2020 % e-com spend using
Digital/Mobile Wallet

14%

2020* Internet
penetration

81%

2020 % POS spend using
Digital/Mobile Wallet

13%

2020* Mobile
penetration

78%

FORECAST

2024 %**
sales from e-com

7%

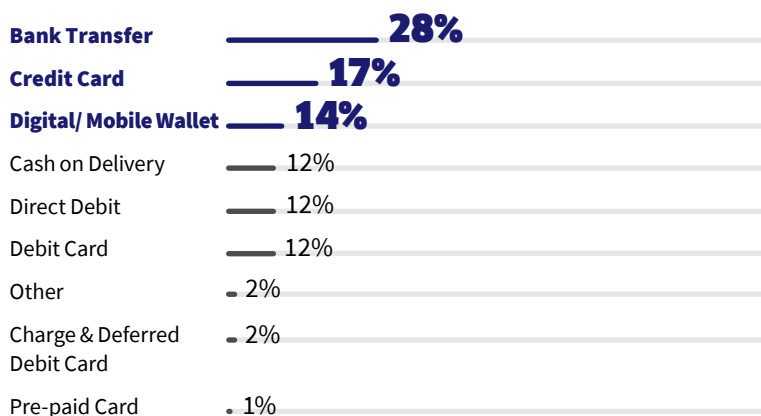
2024 %**
sales from m-com

65%

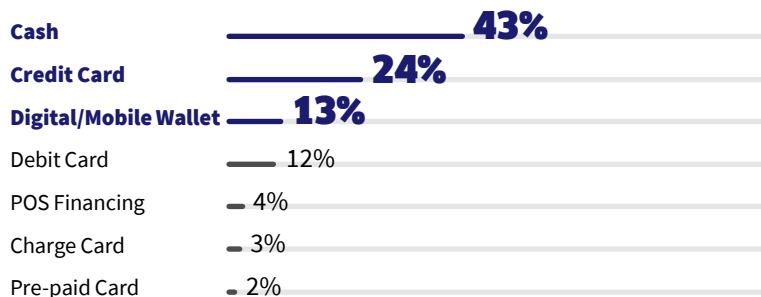
TOP TIP

Traditionally a cash-dominant society, the pandemic has accelerated Malaysia's push towards electronic payments. Consumers are increasingly using digital channels to make payments and migrating away from cash. Even when shopping in-store, more consumers began to check out with a mobile or digital wallet to take advantage of the contactless nature. To support this rapid adoption, the government has offered a preloaded amount of RMB50 when customers sign up to a specific mobile/digital wallet.

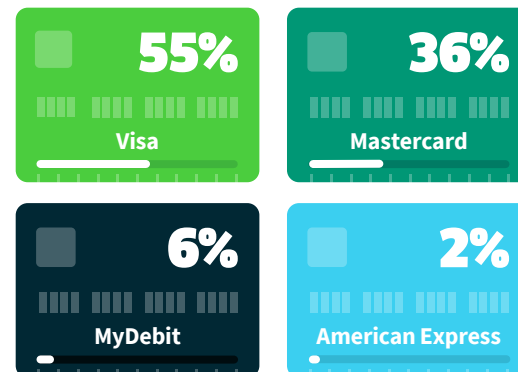
2020 e-com mix by payment method



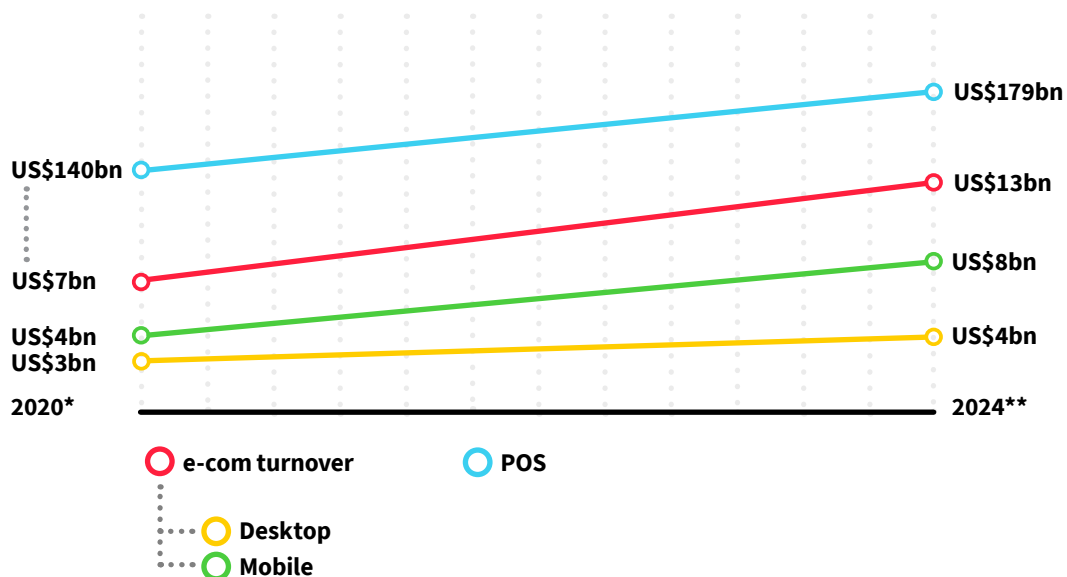
2020 point of sale mix by payment method



2019 card brand breakdowns (e-com and POS)



POS and e-com projected growth



Popular alternative payment methods



CIMB Clicks

* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.

MEXICO

Mexico is one of the top 10 countries by number of UNESCO World Heritage Sites with more than 30 sites on the list. While there aren't as many payment methods, Mexican consumers do utilize a variety whether they're shopping in-store or online. Cards and cash continue to be the most popular but digital/mobile wallet adoption is on the rise. That growth is expected to continue as mobile commerce is projected to grow more than 20% over the next 5 years.

FAST STATS

2020 sales %
from e-com

6%

2020* - 2024**
e-com CAGR

16%

2020 sales %
from m-com

53%

2020* - 2024**
POS CAGR

4%

2020 % e-com spend using
Digital/Mobile Wallet

27%

2020* Internet
penetration

65%

2020 % POS spend using
Digital/Mobile Wallet

4%

2020* Mobile
penetration

68%

FORECAST

2024 %**
sales from e-com

9%

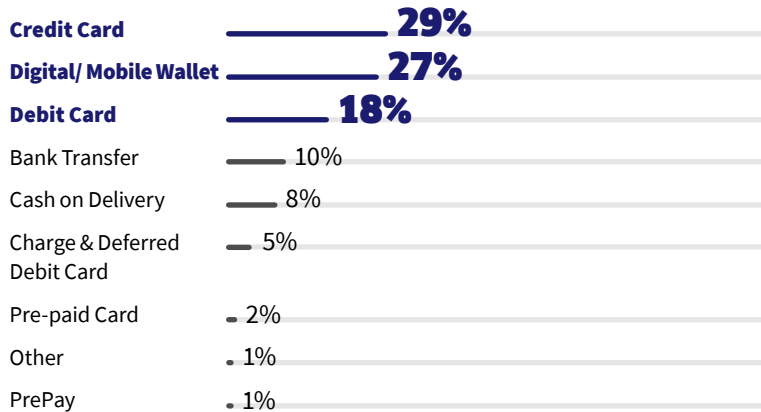
2024 %**
sales from m-com

64%

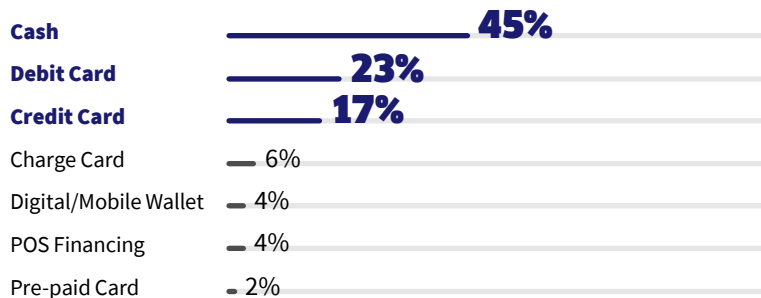
TOP TIP

Cobro Digital (CoDi) may be set to help consumers transition to digital payments for in-person transactions as cash experienced a sharp decline in 2020. Retailers, payment providers and fintechs are currently exploring the system’s potential for digital commerce. Thirty-two of the largest financial institutions in Mexico already participate with more adapting their technology to also process payments through CoDi. The system also has more than 150 non-financial participants, from retailers to fintechs.

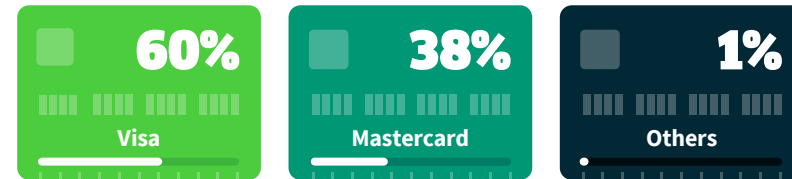
2020 e-com mix by payment method



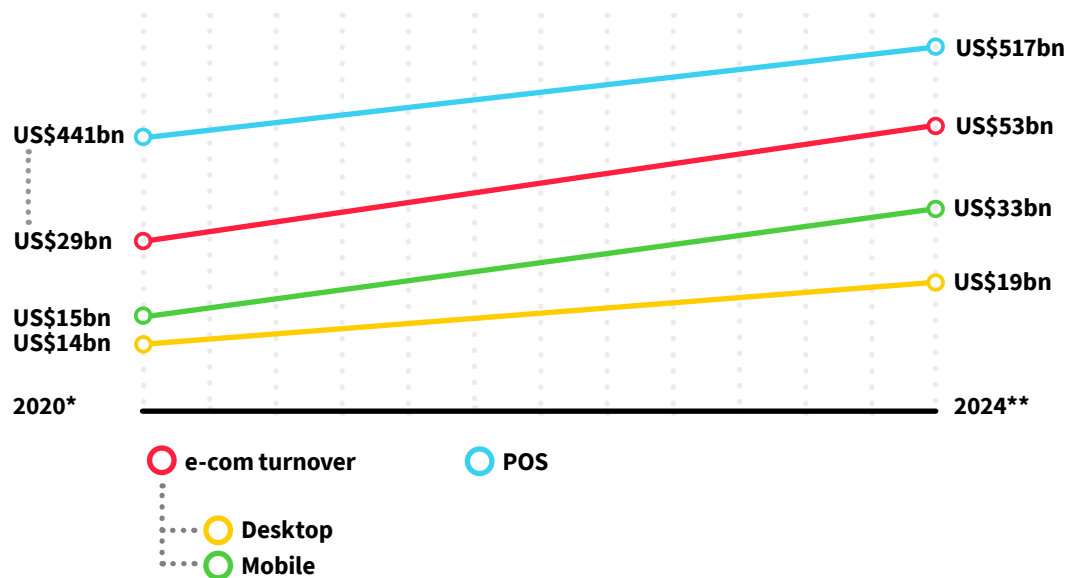
2020 point of sale mix by payment method



2019 card brand breakdowns (e-com and POS)



POS and e-com projected growth



Popular alternative payment methods



* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.



NETHERLANDS

The Netherlands, the lowest-lying country in Europe, is the leading exporter of flowers with almost 80% of the world's bulbs.¹ While there's no one payment method that captures 80% of the market share, there is one that comes close. The Dutch don't take on much debt and instead prefer to pay for online purchases through bank transfer (60%). There's no other payment preference that comes close to a double-digit share of Dutch e-commerce. Their aversion to debt carries through to the point of sale, with most purchases being made with cash or a debit card.

¹<https://www.expatica.com/nl/moving/about/netherlands-facts-108857/>

FAST STATS

2020 sales %
from e-com

14%

2020* - 2024**
e-com CAGR

9%

2020 sales %
from m-com

32%

2020* - 2024**
POS CAGR

4%

2020 % e-com spend using
Digital/Mobile Wallet

8%

2019* Internet
penetration

96%

2020 % POS spend using
Digital/Mobile Wallet

11%

2020* Mobile
penetration

85%

FORECAST

2024 %**
sales from e-com

17%

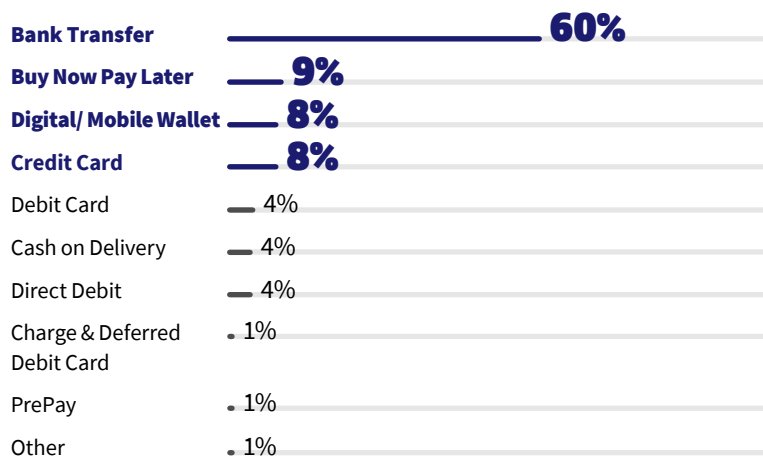
2024 %**
sales from m-com

39%

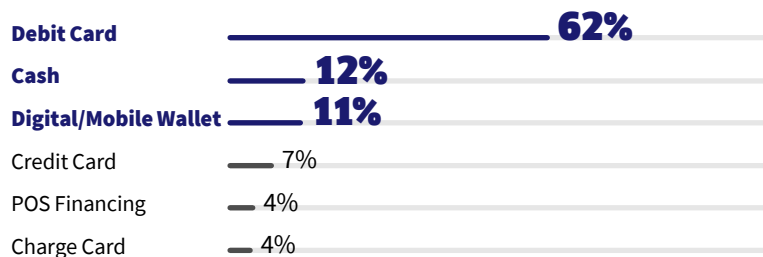
TOP TIP

COVID-19 is bringing new strategies for brands to reach consumers. Mobile and digital wallets like Apple Pay and Google Pay are gaining more traction in-store. Buy now, pay later (BNPL) continues to increase as a way for consumers to continue to support large and small businesses, and consumers have shown increased interest in supporting local businesses. Online brands are experiencing a boost in online sales and last-mile delivery companies are continuing to see increased volumes providing an opportunity for brands to continue to expand their online presence.

2020 e-com mix by payment method

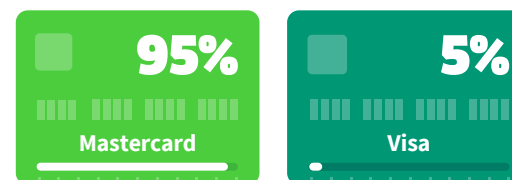


2020 point of sale mix by payment method

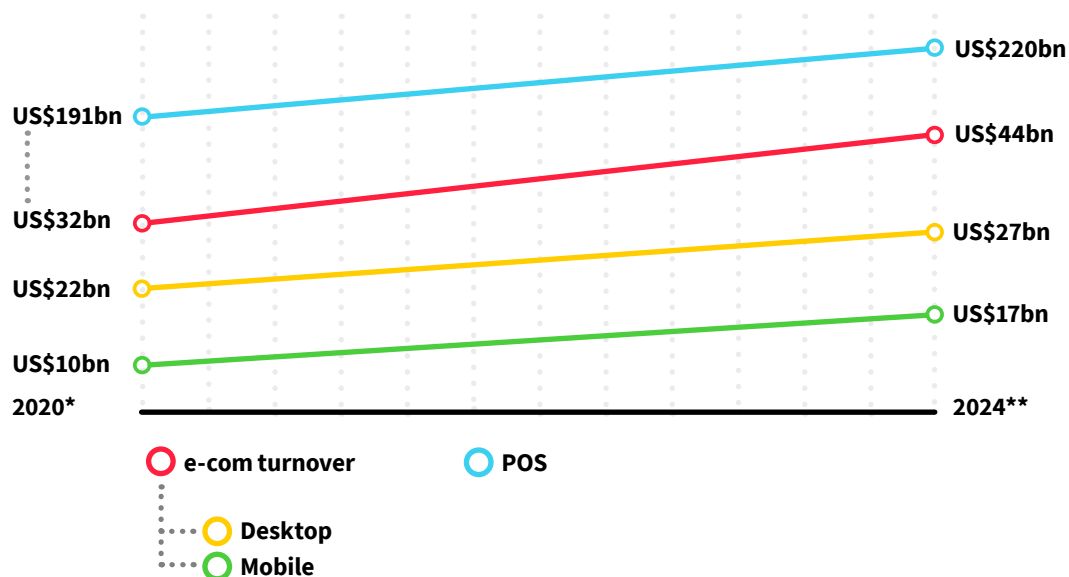


* Estimated **Forecasted
Numbers adjusted for rounding may impact totals.

2019 card brand breakdowns (e-com and POS)



POS and e-com projected growth



Popular alternative payment methods





NEW ZEALAND

New Zealand has a very small human population percentage at only 5%.¹ That makes it the country with the highest animal to human ratio in the world even though the country is actually larger than the UK. These consumers prefer paying with cards over cash when out shopping or checking out online. Credit and debit cards are often the most reached for, likely due to benefits like loyalty and reward programs.

¹<https://www.globotreks.com/destinations/new-zealand/33-quirky-facts-new-zealand/>

FAST STATS

2020 sales %
from e-com

8%

2020* - 2024**
e-com CAGR

8%

2020 sales %
from m-com

47%

2020* - 2024**
POS CAGR

5%

2020 % e-com spend using
Digital/Mobile Wallet

20%

2019* Internet
penetration

91%

2020 % POS spend using
Digital/Mobile Wallet

5%

2020* Mobile
penetration

83%

FORECAST

2024 %**
sales from e-com

9%

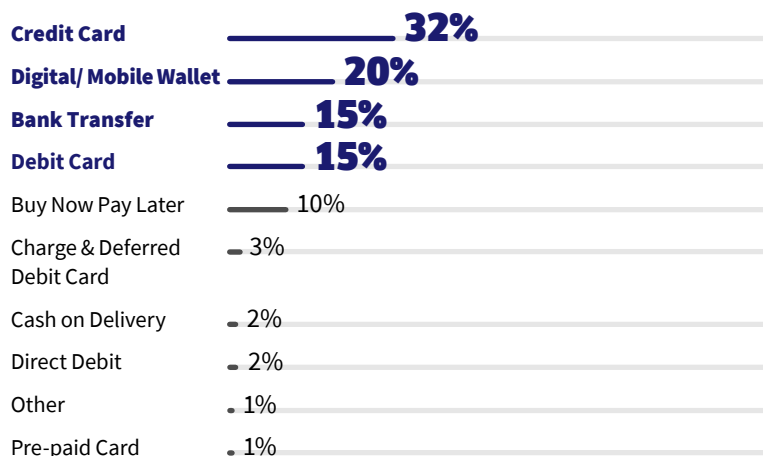
2024 %**
sales from m-com

61%

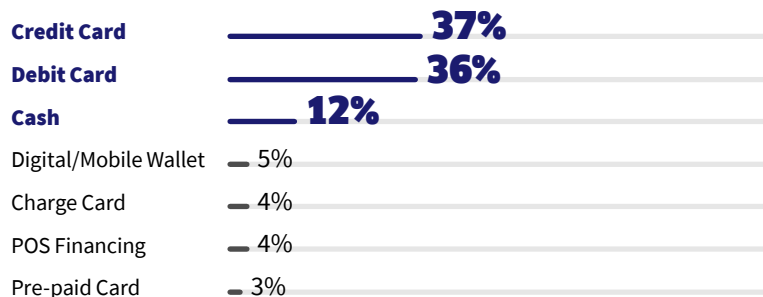
TOP TIP

In 2020, many consumers began to look for options that would help them manage installment payments, such as buy now, pay later (BNPL), which reduces purchasing risk for consumers since they can spread out interest-free payments. The pandemic also facilitated wider public acceptance of QR-based interfaces and even alternative debit types such as Electronic Funds Transfer at Point of Sale (EFTPOS) are beginning to pilot mobile-based payments.

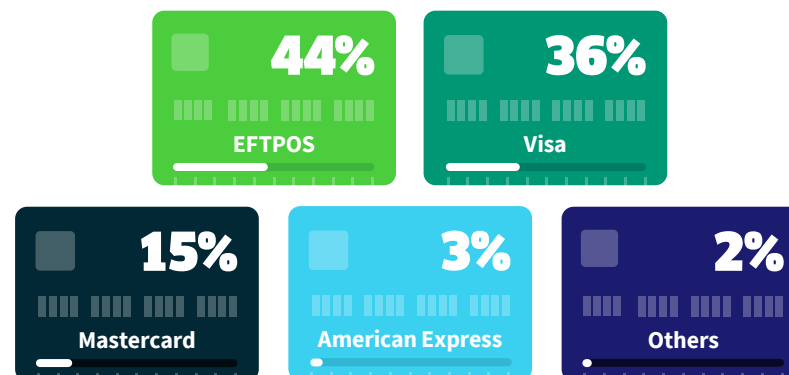
2020 e-com mix by payment method



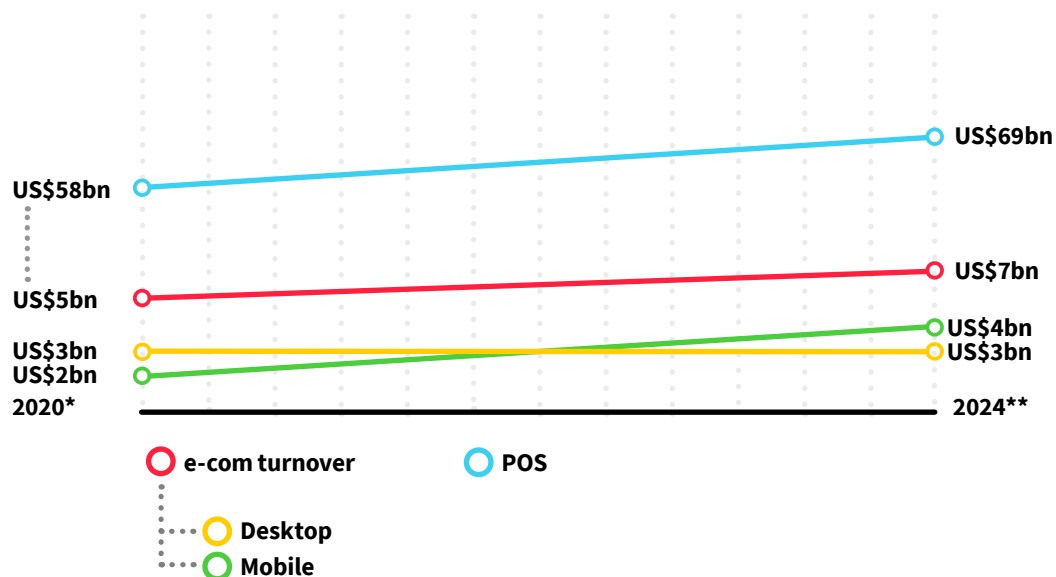
2020 point of sale mix by payment method



2019 card brand breakdowns (e-com and POS)



POS and e-com projected growth



Popular alternative payment methods



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

NIGERIA

At the POS consumers are most often paying with cash but Nigeria is one of the fastest growing markets and digital forms of payments are booming. Online commerce through mobile devices is projected to grow 26% over the next five years.

FAST STATS

2020 sales %
from e-com

7%

2020 sales %
from m-com

65%

2020 % e-com spend using
Digital/Mobile Wallet

7%

2020 % POS spend using
Digital/Mobile Wallet

10%

2020* - 2024**
e-com CAGR

24%

2020* - 2024**
POS CAGR

4%

2019* Internet
penetration

61%

2020* Mobile
penetration

51%

FORECAST

2024 %**
sales from e-com

13%

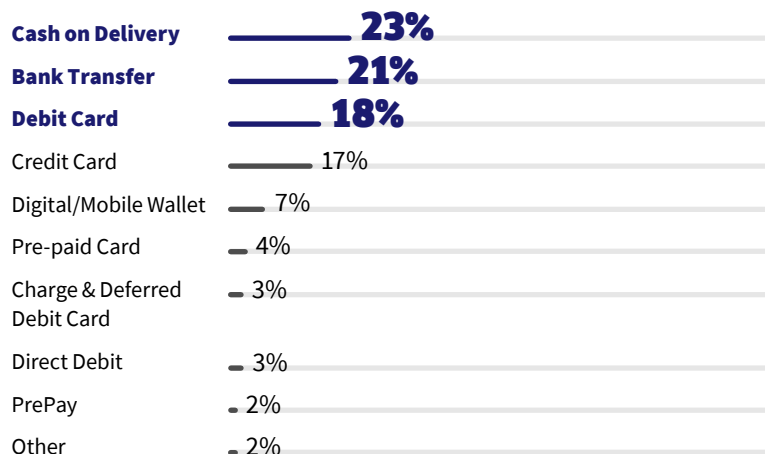
2024 %**
sales from m-com

70%

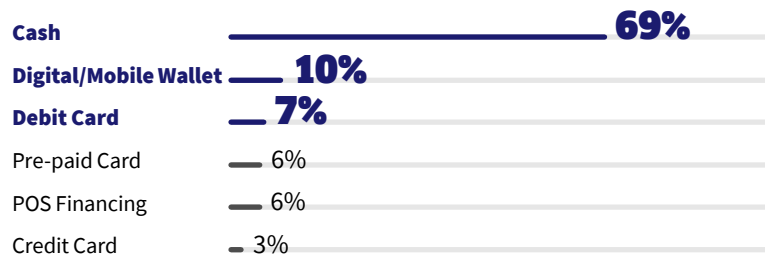
TOP TIP

Nigeria is one of the most developed e-commerce markets in Africa and has the second largest online gambling industry on the continent. Like many other African countries, Nigeria is poised to leapfrog the cash-to-card revolution and is beginning to migrate directly to mobile-enabled payment methods. The youth demographic has been driving demand for cashless and frictionless payments over the last couple of years, with bank transfers being a key payment method for merchants to access Nigerian shoppers.

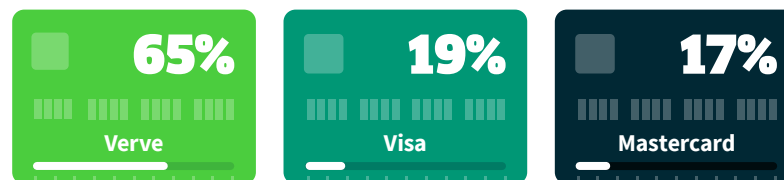
2020 e-com mix by payment method



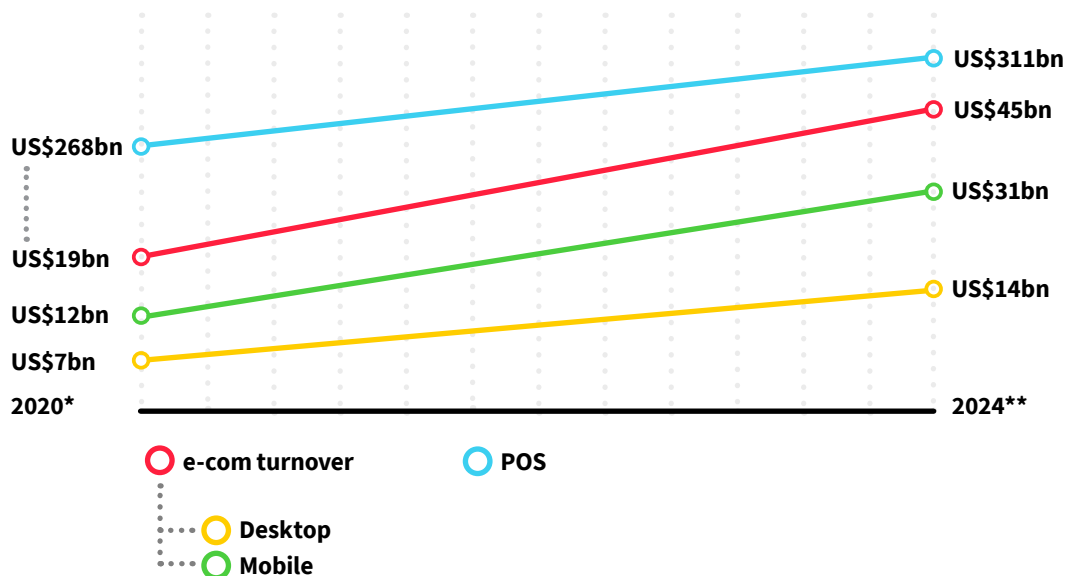
2020 point of sale mix by payment method



2019 card brand breakdowns (e-com and POS)



POS and e-com projected growth



Popular alternative payment methods



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



NORWAY

Ranked as the third most expensive country to live in, Norway's cost of living is 95% higher than other countries around the world.¹ Going out for a beer is one of the most expensive things you can do. When it comes to paying in person, Norwegians prefer a card 88% of the time. When shopping online, they split preferences between a variety of methods, from cards (physical or digital) to bank transfer to BNPL. Options likely come in handy when living in a more expensive country.

<https://www.businessinsider.com/most-expensive-countries-to-live-in-ranked#3-norway-23>

FAST STATS

2020 sales %
from e-com

18%

2020* - 2024**
e-com CAGR

11%

2020 sales %
from m-com

43%

2020* - 2024**
POS CAGR

4%

2020 % e-com spend using
Digital/Mobile Wallet

19%

2019* Internet
penetration

98%

2020 % POS spend using
Digital/Mobile Wallet

8%

2020* Mobile
penetration

86%

FORECAST

2024 %**
sales from e-com

22%

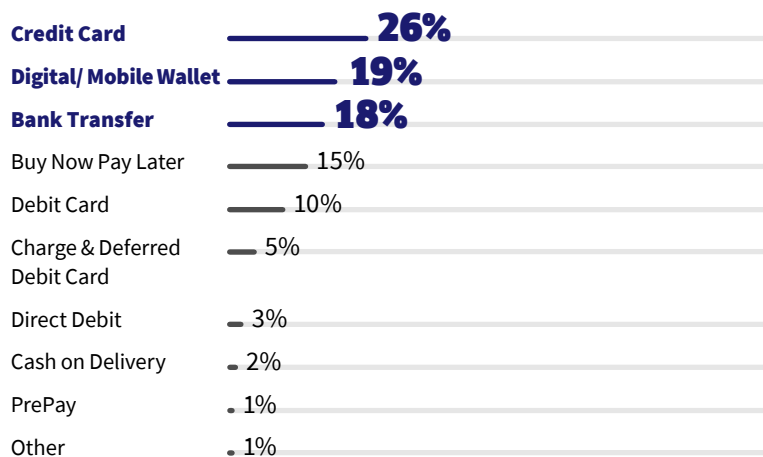
2024 %**
sales from m-com

51%

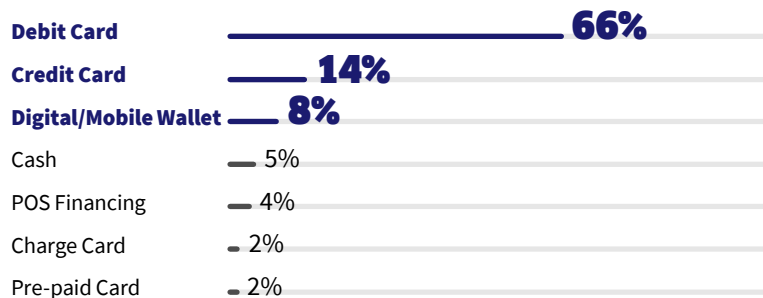
TOP TIP

In an effort to continue to boost mobile payments, Visa is teaming up with the Norwegian digital wallet company Vipps. Due to COVID-19, mobile wallet payments increased 60% at the point of sale as consumers shifted away from using cash. Consumers also opted to change up how they checkout online with buy now, pay later (BNPL) experiencing a 15% increase and debit card use jumping 42% from 2019.

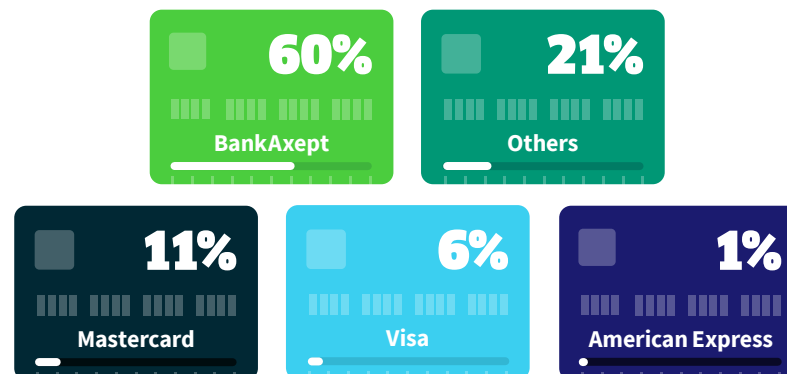
2020 e-com mix by payment method



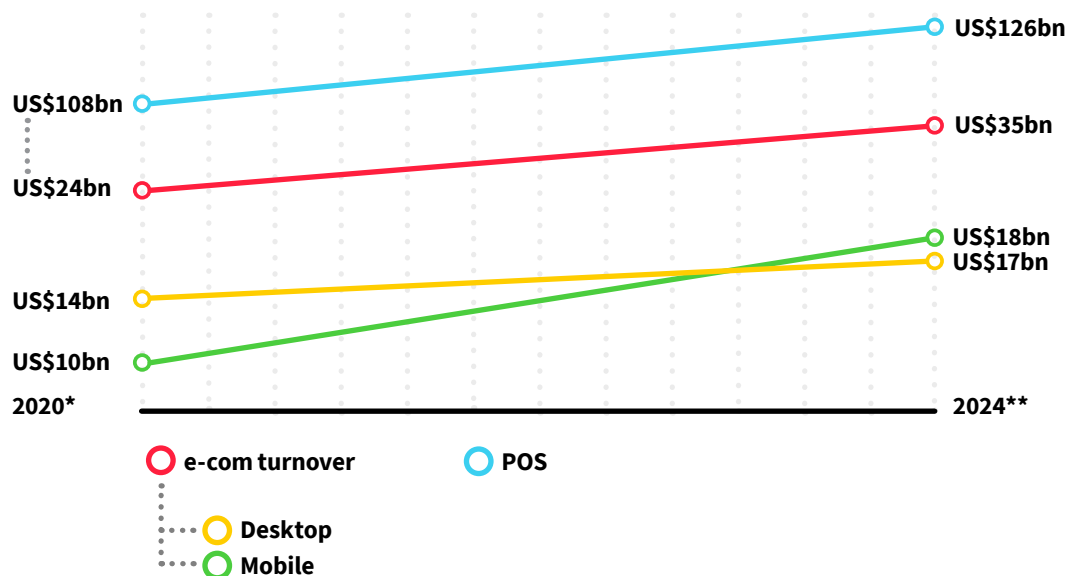
2020 point of sale mix by payment method



2019 card brand breakdowns (e-com and POS)



POS and e-com projected growth



Popular alternative payment methods



* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.

PERU

Home to Machu Picchu, the Rainbow Mountains and Humboldt penguins, Peru is one of the most biologically diverse countries on the planet. For those who love adventure, kayaking at high speed down the Amazon River during the rainy season will give adrenaline junkies the ride of a lifetime. As consumers have been riding the waves of commerce in 2020, they're using cash less and beginning to rely on digital/mobile wallets with credit and debit cards still gaining a large portion of market share.

FAST STATS

2020 sales %
from e-com

16%

2020* - 2024**
e-com CAGR

12%

2020 sales %
from m-com

39%

2020* - 2024**
POS CAGR

7%

2020 % e-com spend using
Digital/Mobile Wallet

8%

2020* Internet
penetration

68%

2020 % POS spend using
Digital/Mobile Wallet

7%

2020* Mobile
penetration

69%

FORECAST

2024 %**
sales from e-com

18%

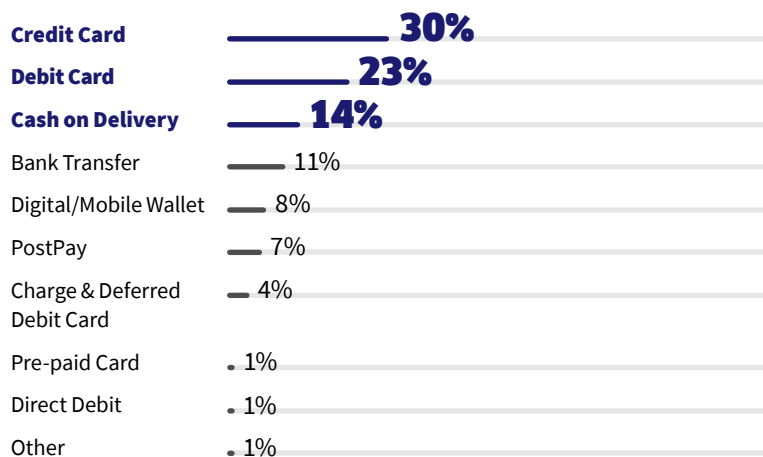
2024 %**
sales from m-com

51%

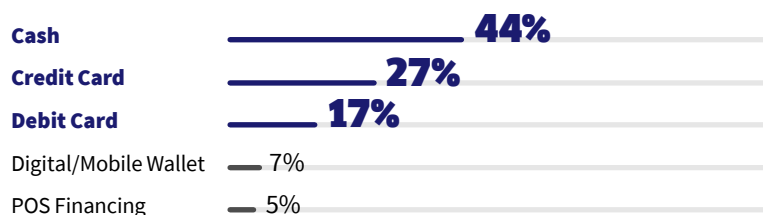
TOP TIP

New acquirers are entering the Peruvian market, receiving full interoperability licenses from card brands Visa and Mastercard. With new acquirers and payment facilitators coming into play, new products for accepting card payments are expected, increasing competition in the marketplace. However, barriers to e-commerce remain with a large unbanked population. Thirty percent of consumers don't have a mobile device and don't have access to electronic payments. In addition, many people are suspicious of entering their personal data on a web page, which they consider unsafe, regardless of the provider.

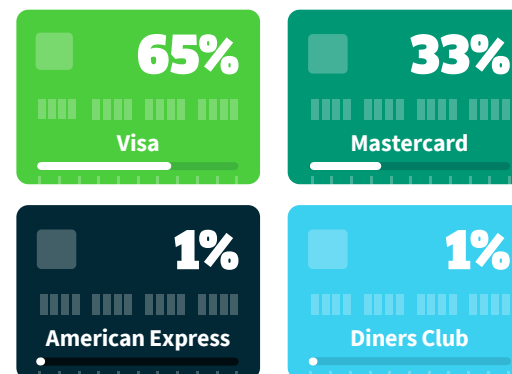
2020 e-com mix by payment method



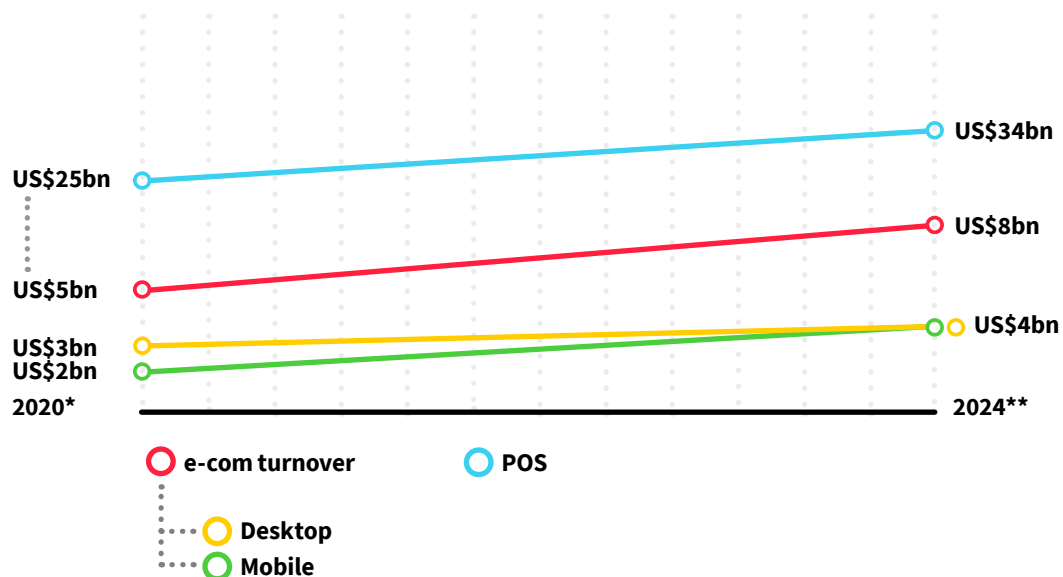
2020 point of sale mix by payment method



2019 card brand breakdowns (e-com and POS)



POS and e-com projected growth



Popular alternative payment methods



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



The Philippines contain three of the world's top ten largest shopping malls, making it possible to serve millions of consumers at the same time.¹ When they head out to shop, they're most often bringing cash with them. But digital/mobile wallet use has more than doubled over the last year as shoppers looked for a more contactless experience. Online checkout transactions are also changing as consumers shift from cash on delivery to credit card and digital/mobile wallets.

¹<https://www.factretriever.com/philippines-facts>

FAST STATS

2020 sales %
from e-com

3%

2020* - 2024**
e-com CAGR

17%

2020 sales %
from m-com

61%

2020* - 2024**
POS CAGR

9%

2020 % e-com spend using
Digital/Mobile Wallet

20%

2020* Internet
penetration

72%

2020 % POS spend using
Digital/Mobile Wallet

13%

2020* Mobile
penetration

69%

FORECAST

2024 %**
sales from e-com

4%

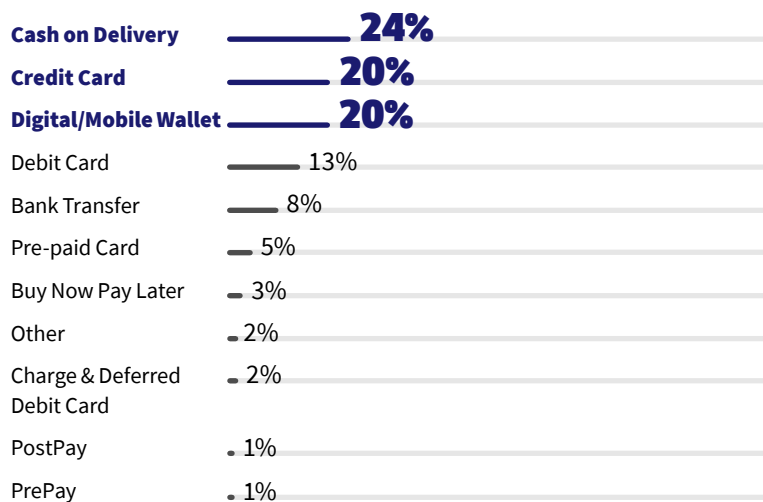
2024 %**
sales from m-com

66%

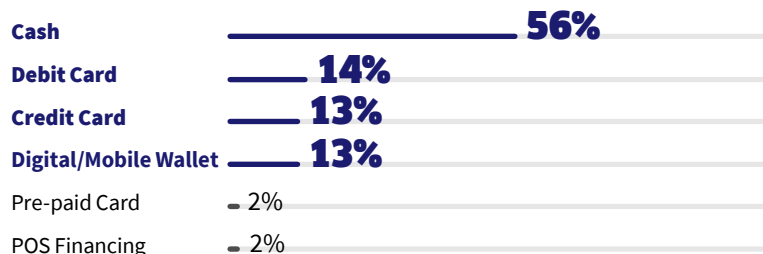
TOP TIP

To compete with neighboring countries, the Philippines is looking to advance digital payments at a faster rate. Digital payments through mobile/digital wallets are gaining tremendous traction, more than doubling at the point of sale and increasing 25% online. Merchants looking to implement acceptance and get ahead of the digital curve will want to enable local options such as GCash, PayMaya and PayPal.

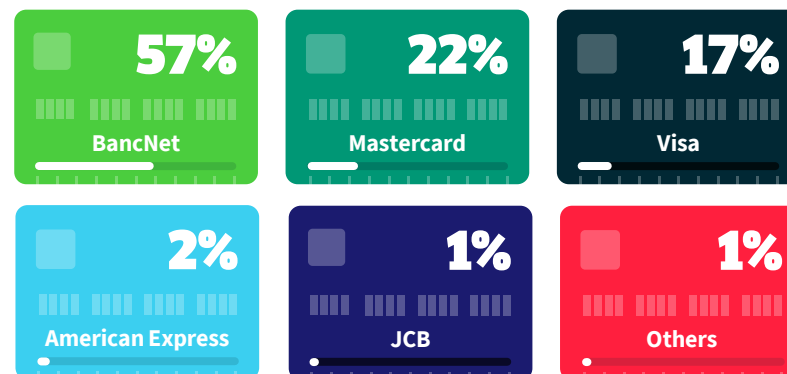
2020 e-com mix by payment method



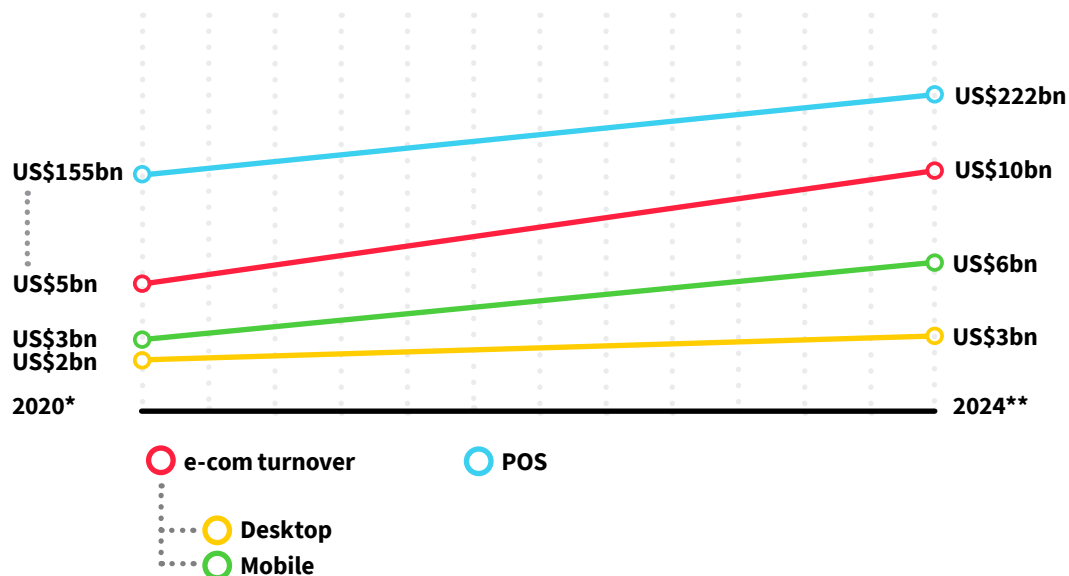
2020 point of sale mix by payment method



2019 card brand breakdowns (e-com and POS)



POS and e-com projected growth



Popular alternative payment methods



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



POLAND

A cornerstone of Poland's economy dates all the way back to the 13th century. The Wieliczka salt mine serves as an attraction for travelers as well as royals and heads of state. Inside, you'll find huge chambers with chandeliers and furniture made of salt as well as a lake and other architectural marvels.¹ Today, the economy relies primarily on bank transfer for online purchases and cash when checking out at the point of sale. Of course, those wishing to visit the mine can purchase tickets with a variety of online payment methods.

¹<https://www.wieliczka-saltmine.com/>

FAST STATS

2020 sales %
from e-com

6%

2020* - 2024**
e-com CAGR

9%

2020 sales %
from m-com

26%

2020* - 2024**
POS CAGR

5%

2020 % e-com spend using
Digital/Mobile Wallet

16%

2019* Internet
penetration

78%

2020 % POS spend using
Digital/Mobile Wallet

7%

2020* Mobile
penetration

79%

FORECAST

2024 %**
sales from e-com

7%

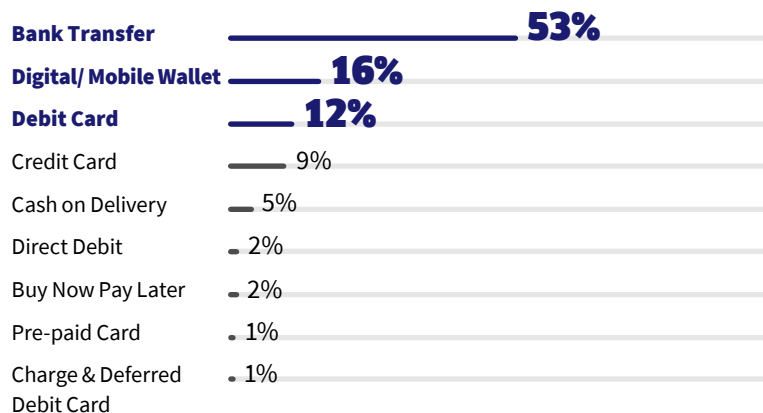
2024 %**
sales from m-com

36%

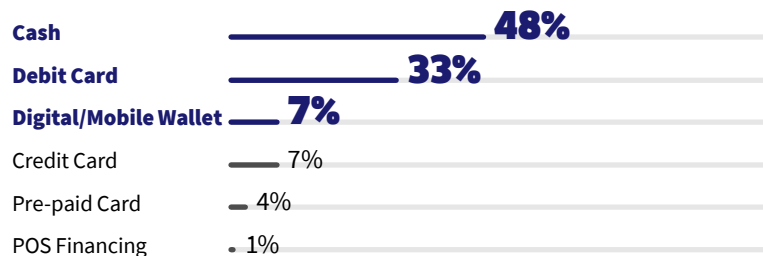
TOP TIP

The largest payment shift occurred at the POS with cash dropping 10 percentage points from the previous year. Instead, consumers were using mobile/digital wallets which more than doubled in the last year to now capture 7% of payments at the POS. While cash remains the top payment preference at the point of sale and bank transfers top the list for online checkout, merchants that implement digital and alternative payment methods will be ahead of the curve as technology continues to shift towards a digital experience.

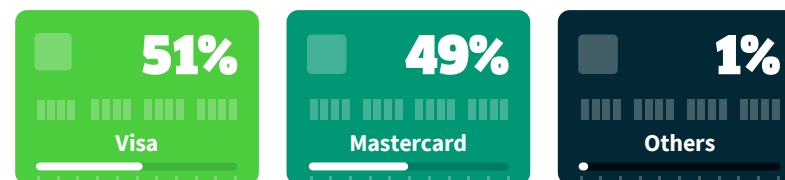
2020 e-com mix by payment method



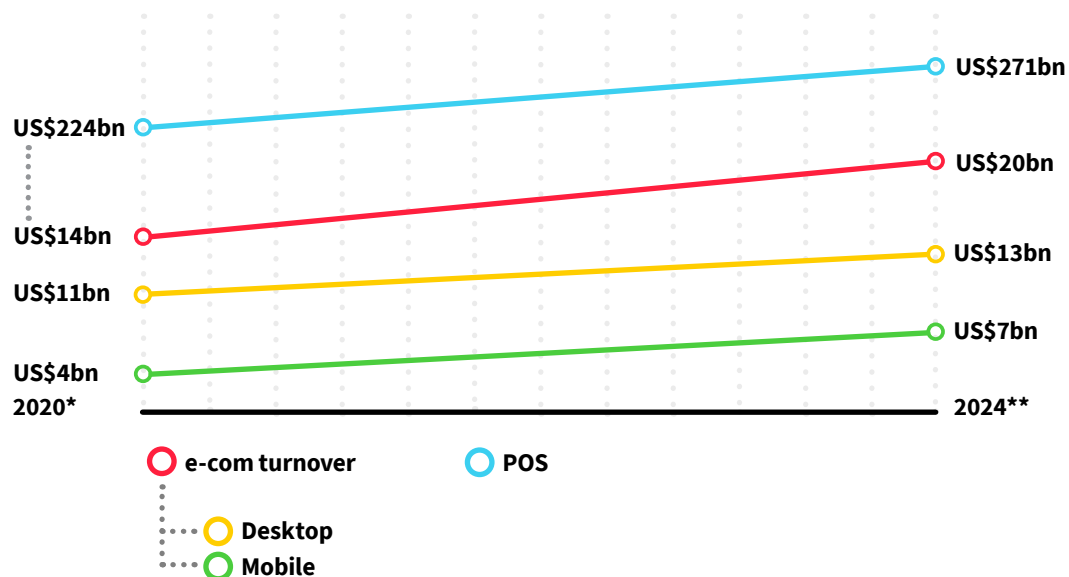
2020 point of sale mix by payment method



2019 card brand breakdowns (e-com and POS)



POS and e-com projected growth



Popular alternative payment methods



* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.



RUSSIA

From sub-zero to sub-tropical, Russians can experience a range of regions and temperatures throughout the country. Siberia is considered to be one of the coldest inhabited regions while Sochi is known as the Russian Riviera.¹ Payment methods in Russia tend to not be as widespread as the temperatures. Cards and cash top the preference list for point of sale checkout while online, cards have migrated into digital/mobile wallets. 2020 marks the first year where digital/mobile wallets are the most preferred online checkout method, replacing the debit card.

¹<https://www.calvertjournal.com/features/show/9981/beyond-the-game-sochi-seaside-walking-guide-soviet-sanatoriums-gardens>

FAST STATS

2020 sales % from e-com	2020 sales % from m-com	2020 % e-com spend using Digital/Mobile Wallet	2020 % POS spend using Digital/Mobile Wallet
3%	35%	29%	6%
2020* - 2024** e-com CAGR	2020* - 2024** POS CAGR	2019* Internet penetration	2020* Mobile penetration
11%	4%	81%	73%

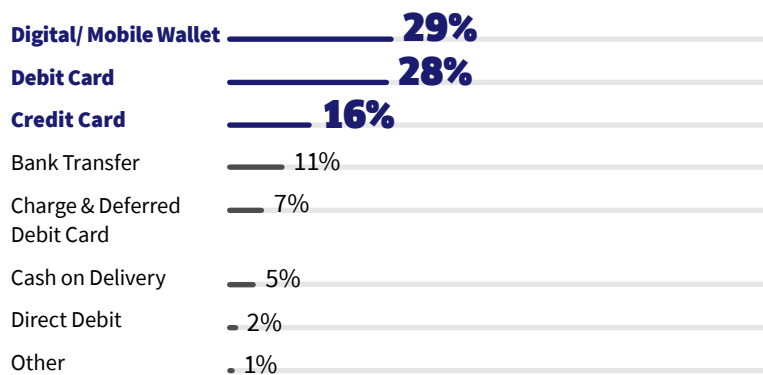
FORECAST

2024 %** sales from e-com	2024 %** sales from m-com
4%	40%

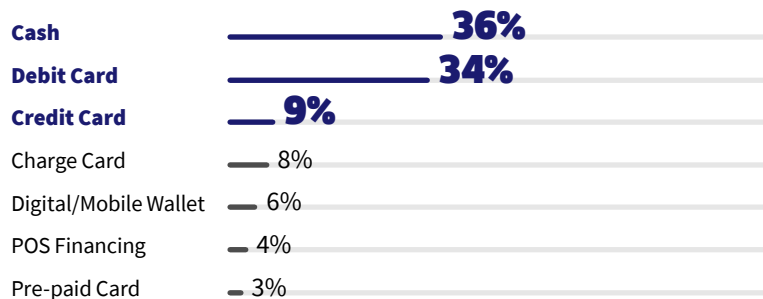
TOP TIP

Similar to many countries around the world, cash became much less prevalent in 2020, decreasing 44% online through cash on delivery (COD) and 25% at the point of sale. Consumers largely began to turn to mobile/digital wallets online which increased 15% but stayed flat at the point of sale indicating the technology may not be widely available yet. Merchants looking to implement digital options can consider alternatives such as WebMoney, PayPal, Apple Pay, Qiwi and Yandex.Money. Credit cards also more than tripled at the point of sale so accepting all card brands will serve merchants well.

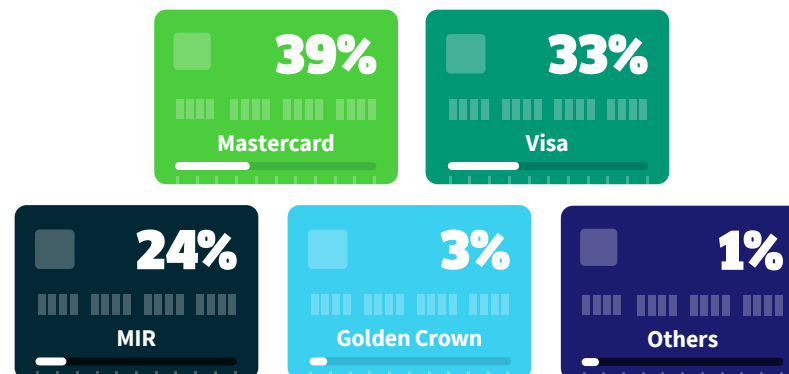
2020 e-com mix by payment method



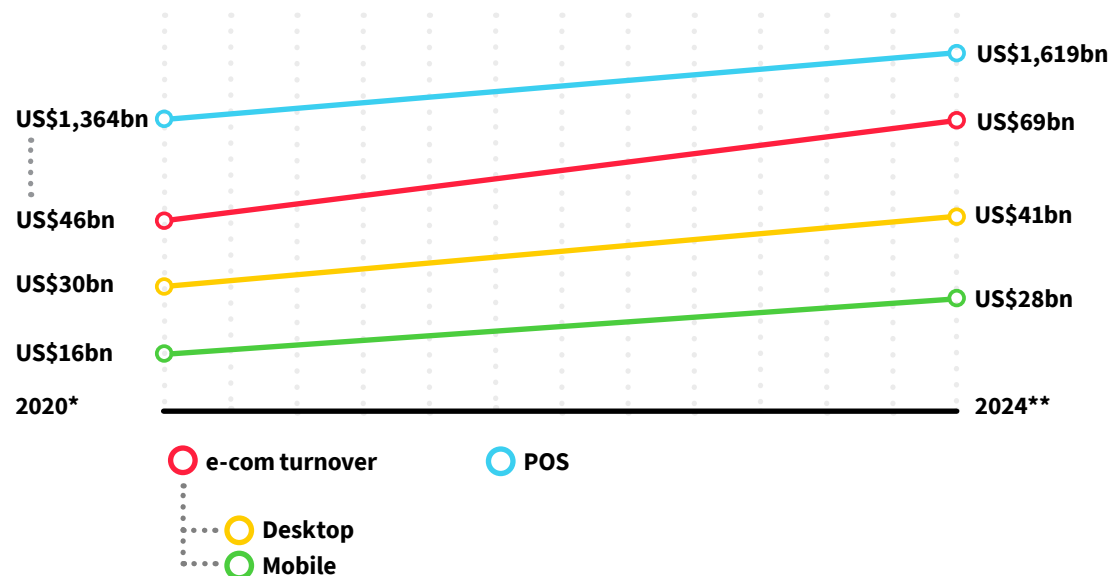
2020 point of sale mix by payment method



2019 card brand breakdowns (e-com and POS)



POS and e-com projected growth



Popular alternative payment methods



* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.

SAUDI ARABIA

Home to untouched archeological sites, Saudi Arabia contains the impressive 2,000-year-old ancient city of Hegra and Jebel Fihrayn, also known as the Edge of the World. When it comes to paying, their preferences are a bit more modern. Credit cards are the most use payment method online and at point of sale, but consumers also vary their choices among digital/mobile wallets, cash/cash on delivery, bank transfer and debit cards.

FAST STATS

2020 sales %
from e-com

2%

2020* - 2024**
e-com CAGR

8%

2020 sales %
from m-com

59%

2020* - 2024**
POS CAGR

4%

2020 % e-com spend using
Digital/Mobile Wallet

16%

2020* Internet
penetration

92%

2020 % POS spend using
Digital/Mobile Wallet

10%

2020* Mobile
penetration

80%

FORECAST

2024 %**
sales from e-com

3%

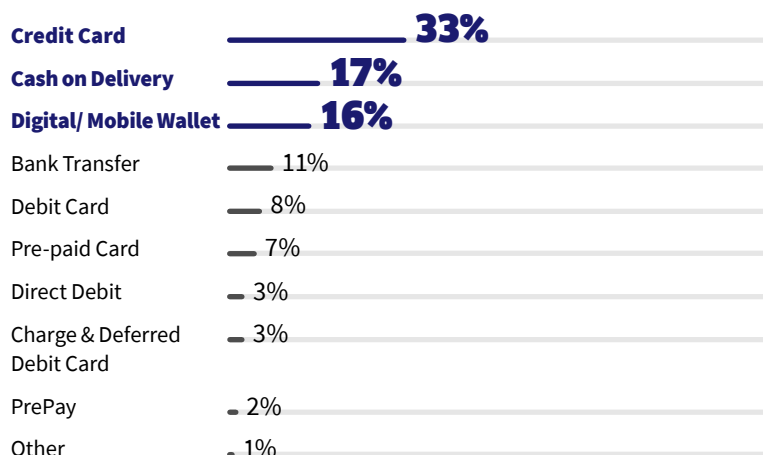
2024 %**
sales from m-com

66%

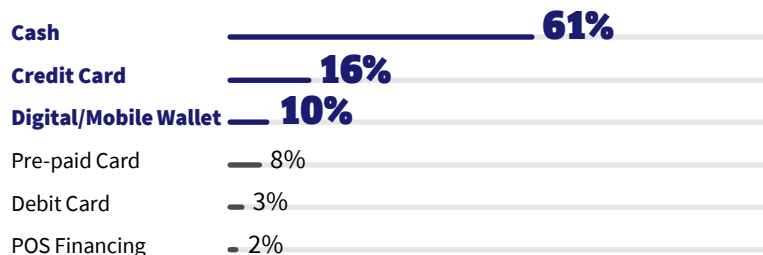
TOP TIP

COVID-19 has accelerated the rate for consumers to consider digital payments. With a high mobile penetration rate and nearly 60% of e-commerce coming from mobile devices, the market is well poised for digital payment penetration. As part of the 2030 vision and goal to enhance electronic payments, Saudi Arabia has announced the launch of a unified QR-based national payment system that will allow consumers, merchants and payment service providers to engage in an open loop payment environment.

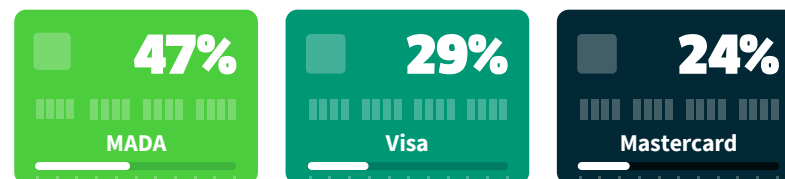
2020 e-com mix by payment method



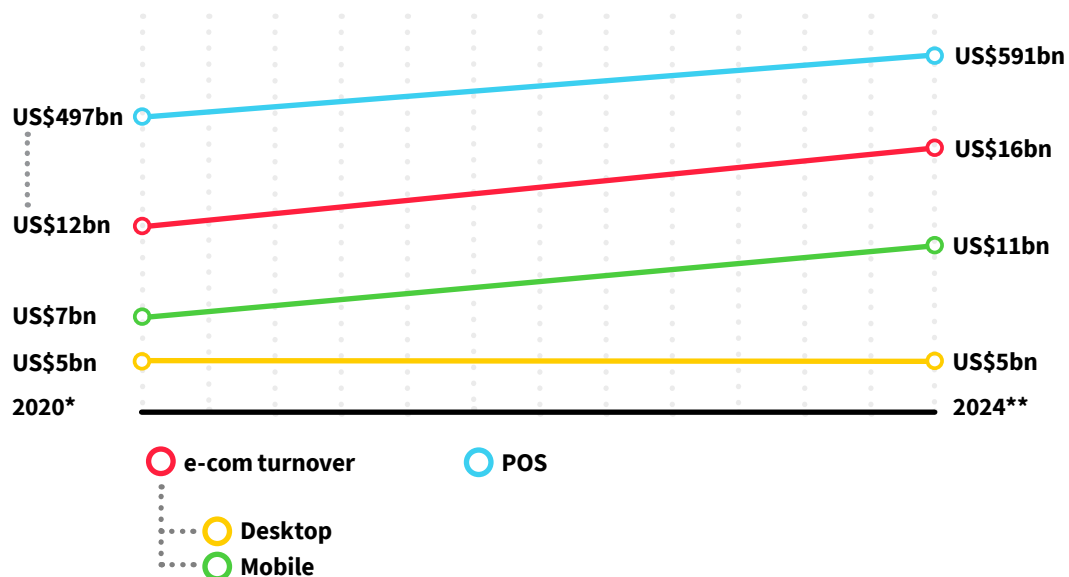
2020 point of sale mix by payment method



2019 card brand breakdowns (e-com and POS)



POS and e-com projected growth



Popular alternative payment methods



* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.



SINGAPORE

One of the world's greenest cities offers something to celebrate nearly year-round. Its rich diversity of races and cultures with individual traditions and customs make it a great place to explore. Whether consumers are celebrating Chinese New Year, Diwali or Hari Raya, they have preferences for how they pay in-person and online. They're most often paying with a credit card anytime they checkout. Digital wallets and buy now, pay later (BNPL) are gaining in popularity as consumers explore different checkout choices.

FAST STATS

2020 sales %
from e-com

6%

2020* - 2024**
e-com CAGR

8%

2020 sales %
from m-com

55%

2020* - 2024**
POS CAGR

5%

2020 % e-com spend using
Digital/Mobile Wallet

20%

2020* Internet
penetration

88%

2020 % POS spend using
Digital/Mobile Wallet

11%

2020* Mobile
penetration

85%

FORECAST

2024 %**
sales from e-com

6%

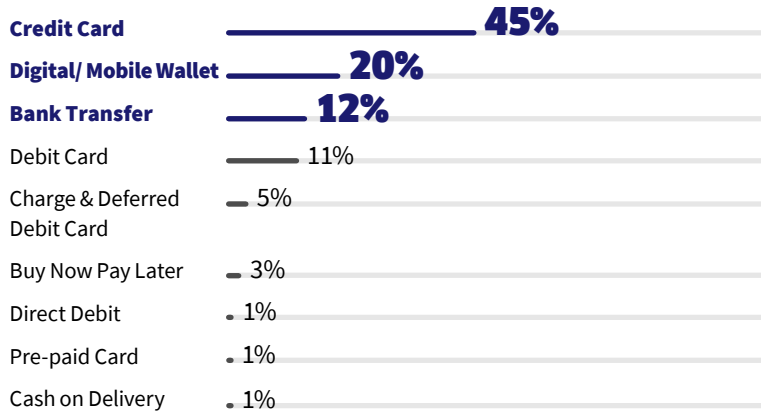
2024 %**
sales from m-com

60%

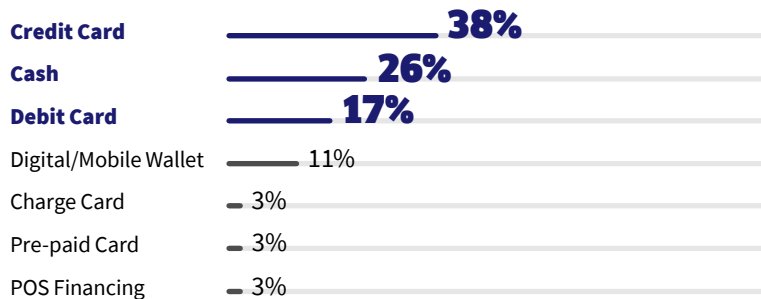
TOP TIP

Singapore has an ambitious goal to become a cashless society by the year 2025 and there are government initiatives taking shape to support traditional retailers with implementing acceptance of digital payments. Many businesses continue to shift their focus to e-commerce and speeding up the checkout process. Some retailers have adopted online to offline, where orders and payments are completed online with the option of selecting collection at their preferred time. The hawker centers that once only accepted cash are pivoting towards accepting digital payments.

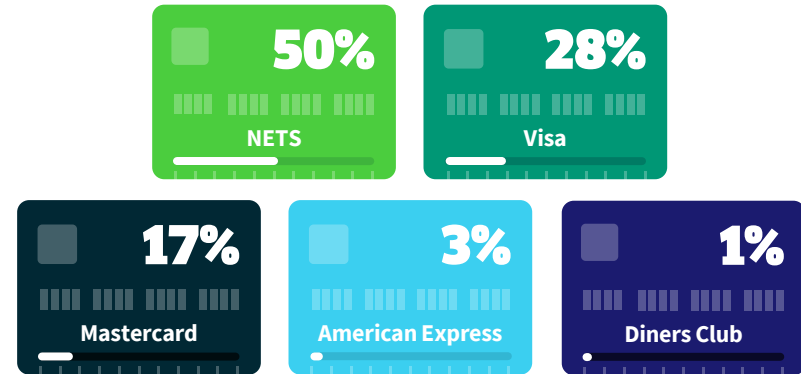
2020 e-com mix by payment method



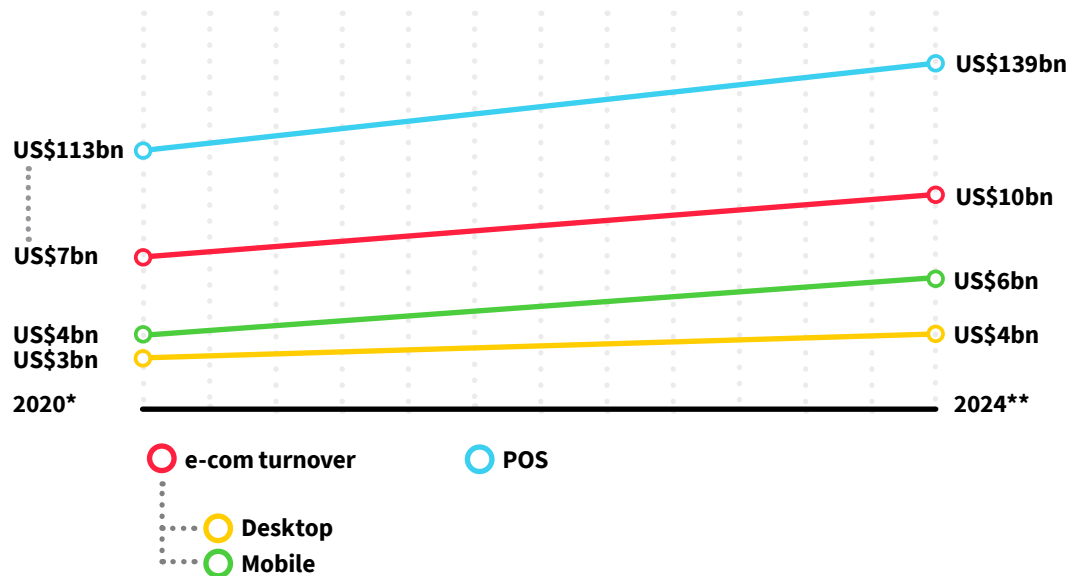
2020 point of sale mix by payment method



2019 card brand breakdowns (e-com and POS)



POS and e-com projected growth



Popular alternative payment methods



* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.



SOUTH AFRICA

South Africa holds one of the most developed economies on the continent, second only to Nigeria. At the point of sale, consumers prefer to pay with cash, however, when online shopping, they have a host of payment preferences such as debit and credit cards, digital/mobile wallets and bank transfer.

FAST STATS

2020 sales %
from e-com

3%

2020* - 2024**
e-com CAGR

16%

2020 sales %
from m-com

63%

2020* - 2024**
POS CAGR

3%

2020 % e-com spend using
Digital/Mobile Wallet

20%

2019* Internet
penetration

55%

2020 % POS spend using
Digital/Mobile Wallet

3%

2020* Mobile
penetration

76%

FORECAST

2024 %**
sales from e-com

4%

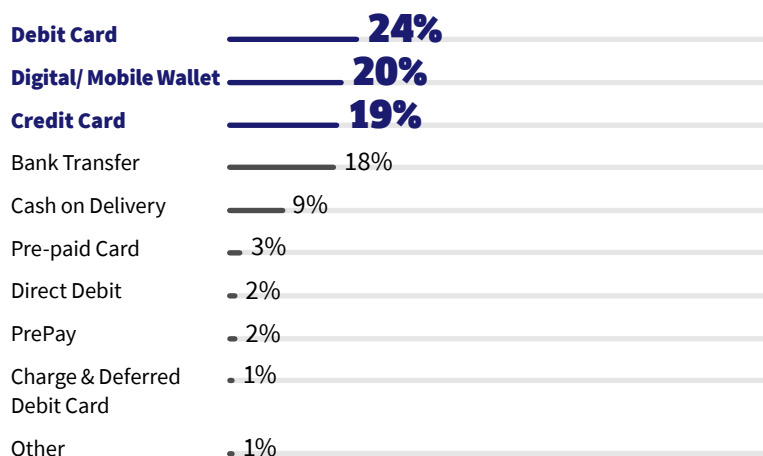
2024 %**
sales from m-com

69%

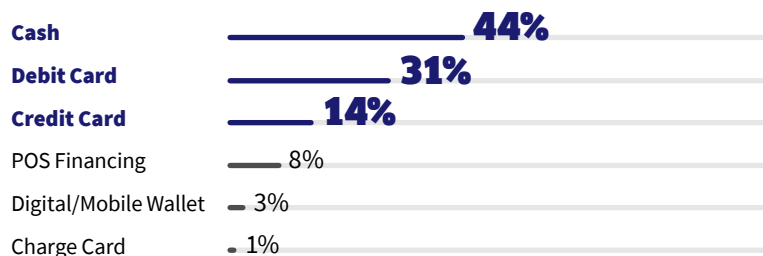
TOP TIP

While South Africa is still heavily reliant on cash, cards are becoming commonplace and are key to enabling consumers to access e-commerce. South Africa has a booming challenger bank industry driving digitalization, focused on expanding financial inclusion to the unbanked population. Ensure that the payment methods offered in this market are diverse and flexible to capture the biggest possible share of shoppers, as well as providing a secure checkout experience.

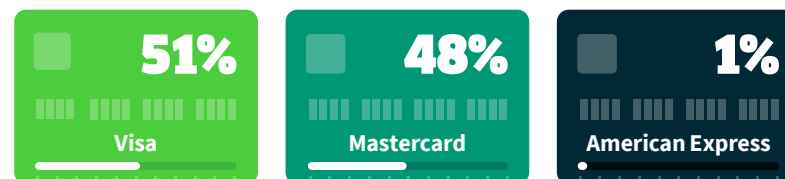
2020 e-com mix by payment method



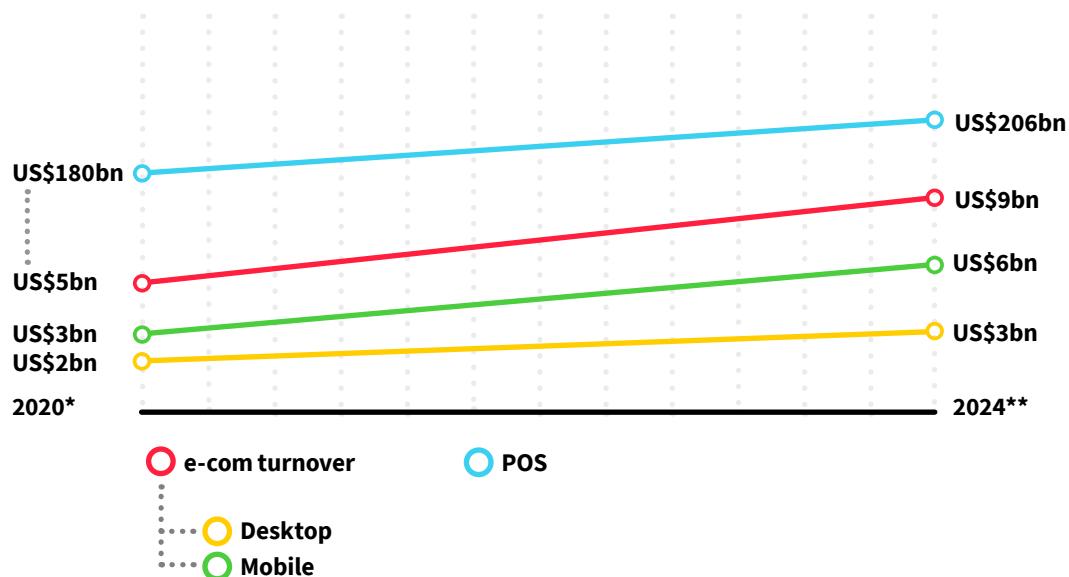
2020 point of sale mix by payment method



2019 card brand breakdowns (e-com and POS)



POS and e-com projected growth




Popular alternative payment methods



* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.



SOUTH KOREA

Online shopping can be cumbersome since the government passed a law requiring all shoppers to install ActiveX plug-ins as proof of ID. While they government has acknowledged the challenges and is working on a new solution, consumers aren't deterred. E-commerce has grown just over 30% in the last two years with credit cards continuing to be the payment method of choice online and at the point of sale.

FAST STATS

2020 sales %
from e-com

8%

2020* - 2024**
e-com CAGR

12%

2020 sales %
from m-com

65%

2020* - 2024**
POS CAGR

4%

2020 % e-com spend using
Digital/Mobile Wallet

17%

2020* Internet
penetration

96%

2020 % POS spend using
Digital/Mobile Wallet

8%

2020* Mobile
penetration

92%

FORECAST

2024 %**
sales from e-com

10%

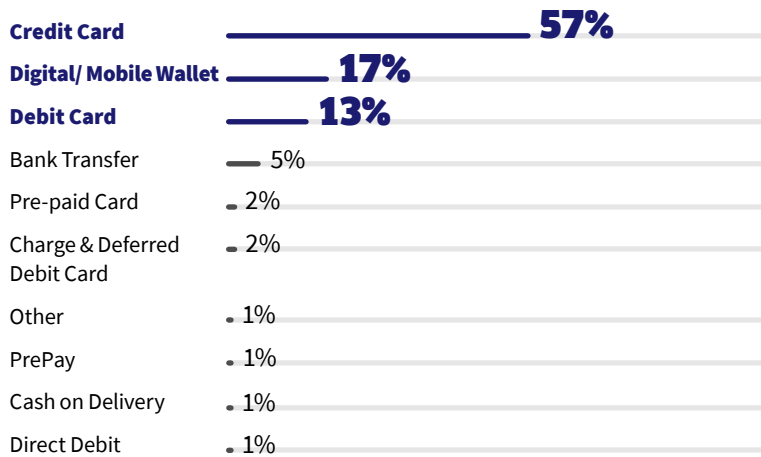
2024 %**
sales from m-com

70%

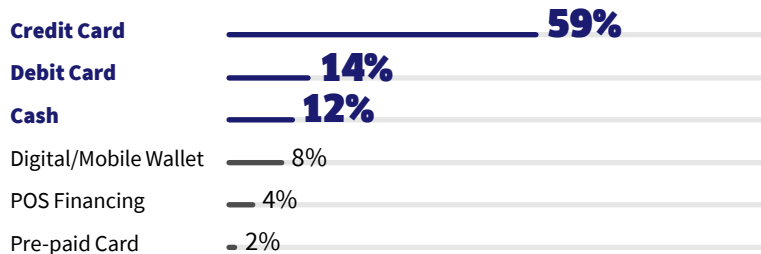
TOP TIP

A strong banked population, high financial awareness and a desire for digital acceleration have driven payment card adoption in South Korea. Spurred on by the pandemic, consumers are shifting to contactless payment cards or mobile wallets with NFC features. There is also strong support from the South Korean government to boost consumer spending digitally through the recent payout in the form of points to households' credit card accounts. Those points can then be used for payments at selected merchants.

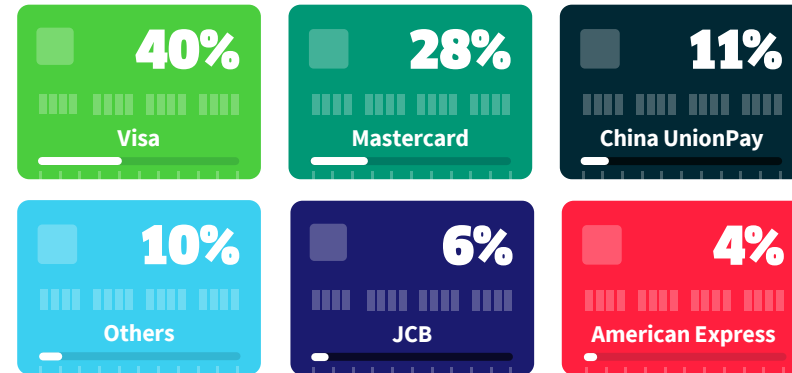
2020 e-com mix by payment method



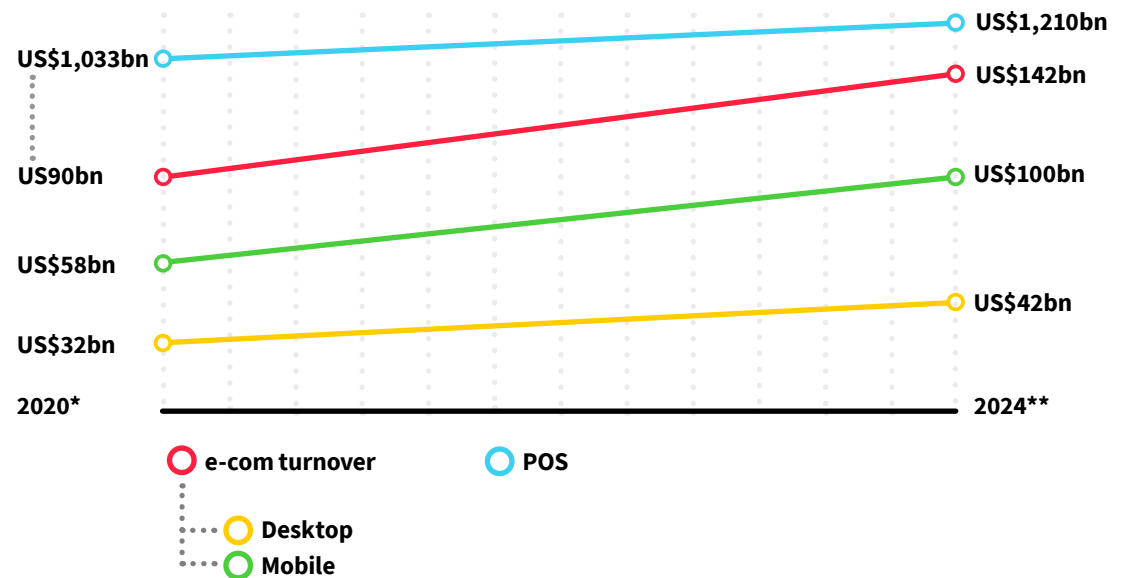
2020 point of sale mix by payment method



2019 card brand breakdowns (e-com and POS)



POS and e-com projected growth



Popular alternative payment methods



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

SPAIN

Leading the world with olive oil production, tourism is also a big contributor to Spain's economy, capturing the second spot just behind France.¹ When it comes to commerce, Spaniards are checking out online with digital/mobile wallets. At the point of sale, cash still leads as the preference but is down 18% from 2019. Credit cards and digital/mobile wallets are capturing market share that cash previously held.

¹<https://www.worldatlas.com/articles/10-most-visited-countries-in-the-world.html>

FAST STATS

2020 sales %
from e-com

13%

2020* - 2024**
e-com CAGR

15%

2020 sales %
from m-com

48%

2020* - 2024**
POS CAGR

5%

2020 % e-com spend using
Digital/Mobile Wallet

30%

2019* Internet
penetration

93%

2020 % POS spend using
Digital/Mobile Wallet

7%

2020* Mobile
penetration

84%

FORECAST

2024 %**
sales from e-com

17%

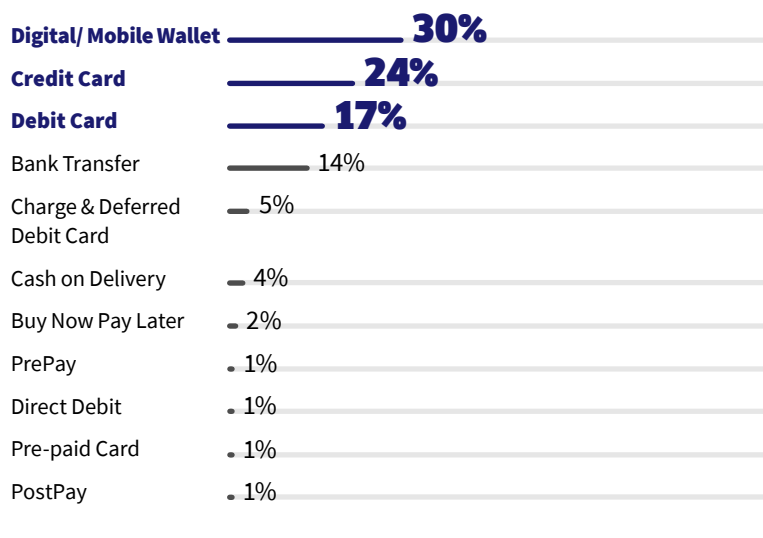
2024 %**
sales from m-com

57%

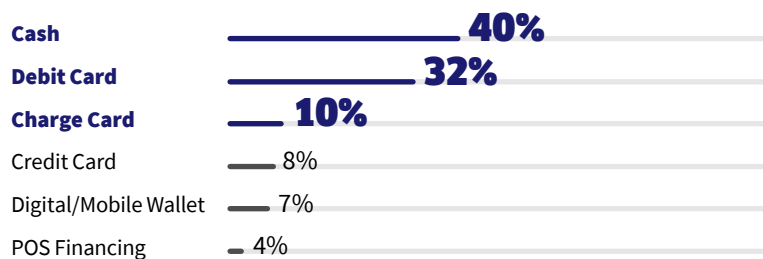
TOP TIP

The pandemic has created opportunities for change and consumers want simplicity and near-instantaneous results. They're continuing to adopt instant payments within e-commerce transactions and look for merchants to provide free, fast and smooth shipping. Retailers of all sizes are boosting their presence in less traditional sales channels such as social media, marketplaces, subscriptions, voice commerce and daily deals sites. International expansion is also a focus to offset the demand decline in the domestic market.

2020 e-com mix by payment method



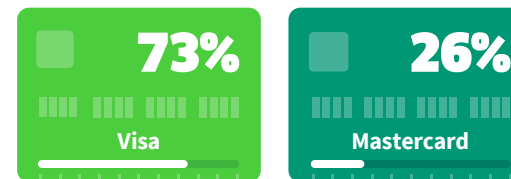
2020 point of sale mix by payment method



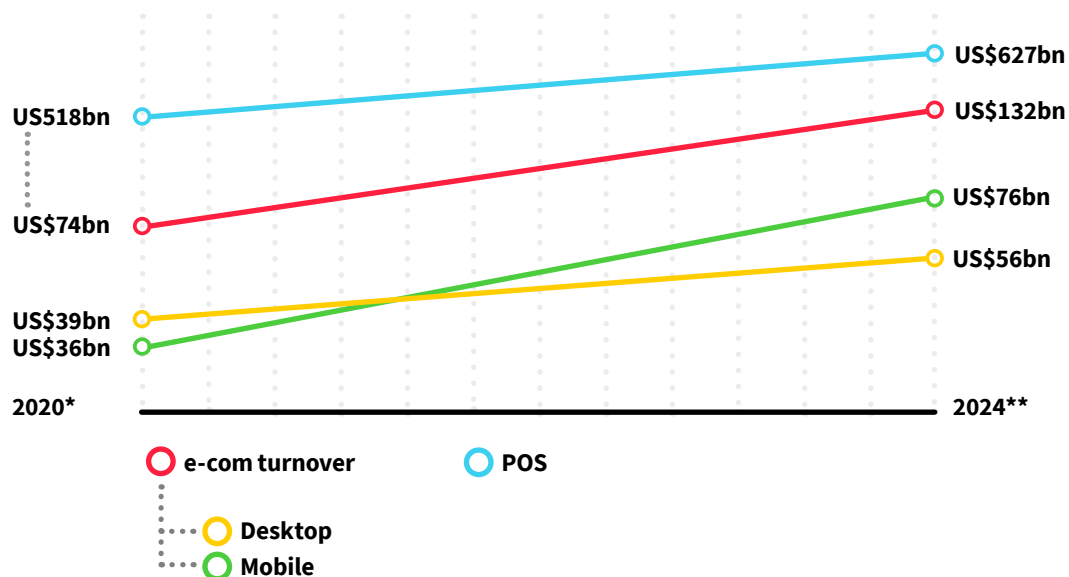
* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.

2019 card brand breakdowns (e-com and POS)



POS and e-com projected growth



Popular alternative payment methods





SWEDEN

With a chance to see the Northern Lights, ice hotels are just one of the notable attractions in Sweden. Whether booking or just shopping online, Swedes typically vary their checkout method between BNPL or bank transfer. Debit cards are also a popular online checkout method but really rule at the point of sale at 55%.

FAST STATS

2020 sales %
from e-com

20%

2020* - 2024**
e-com CAGR

12%

2020 sales %
from m-com

43%

2020* - 2024**
POS CAGR

4%

2020 % e-com spend using
Digital/Mobile Wallet

16%

2019* Internet
penetration

96%

2020 % POS spend using
Digital/Mobile Wallet

11%

2020* Mobile
penetration

84%

FORECAST

2024 %**
sales from e-com

26%

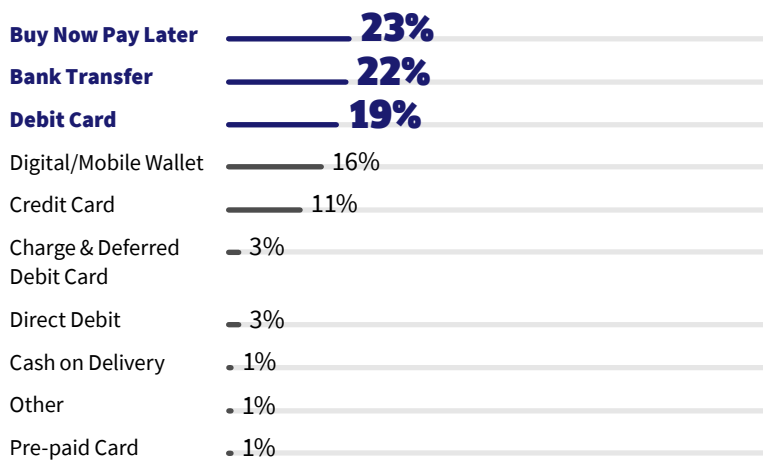
2024 %**
sales from m-com

50%

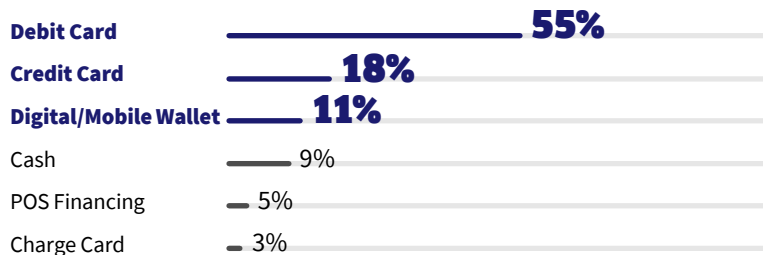
TOP TIP

Still focused on becoming a cashless society, COVID-19 highlighted potential areas of concern for removing cash entirely. While cash is still on the decline, the elderly and consumers in more rural areas have found it more difficult to transition to digital forms of payment although mobile wallets continue to experience growth among the general population. Sweden is also investigating how to implement instant payments with other European countries.

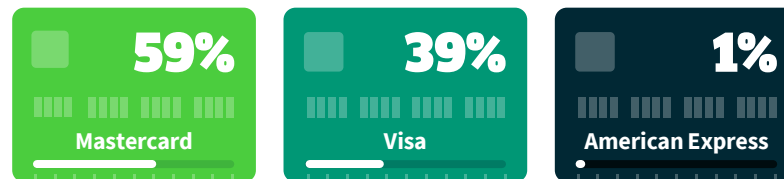
2020 e-com mix by payment method



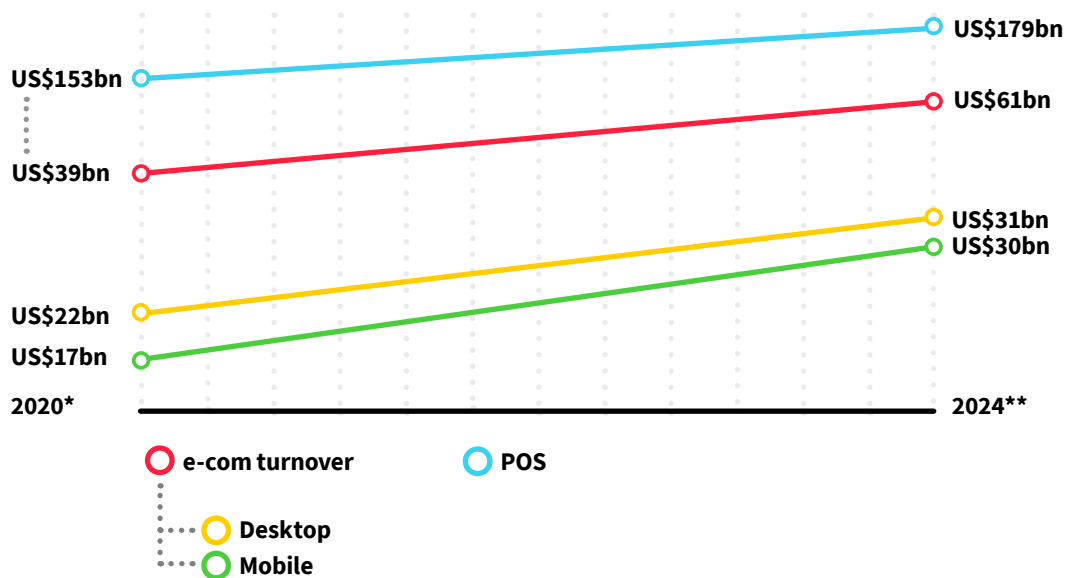
2020 point of sale mix by payment method



2019 card brand breakdowns (e-com and POS)



POS and e-com projected growth



Popular alternative payment methods



Klarna.



* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.

TAIWAN

Taiwan is on a mission to become an eco-friendlier place and plans to become a single-use plastic free market by 2030. That means no more straws, plastic shopping bags or disposable utensils. However, it doesn't apply to payment plastic. Credit cards have long reigned for online checkout but 2020 saw them move to the top of the list at the point of sale. Digital/mobile wallets are also on the rise as consumers look for less contact at the checkout counter.

FAST STATS

2020 sales %
from e-com

10%

2020* - 2024**
e-com CAGR

9%

2020 sales %
from m-com

51%

2020* - 2024**
POS CAGR

6%

2020 % e-com spend using
Digital/Mobile Wallet

16%

2020* Internet
penetration

93%

2020 % POS spend using
Digital/Mobile Wallet

14%

2020* Mobile
penetration

86%

FORECAST

2024 %**
sales from e-com

11%

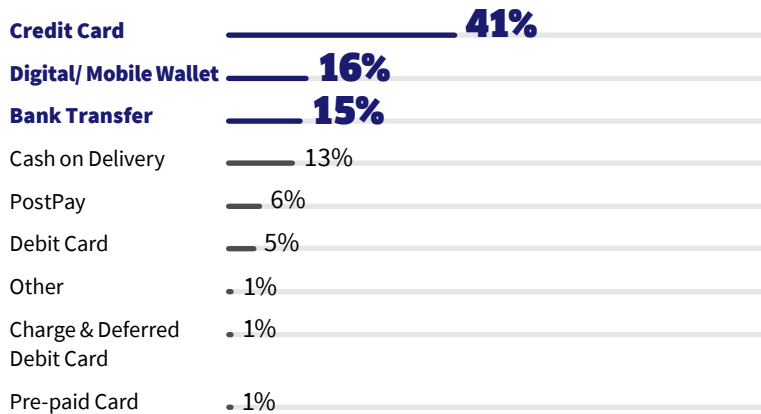
2024 %**
sales from m-com

58%

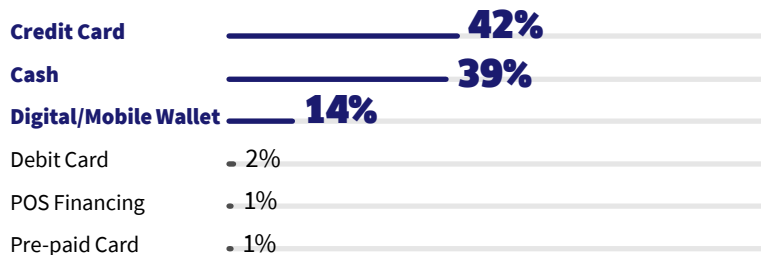
TOP TIP

Taiwan has traditionally been a closed-loop market when it comes to payments. A large portion of card payments are processed through the local card brand Smartpay and even the most popular mobile/digital wallets are local to Taiwan. Mobile and digital wallets more than doubled at the physical point of sale in 2020 so merchants will want to enable acceptance of popular brands such as Line Pay and 7-11 Ibon to take advantage of the digital shift early.

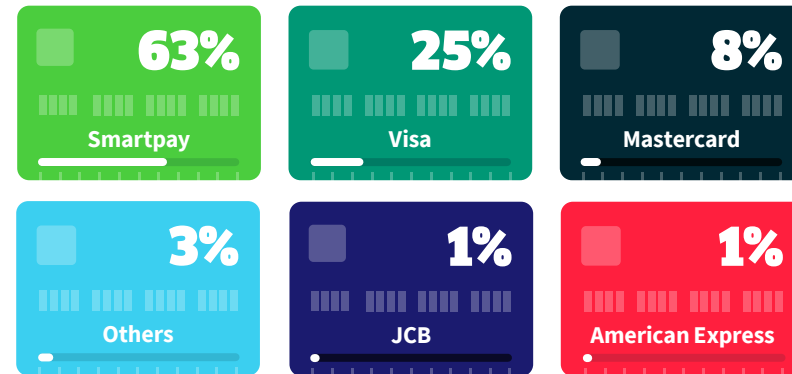
2020 e-com mix by payment method



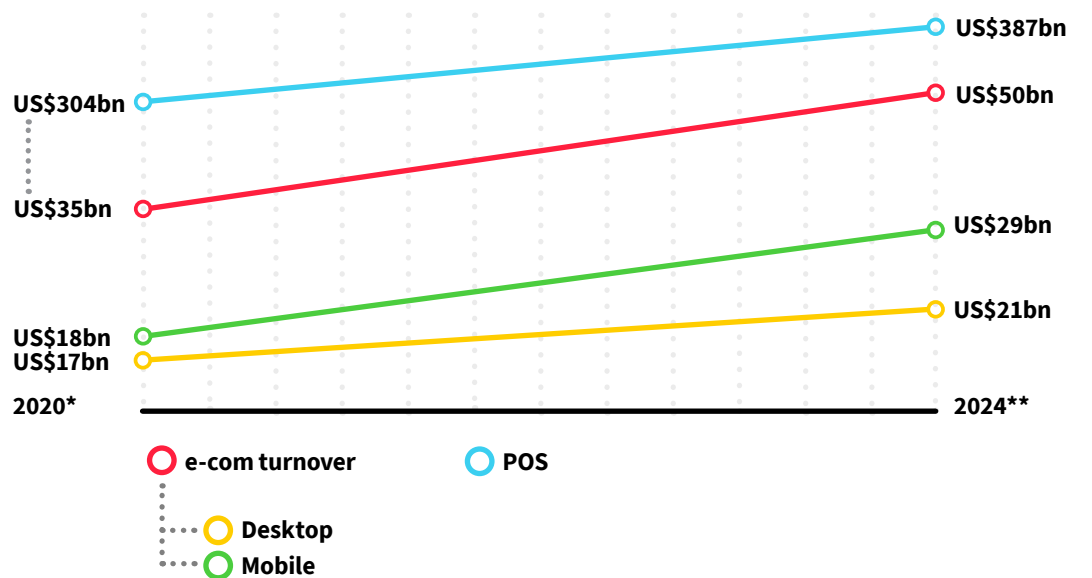
2020 point of sale mix by payment method



2019 card brand breakdowns (e-com and POS)



POS and e-com projected growth



Popular alternative payment methods



* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.



THAILAND

Crowded markets, shopping malls, floating markets, fresh markets and street fairs... There's something for everyone when shopping in Thailand. Consumers can find anything from souvenirs to designer must-haves. Fruit soaps and elephant themes are popular trends. When it comes to payment trends, bank transfer continues to top the e-commerce market at 31% while cash (62%) is still the choice for point-of-sale purchases. Keep an eye out for digital payments as consumers are migrating their credit cards into digital/mobile wallets.

FAST STATS

2020 sales %
from e-com

13%

2020* - 2024**
e-com CAGR

10%

2020 sales %
from m-com

60%

2020* - 2024**
POS CAGR

5%

2020 % e-com spend using
Digital/Mobile Wallet

19%

2020* Internet
penetration

82%

2020 % POS spend using
Digital/Mobile Wallet

20%

2020* Mobile
penetration

76%

FORECAST

2024 %**
sales from e-com

15%

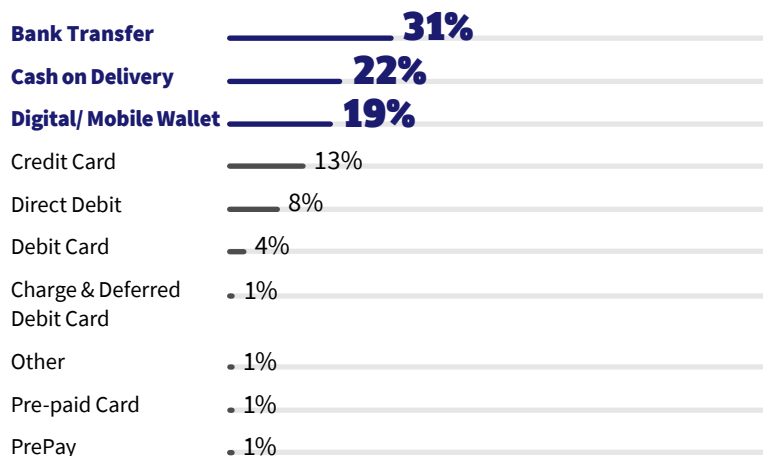
2024 %**
sales from m-com

65%

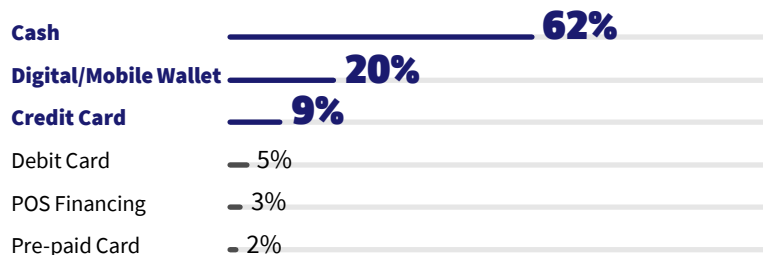
TOP TIP

Digital payments are beginning to enter the forefront at the point of sale due to the pandemic. Consumers rapidly began to adopt mobile/digital wallets, nearly tripling adoption from 2019. Online, consumers most frequently checkout with bank transfer so merchants will need a variety of options to capture the preferences of all generations, online and at the POS. With a low credit card penetration rate, local mobile/digital wallets linked to respective bank accounts are a more favorable alternative for contactless payments.

2020 e-com mix by payment method



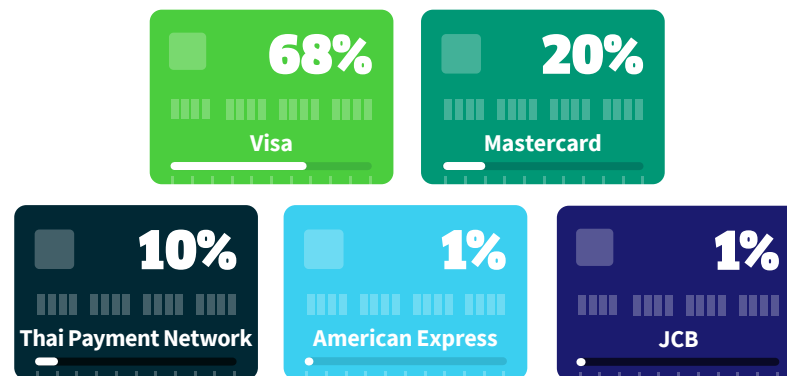
2020 point of sale mix by payment method



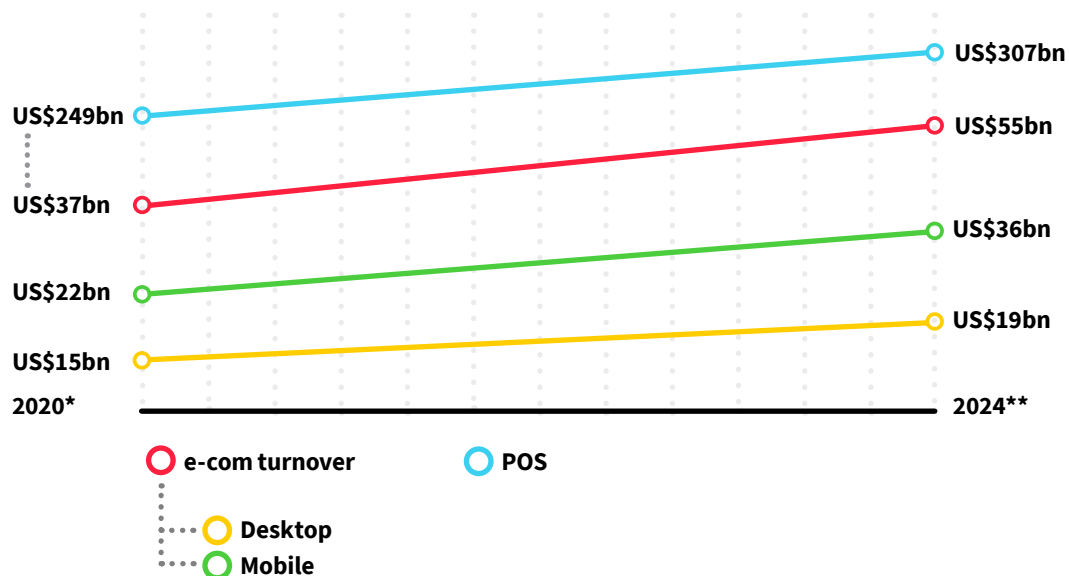
* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.

2019 card brand breakdowns (e-com and POS)



POS and e-com projected growth



Popular alternative payment methods



TURKEY

Home to the only city in the world that sits across two continents, Turkish consumers have clear preferences for paying online and at the point of sale. Whether they are crossing continents through Istanbul or visiting the landscapes of Cappadocia, consumers still prefer cash at the point of sale and credit cards for online checkout. Although credit cards have seen a 17% increase at the point of sale as cash in 2020 declined 24%.

FAST STATS

2020 sales %
from e-com

11%

2020* - 2024**
e-com CAGR

22%

2020 sales %
from m-com

34%

2020* - 2024**
POS CAGR

7%

2020 % e-com spend using
Digital/Mobile Wallet

9%

2019* Internet
penetration

83%

2020 % POS spend using
Digital/Mobile Wallet

7%

2020* Mobile
penetration

76%

FORECAST

2024 %**
sales from e-com

17%

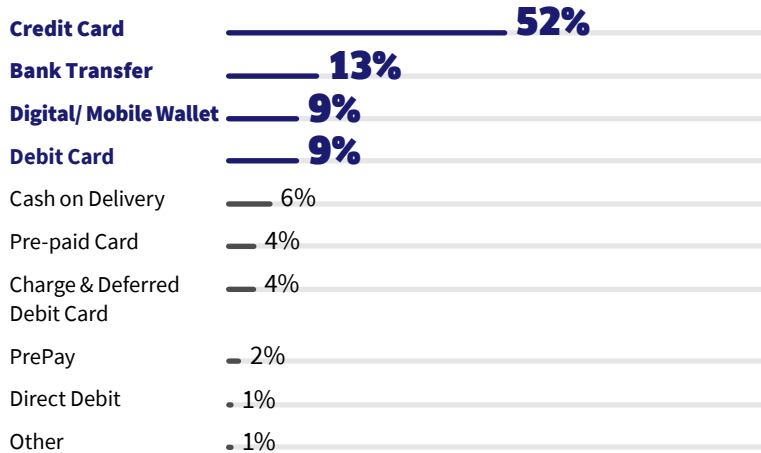
2024 %**
sales from m-com

43%

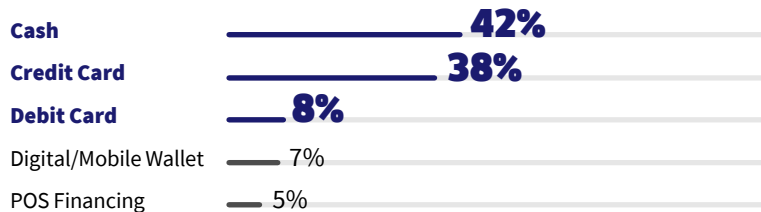
TOP TIP

Debit cards are on the rise at the point of sale and online, most likely attributed to purchasing more smaller ticket items to navigate the pandemic. With cash dropping 36% at the point of sale, consumers were shifting to credit cards with a high interest on using contactless cards. New regulations allow credit card purchases to be spread out over 18 monthly installments. At the point of sale, credit cards increased 81% so merchants should focus on having the right POS technology to account for contactless preferences.

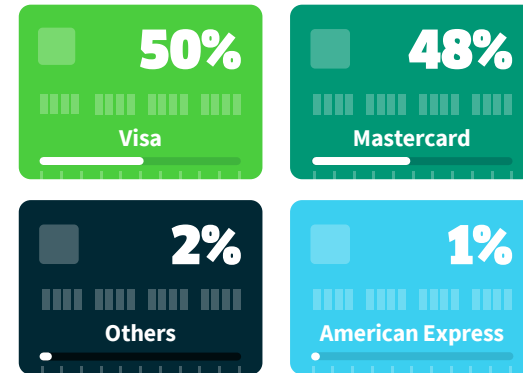
2020 e-com mix by payment method



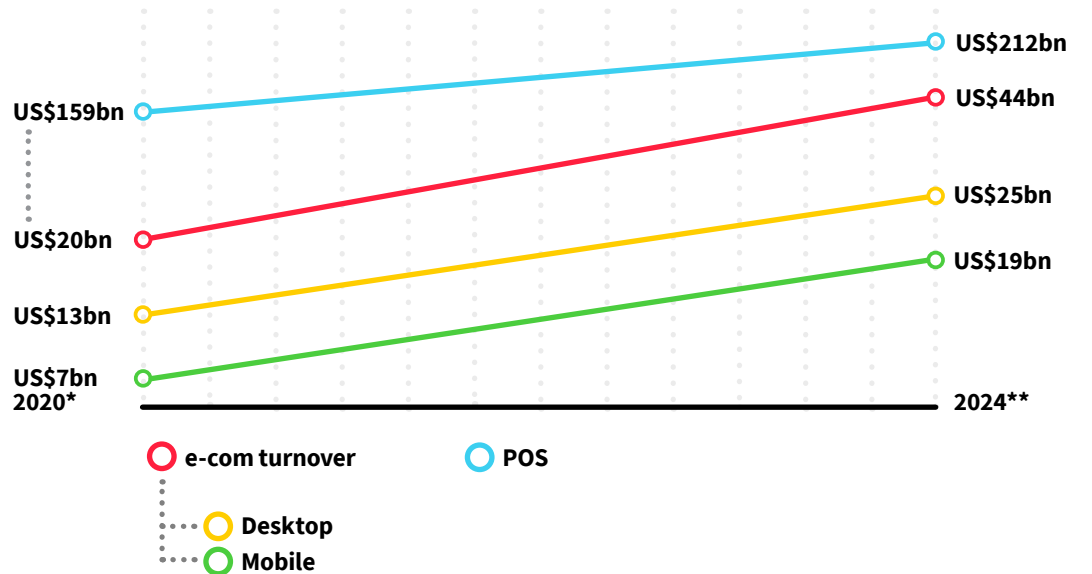
2020 point of sale mix by payment method



2019 card brand breakdowns (e-com and POS)



POS and e-com projected growth



Popular alternative payment methods



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



United Arab Emirates is the home to a vibrant array of cultures and hosts a large population of expats. Almost 90% of the population is made up of expats and the majority live in Dubai where convenience is a way of life.¹ Just about anything can be delivered with a quick click or phone call. Given the diversity of the population, payment preferences are not quite as diverse as one might expect. Credit cards are the most common checkout method online and at the point of sale. The change at the point of sale is largely due to changes in 2020 as cash had a dramatic 41% drop from 2019.

¹<https://www.edarabia.com/population-uae/>

FAST STATS

2020 sales %
from e-com

7%

2020* - 2024**
e-com CAGR

20%

2020 sales %
from m-com

57%

2020* - 2024**
POS CAGR

5%

2020 % e-com spend using
Digital/Mobile Wallet

18%

2020* Internet
penetration

96%

2020 % POS spend using
Digital/Mobile Wallet

7%

2020* Mobile
penetration

83%

FORECAST

2024 %**
sales from e-com

12%

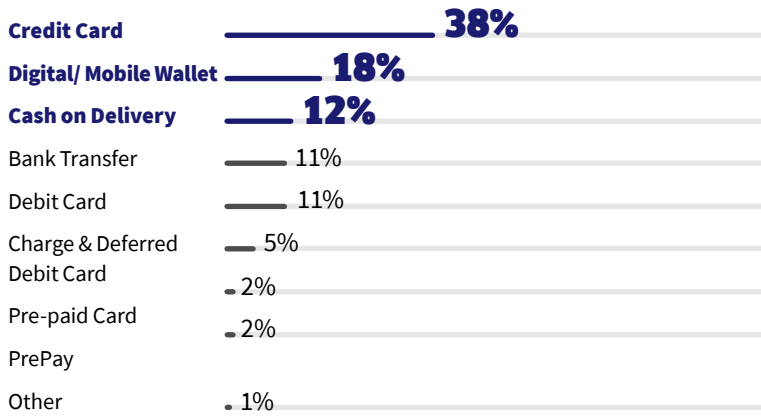
2024 %**
sales from m-com

65%

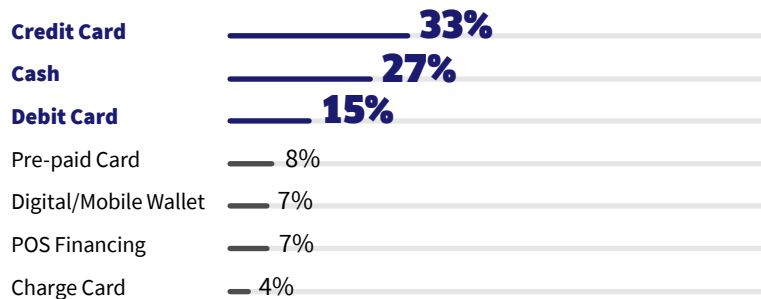
TOP TIP

Retail is booming in UAE, with demand for improved access to online merchants and international brands growing. A previously cash-dominant market, shoppers are increasingly favoring cards and digital payment methods to spend and prefer to buy online rather than in-store. Secure and smooth checkout experiences should be top priority in this market, so consider the use of mobile/digital wallets and tokenization to make sure the checkout journey is frictionless.

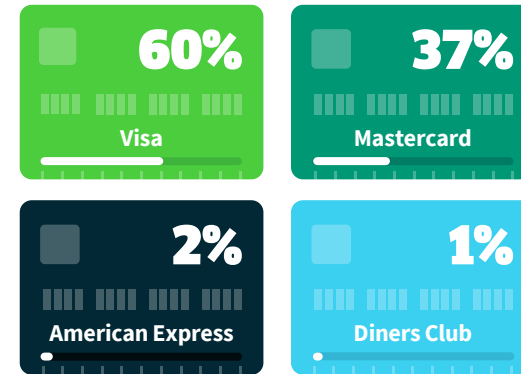
2020 e-com mix by payment method



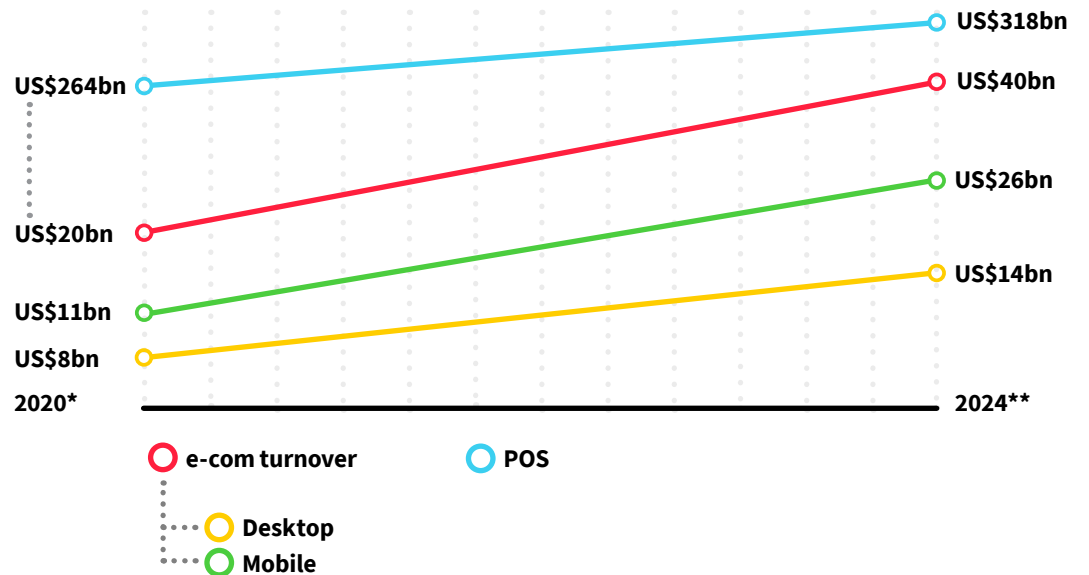
2020 point of sale mix by payment method



2019 card brand breakdowns (e-com and POS)



POS and e-com projected growth



Popular alternative payment methods



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

UK

Best known for iconic landmarks such as Buckingham Palace, Big Ben, Stonehenge and the Tower of London, the UK also boasts more unusual traditions such as bog snorkeling and cheese rolling. Whether consumers are taking part in tradition or meeting up with friends at the pub, they are nearly always using a card or digital/mobile wallet for payment. Debit and credit dominate at the point of sale with cash declining 14% from 2019 and digital/mobile wallets are now the top online checkout method.

FAST STATS

2020 sales %
from e-com

19%

2020* - 2024**
e-com CAGR

8%

2020 sales %
from m-com

33%

2020* - 2024**
POS CAGR

4%

2020 % e-com spend using
Digital/Mobile Wallet

32%

2019* Internet
penetration

95%

2020 % POS spend using
Digital/Mobile Wallet

8%

2020* Mobile
penetration

83%

FORECAST

2024 %**
sales from e-com

21%

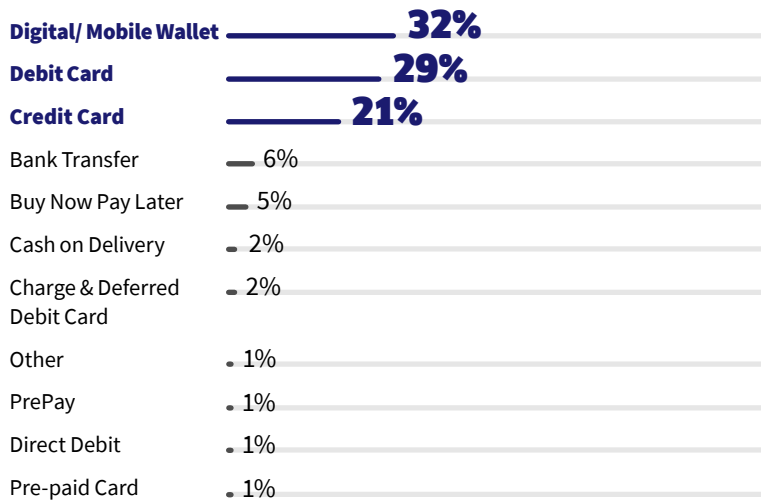
2024 %**
sales from m-com

37%

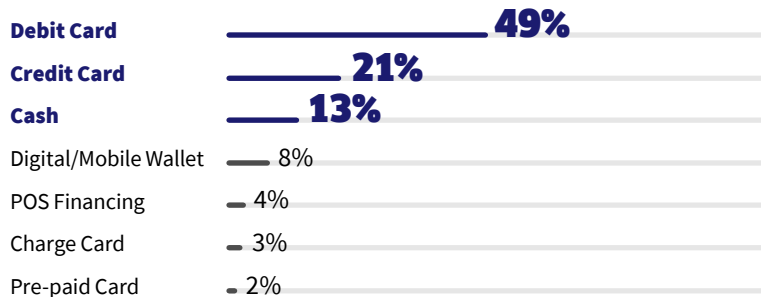
TOP TIP

A number of underlying trends have been accelerated by COVID-19. In-store, there's a continued surge of contactless acceptance driven by the UK limit increase to £45, passed to help combat COVID-19, and an acceleration of integrated payments which enable new functionality such as Click & Collect at restaurants. Retailers and hospitality merchants are adopting e-com solutions at a faster rate, with a focus on ease of integration and more flexible acceptance methods, such as POS financing.

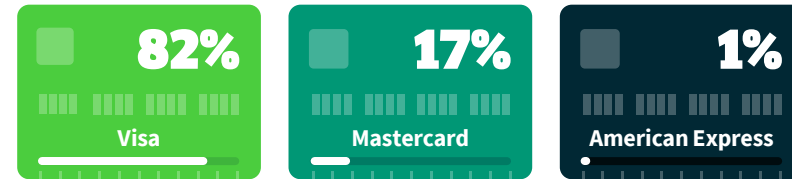
2020 e-com mix by payment method



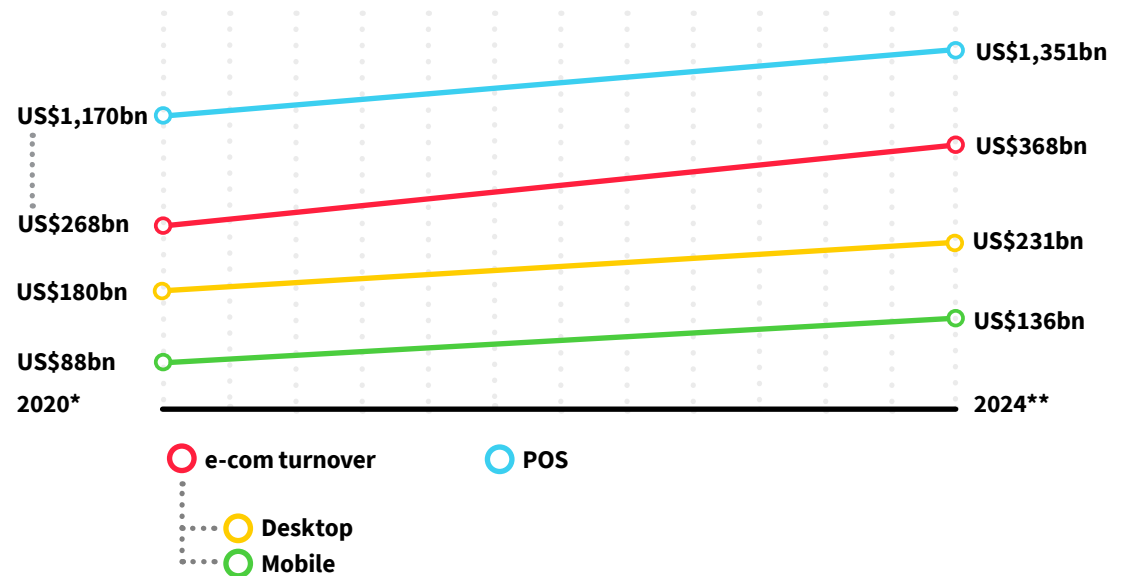
2020 point of sale mix by payment method



2019 card brand breakdowns (e-com and POS)



POS and e-com projected growth



Popular alternative payment methods



* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.

USA



The most expensive coin ever auctioned sold in New York city for \$7,590,020.¹ Face value of the coin? \$20. But it's the only 1933 double eagle coin ever to be legally issued by the U.S. government. These days Americans primarily use their money in the form of cards. 2020 marked the turning point for digital and mobile use to be the most popular way to check out online. At the point of sale, Americans are turning to cards and mobile wallets in lieu of cash as more businesses implement contactless payments.

¹<https://www.guinnessworldrecords.com/world-records/most-expensive-coin-sold-at-auction>

FAST STATS

2020 sales %
from e-com

11%

2020* - 2024**
e-com CAGR

11%

2020 sales %
from m-com

29%

2020* - 2024**
POS CAGR

4%

2020 % e-com spend using
Digital/Mobile Wallet

30%

2020* Internet
penetration

96%

2020 % POS spend using
Digital/Mobile Wallet

10%

2020* Mobile
penetration

83%

FORECAST

2024 %**
sales from e-com

14%

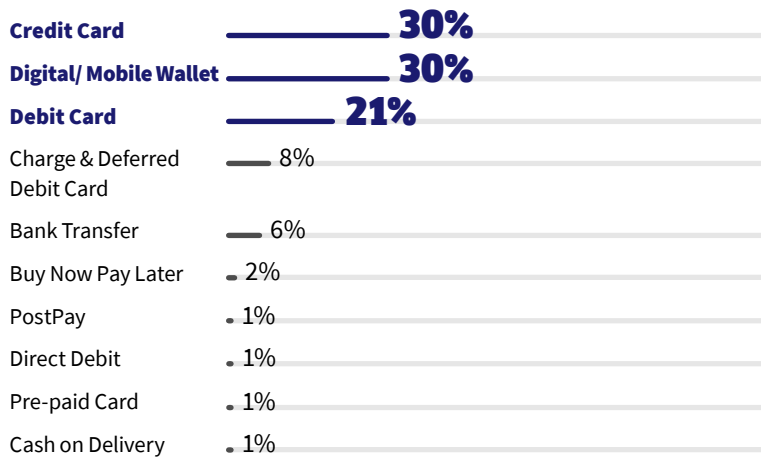
2024 %**
sales from m-com

38%

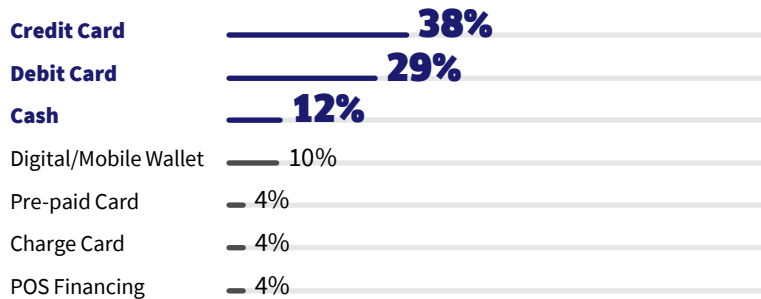
TOP TIP

Digital innovation is now the primary focus as brands race to create an ideal consumer experience amid new customer expectations. Omnichannel experiences are critical to the buying journey but equally important is payment optimization. Businesses have had to expand and alter purchasing methods for consumers. Buy online, pick up curbside and a variety of other variations have made evaluating their payments strategy critical for ongoing continuity.

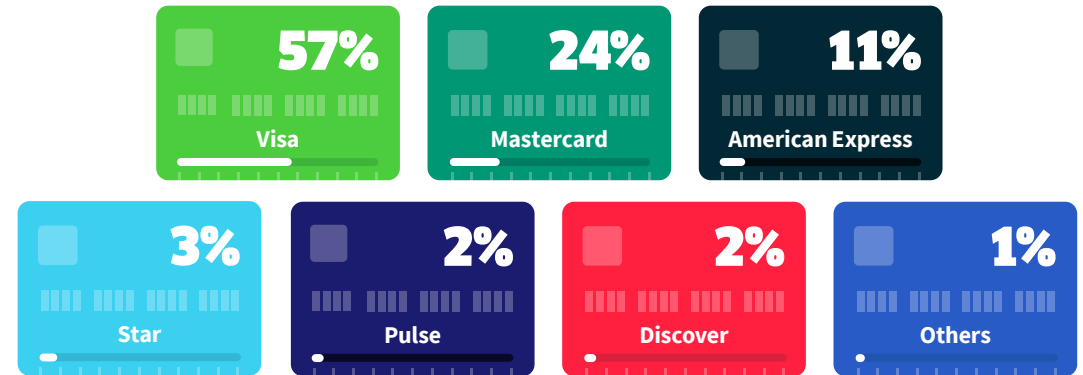
2020 e-com mix by payment method



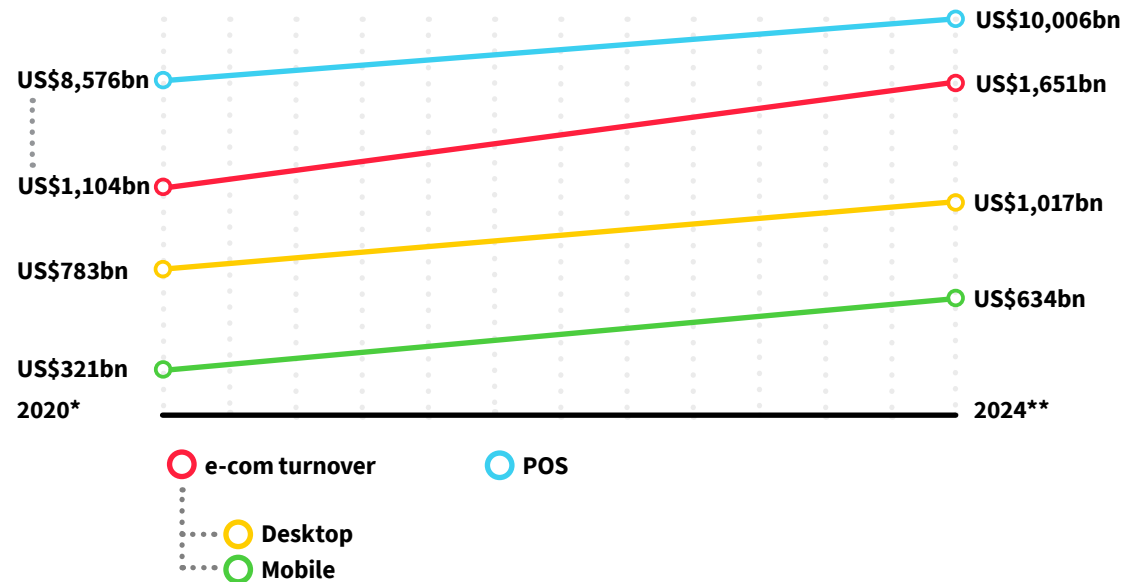
2020 point of sale mix by payment method



2019 card brand breakdowns (e-com and POS)



POS and e-com projected growth



Popular alternative payment methods



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

VIETNAM

The second largest coffee exporter in the world, Vietnam is also home to one of the top 10 most expensive coffees in the world: weasel coffee or Kopi Luwak.¹ While you may not be able to try this expensive coffee on a floating market, you can get a cup of coffee or tea on one. And if you ever see a bamboo stick with the coconut leaf attached, it means the boat is for sale. Whether consumers are buying coffee or a boat, cash is the preferred payment method, in-store or online. However, credit cards and digital/mobile wallets are continuing to rise in popularity at the point of sale.

¹<https://12go.asia/en/vietnam/interesting-facts>

FAST STATS

2020 sales %
from e-com

29%

2020* - 2024**
e-com CAGR

19%

2020 sales %
from m-com

60%

2020* - 2024**
POS CAGR

9%

2020 % e-com spend using
Digital/Mobile Wallet

21%

2020* Internet
penetration

70%

2020 % POS spend using
Digital/Mobile Wallet

12%

2020* Mobile
penetration

72%

FORECAST

2024 %**
sales from e-com

37%

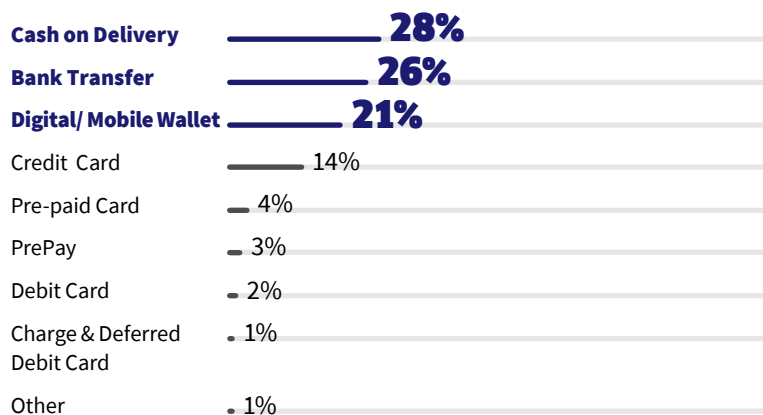
2024 %**
sales from m-com

68%

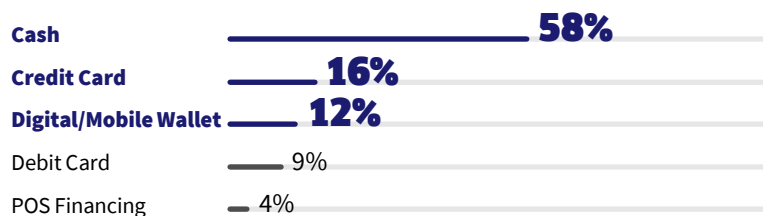
TOP TIP

Amid the pandemic, digital payments have soared in Vietnam primarily at the point of sale. The use of cash declined by 32% and mobile/digital wallets tripled from 2019. Online, consumers looked to bank transfer and mobile/digital wallets at checkout. Retailers looking to provide options to consumers and accept digital wallets will want to accept methods such as MoMo and PayPal.

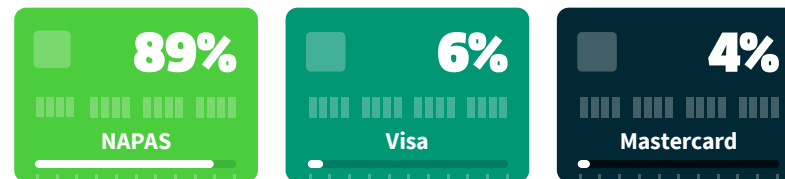
2020 e-com mix by payment method



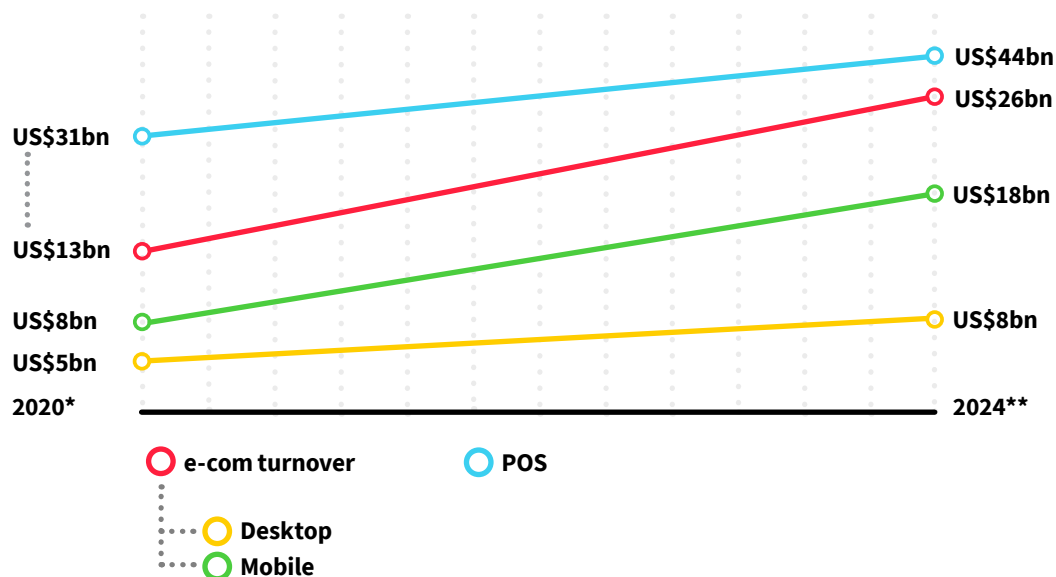
2020 point of sale mix by payment method



2019 card brand breakdowns (e-com and POS)



POS and e-com projected growth



Popular alternative payment methods



* Estimated **Forecasted

Numbers adjusted for rounding may impact totals.



METHODOLOGY

Rebuilding payments **for a smarter world**

The Global Payments Report offers a snapshot of the current payment landscape: globally, by region, and in 41 select countries. The report projects scenarios and trends through 2024 for payment methods as well as market size. In addition, we include a series of five articles with our perspective on current themes in the world of payments.

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 expanded in 2018 to include analysis of payment methods used at the physical point of sale (POS). Previous Global Payments Reports focused exclusively on e-commerce payment methods. This expanded report offers a broader and more complete view of today's global payment landscape.

We continually seek to improve The Global Payments Report based on feedback received from our merchants and other readers. In this year's edition, we introduce two new payment methods: Direct Debit and POS Financing. Direct Debit is an e-commerce payment method where customers give a retailer permission to withdraw funds directly from their bank account on a specified date after the purchase. In previous reports, Direct Debit share was lumped together with Bank Transfer. POS Financing represents a mix of legacy and emerging payments that extend consumer credit at the point of sale. This includes credit offered by retailers, financial institutions, marketplaces, as well as buy now, pay later services, that are growing in popularity.

Another change for 2021 is that we've split EMEA into two separate regions: Europe, and MEA (Middle East and Africa). This change allows our readers to gain better understanding of the trends shaping these two regions.

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

E-commerce market size and forecast data were sourced from GlobalData's *E-Commerce Analytics* database based on data updated in Q3 2020. Therefore, 2020 data cited in the report are estimates. GlobalData collected this information using consumer surveys, B2B surveys and desk research and have also developed a proprietary forecast model for e-commerce market size growth.

The 2020 POS market size was estimated by Worldpay from FIS, based on 2019 data provided by GlobalData and recent McKinsey Global Institute/Oxford Economics macroeconomic assumptions, taking COVID-19 into account. Total POS market size until 2024 was forecasted based on macroeconomic expectations. 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 2024).

Actual shares of individual payment methods by country and region are calculated using the afore-mentioned data model. Our model contains a detailed breakdown of payment methods used when shopping online and at point of sale, which were sourced from *GlobalData's 2020 Consumer Payments Insights* survey, FIS internal data and other public sources.

Forecast breakdown by payment method for each region is calculated using historical percentage share growth trend (in CAGR) for e-commerce and the McKinsey Global Payments Map's indicative trends for POS methods. This was supplemented by payments expertise from both FIS and external experts. McKinsey continuously maintains its payments database from over 200 global sources, including public data, consumer surveys and local research team inputs. All market size data relate to the industry, not from our direct business.

Additional secondary sources for this report include Statista, eMarketer and yStats; data from local card, banking and payments associations; card scheme and payment providers; e-commerce industry reports and studies; news articles; and international organisations 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 e-commerce and point of sale.



PAYMENT TERMS

PAYMENT TERMS

Alternative payment methods

“Alternative” refers to payment methods other than cash or physical cards linked to the global card brand networks. Alternative payment methods include bank transfers, digital wallets, direct debit, mobile wallets, PrePay, PostPay and buy now, pay later (BNPL).

E-commerce

e-commerce includes all consumer-to-business and consumer-to-consumer transactions that occur over the internet, including via websites, apps, the Internet of Things (IoT) and an evolving array of new platforms, devices and experiences. Bill payments are not included, but purchases made online that are settled via invoicing or with cash on delivery are included.

E-com as % of sales

Percentage of purchases made online as a percentage of all sales transactions.

E-com CAGR / POS CAGR

Compound annual growth rates for e-commerce and point-of-sale transaction values projected through 2024.

E-com turnover

Sum of all sales transactions made online, including those made via desktop, tablet and smartphone.

Internet penetration

The percentage of a population that uses the internet in any form on at least an occasional basis.

M-com as % of e-com

Transaction value of purchases made via a mobile internet device as a percentage of all e-commerce transactions.

Mobile penetration

The percentage of a population that owns at least one mobile phone and use the phone(s) at least once per month.

Point of sale (POS)

All transactions that occur at the physical point of sale. Includes traditional in-store transactions as well as all face-to-face transactions regardless of where they take place.

PAYMENT METHODS

Bank Transfer

Bank transfers allow consumers to make e-commerce purchases by paying merchants directly from their bank account. Bank transfers take place within retail banking applications, in dedicated bank transfer apps and directly via e-commerce websites and apps. In 2020, bank transfers represented 7.7% of all e-commerce transactions globally.

Buy now, pay later (BNPL)

BNPL services are post-purchase payments allowing consumers to make payments in interest-free installments or pay off the invoice after a determined period. A growing e-commerce payment method, popular BNPL services include Affirm, Afterpay and Klarna. BNPL accounted for 2.1% of global e-commerce transactions in 2020.

Cash

Once the undisputed leader in POS commerce, cash accounted for 18.2% of POS spend in 2020. Cash is projected to continue to decline in use and will account for only 10.6% of POS spend by 2024.

Cash on Delivery

Cash-on-delivery (COD) transactions feature payment for goods in cash at the time of delivery. COD remains an important payment method by offering an essential link to e-commerce for unbanked consumers. COD accounted for 3.3% of global e-commerce transactions in 2020.

Charge & Deferred Debit Card

Charge cards and deferred debit cards typically charge no interest but require cardholders to pay the outstanding balance in full at fixed intervals, typically monthly. In 2020, charge and deferred debit cards represented 3.3% of e-commerce transactions globally.

Credit cards

An anchor of consumer payments for over half a century, credit cards are issued by financial institutions affiliated with a global card brand network such as Mastercard, Visa, UnionPay, etc. In 2020, credit cards accounted for 22.8% of e-commerce and 20.0% of POS globally. Credit cards allow consumers to make purchases via an extension of credit from a financial institution.

Debit cards

Debit cards allow consumers to purchase 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 2020, debit cards accounted for 12.3% of e-commerce and 20.2% of POS transactions globally.

Direct debit

Direct debit is an e-commerce payment method where customers give a retailer permission to withdraw funds directly from their bank account on a specified date after the purchase. New to our analysis as a distinct category, previous editions of The Global Payments Report included these purchases within bank transfers. In 2020, direct debit accounted for 1.2% of global e-commerce transactions.

Digital wallets and mobile wallets

Digital wallets and mobile wallets are modern payment methods that allow consumers to securely store payment credentials to pay for purchases. Mobile wallets such as Apple Pay, Google Pay and Samsung Pay work only within the specific mobile operating system (OS), whereas digital wallets such as Alipay, WeChat Pay, Paytm and Amazon Pay are OS-agnostic. Many popular wallets are both digital and mobile, and are accepted virtually everywhere commerce takes place: online, in-app or in-store. In 2020, digital and mobile wallets accounted for 44.5% of e-commerce and 33.1% of POS transactions.

POS financing

POS financing represents a mix of legacy and emerging payments that extend consumer credit at the point of sale. This includes credit offered by retailers, financial institutions and marketplaces, as well as BNPL services. New to our analysis as a distinct category in 2021, POS financing represented 3.3% of global 2020 point of sale transactions.

PostPay

PostPay allows consumers to order products and pay for them in full later at an affiliated physical store or ATM. Although PostPay services represent only 0.9% of e-commerce transactions globally, PostPay accounts for 5.4% of e-commerce spend in Latin America, led by Boleto Bancário in Brazil. PostPay thrives in Japan where payments made at Konbini stores represent 10.7% of e-commerce spend.

Pre-Paid Card

Prepaid cards are issued by financial institutions that run scheme networks such as Visa and Mastercard. Prepaid cards can be funded one time or be reloaded, and they can be used to make purchases as easily as debit or credit cards. Prepaid cards saw increased use as a distribution method for COVID-19 relief aid in 2020, primarily in the U.S., representing 1.1% of e-commerce and 3.6% of POS transactions.

PrePay

PrePay services help consumers make e-commerce purchases without a card account and without providing any personal information. Services such as eNETS, paysafecard and Neosurf offer flexible and secure payments via vouchers redeemable at participating merchants. PrePay methods accounted for 0.4% of global e-commerce transactions in 2020.

Others

We continue to track other emerging payment methods—like mobile carrier billing and cryptocurrencies—that in 2020 combined to account for 0.4% of global e-commerce spend.



worldpay
from FIS

About FIS

FIS is a leading provider of technology solutions for merchants, banks and capital markets firms globally. Our more than 55,000 people are dedicated to advancing the way the world pays, banks and invests by applying our scale, deep expertise and data-driven insights. We help our clients use technology in innovative ways to solve business-critical challenges and deliver superior experiences for their customers. Headquartered in Jacksonville, Florida, FIS is a Fortune 500® company and is a member of Standard & Poor's 500® Index.

About Worldpay from FIS

Worldpay are the leading payments technology solutions from FIS (NYSE:FIS) that power smarter payments, for today's smarter world. 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.

For further inquiries, please contact
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