DIGITAL RENAISSANCE IN LATIN AMERICA

A deep dive into trends, opportunities, and challenges in the Latin American e-commerce industry

PagSeguro

TABLE OF CONTENTS

MESSAGE FROM PAGSEGURO

High vaccination levels, recovering economies, no more lockdowns: the worst of the Covid-19 pandemic might be over and "the new normal" is here. And it is highly digital: if e-commerce was already rising in Latin America before 2020, now it's a habit these consumers are nowhere close to leaving behind.

And it's not only in the shopping experience that Latin Americans seek innovation: agility, quickness, and disruption are more and more expected in all steps of the way, including payments. Leading the way with instant payment phenomenon Pix, **Brazil — the #1 market in Latam** — is setting the stage of what's possible and what users want in digital payments.

On the other hand, of course, there's recovering but still unstable economies, highly fluctuating currencies, regulatory challenges, traditional payment methods that a minor, but still considerable, part of the population clings to. Selling to Latin America is not easy, and local knowledge is fundamental. That's why, in this white paper, we bring you exclusive data about what's going on in Latin America in terms of e-commerce and payments, analyzed through the lens of our over 17 years of experience in the region.

The challenges listed above, you don't have to face them alone. They can be navigated, allowing your company to explore the many benefits and the vast potential of Latin America. That's where PagSeguro comes into place, a company that excels at handling complex cross-border transfers, including conversions, fees, and compliance requirements.

With our one-stop payment solution, you can offer local payment methods to all 6 main markets of Latin America and 11 other Latam countries, directly in their local currencies, and settle the money to anywhere in the world. With an easy integration process that best suits your business, no local entities are required, and you ensure a fast, secure payment experience with much higher chances of sales conversion and client retention.

That's not all: our vast expertise and technical resilience ensures us expert risk analysis, 24/7 customer support in your consumers' native language, dedicated account management support, and much more. Our parent company, PagSeguro is one of the biggest fintech businesses in Latam, a company born out of innovation that is pioneering and leading the Brazilian online payment media market.

If you want to not only be part of "the new normal", but lead the market, attending customer expectations is essential. They must be at the center of every business decision, and what Latin American consumers expect is clear: as you'll see in every page of this study, they want agility, they want security, they want reliability, they want innovation.

Latin American consumers expect agility, security, reliability and innovation.

Latin America's payment landscape is varied, fast-changing, and in the midst of a major revolution, of which Pix is the protagonist. This white paper will help keep you up-to-date and show you, in detail, what's happening and what's to come in this fascinating region. Enjoy!

ABOUT PAGSEGURO

international.pagseguro.com

PagSeguro (NYSE: PAGS) provides innovative payment solutions, automating payments, sales, and wire transfers to boost businesses anywhere, in a simple and secure way. Part of the UOL Group – the leader in Brazilian internet –, PagSeguro acts as an issuer, an acquirer, and a provider of digital accounts, besides offering complete solutions for online and in-person payments.

The company also has the most complete payment methods coverage in Brazil and 16 other Latin American countries, besides Portugal, Spain, Turkey, Greece, and Romania, allowing merchants worldwide to process and collect more than 140 local payment methods and local currencies. It also provides instant single or mass cross-border payouts to Brazil.

As a provider of payment solutions for foreign merchants, PagSeguro is well established as the market leader in the online gaming segment, having processed local payments for more than 6,000 games, including giants Valve, Garena, EA, Xsolla, Ubisoft, and Wargaming.

PagSeguro's Payment Processing solution is also suited for Digital Goods (Streaming, Apps, SaaS, Education), Travel Tourism, and Retail,. Accept local payment methods and local currency with PagSeguro's expertise and get settled anywhere in the world without the need for a local entity, providing more agility and saving your business from time-consuming, costly bureaucracy.

PagSeguro's Payout Solution is a disruptive way of sending instant transfers, cleared in minutes directly in local currency, with no banking fees, total transparency, and a high level of compliance. With it, you can boost business innovation in social media, streaming, gaming, and many other markets.

ABOUT AMI

www.americasmi.com

Americas Market Intelligence (AMI) is the premier market intelligence firm for Latin America, providing powerful market and competitive intelligence-driven insights for companies to succeed in the region. With a specialization in the payments industry, its expertise includes e-commerce, neobanks and digital wallets, fintech, point-of-sale (POS) and acceptance technology, financial inclusion, cross-border payments, business-to-business (B2B) payments, open banking, and real-time payments. Its customized research reports deliver data-based clarity and granular strategic direction based on expert sourcing.

AMI's payments practice is focused on helping financial institutions, merchants, and others navigate the unique payments landscape in Latin America and compete in a rapidly digitizing environment. AMI consultants are recognized thought leaders in verticals such as e-commerce, payments innovation, contactless technology, and real-time payments, as well as consumer and payment industry trends.

INTRODUCTION

The digital economy in Latin America is entering **its most promising era yet**.

Over the past decade, observers have watched Latin America evolve digitally, driven by the growth of smartphone penetration, 3G and 4G internet, and the proliferation of social media, messaging apps, and gig economy platforms. Latin America has been characterized by record-high levels of online consumption, paired with stubbornly low levels of digital payment penetration. Exhibiting double-digit e-commerce growth since 2015, but at the same time plagued by an inflexible banking system, high cash usage, inefficient fulfillment logistics, and complicated tax regimes, Latin America has both attracted and deterred international e-commerce merchants over the years.

During 2021, a recovery year, the region's GDP grew 6.4%, offsetting the 2020 reduction and taking the economy back to pre-pandemic levels.

And yet, the COVID-19 pandemic has ushered in a new era in Latin America, one in which the digital economy is front and center and relevant to all social classes rather than an isolated niche for the affluent. Latin America was hit hard during pandemic lockdowns, decreasing more than 6% in GDP in 2020, and more than 10% in select markets like Peru and Argentina.[1] Credit Suisse estimates that this reduction in economic activity sent 40 million into poverty, eliminated 26 million formal jobs, and contributed to a 4% increase in inequality as measured by the Gini coefficient.[2] Apart from the health crisis, Latin America was one of the hardest-hit regions in the world economically due to COVID-19. During 2021, a recovery year, the region's GDP grew 6.4%, offsetting the 2020 reduction and taking the economy back to pre-pandemic levels. Some markets grew more than 10%, such as Peru, Argentina, Chile, and Colombia.

Consistently a paradox, Latin America is now experiencing a true digital revolution despite these conditions. **As a result of pandemic lockdowns, nearly 50 million consumers shopped online for the first time in 2020, and another 51 million did so in 2021, bringing total e-commerce penetration to 67% of the population.[3]** An estimated 100 million people gained access to banking since 2019,[4] driven by both traditional banks and fintech companies reducing the requirements to open simplified bank accounts and debit cards and enabling digital onboarding. Consumers, now more comfortable in the online space than prior to 2020, use online platforms to satisfy their daily needs, whether it be groceries, health care, school supplies, clothing, furniture, online education, gaming, streaming, home delivery, professional services, and software as a service (SaaS). **This trend will continue throughout 2022, likely surpassing the 70% threshold of e-commerce penetration by the end of the year.**

Some industries continued to stumble through 2021, namely travel, in-person entertainment, brick-and-mortar retail, nonessential manufacturing, and construction. Yet, in most markets consumer spending has returned to pre-pandemic levels, and the digital economy is bursting, in particular, e-commerce. **Market forces converged to support an overall e-commerce growth of 36% in 2021 for the region, totaling a forecasted US$266 billion for the year[5] and expected to reach US$346 billion at the end of 2022.**

As Latin America's digital economy surges ahead, international merchants have renewed interest in the region, particularly in leading markets Brazil and Mexico. Global marketplaces from the United States

1 Economist Intelligence Unit (EIU)

2 Credit Suisse Global Wealth Report Outlook, 2020

3 Of the adult population. AMI analysis based on public sources

4 AMI analysis based on World Bank data, public sources and interviews

5 This figure represents Brazil, Mexico, Colombia, Argentina, Chile, Peru, Uruguay, Panama, Paraguay, Costa Rica, Guatemala, and the Dominican Republic, together representing an estimated 95% of total regional volume.

and China — Amazon, AliExpress, Shopee, Wish — can be observed increasing their investments in the region, while global retail brands and e-commerce platforms such as Shopify are growing their presence. Digital goods players, who can easily scale across international borders, are hungry to capture Latin American money, particularly in streaming and gaming — think Disney+, Paramount, TikTok, Twitch , Valve, and Garena. This, combined with a surge of domestic players and global players operating locally (such as Mercado Libre, Linio, Magazine Luiza, B2W, Walmart, Falabella, and Liverpool), is making Latin America more competitive, requiring merchants to strengthen their brand positioning, payment method offering, and overall user experience.

It is clear that international merchants have an unprecedented revenue opportunity in Latin America. Yet in the midst of this spectacular growth, the local payment and e-commerce landscape is getting increasingly complex. As digital services spike, federal and state governments are eager to get their fair share, applying VAT tax and other fees to digital services and digital financial transactions. **The local payment method landscape is becoming more fragmented** as more digital wallets appear on the scene and Central Bank payment solutions scale. And with currency devaluations in Argentina, Brazil, Peru, and other Latam countries over 2021, it has gotten increasingly difficult for Latin Americans to make purchases in foreign currency. All this begs the question to international merchants: How do I navigate this complex, fragmented, and growing region? Where are the best opportunities, and how can I tap into them?

In addition, certain questions persist around the opportunities we have described earlier in this report: What is the full potential of the Latin American market? Will it continue to grow at such aggressive rates, and in which segments? How does Latin America compare to other regions? How can international players feasibly access this market? Is Latin America a worthy investment? What type of local partner should I look for to better navigate this region?

Ultimately, this report aims to answer these questions and give international merchants a deeper understanding of the Latin American e-commerce landscape in 2022 and beyond.

SCOPE AND METHODOLOGY

In response to these questions, PagSeguro commissioned Americas Market Intelligence (AMI) to conduct a study focused on the Latin American e-commerce industry, specifically its main markets Argentina, Brazil, Chile, Colombia, Peru, and Mexico.[6]

METHODOLOGY AND SOURCES

- AMI internal data on Latin America's digitization and e-commerce landscape, gathered every year by AMI, based on desk research, interviews with local e-commerce players, and proprietary analysis
- Extensive desk research of public sources (i.e., central banks, e-commerce organizations, local and regional press and reports)
- In-depth interviews with both cross-border merchants and marketplaces selling in the above-mentioned markets in multiple industries, including retail, video and music streaming, gaming, travel, and B2B digital goods providers (including services that allow companies to build their online platform)
- Time frame: First set of desk research and interviews occurred during August and early September 2021 and updated based on new desk research and interviews during the first quarter of 2022.

6 Referred as the Six Markets for the purpose of this study

DEFINITIONS

In this report, our e-commerce analysis covers all online purchases of goods and services, encompassing all product categories, payment methods, and both local and cross-border purchases. Relevant definitions include:

Industry verticals

- **Retail** is defined as all physical products purchased online directly from a merchant or marketplace.
- **Travel** is defined as services including airline tickets, car rentals, tour packages, hotels, and home rentals.
- **Digital goods** and services comprises two categories:
    - **Digital goods**: All digital goods and services include ride-hailing, delivery apps, streaming, online gaming, online education, digital downloads, mobile top-ups, advertising, SaaS, etc.
    - **Other services**: Purchases such as monthly bills, insurance payments, school tuition payments, homeownership association fees, taxes, and government licenses and fees if they are paid online over an e-commerce gateway. These expenses are not included if they are paid via online banking or direct debit from a check or savings account. Recurring payments to a credit or debit card are included.

Payment methods

- **Internationally enabled credit card:** a credit card from an international network, such as Visa, Mastercard, and American Express, that is enabled by the issuing bank to make cross-border purchases
- **Domestic-only credit card:** a credit card that may only be used for domestic purchases, as determined by the issuing bank. These include cards from local card networks, such as Elo and Hipercard in Brazil, Naranja X in Argentina, and Carnet in Mexico as well as Visa and Mastercard cards that are restricted to domestic use only.
- **Debit card:** a debit card from an international or local card network. Prepaid cards issued by digital wallets and fintech companies that draw off of a digital account are included in this category.
- **Boleto bancário:** a common payment method in Brazil, used in both e-commerce and for other payments. Boleto for short is

an invoice generated by an issuing bank that can be paid online via a payer's online banking portal or in cash at thousands of associated supermarkets, lottery houses, or bank branches.

- **Cash-based payment platforms:** payments in cash such as invoice, barcode that can be paid online, or cash at thousands of associated supermarkets, retail locations, etc. In Peru, the term cash-based payment platform is used to refer to PagoEfectivo, a platform that uniquely combines cash, bank transfers, and wallet payments but is not a wallet. In Brazil, there is Boleto as mentioned above. Other solutions in the region include Oxxo and PagoFácil (Mexico), Sencillito (Chile), Via Baloto (Colombia), and PagoEfectivo (Peru).
- **Digital wallet:** AMI defines a digital wallet as a payment method that stores any funding source on file, including a credit card, debit card, bank account, or stored balance, and uses that funding source to remit payment. E-commerce volume falls into the digital wallet category if the wallet brand is selected at checkout, even if a different funding source (such as a credit card) is ultimately selected to fund the transaction. The main wallets used for e-commerce in Latin America include PagBank, Mercado Pago, and PayPal. Other popular wallets, such as Nequi in Colombia, Uala in Argentina and MACH in Chile leverage an accompanying debit card to enable e-commerce purchases.
- **Bank transfer:** This consists of bank transfers made for e-commerce through a direct bank integration with the merchant as well as bank transfers through a dedicated real-time payment platform, such as Pix in Brazil and Botón PSE in Colombia. Launched in 2020, Pix is the Brazilian Central Bank's real-time payment system, which will be discussed in detail in this paper.
- **BNPL (Buy Now Pay Later):** This consists of a payment button that allows customers to buy and pay for the purchases in installments using a debit card, bank account, or other payment method other than a credit card. "These differ from traditional credit card installments, which are offered by the issuing bank and are only available to credit card holders." This is an emerging payment method in Latin America and includes providers such as Addi, Kueski Pay, Zip, and VirtusPay.
- **Other:** Other payment methods included in this report include one-time-use gift cards, direct carrier billing, meal voucher cards, and cash on delivery, among others.

Cross-border and domestic transactions

- **Cross-border transaction**: a purchase made by a consumer at a merchant located outside of its country (e.g, a Brazilian customer purchasing at a merchant located outside of Brazil)
- **Domestic transactions**: a purchase made by a consumer located in one market at a merchant located at the same market (e.g., a Mexican customer purchasing from a Mexican merchant) or purchases made at global merchants with local presence in such markets

What else is included in our e-commerce numbers?

- **B2B e-commerce**: All e-commerce between businesses over an e-commerce payment platform using any of the aforementioned payment methods is included in this analysis. B2B invoices paid via bank or wire transfer or in cash are not captured here.

What is not included in our e-commerce numbers?

- E-commerce purchases facilitated by marketplaces or social media but in which the final payment does not take place over digital channels
- E-commerce purchases from international visitors to Latin American countries or using credit or debit cards issued from a non-local bank
- Payments made in cash for ride-hailing and delivery app services

Other specifications

- All monetary values are expressed in **U.S. dollars** unless otherwise specified.
- Please note that numbers in charts may not add due to rounding.

PART 1

UNDERSTANDING THE POTENTIAL OF LATIN AMERICA

LATIN AMERICA POPULATION AND GDP

Latin America and the Caribbean is a large and diverse region, comprising 610 million people in 2021, or 8% of the world's total population. The region generated US$4.9 trillion in GDP in 2021, equating to 5% of the global total. Average GDP per capita in 2021 was US$7,925, compared to US$69,079 in the United States and US$42,224 across OECD countries. As an emerging region, Latin America's economic development trails that of developed economies, owing to many factors, among them lower worker productivity[7], higher levels of unemployment, and large informal economies. Precisely because of its large informal sector and smaller professional class, Latin America was particularly hard hit during the COVID -19 pandemic, with the economy contracting 6.4% in 2020, compared to an overall global shrinkage of 3.7%. The region's recovery was also more aggressive than the global average; **in 2021, Latin America GDP recovered and grew 6.4%, compared to overall global recovery of 5.6%.**

LATIN AMERICA IN NUMBERS (2021):

610 Million
people

$4.9 Trillion
in GDP

6.4%
of recovery and growth

7 Economist Intelligence Unit (EIU)

LATIN AMERICA: BASIC DEMOGRAPHICS

	POPULATION (MN)		GPD (USD BN)		GDP PER CAPITA	
	2020	2021	2020	2021	2020	2021
Argentina	45	46	$383	$455	$8,600	$9,976
Brazil	213	213	$1,445	$1,646	$6,822	$7,716
Chile	19	19	$253	$331	$13,234	$17,231
Colombia	51	51	$271	$301	$5,336	$5,871
Mexico	129	130	$1,076	$1,286	$8,319	$9,870
Peru	33	33	$202	$226	$6,261	$6,805
Top 6 Markets	490	493	$3,630	$4,245	$7,436	$8,612

FIGURE 1. LATIN AMERICA: BASIC DEMOGRAPHICS

And yet, despite these circumstances, and perhaps precisely because of them, Latin America is a promising business environment in 2022. First, despite being fragmented across 30+ countries, the bulk of economic activity takes place within the region's **top six markets (Brazil, Mexico, Colombia, Argentina, Chile, and Peru),[8] which represent 88% of Latin America's population and 93% of its GDP.[9]** Brazil, a behemoth on its own, represents 213 million people, followed by Mexico with a population of 130 million. These economies amass over US$1 trillion each in GDP.

Brazil, Mexico, Combia, Argentina, Chile and Peru represent 88% of Latin America's population

Second, **Latin America is a high-growth region**. Over the past 50 years, economic growth in Latin America was largely driven by population, which grew at an average annual rate of 1.8% from 1965-2015. But from 2015-2020, this growth rate has fallen nearly one percentage point to 0.9%, meaning that region can no longer derive growth from demographics. Instead, **GDP acceleration is coming from increases in productivity brought about by technology and digitization**.

8 Referred to as the Six Markets throughout this report

9 World Bank

Indeed, as the region recovers from the COVID-19 crisis, GDP is expected to grow 1.8% in 2022, compared to 3.1% in OECD countries, and an average of 2.1% annually through 2025. This growth will be fastest in Peru and Colombia, where COVID-19 lockdowns were the most severe and their economies most damaged.

The forecasted growth can be attributed to several factors. First, **Latin America is experiencing rapid growth of its e-commerce and digital services sectors (more than 30% annual growth).** Second, as a net exporter region, exports are forecasted to grow 13% annually through 2023, driven by demand in the United States and China, and rising global export prices.[10] Finally, according to an analysis conducted by AMI in September 2021, **Latin America is likely the world region closest to reaching COVID-19 herd immunity** thanks to both the forces of contagion and vaccination levels. This is serving to fully open up the region's economies, which began in late 2021 and continues throughout 2022.

GDP GROWTH, LATIN AMERICA
%, 2018-2025

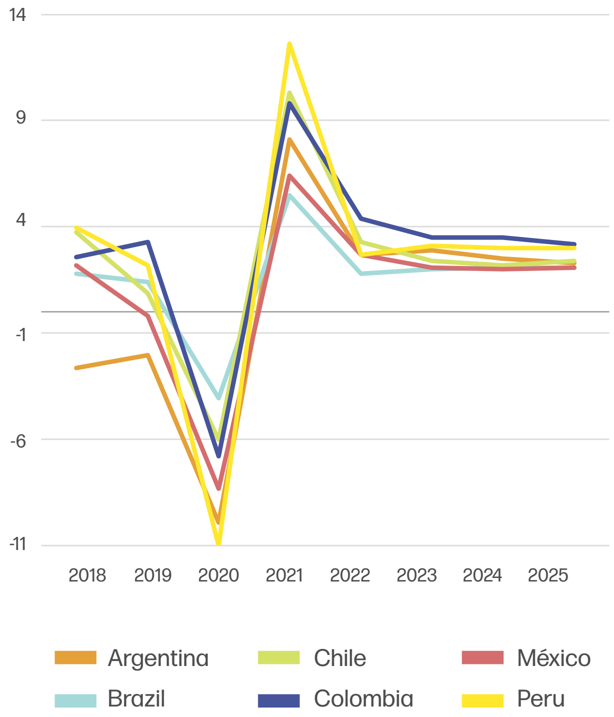


FIGURE 2. GDP GROWTH, %, 2018-2025, WITHIN LATIN AMERICA

GDP GROWTH, WORLD REGIONS
%, 2018-2025

FIGURE 3. GDP GROWTH, %, 2018-2025, WORLD REGIONS

10 AMI analysis based on Trade Economics, US trade data, EIU, Forbes

DIGITIZATION, TECHNOLOGY, AND BANKING PENETRATION

From internet to smartphone penetration, the pandemic accelerated digital inclusion throughout Latin America. Today, ownership of a smartphone is high across our Six Markets, with 77% penetration. Internet usage grew to 77% of the population among the Six Markets, reaching up to 88% in Argentina, with Colombia trailing at 65%. These numbers are up from just over 50% in 2017, demonstrating a significant jump in the digital economy that was accelerated by the pandemic but was already underway pre-COVID-19.[11]

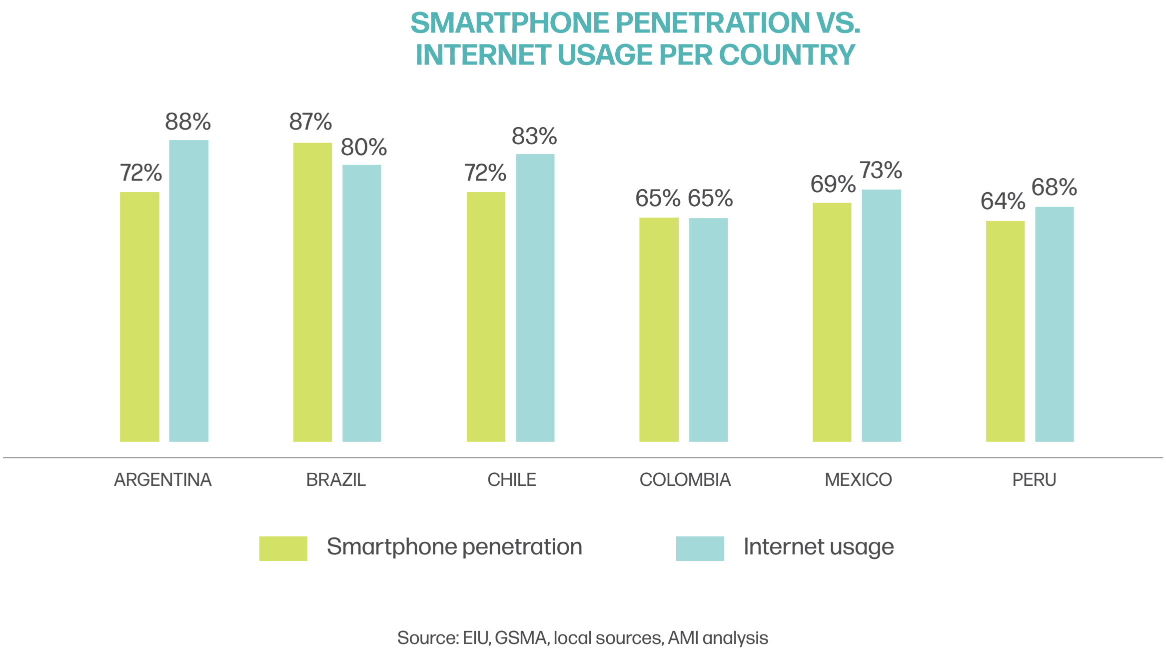


FIGURE 4. SMARTPHONE PENETRATION VS. INTERNET USAGE IN LATIN AMERICA

As is well documented, Latin Americans are among the most active users on social media platforms such as Instagram, Facebook, and TikTok. **Brazil has the fifth-largest population of social media users globally, with 166 million users in 2021. By 2025, this number will exceed 180 million, or 85% of the adult population.**[12] Comscore reports that TikTok now has 70 million users, and perhaps the most pervasive, WhatsApp is used by over 90% of adults in Brazil, Argentina, and Colombia.[13] Latin Americans are

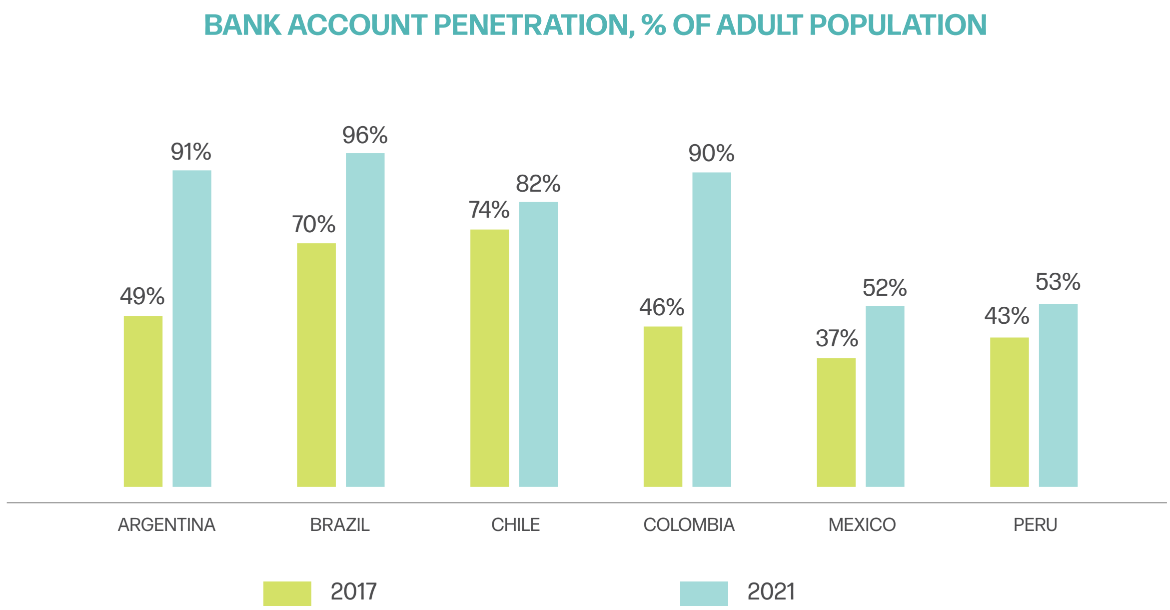
11 As per Internet World Stats, GSMA, and AMI analysis

12 Statista, 2020

13 Global Web Index's 2020 Social Media User Trends Report

online and actively engaged, making them a prime demographic for international merchants wanting to tap into new markets.

On top of technological advancements, the pandemic also propelled banking to new heights as millions of people across Latin America opened a bank account for the first time. According to AMI analysis, the percentage of the Six Markets' population with a bank account grew from 51% in 2017, climbing to 80% in 2021.[14] In addition, AMI estimates that **about a third of the population accesses the financial system through a neobank or digital wallet**, indicating the importance of nontraditional players in promoting financial inclusion both before and during the pandemic. The public sector also played a role, as government agencies paid out social benefits subsidies into bank accounts, digital wallet accounts, or onto a prepaid card in Brazil, Colombia, Argentina, Chile, and Peru in response to COVID-19.



Source: World Bank, local sources, AMI analysis

FIGURE 5. BANK ACCOUNT PENETRATION, % OF ADULT POPULATION

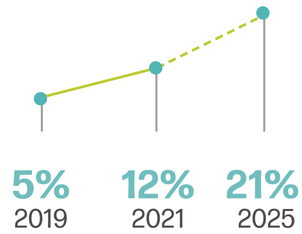
14 World Bank, local official sources, and AMI analysis

CASH CONVERSION: A NEW DIGITAL FRONTIER FOR LATIN AMERICA

As a result of these combined forces, Latin America is going through the most rapid period of cash conversion experienced in its history. When considering Brazil, Mexico, Colombia, Chile, and Peru, the share of cash across face-to-face retail fell dramatically from 75% in early 2020 to 53% in 2021, demonstrating a true shift in consumer adoption of cards and other digital payment methods. While these numbers reflect the performance in the physical environment, such a decline in the use of cash demonstrates **increased comfort with digital payment methods across all channels**.

The data also reveal a migration from physical to digital, which has only begun to take root. Globally, the percent of total retail expenditure represented by e-commerce is used as a proxy to understand e-commerce penetration and maturity. Today, in the U.S. market, e-commerce represents 14% of total retail, up from 11% in 2019.[15] In Latin America, this number began the COVID-19 pandemic at 5%, reached 12% in 2021, and is estimated to continue to rise to 22% in 2025, bolstered strongly by Brazil (reaching 27% in 2025). These data reveal that Latin American e-commerce can continue to grow at current rates (more than 25% annually) for three to five years before growth begins to decelerate.

E-COMMERCE PENETRATION OF TOTAL RETAIL IN LATAM



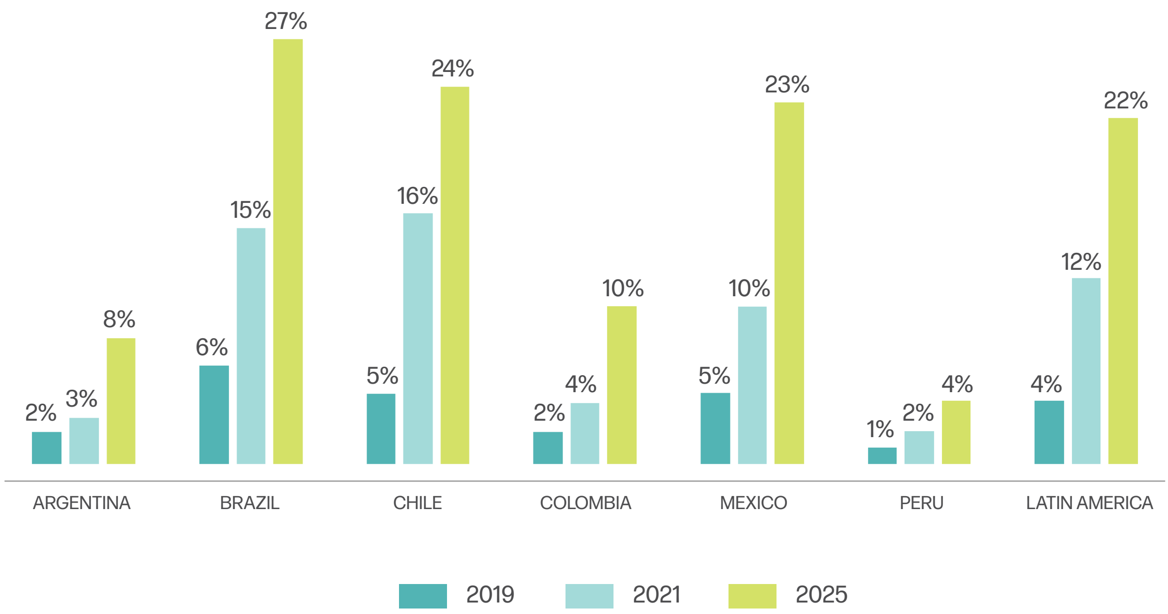
Latin American e-commerce can continue to grow more than

25%

annualy for the next three or five years

15 Statista, released February 2022, 2021 data as of October 2021

E-COMMERCE AS A % OF TOTAL RETAIL



Source: EIU, AMI proprietary research

FIGURE 6. E-COMMERCE AS A % OF TOTAL RETAIL

As a result of this technology and financial evolution, **the Latin American population is more prepared than ever to participate in global digital trends**; and indeed, more specifically, Latin America is leading global growth in areas like online retail, gaming, streaming, social media influencing, SaaS, cryptocurrency adoption, and others. With 51 million Latin Americans shopping digitally for the first time in 2021, exploring the digital options and brands they encounter online, the region is newly invigorated for e-commerce growth, which will be sustained through the medium term of five years in most markets. For these reasons, global merchants are increasingly looking to the region – and help to do so from local experts – to propel their international expansion.

Latin America is leading global growth in areas like online retail, gaming, streaming, social media influencing, SaaS, cryptocurrency adoption, and others

PART 2

E-COMMERCE IN LATIN AMERICA

E-COMMERCE: THE BIG NUMBERS

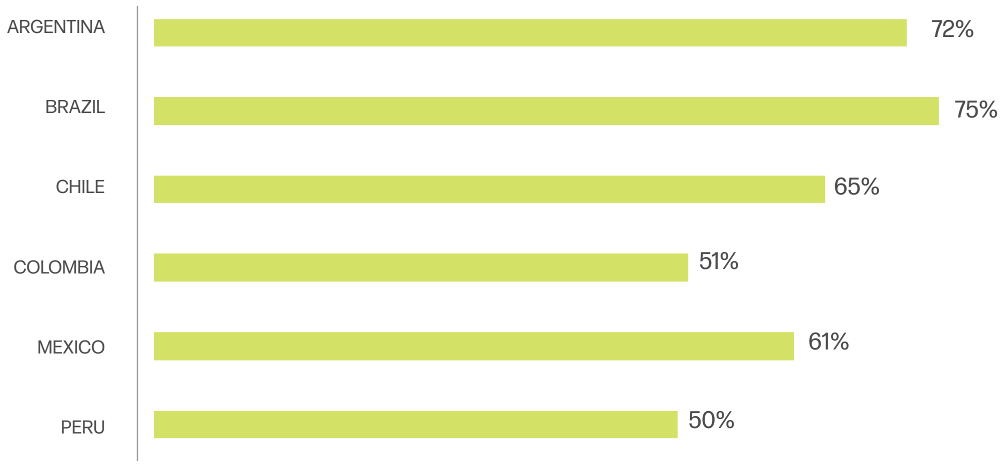
E-commerce was one of the fastest-growing segments of the Latin American economy in 2021. Per AMI analysis, in 2020 61% of the population in the Six Markets made online purchases, representing 19% growth over 2019. In 2021, this number has continued to grow to 67%, or 256 million shoppers (see Figure 7 for a country breakdown), demonstrating that while COVID-19 was an accelerator of online shopping, the habit did not subside once lockdowns ended. **Latin Americans have doubled down on e-commerce, continuing to increase their consumption**, as the frequency of purchase, the types of products purchased online, and the average ticket increase.

E-SHOPPERS 2021

128 Mn	20 Mn	60 Mn	12 Mn	25 Mn	10 Mn
Brazil	Colombia	Mexico	Peru	Argentina	Chile

Source: AMI analysis

E-COMMERCE SHOPPING PENETRATION, % OF ADULT POPULATION



Source: AMI analysis

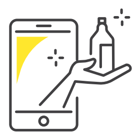
FIGURE 7. E-SHOPPERS AND E-COMMERCE PENETRATION IN LATIN AMERICA, 2021

This increase in e-commerce adoption has contributed to the explosion of the sector in the past 18 months. In total, Latin America's total e-commerce market in 2020 was worth US$209 billion,[16] 94% (US$197 billion) of which came from the Six Markets. This represents **growth of 18% over 2019**, which is significant, considering overall negative GDP growth and the complete implosion of the travel industry. In 2021, the results of e-commerce are even more impressive: The Six Markets volume grew by 36% to reach a value of US$266 billion, representing over 90% of the total region, which stands in contrast to a GDP growth of only 6.5%. And this growth will be sustained: AMI predicts a compound **annual growth rate (CAGR) of 25% through 2025**, reaching US$646 billion in 2025, concentrated within the retail and digital goods and services industries and growing most rapidly in Argentina and Colombia.

TOP SIX MARKETS

256 Million
e-shoppers

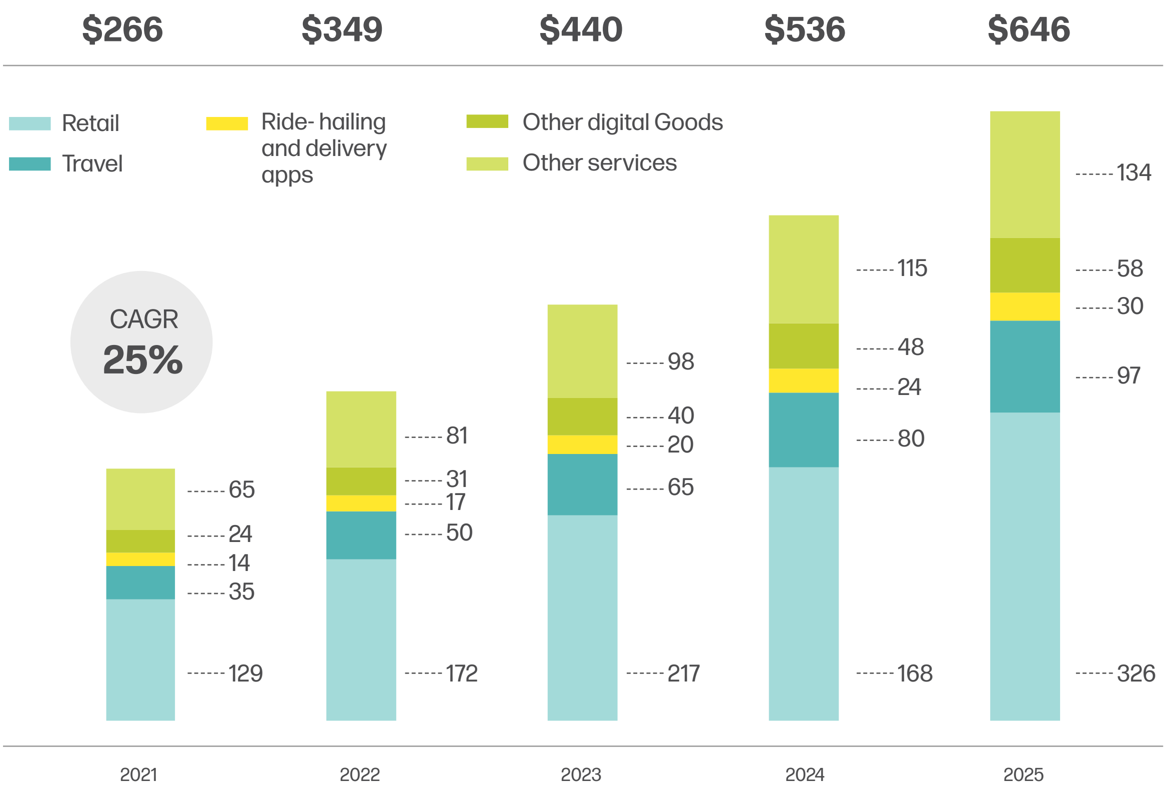
$268 Billion
transaction volume
MAY 2022



67%
e-commerce penetration

16 This figure represents Brazil, Mexico, Colombia, Argentina, Chile, Peru, Uruguay, Panama, Paraguay, Costa Rica, Guatemala, and the Dominican Republic.

TOTAL E-COMMERCE MARKET VALUE



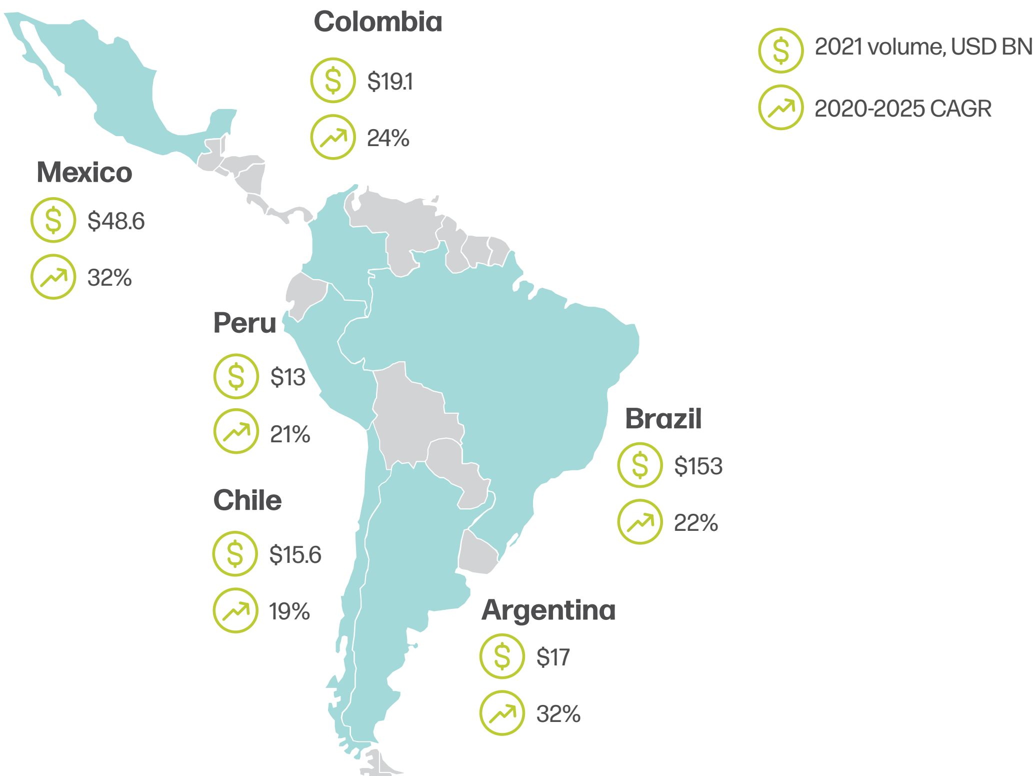


FIGURE 8. LATIN AMERICA E-COMMERCE IN 2021: THE BIG NUMBERS

E-COMMERCE: TRENDS AND OPPORTUNITIES

This uptick in e-commerce consumption varies among sectors, of course. That is to say, retailers such as supermarkets, pharmacies, and department stores were never affected by the pandemic in terms of total sales, unlike the travel industry, which plunged more than 50% in 2020. On the contrary, **retailers registered 2020 as one of their best years based on increased demand, which was sustained in 2021, growing 40%**. In 2021, the travel industry recovered, growing from 20% to 40%, and is expected to grow further in 2022 as travel resumes near-normal levels. Retail will also enjoy strong growth through 2022, triggered by growing cross-border e-commerce and continued organic growth of the domestic sector.

Marketplaces and department stores have been the biggest winners in online retail, as consumers are increasingly looking to one-stop-shop websites that can meet a variety of needs. Mercado Libre throughout the region, as well as leading local marketplaces in Brazil, reported growth in excess of 50% through 2021. Increasingly, retailers are morphing into marketplaces, incorporating third-party sellers onto their platform to take advantage of this rising trend.

The gaming industry also grew more than 30% in Latin America in 2020.

Streaming was another sector that experienced a major boost in 2020 and kept growing, but at a smaller rate, in 2021 and beyond. The gaming industry also grew more than 30% in Latin America in 2020. Newzoo's Global Games Market Report17 predicts that the Latin America gaming industry reached US$8.9 billion in 2021 representing 4% of total global games market, being the second region in growth (10% year over year [YoY]), only behind middle east and Africa that grew 19.9% YoY. Overall, digital goods and services will grow 34% annually through 2024.

Online travel services grew an impressive 47% in 2021, rebounding back from a year of near-zero growth, as many Latin Americans have resumed normal travel, especially domestically. Domestic travel has nearly recovered to 2019 levels, held back only slightly by still low international leisure travel and corporate travel. These two segments will continue to grow as countries relax their entry requirements, assuming no major relapse in COVID-19 cases and consequential shutdowns.

E-COMMERCE: MOBILE GAINING SHARE AND LEADING ONLINE PURCHASES

Consumers' preference to make online purchases via mobile instead of desktop was another noticeable behavioral shift in 2021, representing 65% of the total online shopping volume. Throughout the pandemic, even novice e-commerce shoppers used a smartphone to make their first online purchase, bolstering m-commerce (mobile e-commerce). **Eventually surpassing three times the volume of desktop-based online purchases, AMI anticipates m-commerce to grow at 31 % CAGR through 2025, climbing to 78% of total share.**

Mobile commerce is growing across Latin America but is accelerating the fastest in Argentina, where mobile uptake has been slower than in the rest of the region. **Brazil is ahead of the pack, with already 69% of purchase volume taking place over the mobile channel.** Marketing trends like "shoppertainment" and livestreaming, in which influencers promote products through livestreaming on social media, is just one trend that has pulled consumers much more powerfully toward mobile. Mobile commerce also exceeds 70% in Colombia, where broadband internet and Wi-Fi are most limited and most consumers access the internet through a mobile device. Finally, mobile commerce is most predominant in verticals with a lower average ticket, such as gaming, streaming, and certain retail categories like fashion and accessories.

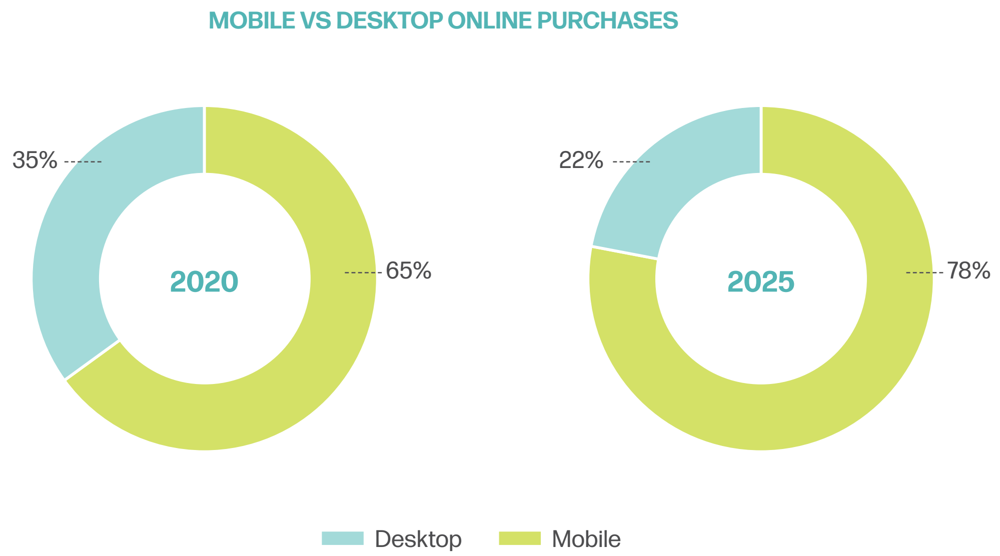


FIGURE 9. MOBILE VS. DESKTOP ONLINE PURCHASES, 2020-2025, %

E-COMMERCE: CROSS-BORDER VS. DOMESTIC E-COMMERCE

Like in other parts of the world, the pandemic heavily impacted cross-border e-commerce throughout Latin America in 2020 and 2021. With international borders closing, supply chains interrupted, international travel falling to nearly zero, and rampant currency devaluation, cross-border shopping in the region remained almost flat in comparison to 2019, hovering around US$29 billion in 2020. Meanwhile, Latin American domestic e-commerce experienced 121% growth during this time, reaching US$180 billion, due to unprecedented demand.

Latin American domestic e-commerce experienced 121% growth in 2020, reaching US$180 billion

In 2021, cross-border e-commerce began to grow again, at 32%, powered by consumer interest in international brands, the large variety of products available on the global market, and better pricing, as well as the **growth of digital goods like gaming**, whose supply from local players is limited in Latin America. The availability of international online shopping is also becoming more available, as international merchants increasingly partner with local payments processors that **enable local payment methods and provide a localized shopping experience for Latin American shoppers.**

There are variations in the use of cross-border e-commerce across the region. It has the highest volumes in Mexico and Brazil (US$11.5 billion and US$8.6 billion, respectively) — the first markets that international merchants target when expanding into the region. Both have seen the aggressive expansion of Chinese retailers and marketplaces, who have successfully managed to compete with large and entrenched local players. Mexico also enjoys a high share of cross-border (24%) due to its proximity to the United States and the ease of shipping logistics into the country from North America. Cross-border e-commerce is limited in markets like Argentina (3% of share), where capital controls make it difficult for consumers to shop on the international market, making a localized selling strategy even more important in this market.

Cross-border sales are present in every vertical, representing ~10% of retail expenditure, especially in categories like clothing, accessories, and technology, and **a higher share in digital goods**, including ride-hailing, streaming, gaming, and software, services which are most often provided by international companies.

Moving forward, AMI expects cross-border e-commerce to **grow at a rate of 34% annually, faster than domestic spend**, growing at 24%. As the barriers to international commerce deteriorate globally in the next several years, considering payments, logistics, and taxes and regulation, global shopping will be an increasingly relevant trend, especially in Latin America, where the international marketplace offers greater variety, pricing, and also prestige and allure. As a result of these forces, cross-border e-commerce represents a compelling opportunity area with volume **expected to hit US$95 billion by 2025**.

CROSS-BORDER AND DOMESTIC E-COMMERCE, USD BN

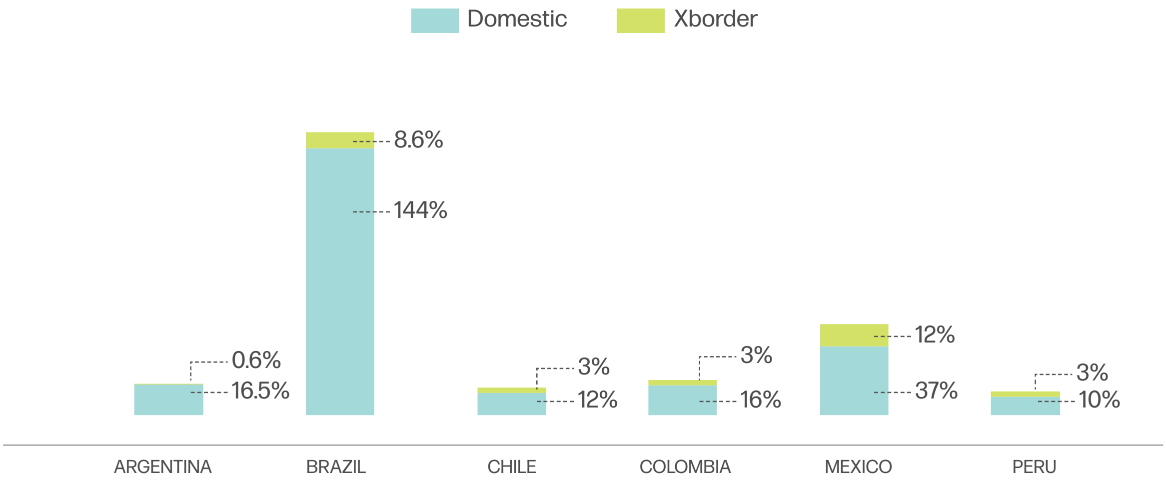


FIGURE 10. CROSS-BORDER AND DOMESTIC E-COMMERCE, USD BN

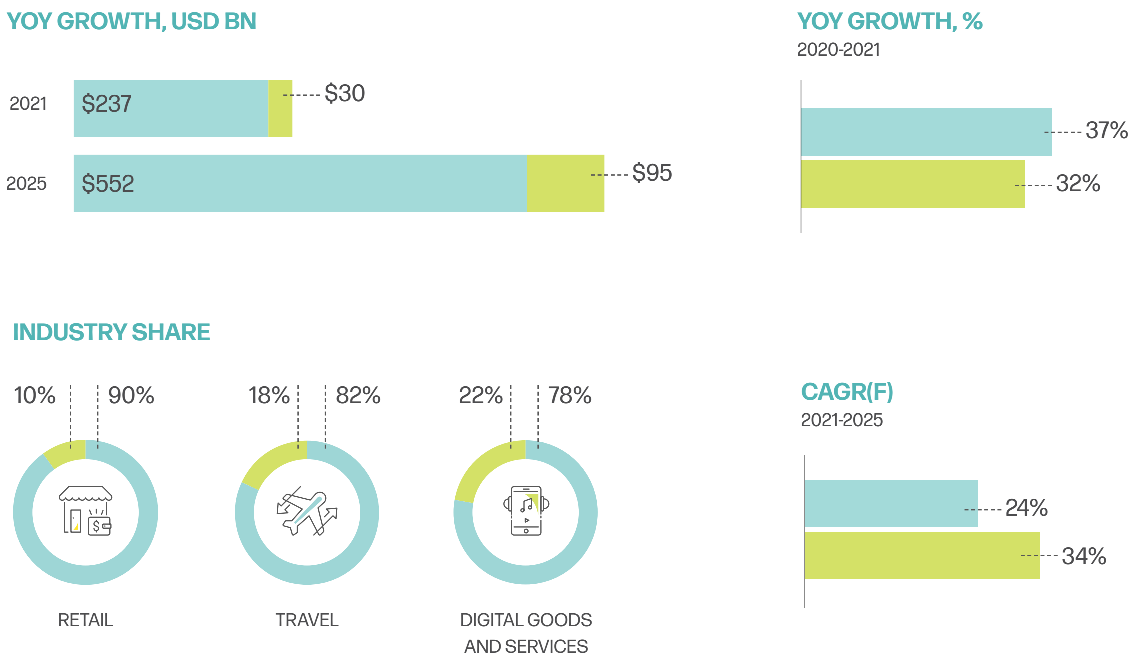


FIGURE 11. DOMESTIC VS. CROSS-BORDER E-COMMERCE, USD BN

PART 3

PAYMENT METHODS

Just like the region as a whole, the mix of payment methods for e-commerce in Latin America is diverse, with dominance of local payment methods not commonly seen on the global stage. As interviewees attested, **success in Latin America is dependent upon offering the payment methods consumers have access to and are familiar with.** Localized charge-backs improve the overall client experience with faster processes and fewer declined transactions, all of which contribute to greater sales.

While each country differs (detailed explanation below), a broad description of payment methods in the region and their respective share of total volume are as follows:

Internationally enabled credit cards

Credit cards that are enabled for international use by the issuing bank. Examples include select **Visa** and **Mastercard cards** and **American Express**.

SHARE OF LATAM E-COMMERCE, 2021	SHARE OF LATAM E-COMMERCE, 2025	CAGR, 2020-2025
22%	22%	25%

Domestic-only credit cards

Credit cards that are not enabled for international use by the issuing bank. Examples include national-only card networks like **Elo (Brazil) and Naranja (Argentina)**, as well as **Visa** and **Mastercard cards** that are restricted to domestic use only.

SHARE OF LATAM E-COMMERCE, 2021	SHARE OF LATAM E-COMMERCE, 2025	CAGR, 2020-2025
30%	24%	18%

Debit cards

Debit cards issued by a bank or fintech company. These may or may not be enabled for e-commerce or international use.

SHARE OF LATAM E-COMMERCE, 2021	**11%**	SHARE OF LATAM E-COMMERCE, 2025	**12%**	CAGR, 2020-2025	**28%**

Cash vouchers

A barcode generated at the time of purchase by the merchant or supporting bank, which the buyer takes to an affiliated physical agent to make the payment in cash. Examples include **Boleto bancário (Brazil), and Oxxo (Mexico).**

SHARE OF LATAM E-COMMERCE, 2021	**10%**	SHARE OF LATAM E-COMMERCE, 2025	**6%**	CAGR, 2020-2025	**12%**

Digital wallets

Wallets that enable shoppers to choose any affiliated payment credential. In addition, digital wallets may store their own digital balance. Examples include **PagBank, Mercado Pago, PayPal, and MACH Pay**.

SHARE OF LATAM E-COMMERCE, 2021	**11%**	SHARE OF LATAM E-COMMERCE, 2025	**10%**	CAGR, 2020-2025	**23%**

Bank transfers

Transfers between bank accounts. These may take place within a dedicated bank transfer platform, a shopper's bank mobile app, or via Web-based online banking. Examples include **Pix (Brazil), PSE (Colombia),** and direct integrations with various banks supporting e-commerce purchases.

SHARE OF LATAM E-COMMERCE, 2021	**13%**	SHARE OF LATAM E-COMMERCE, 2025	**21%**	CAGR, 2020-2025	**40%**

Buy Now Pay Later

Includes Buy Now Pay Later fintechs including **Kueski Pay, Addi, VirtusPay,** and others.

SHARE OF LATAM E-COMMERCE, 2021	**1%**	SHARE OF LATAM E-COMMERCE, 2025	**3%**	CAGR, 2020-2025	**58%**

Others

Includes prepaid cards, direct carrier billing, cash on delivery, and other miscellaneous payment methods

SHARE OF LATAM E-COMMERCE, 2021	**3%**	SHARE OF LATAM E-COMMERCE, 2025	**2%**	CAGR, 2020-2025	**15%**

As the previous data reveal, some important shifts in the overall share of e-commerce payment methods . Credit cards as a whole will remain the leading payment methods, representing 46% of volume, followed by bank transfers, which will nearly double their share in the next four years, representing 21% of volume. **This boost in bank transfers owes mostly to Pix** but also to the continued expansion of Botón PSE in Colombia and bank transfers in Chile. Taking the third spot will be debit cards, consuming 12% of volume. Some additional notable trends and observations in the payment method include the following:

Credit cards will remain the leading payment methods, representing 46% of volume

- **Domestic-only credit cards will continue to capture a relevant share.** Although there is a trend toward the internationalization of payment cards in general, in several markets like Brazil, Argentina, and Chile, domestic credit cards that can only be used in the national territory are still relevant.
- **Beyond whether a card is internationally enabled or not, attested by every merchant interviewed for this study, being able to process card transactions locally (as opposed to through an offshore acquirer) is a game changer.** Locally processed cards enjoy higher approval rates, since issuers are more likely to approve transactions processed by a well-known local acquirer and merchant. Some interviewees mentioned that when they offered local cards in markets like Chile and Colombia, the authorization rate increased by 40%.
- **Another benefit of accepting credit cards locally is being able to offer payment installments.** This is a monthly payment plan offered to the shopper at the point of sale and financed by the acquirer. **Interviewees revealed that up to 50% of e-commerce payments paid by credit cards are made with installments, depending on the segment, vertical, and purchase size.** On average, installments are used for purchases as low as US$30, signaling to international merchants the importance of localizing the payment experience to the Latin American shopper.

- **Finally, with respect to credit cards, charge-backs become less of a complex operation when they are localized.** Charge-backs are often much more demanding for cross-border transactions due to variables like foreign exchange rates and settlement time.

- **Debit is the #2 payment method across the region, but in Brazil, for example, debit cards represent only 2% of total spend,** since most banks have not enabled debit for e-commerce. This is a main driver for the expansion of Pix in Brazil. In other markets like Mexico, debit is a primary and preferred payment method for many e-shoppers, representing 26% of spend.

- **Cash-based methods, although losing share over time, remain significant, especially in Brazil and Peru,** since it is the only payment available for the truly unbanked population.

- **Digital wallets are mostly keeping pace with overall market growth, representing around 10% of total expenditure.** Some small wallets, including MACH Pay in Chile, are experiencing rapid growth as they become a mainstream payment method. Other popular wallets, like Yape in Peru and Nequi in Colombia, are significant players in in-store payments but have not yet made the leap into e-commerce.

An additional trend that deserves more detail is the expansion of bank transfers. This phenomenon is taking place most notably in Brazil, thanks to Pix, Brazil's real-time payment platform developed by the Brazilian Central Bank and launched in November 2020. **As of the end of Q4 2021, Pix had surpassed all other payment methods in number of transactions** (3.9 million transactions), facilitating over 356 billion dollars in money transfers,[17] **marking an economy-wide trend toward instant, frictionless mobile-based transfers** for peer-to-peer (P2P) payments, purchases, and beyond. Pix is already capturing more than credit cards volume when considering all merchant sales (online and offline), with a total of US$124 billion in Q1 2022, up from US$86 billion from the previous quarter.

These numbers demonstrate the importance of local payment methods for international merchants wishing to sell to the whole population of Latin American e-commerce shoppers. Pointedly, in 2021, non-card payment methods represent 38% of total e-commerce volume; and local payment methods represent 78% in e-commerce. Having a localized payment method strategy is therefore required to successfully penetrate the region. To this end, a further description of payment methods and trends at the country level follows.

17 Brazilian Central Bank

ARGENTINA

E-commerce in Argentina reached over **US$17 billion in 2021 and is expected to grow to US$51 billion in 2025, growing at a rate of 31% annually**. From this value, 98% of volume belongs to local e-commerce, which will not likely change in the short term due to Argentina's strict international remittances controls, taxes on international purchases and highly volatile national currency.

Credit cards represent 52% of all e-commerce payments in Argentina, and domestic-only cards represent 65% of that volume, since it is common practice for banks to restrict access to international use on many cards issued. Out of these credit card transactions, 26% are paid in installments. Behind credit cards follow wallets (21%) and debit cards (20%). Thanks to leadership from Mercado Pago, a regional digital wallet founded in Argentina, Argentines have become the most active users of wallets in Latin America, with this payment method growing 38% annually. This is the one market where wallet growth is aggressive, growing faster than any other payment method.

While representing only 4% of volume, cash voucher networks PagoFácil and Rapipago together have 9,000 collection locations across Argentina, making them attractive options for unbanked e-commerce shoppers. Cash-based payments are relevant in specific segments as gaming. However, interviewees

TOP 3 E-COMMERCE PAYMENTS METHODS IN ARGENTINA

52%
credit cards

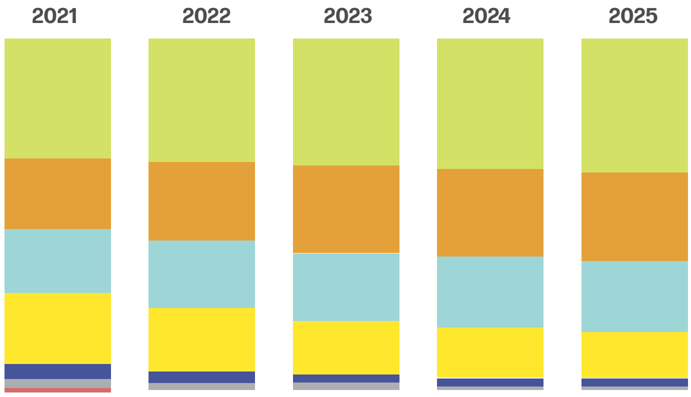
21%
wallets

20%
debit card

suggest that after the pandemic, these cash payment options did not rebound, with consumers turning to other options instead, especially wallet payments, which are also available to shoppers without a bank account. Also considering that Argentina has reached 91% banking penetration, these cash options do not hold as much importance as they once did when the unbanked population was more prevalent.

ARGENTINA BREAKDOWN OF E-COMMERCE BY PAYMENT METHOD

% OF VOLUME, 2021-2025



	2021	2022	2023	2024	2025
Domestic credit card	34%	35%	36%	37%	38%
Wallets	21%	23%	25%	26%	26%
Internationally enabled credit card	18%	19%	19%	20%	20%
Debit card	20%	18%	15%	14%	13%
Cash vouchers	4%	3%	2%	2%	2%
Other*	3%	2%	2%	1%	1%
Bank transfers	1%	0%	0%	0%	0%
Buy Now Pay Later	0%	0%	0%	0%	0%

* Includes prepaid cards, direct carrier billing, cash on delivery, and other miscellaneous payment methods

FIGURE 12. ARGENTINEAN E-COMMERCE PAYMENT METHOD BREAKDOWN, %, 2021 AND 2025(F)

BRAZIL

Brazil is Latin America's giant, representing 57% of the region's total e-commerce sales in 2021. AMI expects it to exceed US$343 billion in 2025, growing at 22% annually. As the market with relatively high credit card penetration in the region (31% of adults in 2021), credit cards are the dominant e-commerce payment method, representing 57% of total spend. However, internationally enabled credit cards represent only 18%, since some 70% of credit cards issued locally are restricted to domestic use only.

Credit cards will continue to be top payment method through 2025, partly because of the ability to enable installments, critically important since an estimated 60% of online credit card transactions are purchased using them[18] but will lose share over time. By 2025, credit cards will represent 46% of the total e-commerce market.

This is explained mainly due to an important transformation in how Brazilians pay: the ramping up of Pix. Brazil's Central Bank released the instant payment method in November 2020, and in less than one year, Pix is already capturing more than credit card volume when considering all merchant sales (online and offline), a total of US$124 billion in Q1 2022, up from US$86 billion from the previous quarter.[19] Within e-commerce in

TOP 3 E-COMMERCE PAYMENTS METHODS IN BRAZIL

56%
credit cards

15%
Pix

12%
wallets

18 E-bit, 2021

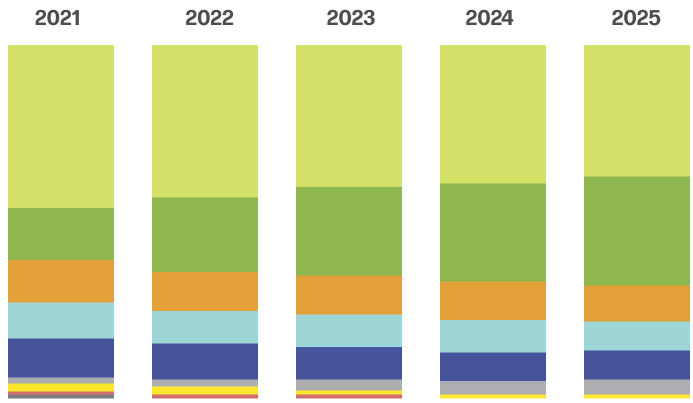
19 Brazilian Central Bank

2021, Pix managed to claim 15% of e-commerce volume, an astounding feat considering bank transfers were at 2% in 2020. **According to PagSeguro, some merchants report that Pix already represents 50% of their total e-commerce volume.** As Alain Delcourt, managing director at PagSeguro International explains, "The interesting thing about Pix is that it is a seamless payment method for those without credit card, representing an alternative to ***boletos***, bank transfers, and debit cards, whose user experience is manual and slow." Formerly, ***boletos*** were the preferred payment method to pay online for Brazilians who did not have a credit card, but this has changed rapidly, with Pix volume already exceeding ***boletos*** in e-commerce. By 2025, AMI anticipates that Pix will represent 31% of e-commerce volume, surpassing US$100 billion.

While Pix works to replace cash payments and even debit card purchases, wallets are growing at a similar rate to credit cards, around 17% annually, with **PagBank, Mercado Pago, and PayPal leading growth.**

BRAZIL BREAKDOWN OF E-COMMERCE BY PAYMENT METHOD

% OF VOLUME, 2021-2025



	2021	2022	2023	2024	2025
Domestic credit card	46%	43%	40%	39%	37%
Pix	15%	21%	25%	28%	31%
Wallets	12%	11%	11%	11%	10%
Internationally enabled credit card	10%	9%	9%	9%	8%
Cash vouchers	11%	10%	9%	8%	8%
Buy Now Pay Later	2%	2%	3%	4%	4%
Debit card	2%	2%	1%	1%	1%
Bank transfers	1%	1%	1%	0%	0%
Other*	1%	0%	0%	0%	0%

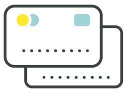
* Includes prepaid cards, direct carrier billing, cash on delivery, and other miscellaneous payment methods

FIGURE 13. BRAZILIAN E-COMMERCE PAYMENT METHOD BREAKDOWN, %, 2021 AND 2025(F)

CHILE

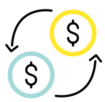
Chile is one of the highest-banked markets in Latin America, with 82% of Chileans owning a bank account and debit card. This is due in part to state-owned BancoEstado's Tarjeta RUT product, a debit card and account available to any Chilean with a national identification number. For these reasons, credit and debit cards have a high penetration of e-commerce sales (78%), while alternative payment methods have a relatively lower importance. Nearly all credit cards and debit cards are internationally enabled, making Chile attractive for international e-commerce, which represents 21% of spend. Chileans are not used to paying in installments; only 17% of the card transactions are made in installments. This can be explained by the fact that Chile is a wealthier country (highest per capita GDP); also, there are very stable economic conditions and normal inflation (unlike Brazil and Argentina), where inflation together with currency devaluation drives use of installments. Chile is also unique in its penetration of e-commerce for its small population: **Total e-commerce sales amounted to US$15.6 billion in 2021, amounting to US$812 in annual e-commerce sales per capita.** This is compared to US$717 in Brazil and US$373 in Mexico, demonstrating the massive potential of Latin America's smaller markets to catch up.

TOP 3 E-COMMERCE PAYMENTS METHODS IN CHILE



57%
credit cards

21%
debit card

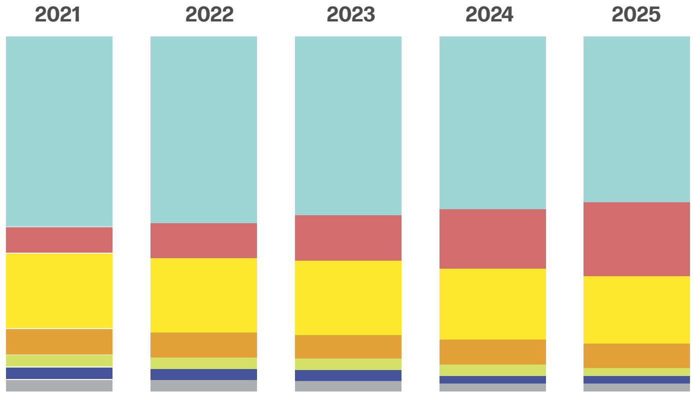


7%
bank transfers

Among local payment methods, digital wallets, including Mercado Pago and MACH, lead the charge, with 7% share. Bank transfers also represent 7% of volume in 2021, but these are growing at 55% annually as enablers like Khipu evangelize this payment method.

CHILE BREAKDOWN OF E-COMMERCE BY PAYMENT METHOD

% OF VOLUME, 2021-2025



	2021	2022	2023	2024	2025
Internationally enabled credit card	54%	53%	51%	49%	47%
Bank transfers	7%	10%	13%	17%	21%
Debit card	21%	21%	21%	20%	19%
Wallets	7%	7%	7%	7%	7%
Domestic credit card	3%	3%	3%	3%	2%
Cash vouchers	3%	3%	3%	2%	2%
Other*	3%	3%	3%	2%	2%
Buy Now Pay Later	0%	0%	0%	0%	0%

* Includes prepaid cards, direct carrier billing, cash on delivery, and other miscellaneous payment methods

FIGURE 14. CHILEAN E-COMMERCE PAYMENT METHOD BREAKDOWN, %, 2021 AND 2025(F)

COLOMBIA

Colombia is the region's third-largest e-commerce market, totaling over US$19 billion in 2021; yet it is underpenetrated, with only US$372 per capita e-commerce spend in this market of 51 million inhabitants. Growing at 24% annually, Colombia has not yet experienced the e-commerce boom of domestic e-commerce to the same level as Brazil and Mexico, creating a window of opportunity for international players who wish to explore this market full of potential.

Alternative payment methods are important in Colombia, where banking penetration is limited. While government sources purport that 90% of Colombians own a bank account, usage of credit and debit cards is low, with cash still representing more than 70% of all purchases. This high preference for cash has held back the country's digitization and created the need for local payment methods.

Cards represent 46% of total e-commerce volume, demonstrating that e-commerce is concentrated among the banked population. Of these, most are internationally enabled, **yet issuing banks may frequently decline international transactions due to perceived high risk.** Merchants relate that local processing, even for international cards, is important in this market where fraud rates are higher than the average.

Beyond cards, Colombia also has the leading share of bank transfers,

TOP 3 E-COMMERCE PAYMENTS METHODS IN COLOMBIA

40%
bank transfers

36%
credit cards

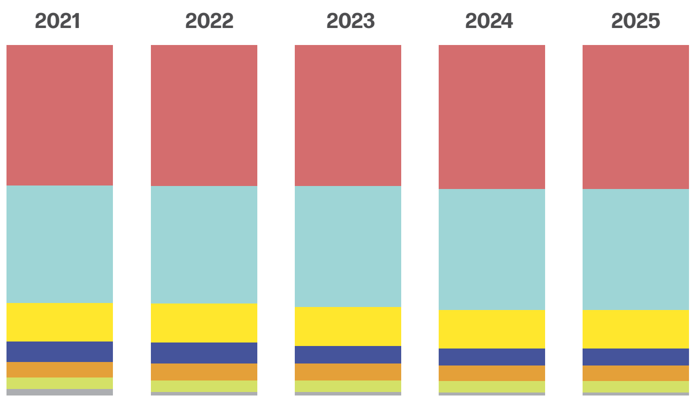
11%
debit cards

namely the Botón PSE, an online payment platform belonging to the local clearinghouse. This payment method represents 40% of e-commerce expenditure and is growing faster than the market average at 25% through 2025. In Q2 2021, it reported growth of 38% across its 14,000 integrated merchants.[20] This is impressive movement, speaking to the willingness of Colombians to transact online when they have access to a local, secure, and easy payment method.

Beyond bank transfers, local cash payment networks Efecty and Via Baloto remain useful for fully unbanked consumers, representing 6% of total volume. Cash is also an interesting payment method for the gaming industry and other segments popular among young people who may have not yet become banked and represents 6% of e-commerce volume. Digital wallets are significant, namely PayPal and Mercado Pago, taking up 5% of total share.

COLOMBIA BREAKDOWN OF E-COMMERCE BY PAYMENT METHOD

% OF VOLUME, 2021-2025



	2021	2022	2023	2024	2025
Bank transfers	40%	40%	40%	41%	41%
Internationally enabled credit card	33%	33%	34%	34%	34%
Debit card	11%	11%	11%	11%	11%
Cash vouchers	6%	6%	5%	5%	5%
Wallets	5%	5%	5%	5%	5%
Domestic credit card	3%	3%	3%	3%	3%
Other*	2%	1%	1%	1%	1%
Buy Now Pay Later	0%	0%	0%	0%	0%

* Includes prepaid cards, direct carrier billing, cash on delivery, and other miscellaneous payment methods

FIGURE 15. COLOMBIAN E-COMMERCE PAYMENT METHOD BREAKDOWN, %, 2021 AND 2025(F)

20 Botón PSE (www.pse.com.co)

MEXICO

Mexico is an exciting e-commerce market due to its robust domestic market and proximity to the United States, making it **a prime target for cross-border retail**. This market reached nearly US$50 billion in 2021 and will almost triple in size to US$146 billion by 2025. Mexico will achieve 32% annual growth through 2025, owing mostly to current e-commerce shoppers expanding their annual spend, which today sits at only US$373, relatively low for the #2 economy in the region. Historically held back by a lack of access to digital payment methods, Mexico's expansion of digital banking and online commerce during the pandemic are breaking down these barriers, encouraging consumers to spend more online.

Similar to other markets in the region, credit cards are the leading payment method in Mexico, capturing 44% of e-commerce spend in 2021, with 26% being paid in installments, which is very common, especially during holiday and promotion times. Unlike other markets, however, Mexico has a high share of debit cards, which represent 26% of the market. Through individual relationships developed with merchants and local acquirers, issuers have been opening up debit cards for

TOP 3 E-COMMERCE PAYMENTS METHODS IN MEXICO

44%
credit cards

26%
debit cards

9%
digital wallets

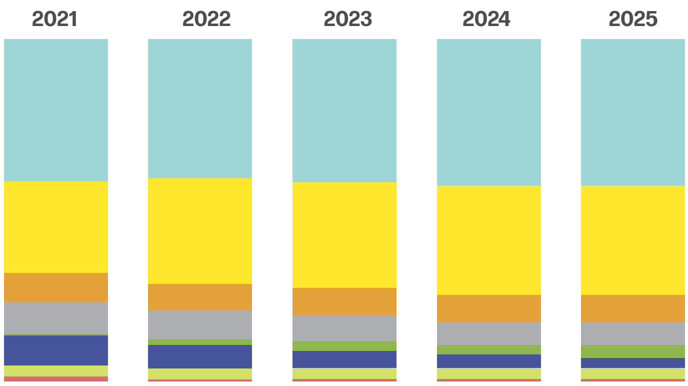
e-commerce over time, making Mexico a highly appealing market for merchants with a low average ticket (suitable for debit cards), including subscription model merchants. However, forging a relationship with a local payment processor who has a relationship with leading issuers is crucial to benefit accordingly. Debit cards will grow at a CAGR of 39% and will represent 31% of all payments by 2025. This growth will happen due to the replacement of cash-based payments, which represented 9% of payments in 2021 and will gradually lose share, decreasing to 3% by 2025.

Wallets are another important payment method in Mexico, primarily PayPal, which is often used for cross-border shopping, and Mercado Pago. Wallets are gaining speed rapidly in Mexico, growing 30% annually, as consumers increasingly adopt these secure and user-friendly payment methods.

Bank transfers have not yet made traction in e-commerce in Mexico. Launched in 2019, CoDi (Cobro Digital), Mexico's real-time payment bank transfer platform, still does not show a large adoption rate. While there are over 13 million CoDi accounts as of May 2022, only 5% of users have ever made a payment, as there is virtually zero acceptance of CoDi in the e-commerce space.

MEXICO BREAKDOWN OF E-COMMERCE BY PAYMENT METHOD

% OF VOLUME, 2021-2025



	2021	2022	2023	2024	2025
Internationally enabled credit card	41%	40%	41%	42%	42%
Debit card	26%	30%	30%	31%	31%
Wallets	9%	8%	8%	8%	8%
Other*	10%	9%	8%	7%	7%
Buy Now Pay Later	1%	2%	3%	3%	4%
Cash vouchers	9%	7%	5%	4%	3%
Domestic credit card	3%	3%	3%	3%	3%
Bank transfers	2%	1%	1%	1%	1%

* Includes prepaid cards, direct carrier billing, cash on delivery, and other miscellaneous payment methods

FIGURE 16. MEXICAN E-COMMERCE PAYMENT METHOD BREAKDOWN, %, 2021 AND 2025(F)

PERU

Peru, which has the highest share of cash usage across the economy overall (80% of face-to-face retail in 2020), this market also had the **fastest rate of e-commerce growth across our Six Markets in 2021, growing 91%,** and will grow at 21% per year through 2025. Today at a market size of US$13 billion, Peru will grow to US$28 billion by 2025, driven by growth across all industries, in particular streaming and the gig economy, restaurants, grocery, gaming, and general retail.

Peru is where credit cards have the lowest share of total e-commerce (34%), which has changed dramatically since 2019, when credit cards dominated at 64% share. During the pandemic, debit cards and alternative payment methods grew the most rapidly, as Peru welcomed millions of first-time shoppers to the arena. In particular, cash and bank transfer payment method PagoEfectivo helped drive growth, as well as a variety of wallets, led by Mercado Pago.

TOP 3 E-COMMERCE PAYMENTS METHODS IN PERU

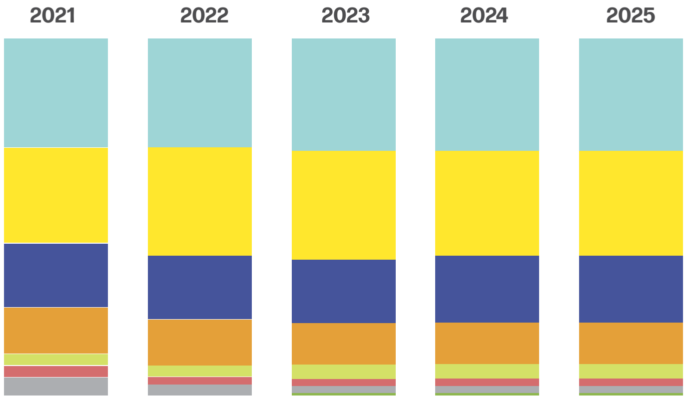
34%
credit cards

27%
debit cards

7%
Non-card payment platforms

PERU BREAKDOWN OF E-COMMERCE BY PAYMENT METHOD

% OF VOLUME, 2021-2025



	2021	2022	2023	2024	2025
Internationally enabled credit card	30,8%	31,2%	31,7%	32%	32,2%
Debit card	27%	29%	29,9%	29,8%	29,9%
Cash vouchers	18%	18%	18,5%	18,8%	19%
Wallets	13%	13%	12%	11,9%	12%
Domestic credit card	3,4%	3,5%	3,5%	3,6%	3,6%
Bank transfers	3%	2%	2%	1,9%	1,8%
Other*	5%	3%	2,3%	1,9%	1,5%
Buy Now Pay Later	0%	0%	0,1%	0,1%	0,1%

* Includes prepaid cards, direct carrier billing, cash on delivery, and other miscellaneous payment methods

FIGURE 17. PERUVIAN E-COMMERCE PAYMENT METHOD BREAKDOWN, %, 2021 AND 2025(F)

NOTE: IN PERU, "NON-CARD PAYMENT PLATFORMS" REFERS TO PAYMENT PLATFORMS THAT ENABLE CASH, BANK TRANSFER, AND WALLET PAYMENTS, SPECIFICALLY PAGOEFECTIVO AND SAFETYPAY.

In consideration of these numbers and predictions, it is apparent that offering local payment options will be crucial for merchants seeking to gain customers in Latin America. At the end of the day, local payment methods are the ones with the fastest projected growth rate and with the highest customer adhesion levels.

ADDITIONAL PAYMENTS TRENDS IN LATIN AMERICA

In addition to offering local payment methods, merchants entering the region also need to consider general trends taking place within e-commerce to optimize the shopping experience for local buyers. Some additional trends related to Latin American e-commerce that merchants should prioritize include:

Faster and monitored/ notified payments: Solutions such as Brazil's Pix and Yape in Peru, in which the customer makes an instant payment and the merchant/provider can instantly ensure the payment was made, are increasingly common. These transactions are appealing to merchants because of their low cost relative to cards, their speed (merchants receive funds in their merchant account) in real time, and the zero risk of charge-backs. However, one risk of these platforms is that there are unclear rules outlining the liability in case of fraud and undefined protocols in the case of returns and refunds. As instant bank transfer payments grow for purchases, these rules are likely to be defined over time in each market.

Virtual cards: Interviewees emphasized that nowadays consumers are more attentive to security and thus avoid sharing their card details for one-time online purchases. In this context, merchants are seeing an increase in the use of virtual cards for e-commerce purchases, for either single or recurrent purchases. This practice can be expanded to subscription payments by generating a dedicated card used to pay for Netflix, another for Spotify, and so on.

Use of alternative payment methods for subscriptions: Until now, in most cases, credit cards, and to a limited degree debit cards, are the only payment methods available for use for subscription-based services (such as Netflix and Spotify). This presents a challenge for merchants who want to expand their reach to the underbanked and those who may not wish to sign up for a monthly recurring payment. To solve this, some merchants are experimenting with alternative payment methods to enable monthly subscriptions, such as prepaid packages paid for using boleto, another cash voucher, or gift card. Some interviewed merchants mentioned soon enabling Pix for automatic recurring transactions, which is a functionality soon to be enabled by the Central Bank. Increasingly, subscription merchants will have more options to offer their customers, which may require an adjustment to a prepaid plan or integration with non-card payment methods.

Cryptocurrency: Interviewees highlighted the increasing interest from consumers to pay in cryptocurrency. An AMI survey of 520 consumers conducted in April 2022 found that 36% of Latin American consumers had already purchased cryptocurrency, and another 36% were interested in doing so,[21] with investments being the main use case up to now. Markets such as Argentina and Venezuela, which suffer from volatile currency and strict rules to operate in hard currency, view crypto as a viable alternative to surpass challenges like inflation and as a way to access foreign currency needed to make international transactions. So far, merchant integrations with crypto wallets are limited in Latin America, making the use of crypto to fund a purchase challenging; but we expect this capability to become increasingly available as the crypto ecosystem becomes more developed and especially as major local brands like Tiendas Elektra in Mexico and delivery platform Rappi (pilot program) accepting cryptocurrency.

Buy Now Pay Later: While still in its very early days, alternative lenders are starting to offer credit solutions directly at the POS. Currently enabled by local players like Mercado Libre and Addi, as well as global entrants such as Zip, this payment scheme allows non-credit card holders to access financing options when making online purchases. Considering the popularity of installment payments in e-commerce, and the 197 million banked Latin Americans who do not own a credit card, Buy Now Pay Later has promised to disrupt current e-commerce payment models.

Final thought on payments: International players are recommended to closely monitor new or alternative payment systems that are helping to speed up payments in local markets, to best serve local customers, and to compete with domestic competitors. Because the ecosystem changes rapidly and due to the differences between markets, it is useful to rely on a local payment processor who can provide insight into the changing payments landscape in each market and ensure merchants are aligning themselves with consumer expectations.

21 N=400 consumers located in Argentina, Brazil, Mexico, and Peru. Results are statistically significant with a 95% confidence interval.

PAYMENT ORCHESTRATION AND MERCHANT STRATEGY IN LATIN AMERICA

Considering these exciting trends, more international merchants than ever are looking into Latin America as part of their international expansion. To successfully tap into the region, international players have various options to structure their expansion efforts, which we describe below:

Acting as an international entity

The first option is to remain as an international entity, without developing local inroads into the market. This structure allows the international merchant to follow their normal operational protocol but limits them to only offering international payment methods, namely internationally enabled credit cards, which most of the Latin American population still does not have.

This option is the simplest and is recommended for merchants who want to take a casual approach to Latin America. It requires no localization in terms of website language, payment methods, or local integrations and will capture expenditure from Latin America only sporadically.

This is not the recommended approach for merchants who specifically want to generate growth from Latin America. Confirmed by interviewees who only offer international credit cards as a payment option for their Latin American clients, this option limits the addressable market size merchants can tap into (since it denies access to local payment methods) and also suppresses authorization rates. Moreover, poor consumer experience, resulting from card declines and difficulty navigating a merchant's website due to lack of localization, can impact people's decision to buy again and recommend the store.

Partnering with a local payment processor

Another structure for international expansion involves partnering with a local payment provider, such as PagSeguro and others, which offers connections to local card acquirers and alternative payment methods. This offers merchants the ability to accept dozens of payment methods across the region with one single integration. In such a case, the international merchant looks and feels local to Latin American shoppers across multiple countries while never having to open a local entity in any market in the region.

Reiterated by every interviewee, **with local partners international players can gain a local vision, which is imperative for success in the region.** For many prominent international companies, expanding into Latin America was only made possible by partnering with local and regional experts, hence the successful landing of international marketplace giants such as AliExpress, Amazon, Wish, Shein, and Shopee. Other examples include giants in the digital goods vertical such as TikTok (social media app), Disney+, HBO Max (streaming), Garena, Valve, Riot Games (gaming), and Bytedane (social app/ gaming). These companies started in the region with the support of local providers of payment and e-commerce capabilities for global companies to operate as local as possible, such as PagSeguro.

This model is ideal for merchants who want to scale quickly across Latin America and who do not have the need or desire to open local entities in the region.

Establishing themselves as a local entity in the market

To do so is an important decision and a large investment of time, money, and human resources. Opening a local entity requires establishing a physical address, hiring employees, acquiring local expertise, obtaining the necessary licenses, and paying local taxes. This is a required step for merchants who wish to store inventory locally, have local employees, or who, for tax or legal purposes, deem it beneficial to do so.

For many merchants, this is often an extremely costly and time-consuming process, one that takes several years, depending on the market. It should only be considered for those who have a long-term vision of developing the business within a particular country. Merchants can have a large and prosperous e-commerce business across Latin America using Option 2 without ever needing to have a local entity in the region.

Keeping this in mind, it is common for international players to operate with a mixed model, opening a local entity in larger markets like Brazil and Mexico, or even Colombia due to its strategic location in the Andean region. From there, they collaborate with regional payment processors to accept payment in the smaller markets, to allow for a truly regional presence.

No matter which route an international player takes, the consensus is that offering local payment methods in local currency and having local expertise is paramount. Almost all interviewees mentioned they are working in the same direction to offer a truly local experience for their consumers.

PART 4

REGULATORY LANDSCAPE

Regulation and taxes are a complex part of operating in Latin America. Markets such as Argentina and Brazil in particular present an extra challenge for international merchants due to the complexity and high cost of taxes and fees. Making matters worse, the tax regime is not always clear, providing room for varied interpretations, even among local experts.

As the digital economy has ramped up, governments across the region have begun implementing laws regarding value-added taxes (VAT) on digital services such as streaming and gaming, offered by international merchants. However, these rules are complicated and often difficult to understand how much merchants are required to pay, if they are required to pay at all, or if their payment provider or digital marketplace withholds these taxes. Getting clarity on this as the rules are constantly changing is a key challenge to operating in the region.

Getting clarity as the rules are constantly changing is a key challenge to operating in Latam

In addition to VAT, foreign exchange remittances are often regulated in Latin American markets, which brings additional challenges for international players. Sending dollar payments from Argentina to another country, for example, is a highly controlled transaction.

To showcase the extent of different taxes and regulations applicable for each of the Six Markets, this section explains modern legislation with respect to taxing digital commerce created over the past years in these economies. Its purpose is to discuss their implications and impact on merchants operating in the following countries, with a focus on taxes applied to digital services.

Argentina

According to many, Argentina is the most complicated market in Latin America for international merchants to enter due to heavy fiscal and regulatory guidelines. For starters, the VAT legislation (Resolución General 4240/2018 AFIP, 11/05/2018) establishes a standard fee of 21% for listed merchants by the Argentine government, in addition to an 8% PAIS tax (Resolución General 4659/2020 AFIP, 07/01/2020).

Meanwhile, international merchants do not pay VAT but are expected to pay a 30% PAIS tax, which was originally legislated to conserve U.S. dollar reserves in the country. Due to this, anything going through the foreign exchange market via consumer or payment intermediaries is directly taxed by the banking or credit card entity. For merchants who work with a local payment processor, all of these necessary tax payments are retained and paid by the payment processors, obviating the need for the merchant to get involved. The merchant then receives the net amount once taxes have been deducted.

On top of these, there is also the non-aggregate **income tax** *("Ganancias")* assessed to merchants (Resolución General 4815/2020 AFIP, 15/09/2020) that adds an extra 35% applied to the same operations as the PAIS tax, with the same collection and withholding requirements.

Lastly, Argentina's Central Bank (BCRA) enacted a quota for individuals to purchase foreign currency, in another bid to protect the country's dollar reserves, with a **US$200-per-month limitation**. Such a low limit can affect e-purchasing behavior. The US$200 limit forces consumers to choose carefully what they want to buy, which can impact their willingness to sign up for subscriptions. Most Argentines prefer not to block a limit per month with a subscription and would rather have the option to define how to allocate their limit month by month.

In general, high taxes, weak and volatile currency, high inflation, governmental instability, and limits on international e-commerce purchases to conserve national reserves makes Argentina one of the most challenging Latin American markets to enter.

Brazil

Foreign companies eyeing Brazil must be aware of IOF, a tax on financial operations, that is of 0.38% for international remittances. This tax is applicable to all purchases made by Brazilians from a foreign company. It's mandatory to withhold the IOF and this is done by the local payment provider.

Imported physical goods worth over US$50 can also be subject to a 60% import tax added to the purchase price, along with an additional state tax at times. The reality of the situation, though, is that this tax is not always guaranteed, meaning it is unpredictable.

This happens when goods are shipped and the customer has the responsibility to pay the duties "delivery duty unpaid" (DDU). The customer is notified when the Brazilian customs request the payment, which can delay the delivery and create a friction in the process, as mentioned earlier. Although most shipments follow the DDU model, there is another option in which the seller pays the duties in advance called "delivery duty paid" (DDP). Sellers can collect the amount paid during the checkout process. This option avoids delays with the customs but incorporates the tax in the purchase since the beginning.

Local partners guarantee the proper knowledge and offer the best options for international merchants expanding into Brazil

As mentioned by an international retailer interviewed for this study, consumers sometimes receive a custom notification to pay this additional tax. Although merchants tend to mention this on their websites and apps, this notification process can create friction with the client and cause delays on product delivery.

Certain challenges in Brazil include not only hefty taxes and fees but also high levels of complexity. The World Bank confirmed this perception in its 2019 Ease of Doing Business Index[22] when it ranked Brazil 124 out of 190 markets. This reiterates the importance of having local partners to guarantee the proper knowledge and offer the best options for international merchants expanding into Brazil.

22 The Ease of Doing Business Index ranks countries against each other based on how the regulatory environment is conducive to business. Economies with a high rank (1 to 20) have simpler and more friendly regulations for businesses.

Chile

Today, Chile has the **VAT Law** (Law N.825) influencing how international players operate in the country. As of June 2020, Chile introduced a 19% VAT rate for digital services. More recently was the **Tax Modernization Law** (Law N.21,210) that assigned a tax burden on the delivery of digital entertaining content, software, storage, platforms, and computing software, as well as advertising.

VAT payment is a responsibility of the merchant that must make a register within the Chilean tax authority. The tax payment, though, can be via a reverse charge in case the beneficiary of the service (customer) is a VAT registrant, or if the beneficiary of the service is not registered, in case of digital services, the merchant/provider has to make a register to effect the payment.

Colombia

As of January 1, 2019 in Colombia, the VAT rate is **19%.** One of the most influential legislations shaping taxes and regulatory for international merchants is **Decreto 2179, 2018**. According to this rule, merchants should declare and pay the VAT accrued as of July 1, 2018, by January 15, 2019. The resolution requires foreign services providers to file VAT returns every two months on specific dates set by the government.

Having a local tax consultant can help and provide the appropriate guidance for international players

This is to say that merchants are responsible for the VAT, but this can be paid in two ways: (i) If the payment is made with credit or debit cards and the merchant is registered in Colombian tax authority, VAT will be withheld by credit card issuers; (ii) if payment is made in cash, payment providers should withhold and pay the tax.

Since merchants are responsible for the tax payment, and the legislation can become unclear depending on the payment method, or local merchant situation with authorities, it is crucial to understand and properly pay the applicable taxes. That being said, having a local tax consultant can help and provide the appropriate guidance for international players willing to operate in Colombia.

Mexico

In today's regulatory landscape in Mexico, there is a **16% VAT** for digital service providers as of June 1, 2020, for both B2B and B2C (business to consumer), including download and streaming media, music, or films; gaming; apps; e-learning (automated); online societies or clubs; and dating sites. Electronic books and online news are exempt. Merchants are responsible for the 16% VAT payment and, if they fail to pay, could be blocked from public networks.

Recently there were some legislative changes to VAT and **ISR** (income tax) in Mexico.

The tax reform would require foreign digital service providers to register with the Mexican tax authorities and obtain a tax identification number for VAT purposes. They also would have to (i) appoint a tax representative in Mexico; (ii) provide a Mexican tax address, and (iii) collect the VAT on the price of the digital service.

For foreign digital services, this amendment created two categories with different collection, reporting, and VAT payment policies. For **Category 1**, this includes companies providing downloads or access to images, movies, videos, music, games, and other multimedia content. **Category 2**, on the other hand, are those that perform intermediation services between potential sellers/buyers of products/services.

Providers of Category 2 intermediation services would have to issue formal electronic invoices related to the VAT withholding on the sales of goods and services; they also would have additional reporting and registration obligations.

Peru

The standard VAT rate in Peru is **18%** (16% of VAT plus 2% municipal promotion tax), but digital services are technically not included. Although the Peruvian Tax Administration does not have the legislative framework to withhold VAT on digital operations, it is important to keep in mind that the country has already enacted a 30% withholding tax on digital services provided by nonresidents to Peruvians. Digital services are defined in **Report No. 044-2014-SUNAT/4B0000**. Since the regulation is not well defined, having a local partner to support international merchants becomes a competitive advantage for those operating in this market. Peru does not have a structure defined to control this tax retention, also financial agents such as issues, can not take the responsibility to withheld this tax, this means it is recommended that international players consult with a local tax specialist to proper understand and jump into Peruvian market.

Digital services like technical assistance services used in Peru is another important topic for international players. Income derived from providing digital services via internet or any other Web application when said services are economically used or consumed in Peru were incorporated into the 2003 Peruvian Income Tax Law with **Decree No. 945** , being levied with a 30% withholding tax.

Then there is **Section 4-A (b) of the Peruvian Income Tax Law**, where revenue earned from the sale of digital services becomes taxable income. According to Peruvian law, digital services include any services provided via the internet like hosting, data warehousing, application hosting, website hosting, online consulting services, and the like.

Described earlier, every one of the Six Markets implements different regulations, therefore making it more demanding for foreign companies to navigate all of them. Interviewees mentioned that understanding how to operate in each market is one of the largest obstacles for selling in Latin America, thus being a key factor in deciding which markets to join.

So, how do foreign merchants deal with these challenges? Merchants currently operating in the region guarantee that the wisest solution is to collaborate with local partners to assist in navigating each market. **Due to the local expertise, a local partner, as a local payment provider, can support by disclosing new regulations or changes in regulations that can affect merchants' activities; and consulting with a local tax specialist will help find the best solution for each merchant**. Any international expansion plan is more likely to succeed this way. If an international player prefers to do it alone, having a local expert on the team would still be fundamental.

PART 5

SUMMARY RECOMMENDATIONS

To excel in Latin America and take advantage of historic growth, international players need to make international purchases look like and feel like the local purchase experience. In order to guarantee that, they must:

Gain local expertise: Any company aspiring to expand into Latin America must develop both local knowledge and local vision. Rather than maintaining a local office or hiring local employees, this can easily be achieved by partnering with a payment processor providing location-specific support, such as risk analysis solutions based on local consumer behavior, local data sources, and machine learning, and local customer services providing local support for customers during the payment process. This strategy also enables international merchants to test out different solutions, such as varying mixes of payment methods, to deliver the highest-quality service to their clients.

Offer local payment methods: Latin Americans need to be able to pay as if they were purchasing locally.

Offer more than one payment method: Interviewees recommend that international players provide at least three payment methods in order to access more of the population.

Have websites and apps in the local language: It is imperative to provide product/service descriptions in the local language, assist the population in understanding what they are buying, and master marketing and promotions, as well as conduct research to find what consumers need and want.

Ensure transparency: Show the final price in the local currency that clients will use to pay and let them know if any additional taxes may occur (customs, for example).

Guarantee excellence in customer service and communication channels: Offer reliable customer service channels in the local language to support shoppers during the purchase journey, offering timely and efficient support if requested. Similarly, take this opportunity to get to know clients and their expectations.

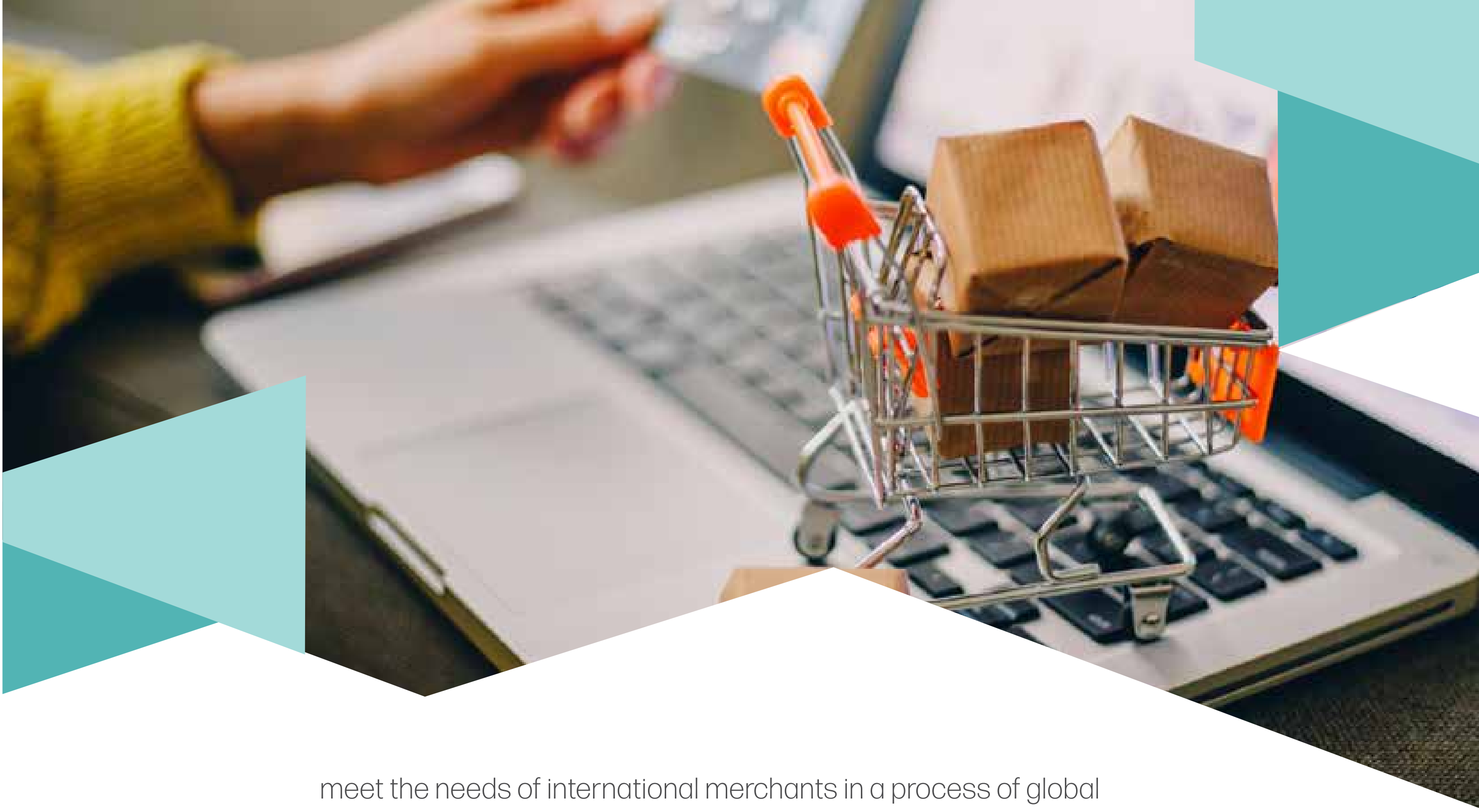
Value the quality of delivery: For retailers, it is imperative to deliver not only on time but also correctly, with respect to the correct product and quantity. After all, a bad experience can prevent consumers from repurchasing. Offering a package tracking option that allows customers to monitor the delivery is well perceived by Latin American customers.

FINAL THOUGHTS

Even as Latin America continues to grow, **the region is still full of untapped potential**. Brazil is a massive, US$203 billion opportunity, with a sophisticated population eager to experiment with international brands and physical and digital products. Mexico, Colombia, and Peru all represent underdeveloped markets in which consumers are actively becoming digitized, willing to purchase more often and from a greater variety of online merchants.

With a highly banked population, Chile may be one of the easiest markets to penetrate. And Argentina, despite its macroeconomic difficulties, is one of the fastest-growing markets in the region, albeit presently for domestic e-commerce. Following major e-commerce growth spurts during the pandemic, both the data and local interviewees agree there is no going back to pre-pandemic levels, meaning more Latin Americans will be using e-commerce channels from here on out.

At the same time, tax and regulatory complications, a fragmented payment landscape, and linguistic and cultural barriers deter some merchants from investing in this region. This need not be the case. Through relationships with local experts designed to



meet the needs of international merchants in a process of global expansion, **merchants can access 100% of the Latin American addressable market without ever setting up a local entity**.

And while cross-border e-commerce took a hard hit during the pandemic, international merchants have important advantages over local ones that give them a competitive edge: cheaper prices, greater variety, and the prestige that comes from being international. In addition, global merchants often have more experience, are more closely aligned with global best practices, and have more secure platforms with a better user experience and overall superior shopping experience compared to some local players. For these reasons, international merchants should rest assured that with the right strategy, they can and will successfully compete in this region.

With the right strategy, international merchants can and will successfully compete in Latam

Exceeding over US$660 billion in market size by 2025, Latin America will only get easier to work in, as the region becomes more digitized, more banked, and more **globally connected**. It will also get increasingly competitive. For these reasons, merchants should also consider opportunities outside of the largest markets, working with a local partner that can guarantee true scale across the region, and provide first mover access to developing economies. Beyond the top Six Markets, Ecuador, Guatemala, Costa Rica, Panama, Paraguay, and the Dominican Republic represent emerging growth opportunities that merchants should also consider as they expand in the region. Latin America offers nearly unlimited potential that, with the right combination of payment methods and localization, can help merchants enjoy success for years to come.

DATA APPENDIX

LATAM OVERVIEW

ARGENTINA

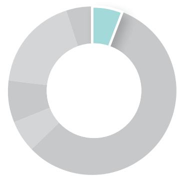
INDICATORS

46
Millions
of people
(2021 EIU)

9%
of the Top 6 Market

$17 BN
E-commerce
Volume
(USD BN)

6%
of the Top 6 Market



40
Millions of
Internet users
(2021 EIU)

88%
Internet
penetration
(2021 % OF TOTAL POPULATION, EIU)

72%
Smartphone
penetration
(2021 % OF TOTAL POPULATION, GSMA)

72%
E-commerce
penetration
(2021 % OF POPULATION AGED 15+ Y/O THAT HAS USED E-COMMERCE IN THE PAST YEAR)

25
Millions of
E-shoppers
(BASED ON LOCAL SOURCES, 2020 AND 2021 AMI CONSUMER SURVEY AND AMI ANALYSIS)

PAYMENT METHODS

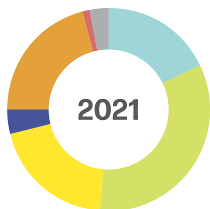
91%
Bank account
penetration
(2021, % OF ADULT POPULATION)

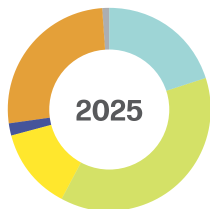
14%
Credit card penetration
(2021, % OF ADULT POPULATION)

26%
Credit card volume
paid in installments

BREAKDOWN OF E-COMMERCE BY PAYMENT METHOD

% OF VOLUME, 2021-2025





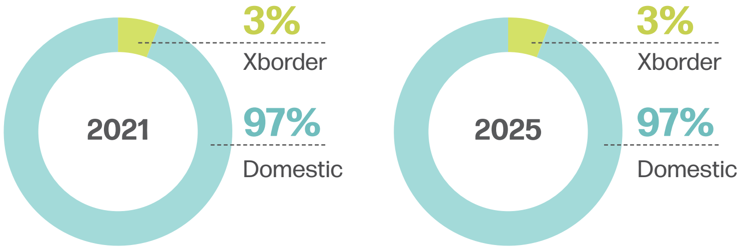
	2021	2025
Internationally enabled credit card	18%	20%
Domestic credit card	34%	38%
Debit card	20%	13%
Cash vouchers	4%	2%
Wallets	21%	26%
Bank transfers	1%	0%
Buy Now Pay Later	0%	0%
Other*	3%	1%

* Includes prepaid cards, direct carrier billing, cash on delivery, and other miscellaneous payment methods

E-COMMERCE MARKET

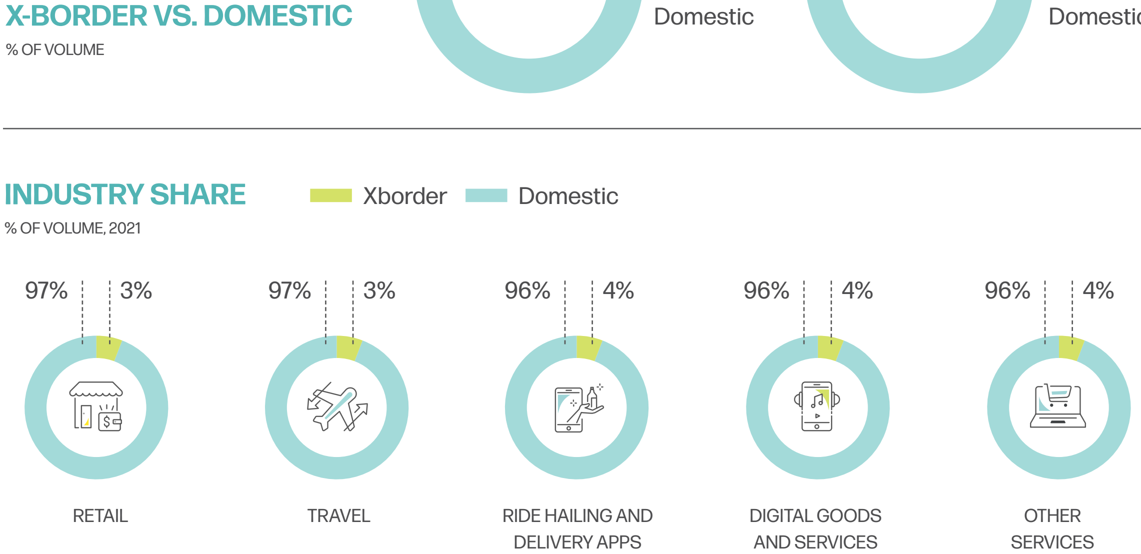
SHARE OF X-BORDER VS. DOMESTIC

% OF VOLUME



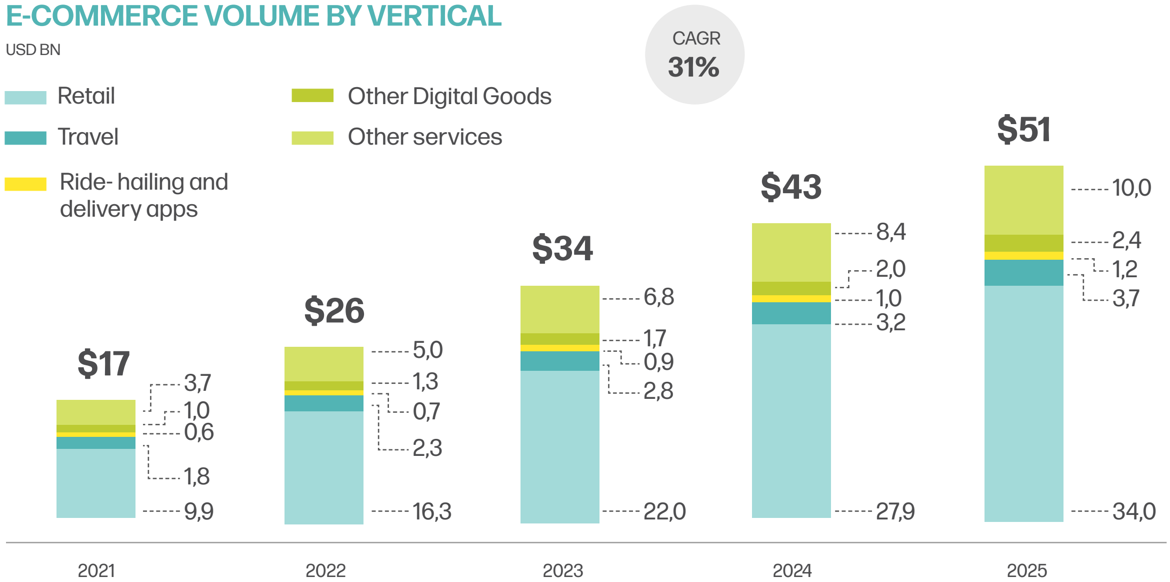
INDUSTRY SHARE

% OF VOLUME, 2021

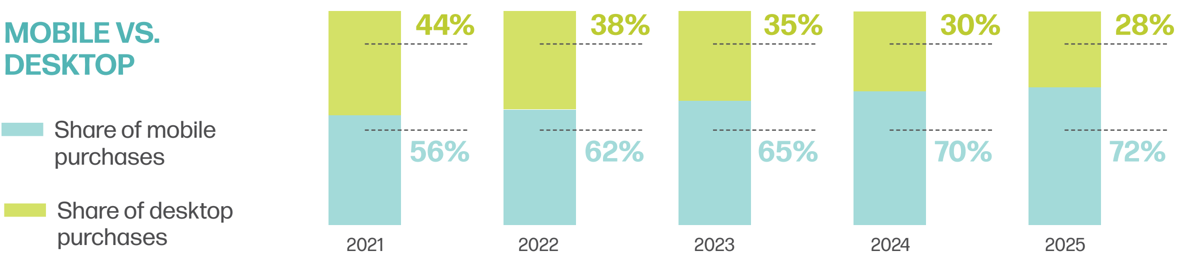


E-COMMERCE VOLUME BY VERTICAL

USD BN



MOBILE VS. DESKTOP



BRAZIL

INDICATORS

213
Millions of people
(2021 EIU)

43%
of the Top 6 Market

$153 BN
E-commerce Volume
(USD BN)

57%
of the Top 6 Market

171
Millions of Internet users
(2021 EIU)

80%
Internet penetration
(2021 % OF TOTAL POPULATION, EIU)

87%
Smartphone penetration
(2021 % OF TOTAL POPULATION, GSMA)

75%
E-commerce penetration
(2021 % OF POPULATION AGED 15+ Y/O THAT HAS USED E-COMMERCE IN THE PAST YEAR)

128
Millions of E-shoppers
(BASED ON LOCAL SOURCES, 2020 AND 2021 AMI CONSUMER SURVEY AND AMI ANALYSIS)

PAYMENT METHODS

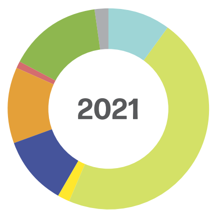
96%
Bank account penetration
(2021, % OF ADULT POPULATION)

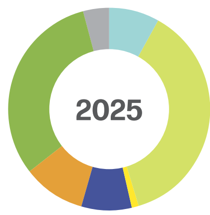
31%
Credit card penetration
(2021, % OF ADULT POPULATION)

46%
Credit card volume paid in installments

BREAKDOWN OF E-COMMERCE BY PAYMENT METHOD

% OF VOLUME, 2021-2025





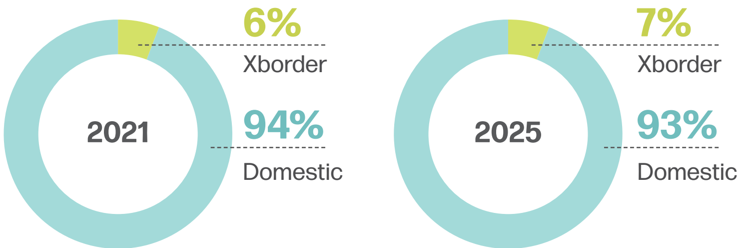
	2021	2025
Internationally enabled credit card	10%	8%
Domestic credit card	46%	37%
Debit card	2%	1%
Cash vouchers	11%	8%
Wallets	12%	10%
Bank transfers	1%	0%
Pix	15%	31%
Buy Now Pay Later	2%	4%
Other*	1%	0%

* Includes prepaid cards, direct carrier billing, cash on delivery, and other miscellaneous payment methods

E-COMMERCE MARKET

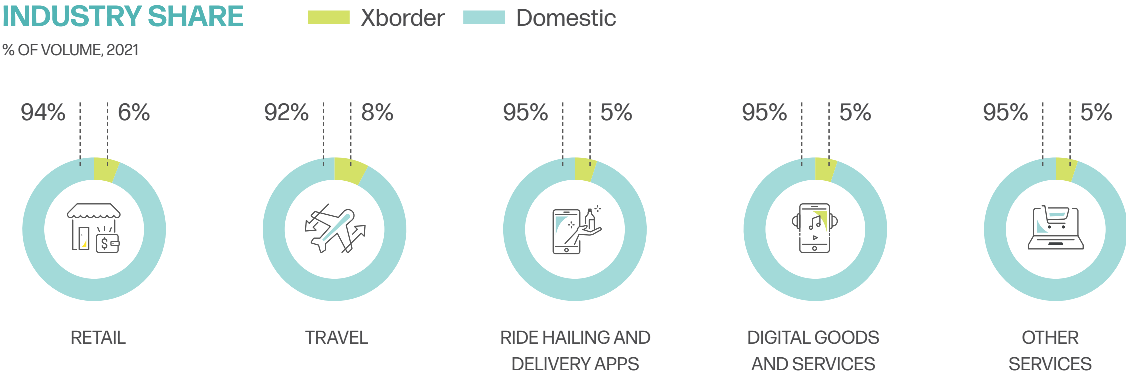
SHARE OF X-BORDER VS. DOMESTIC

% OF VOLUME



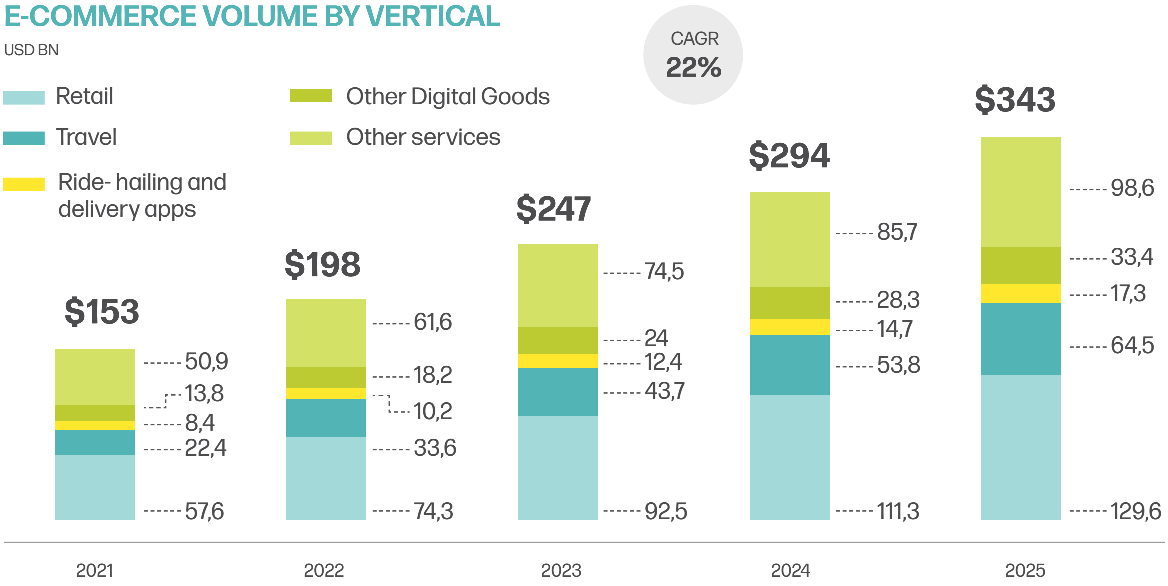
INDUSTRY SHARE

% OF VOLUME, 2021

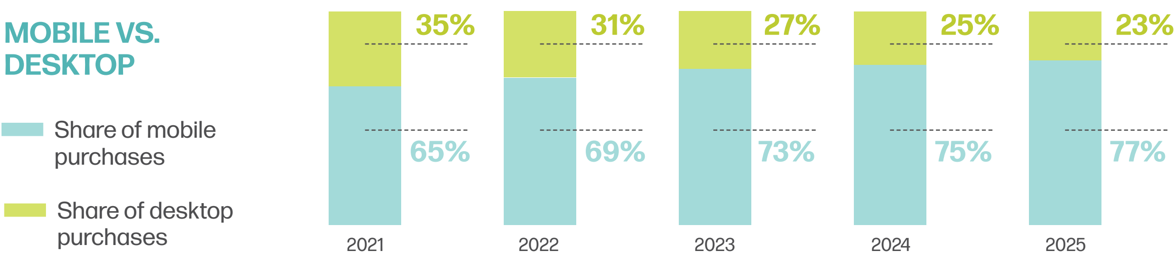


E-COMMERCE VOLUME BY VERTICAL

USD BN



MOBILE VS. DESKTOP

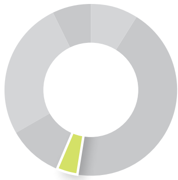


CHILE

INDICATORS

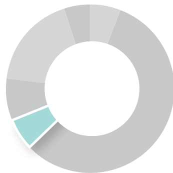
19
Millions
of people
(2021 EIU)

4%
of the Top 6 Market



$16 BN
E-commerce
Volume
(USD BN)

6%
of the Top 6 Market



16
Millions of
Internet users
(2021 EIU)

83%
Internet
penetration
(2021 % OF TOTAL POPULATION, EIU)

72%
Smartphone
penetration
(2021 % OF TOTAL POPULATION, GSMA)

65%
E-commerce
penetration
(2021 % OF POPULATION AGED 15+ Y/O THAT HAS USED E-COMMERCE IN THE PAST YEAR)

10
Millions of
E-shoppers
(BASED ON LOCAL SOURCES, 2020 AND 2021 AMI CONSUMER SURVEY AND AMI ANALYSIS)

PAYMENT METHODS

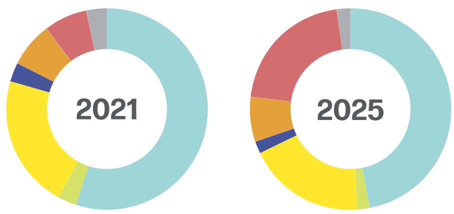
82%
Bank account
penetration
(2021, % OF ADULT POPULATION)

36%
Credit card penetration
(2021, % OF ADULT POPULATION)

17%
Credit card volume
paid in installments

BREAKDOWN OF E-COMMERCE BY PAYMENT METHOD

% OF VOLUME, 2021-2025



	2021	2025
Internationally enabled credit card	54%	47%
Domestic credit card	3%	2%
Debit card	21%	19%
Cash vouchers	3%	2%
Wallets	7%	7%
Bank transfers	7%	21%
Buy Now Pay Later	0%	0%
Other*	3%	2%

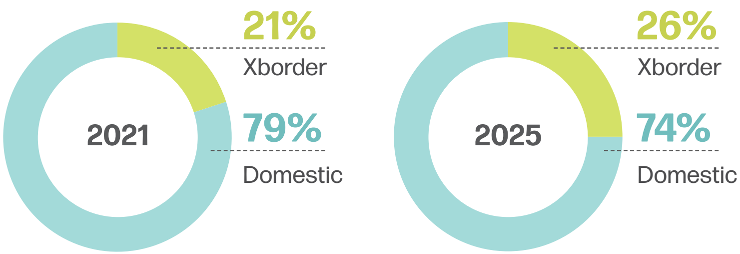
* Includes prepaid cards, direct carrier billing, cash on delivery, and other miscellaneous payment methods

CHILE

E-COMMERCE MARKET

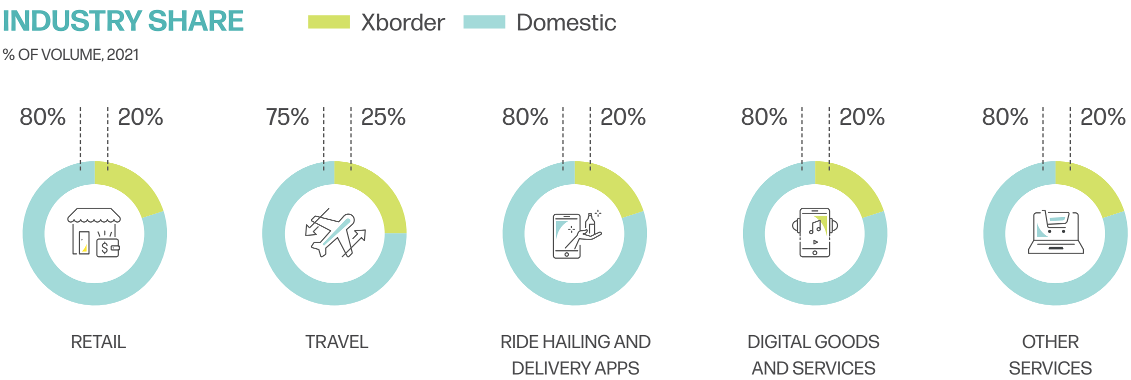
SHARE OF X-BORDER VS. DOMESTIC

% OF VOLUME



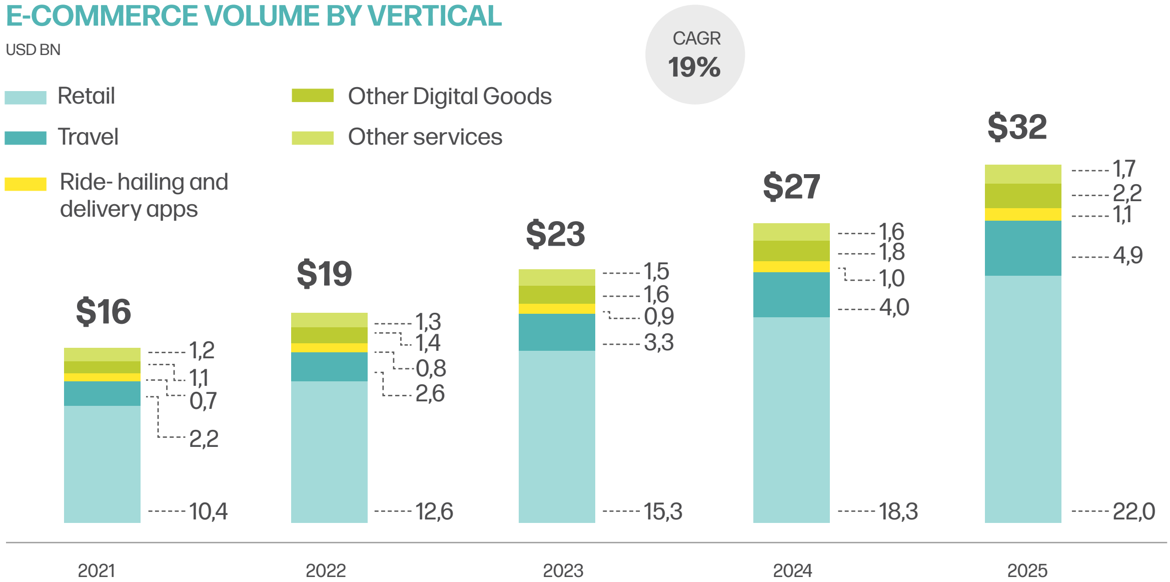
INDUSTRY SHARE

% OF VOLUME, 2021



E-COMMERCE VOLUME BY VERTICAL

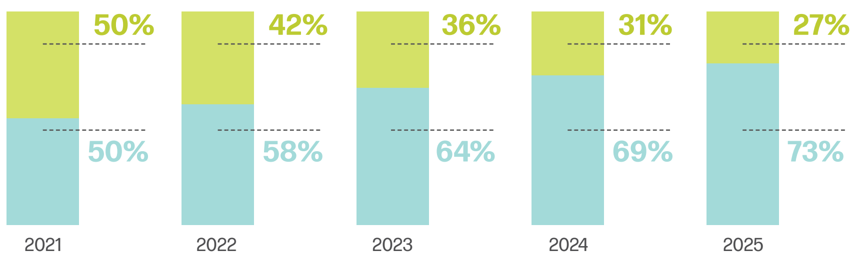
USD BN



MOBILE VS. DESKTOP

Share of mobile purchases

Share of desktop purchases



COLOMBIA

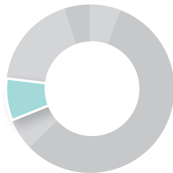
INDICATORS

51
Millions
of people
(2021 EIU)

10%
of the Top 6 Market

$21 BN
E-commerce
Volume
(USD BN)

8%
of the Top 6 Market



33
Millions of
Internet users
(2021 EIU)

65%
Internet
penetration
(2021 % OF TOTAL POPULATION, EIU)

65%
Smartphone
penetration
(2021 % OF TOTAL POPULATION, GSMA)

51%
E-commerce
penetration
(2021 % OF POPULATION AGED 15+ Y/O THAT HAS USED E-COMMERCE IN THE PAST YEAR)

20
Millions of
E-shoppers
(BASED ON LOCAL SOURCES, 2020 AND 2021 AMI CONSUMER SURVEY AND AMI ANALYSIS)

PAYMENT METHODS

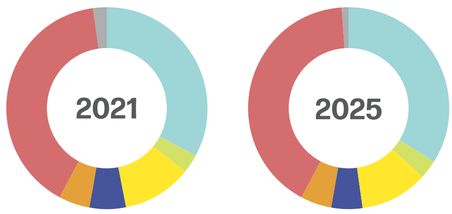
90%
Bank account
penetration
(2021, % OF ADULT POPULATION)

16%
Credit card penetration
(2021, % OF ADULT POPULATION)

25%
Credit card volume
paid in installments

BREAKDOWN OF E-COMMERCE BY PAYMENT METHOD

% OF VOLUME, 2021-2025



	2021	2025
Internationally enabled credit card	33%	34%
Domestic credit card	3%	3%
Debit card	11%	11%
Cash vouchers	6%	5%
Wallets	5%	5%
Bank transfers	40%	41%
Buy Now Pay Later	0%	0%
Other*	2%	1%

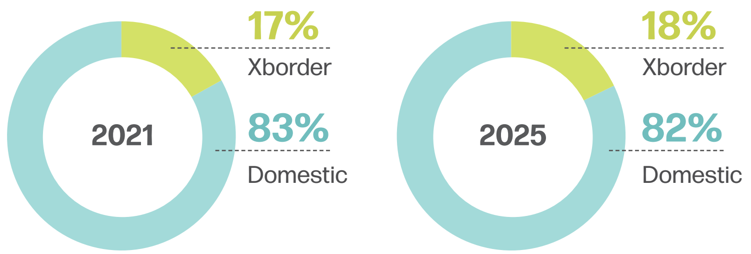
* Includes prepaid cards, direct carrier billing, cash on delivery, and other miscellaneous payment methods

COLOMBIA

E-COMMERCE MARKET

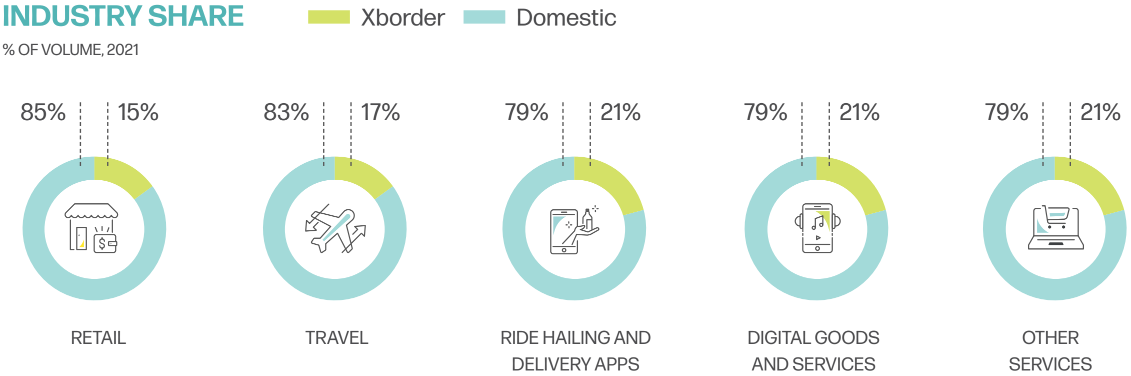
SHARE OF X-BORDER VS. DOMESTIC

% OF VOLUME



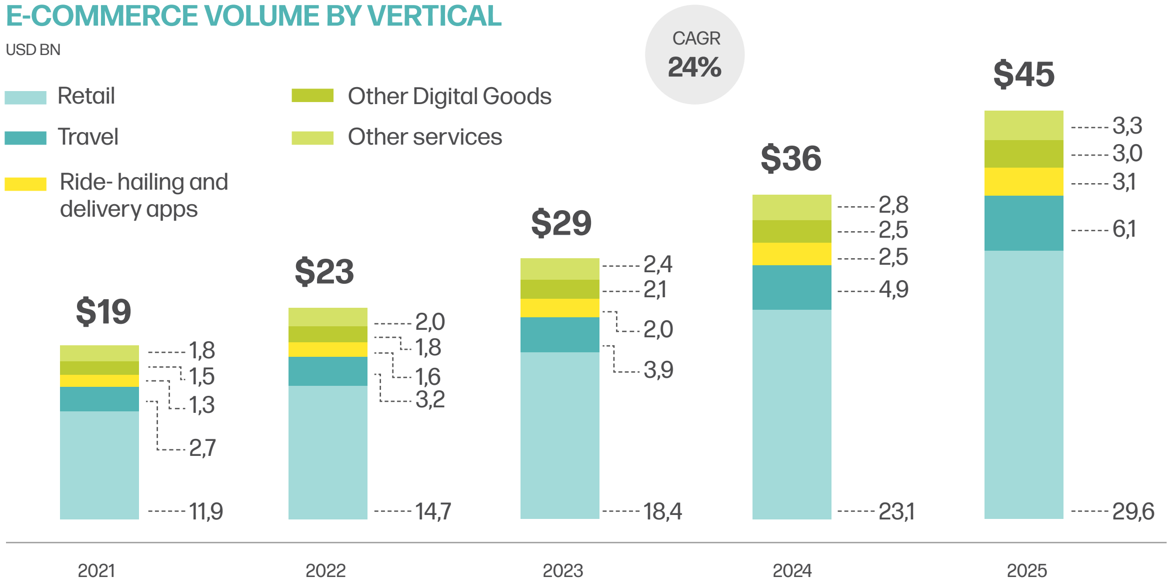
INDUSTRY SHARE

% OF VOLUME, 2021

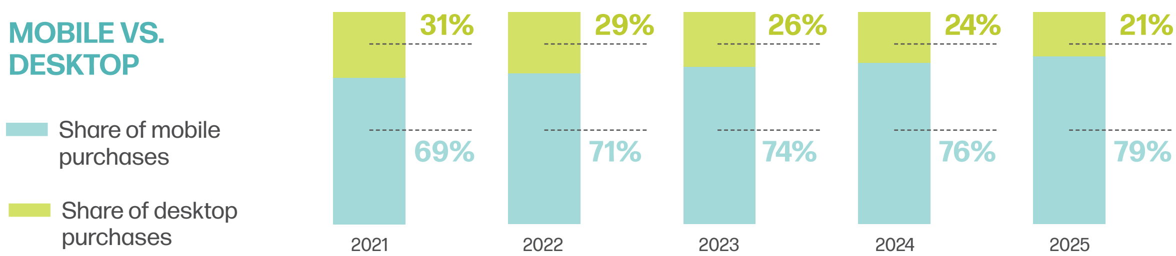


E-COMMERCE VOLUME BY VERTICAL

USD BN



MOBILE VS. DESKTOP



MEXICO

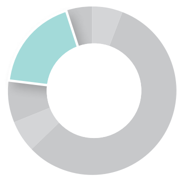
INDICATORS

130
Millions of people
(2021 EIU)

26%
of the Top 6 Market

$49 BN
E-commerce Volume
(USD BN)

18%
of the Top 6 Market



95
Millions of Internet users
(2021 EIU)

73%
Internet penetration
(2021 % OF TOTAL POPULATION, EIU)

69%
Smartphone penetration
(2021 % OF TOTAL POPULATION, GSMA)

61%
E-commerce penetration
(2021 % OF POPULATION AGED 15+ Y/O THAT HAS USED E-COMMERCE IN THE PAST YEAR)

60
Millions of E-shoppers
(BASED ON LOCAL SOURCES, 2020 AND 2021 AMI CONSUMER SURVEY AND AMI ANALYSIS)

PAYMENT METHODS

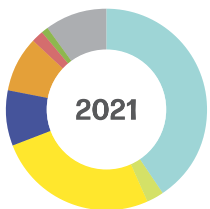
52%
Bank account penetration
(2021, % OF ADULT POPULATION)

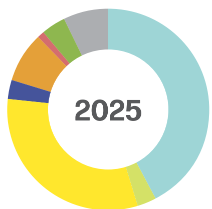
11%
Credit card penetration
(2021, % OF ADULT POPULATION)

26%
Credit card volume paid in installments

BREAKDOWN OF E-COMMERCE BY PAYMENT METHOD

% OF VOLUME, 2021-2025





	2021	2025
Internationally enabled credit card	41%	42%
Domestic credit card	3%	3%
Debit card	26%	31%
Cash vouchers	9%	3%
Wallets	9%	8%
Bank transfers	2%	1%
Buy Now Pay Later	1%	4%
Other*	10%	7%

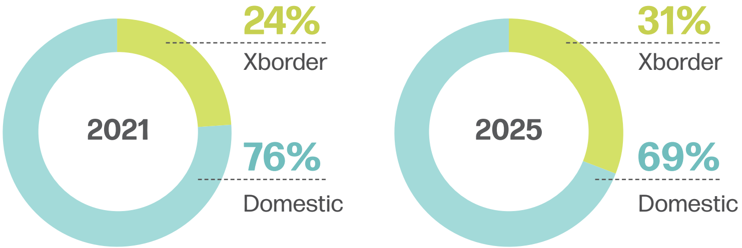
* Includes prepaid cards, direct carrier billing, cash on delivery, and other miscellaneous payment methods

MEXICO

E-COMMERCE MARKET

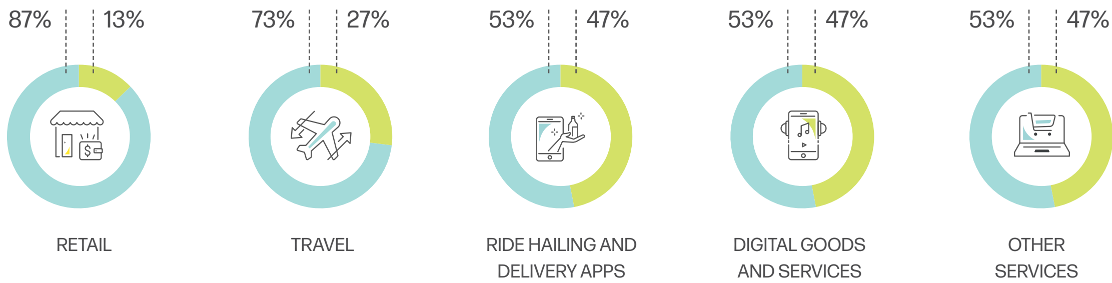
SHARE OF X-BORDER VS. DOMESTIC

% OF VOLUME



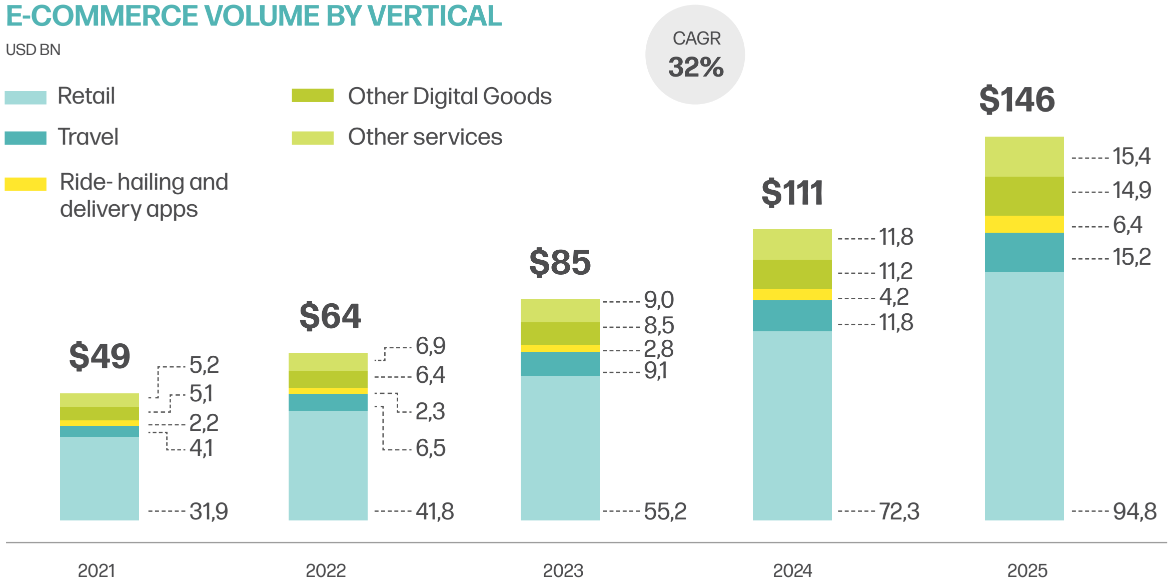
INDUSTRY SHARE

% OF VOLUME, 2021

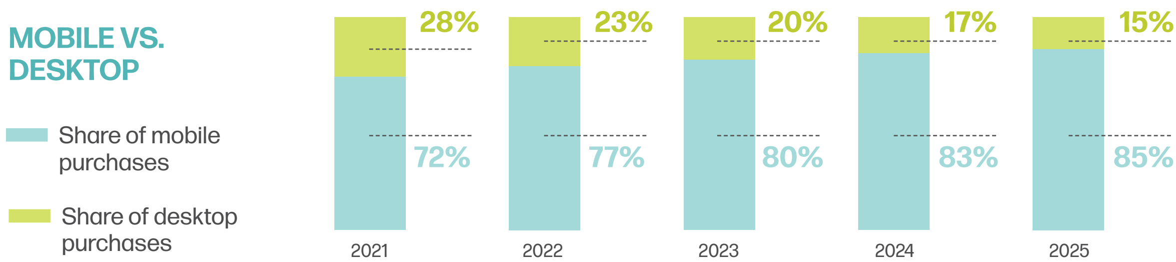


E-COMMERCE VOLUME BY VERTICAL

USD BN



MOBILE VS. DESKTOP



PERU

INDICATORS

33
Millions of people
(2021 EIU)

7%
of the Top 6 Market

$13 BN
E-commerce Volume
(USD BN)

5%
of the Top 6 Market

23
Millions of Internet users
(2021 EIU)

68%
Internet penetration
(2021 % OF TOTAL POPULATION, EIU)

64%
Smartphone penetration
(2021 % OF TOTAL POPULATION, GSMA)

50%
E-commerce penetration
(2021 % OF POPULATION AGED 15+ Y/O THAT HAS USED E-COMMERCE IN THE PAST YEAR)

12
Millions of E-shoppers
(BASED ON LOCAL SOURCES, 2020 AND 2021 AMI CONSUMER SURVEY AND AMI ANALYSIS)

PAYMENT METHODS

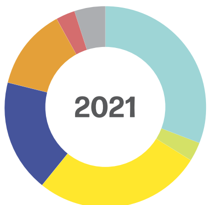
53%
Bank account penetration
(2021, % OF ADULT POPULATION)

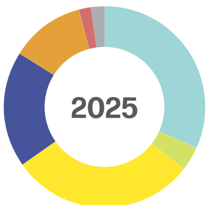
30%
Credit card penetration
(2021, % OF ADULT POPULATION)

4%
Credit card volume paid in installments

BREAKDOWN OF E-COMMERCE BY PAYMENT METHOD

% OF VOLUME, 2021-2025





	2021	2025
Internationally enabled credit card	30,8%	32,2%
Domestic credit card	3,4%	3,6%
Debit card	27%	29,9%
Cash vouchers	18%	19%
Wallets	13%	12%
Bank transfers	3%	1,8%
Buy Now Pay Later	0%	0,1%
Other*	5%	1,5%

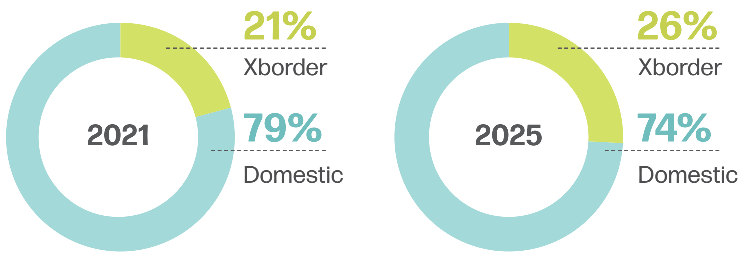
* Includes prepaid cards, direct carrier billing, cash on delivery, and other miscellaneous payment methods

PERU

E-COMMERCE MARKET

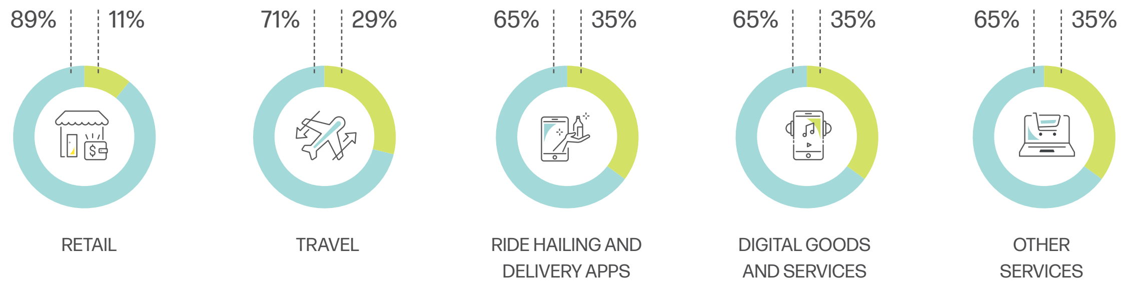
SHARE OF X-BORDER VS. DOMESTIC

% OF VOLUME



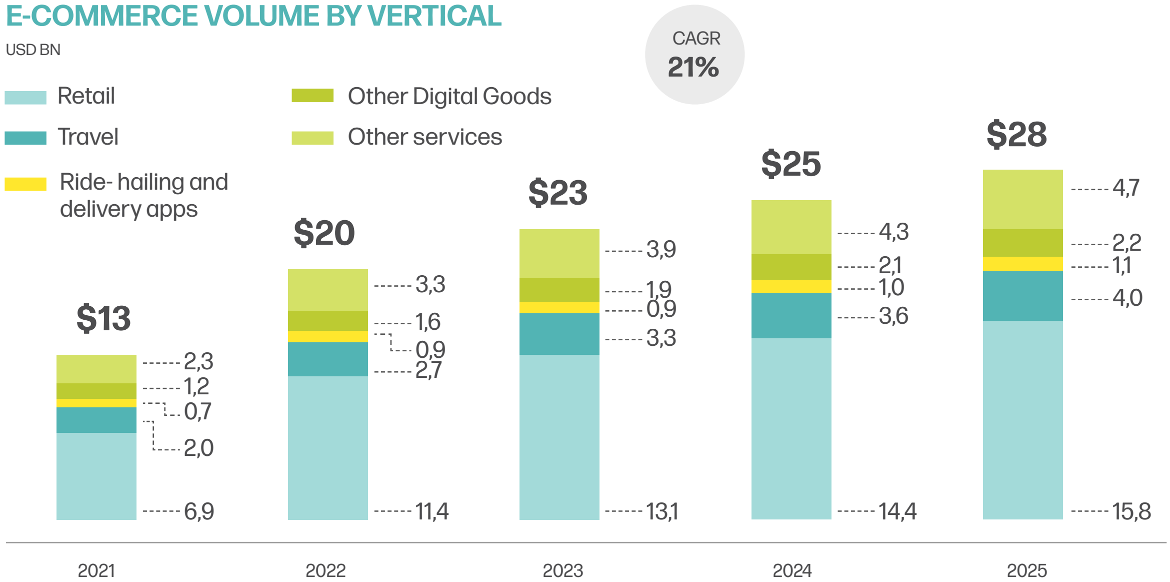
INDUSTRY SHARE

% OF VOLUME, 2021

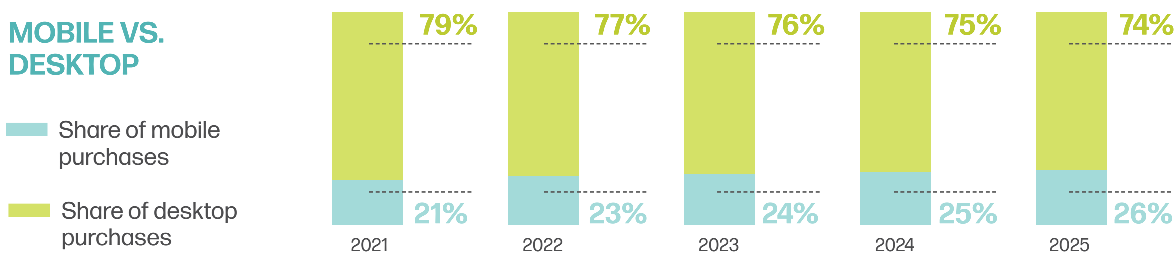


E-COMMERCE VOLUME BY VERTICAL

USD BN



MOBILE VS. DESKTOP



FIND US ON:

international.
pagseguro.com

blog.international.
pagseguro.com

linkedin.com/
pagsegurointernational

PagSeguro