ATLANTICO

Latin America **Digital Transformation** Report 2022

September 20, 2022

Disclaimer

This report, including the information contained herein, has been compiled for informational purposes only and does not constitute an offer to sell or a solicitation of an offer to purchase any security. Any such offer or solicitation shall only be made pursuant to the final offering documents related to such security. This report also does not constitute legal, strategic, accounting, tax, or other similar professional advice normally provided by licensed or certified practitioners.

The report relies on data from a wide range of sources, including public and private companies, market research firms and government agencies. We cite specific sources where data are public; the presentation is also informed by non-public information, interviews with experts (on-and off-the-record), proprietary data analysis, primary research conducted by Atlantico and by others. We disclaim any and all warranties, express or implied, with respect to the presentation.

Atlantico makes no representations or warranties regarding the accuracy or completeness of the information contained in this report and expressly disclaims any and all liabilities based on it. Atlantico shall not be obliged to maintain, update or correct the report, nor shall it be liable, in any event, for any losses suffered as a consequence of the use of this report by any third parties.





Readme.txt

After years of pumping steroids into the veins of the world economy, Central Banks pressed the brakes as inflation finally reared its head. Asset prices worldwide adjusted abruptly, and tech companies were no exception – with cash flows further into the future, they felt the pain especially severely as investors questioned the unwinding of this economic adjustment. Venture funding eased up and founders that the market encouraged to grow at all costs only six months ago are now told to focus on margins.

Cautious optimism. Curiously, our mixed emotions about the current state of the market mirror how tech founders and workers are feeling this year. Our optimism is rooted in the conviction that digitalization is a secular force transforming Latin America for decades to come. Whether we are drunk at the peak (last year) or hungover in the trough (this year), when we zoom out from the cycle of the day, the trendline is clearly up and to the right.

As our Digital Transformation Index shows, the region's technology ecosystem Our research shows that founders are tightening their belts, but most likely stands to grow by an order-of-magnitude as it catches up to the likes of India, not enough given the uncertain global and regional backdrop. Yet, China, and even the US, all of which began their journeys long before us. Value encouragingly, historic data shows that a pot of gold (or bitcoin) may await creation from tech in LatAm will be measured in the trillions of dollars. us at the end of the rainbow if we exercise enough caution to make it there. The data shows that businesses that survive and get funded in bear The foundation for long-term growth is rock solid: LatAm is ahead of China in markets like these are significantly more likely to become large, internet penetration and leads globally in digital adoption for most internet independent public companies. But ensuring survival is far from an easy services and digital media. Capital, long a barrier to growth, is no longer scarce feat and finding balance is key this year.

even after a halving of venture funding from 2021 peaks. Despite the market downturn, human capital still flocks to tech, with students at top schools Amidst all the dynamism, this year we found ourselves drawn to explore reinforcing their preference to work in tech above all other fields.

Perhaps most striking is how the pandemic-sparked digital boom has persisted in Latin America, representing a permanent leap forward while more developed markets like the US are now reverting to pre-pandemic trendlines. This great leap forward in digital adoption goes beyond e-commerce and food delivery and is seen across all areas of society – from digital banking usage to telemedicine. After experiencing the future, for Latin Americans there is no going back to waiting in line at the bank branch or at the doctor's office.

If there's a reason why optimism runs through our veins as entrepreneurs, there is equally good reason for the caution with which such optimism should be tempered. As Tom Jobim warned us, "Brazil is not for beginners," and, in this year's market downturn, neither is the rest of the world.

three different areas of opportunity: for Fintech, Latin America's world-class performance continues. A rising tide for B2B innovation accelerated by infrastructure buildout and record-breaking adoption of Brazil's instant payment system Pix define this continued success. Moreover, a new wave of entrepreneurs is breaking barriers for SMB digitalization in Latin America, bridging the gap between the abnormally high number of SMBs in the region and the equally shy value they create for the economy. Finally, for Crypto and web3, while it's still early days, Latin America is perhaps the most fertile ground for the application of successful use cases.

We are excited to have you join us in this third edition of the Report. Enjoy the ride!





Research Team

Let us give credit where credit is due









Special Contributors

Julio Vasconcellos

Partner, Atlantico



Ana Martins Partner, Atlantico

Victor Ramos

Associate, Atlantico



Nathan Wong Project Lead,

Harvard Business School

Carlos Pinto Wharton School, University of Pennsylvania



Maika Pereira Wharton School, University of Pennsylvania

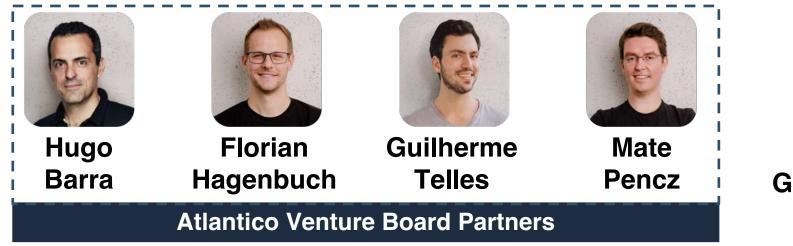
Ana Luisa Guimarães

University of Southern California



Aurora Feng Stanford University







Guilherme Grupenmacher





Our Partners

We are thankful for the help of these organizations and contributors who partnered with us on primary research and data collection and analysis







B



Conexa 🖶

Extensive Primary Research Initiatives



Cases with 25+ Leading Companies in the Region

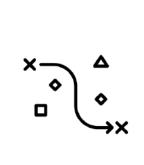
... and countless other experts and friends who we interviewed and helped us with on- and off-the-record data, information, and insights. Thank you!



Atlantico is a leading early-stage venture capital fund investing in Latin America



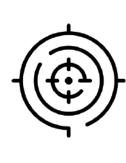




Led by modern founder-CEOs with a long record of investing success Atlantico was started by entrepreneurs who founded and scaled some of the largest tech companies in Latin America (and the world) and have been investing in the region for over a decade.



Unique boutique approach enabled by a highly-selective investment style We concentrate capital on fewer, higher-conviction investments in order to focus our time and support for our portfolio companies.



Extended team comprised of world-class specialists with domain expertise Atlantico has an exclusive team of Operating Partners with deep expertise in Product, Engineering, Talent, and Growth to help founders win.



6

About Atlantico

Deep analytical and primary research capabilities that support all activities We believe judgment in venture comes from combining qualitative patternmatching (the "art" from hands-on experience) and rigorous data analysis (the "science"), and tirelessly apply this approach to our work.





Latin America Digital Transformation Report 2022



1. The Foundations

1.1 Socioeconomic Foundations 1.2 Digitalization 1.3 Remote Work

2. A Changing Landscape **2.1 State of Venture Capital and Tech 2.2 The Latin American Opportunity**





3.1 Fintech **3.2 SMB Digitalization** 3.3 Web3 & Crypto





Latin America Digital Transformation Report 2022







1.1 SOCIECONOMIC FOUNDATIONS

Latin America has a population of 665 million people and a GDP of over US\$ 5T, with Brazil, Mexico, Argentina, Chile, and Colombia making up 80% of it. With key elections across the region this year, Latin America has been experiencing a recent resurgence in left-of-center politics



1.2 DIGITALIZATION

Latin Americans continue to come online at a rapid pace, with internet penetration reaching 78%, surpassing China. 5G adoption shows promise and e-commerce penetration, accelerated by COVID-19, continues even post-pandemic

1.3 REMOTE WORK

While COVID-19 brought about the rapid adoption of remote work, the ability to do so was highly dependent on wage levels. Employees working remotely have shown higher levels of satisfaction and productivity, especially when given flexibility to choose where and when to work from the office









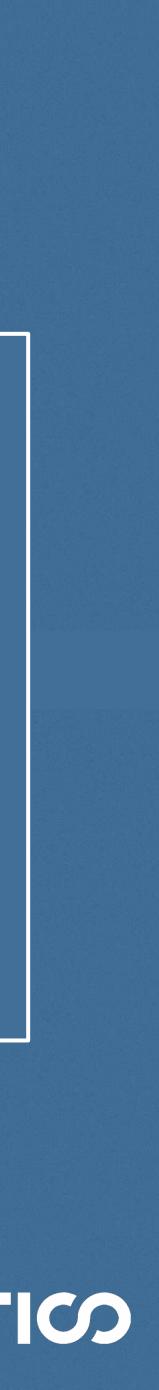


"The only constant in life is change."

- Heraclitus



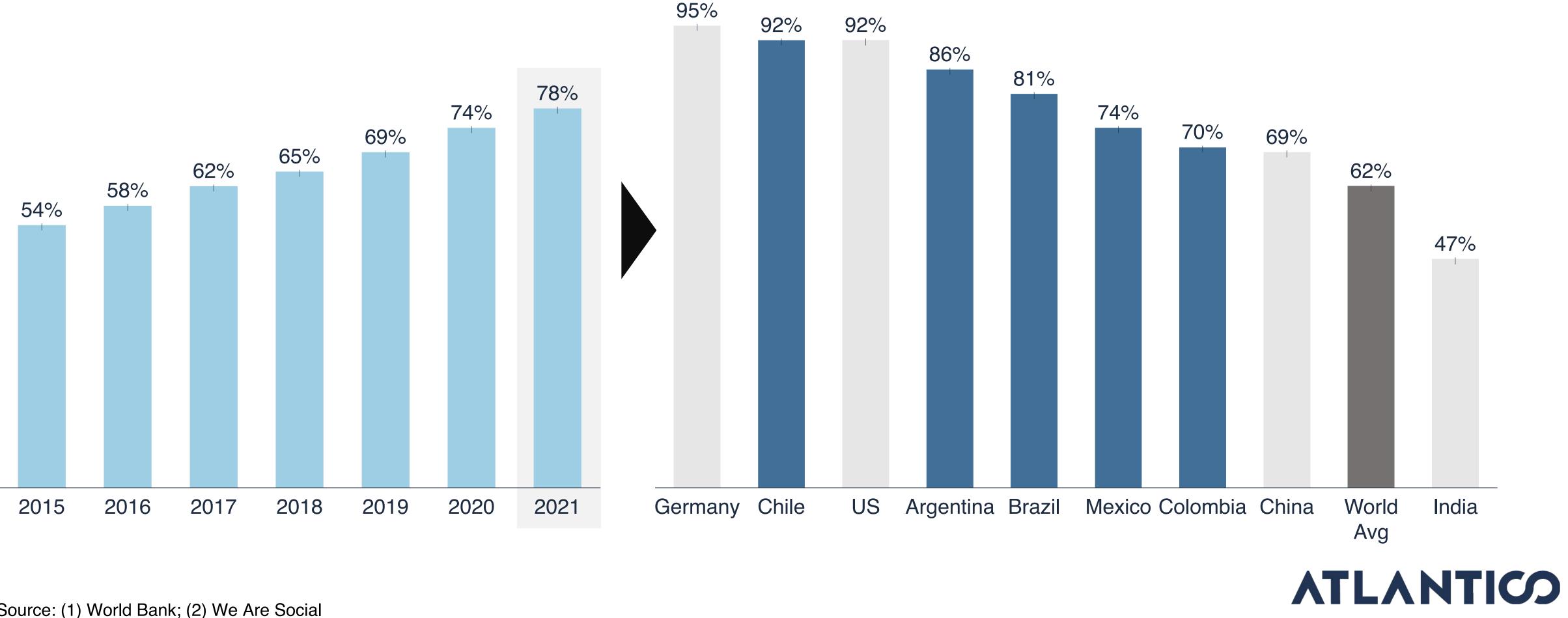




Internet penetration in LatAm has surpassed that of China and India and is approaching that of developed economies

Internet penetration rate by year and region

Latin America, 2015-2021; Worldwide, 2021

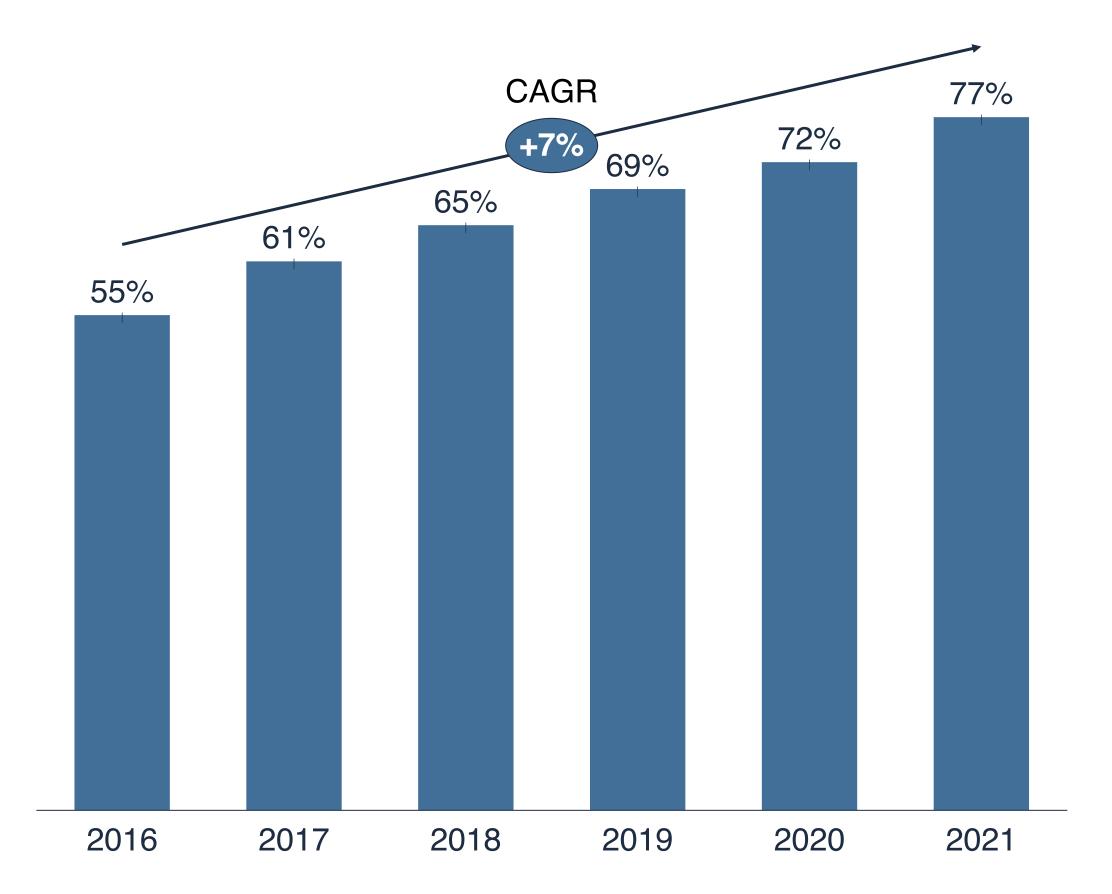




Smartphone adoption rate has increased 40% over the last five years, with most devices running on Android

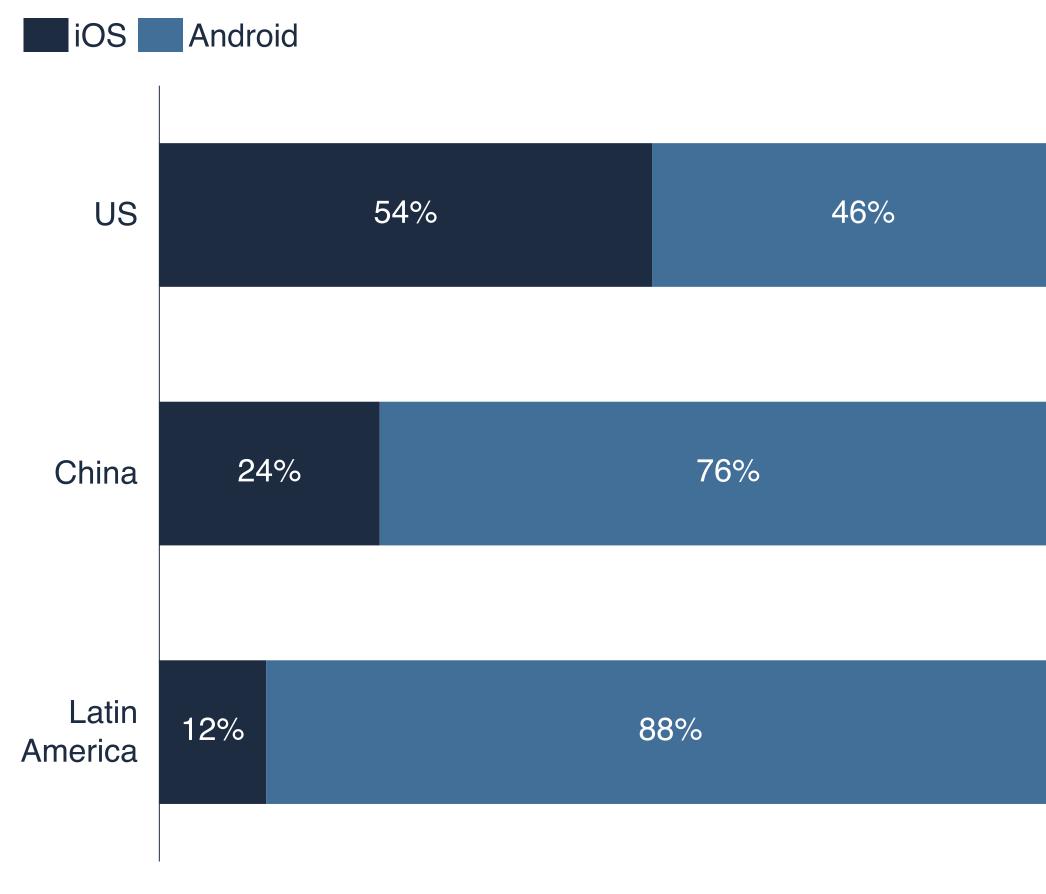
Smartphone adoption rate in Latin America¹

% of total population



20

Smartphone operating system market share by region² % of total Android and iOS devices



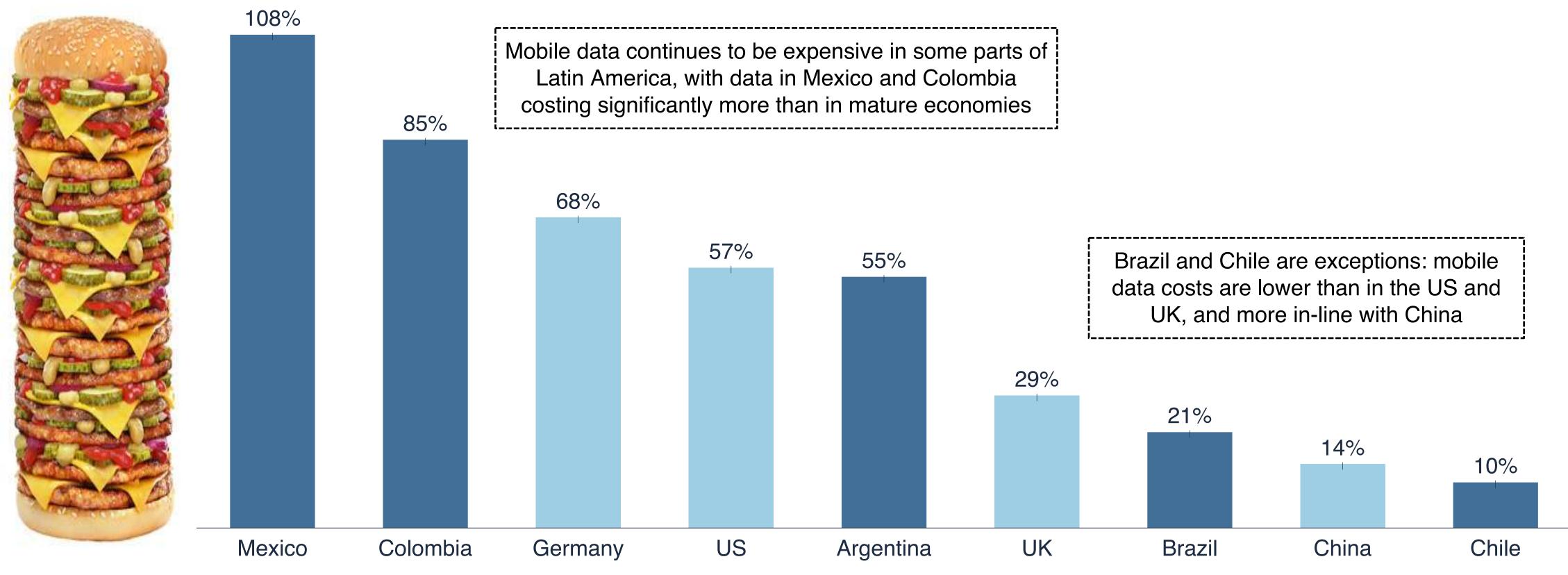


ATLANTICO



Mobile data cost in Mexico and Colombia is higher than in developed countries, while Brazil and Chile are cheaper

Local Cost of 1 GB Mobile Data (2022) vs 1 Big Mac (per Big Mac Index, 2021)^{1,2*} Percentage of 1 GB of mobile data per 1 Big Mac in Local Currency



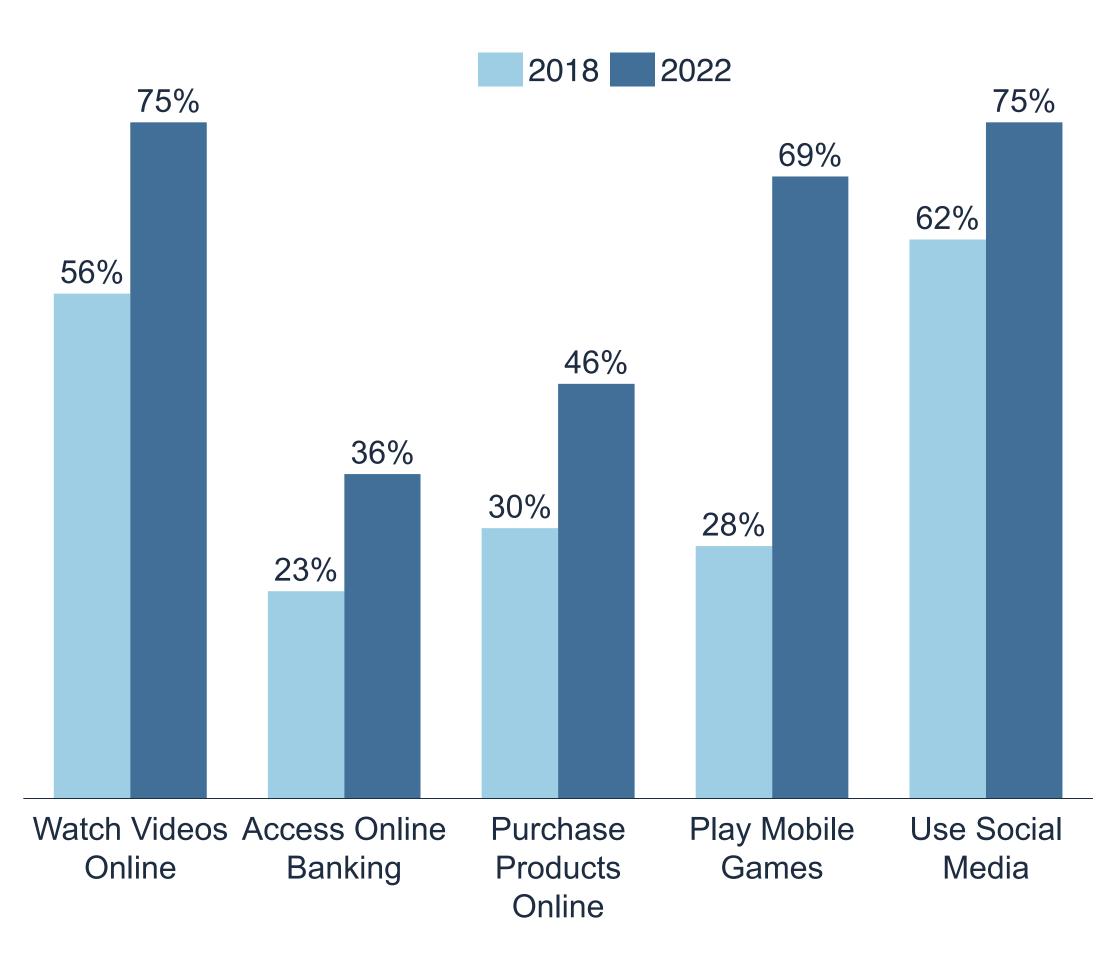
Note: (*) The Big Mac Index is compiled by the Economist to determine if currencies are at their correct level based on purchasing power parity 21 Source: (1) We are Social; (2) The Economist



Digital adoption has transformed everyday life for broad swaths of the Latin American population

Percentage of Brazilians who...

% of survey respondents



Time spent daily by activity by country

Number of hours

	Brazil	Mexico	US	*: China
Using Internet	10.3	9.9	7.0	5.3
Watching TV Online	4.1	3.6	4.8	3.0
Using Social Media	3.7	3.3	2.2	2.0

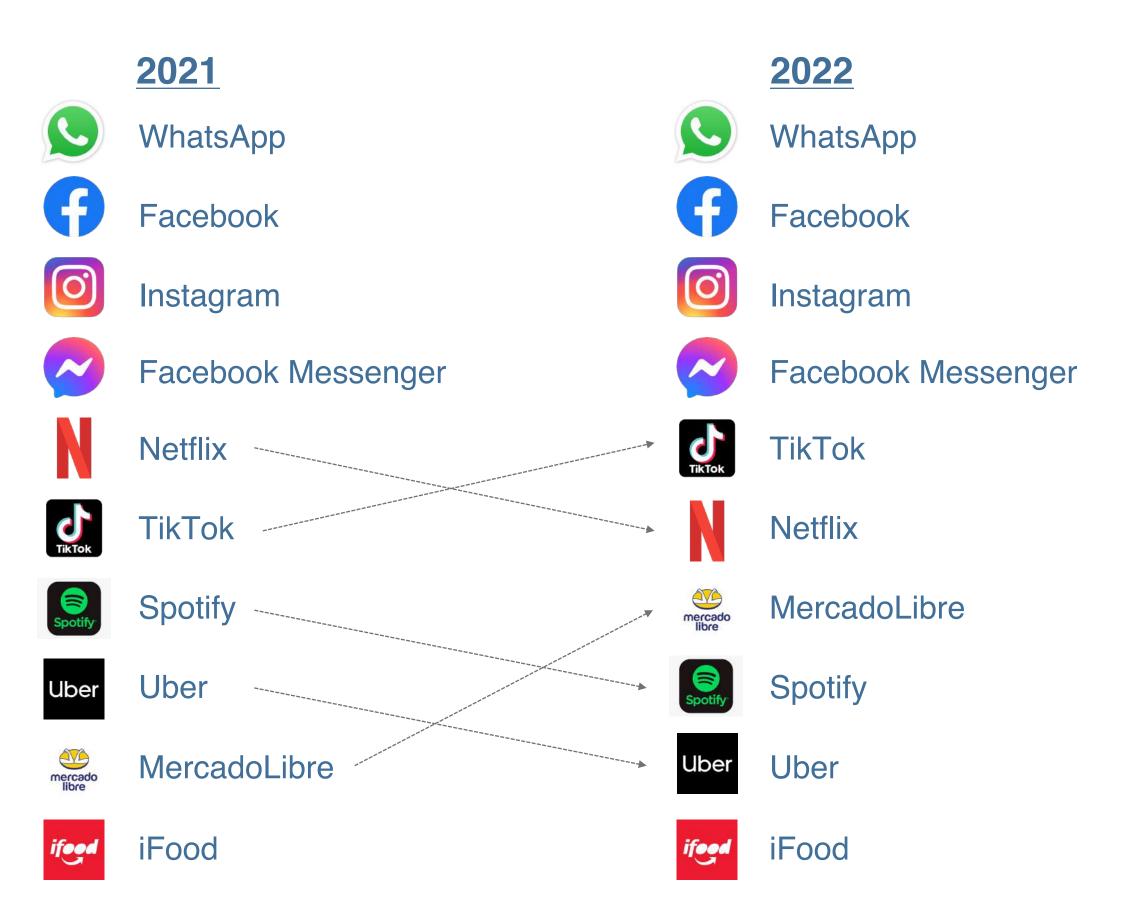




In the social media category, WhatsApp remains the dominant platform and TikTok continues to gain traction

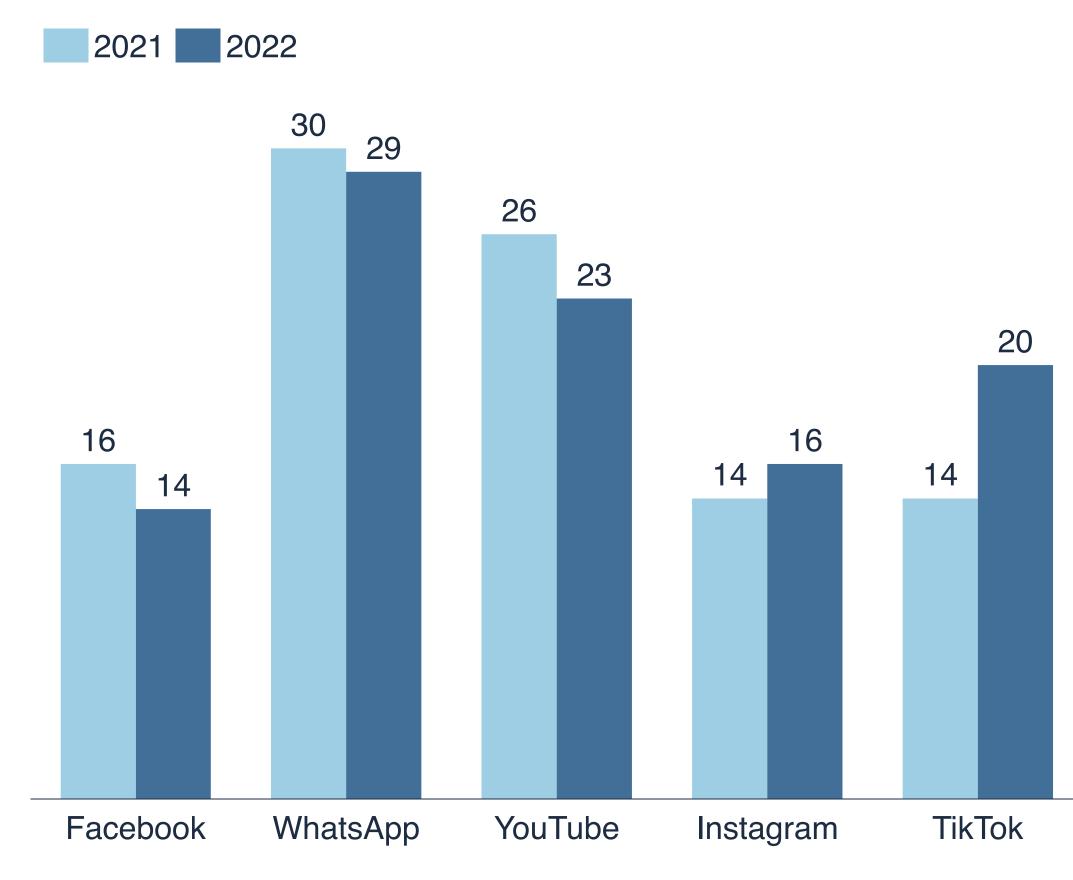
Ranking of mobile apps in Brazil

By monthly active users



Brazilians' usage of social media by year

Hours spent per month by social media app

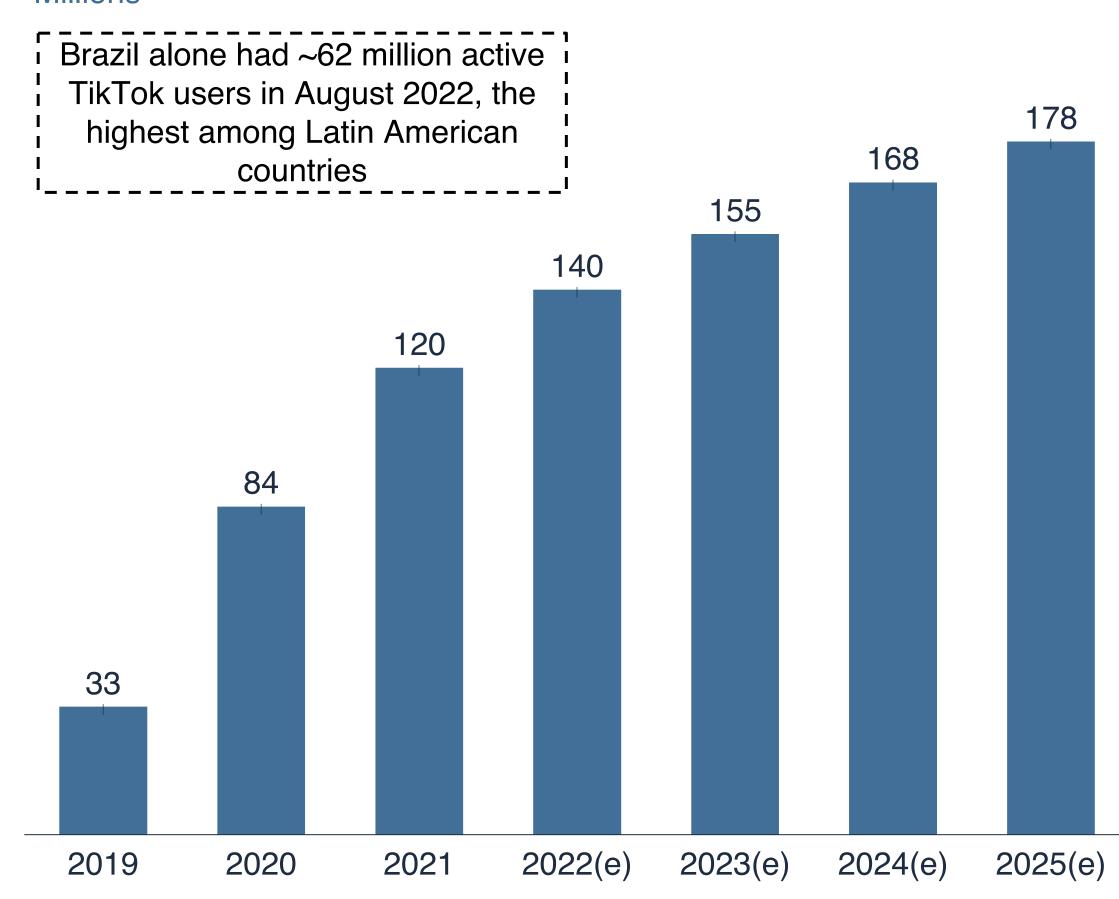






Chinese social network giants TikTok and Kwai are increasingly popular in Latin America, particularly in Brazil

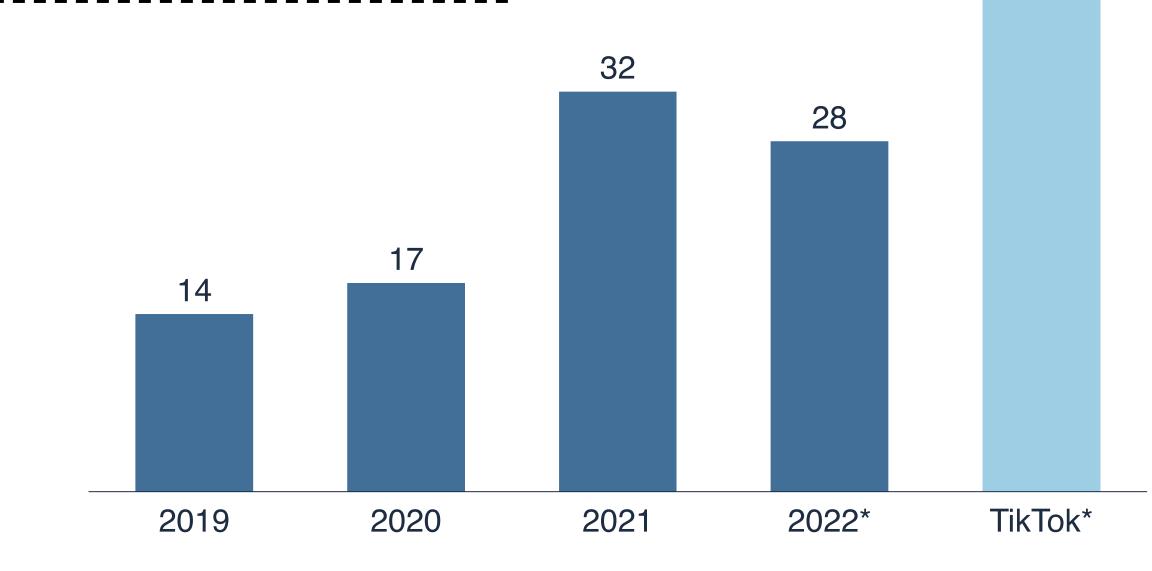
Number of TikTok active users in Latin America Millions



Note: (*) Numbers from August 2022 24 Source: Insider Intelligence, Data.ai, Google Trends, Rest of World, Atlantico Analysis

Growth of Kwai active users in Brazil Millions

! While TikTok targets more affluent ! audiences, another Chinese rival, Kwai, targets blue-collar workers and lower-income populations, a strategy that has allowed it to go viral in more recent years



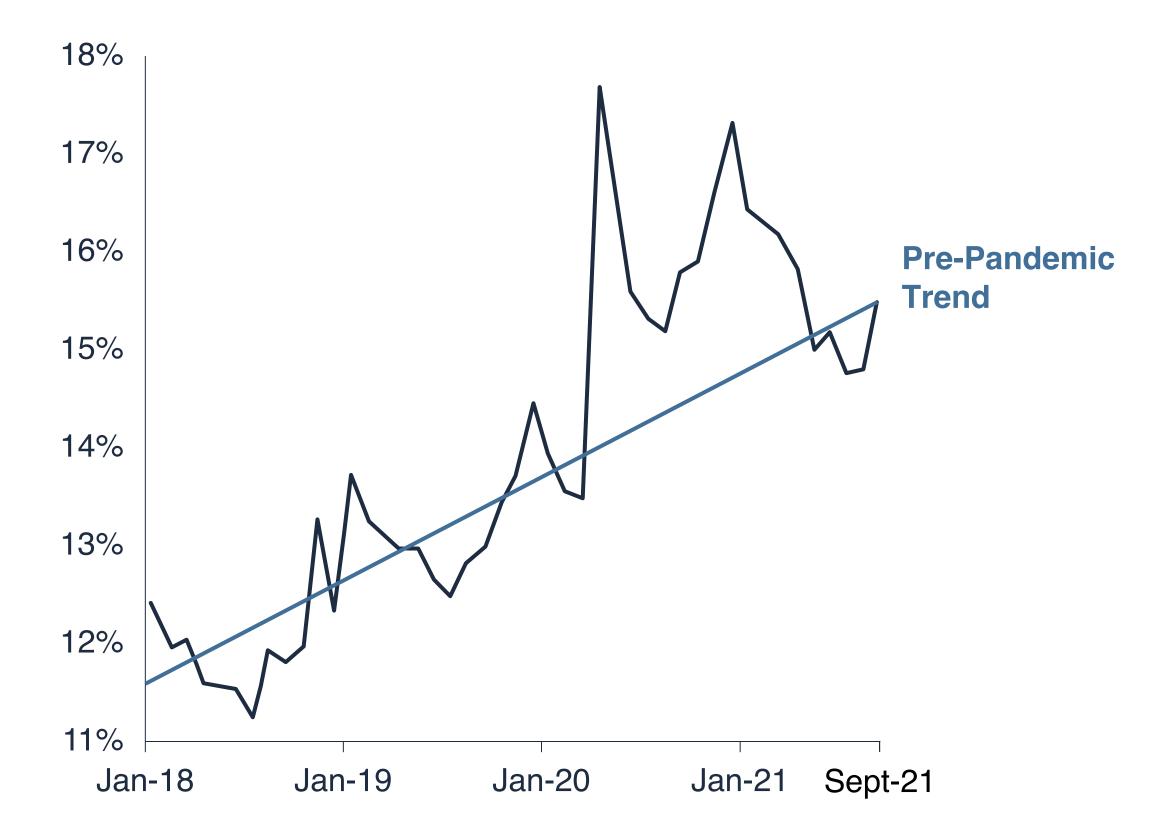


62

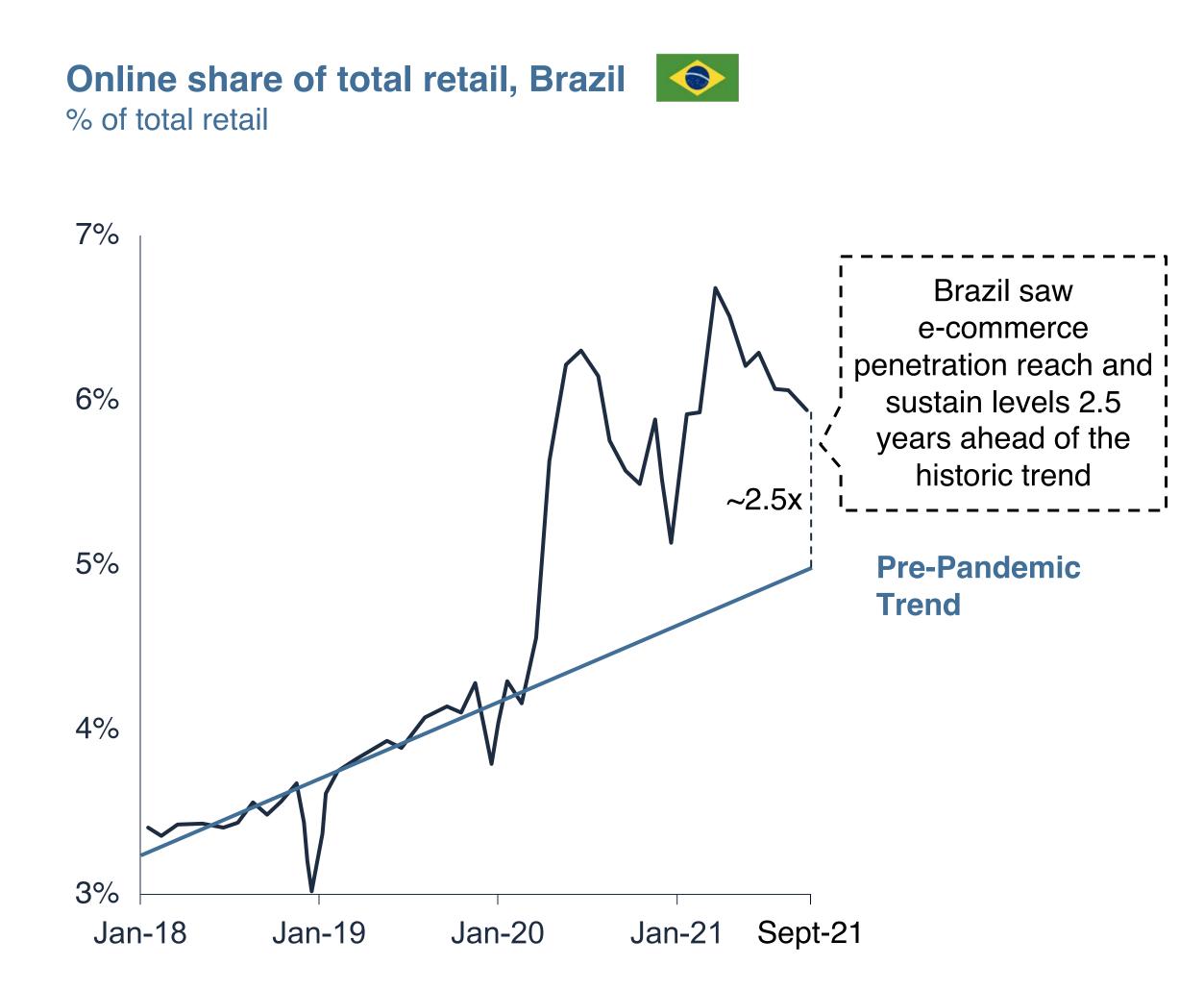


Back to the Future: US e-commerce penetration reverted to prepandemic levels while Brazil stayed nearly 3 years ahead of trend

Online share of total retail, United States % of total retail



Note: Study analyzes all Mastercard anonymized transaction-level data for the researched economics 25 Source: International Monetary Fund and MasterCard Economics Institute "E-commerce During Covid: Stylized Facts from 47 Economies" (2022)







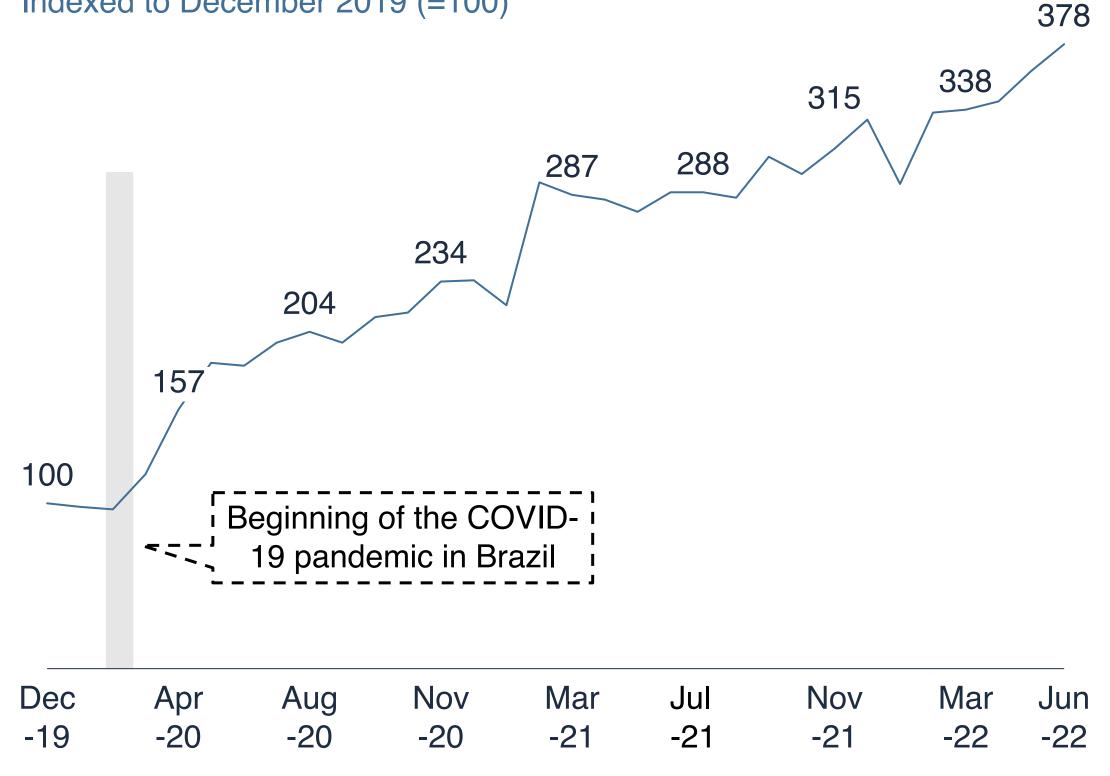
Food and grocery delivery continued growing well past the pandemic boom, as seen through category leader iFood

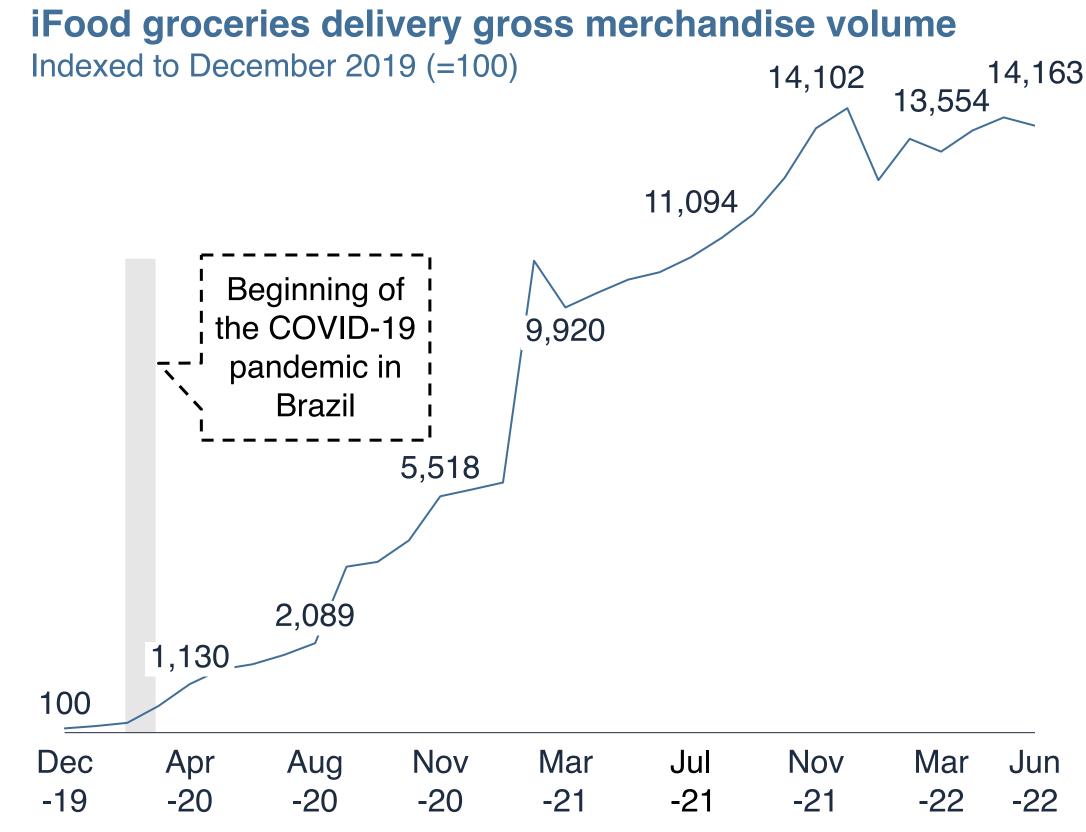


iFood is Brazil's leading food and grocery delivery platform, processing ~25% of total food delivery orders in the country, and nearly 80% when considering online aggregators only

iFood food delivery gross merchandise volume

Indexed to December 2019 (=100)









Pix, a brief history of the future

Pix is Brazil's instant payment system. It is free to use, available 24/7, and can be used by individuals, businesses, and the government. Launched in November 2020, Pix has taken Brazil by storm.

Pix was developed by the Brazilian Central Bank in partnership with private financial institutions. It is integrated into the apps of banks and digital wallets with high visibility to the user, as required by the Central Bank.

From the users' perspective, they only need to register a unique key to use Pix. This key can be one's phone number, e-mail address, tax ID number (CPF), or a randomly-generated code. Each key is tied not only to one unique individual or business, but also to a single financial institution and account. This allows users to have different keys for different banks and accounts.

To pay with Pix (or 'make a Pix' in the new colloquialism), a user taps the Pix button or link in their financial institution's app, fills in the receiver's unique key, the amount to be paid, an optional note, and securely confirms the transfer. The whole process can also be completed by scanning a QR code, now as ubiquitous in Brazil as the street vendors that happily use them.

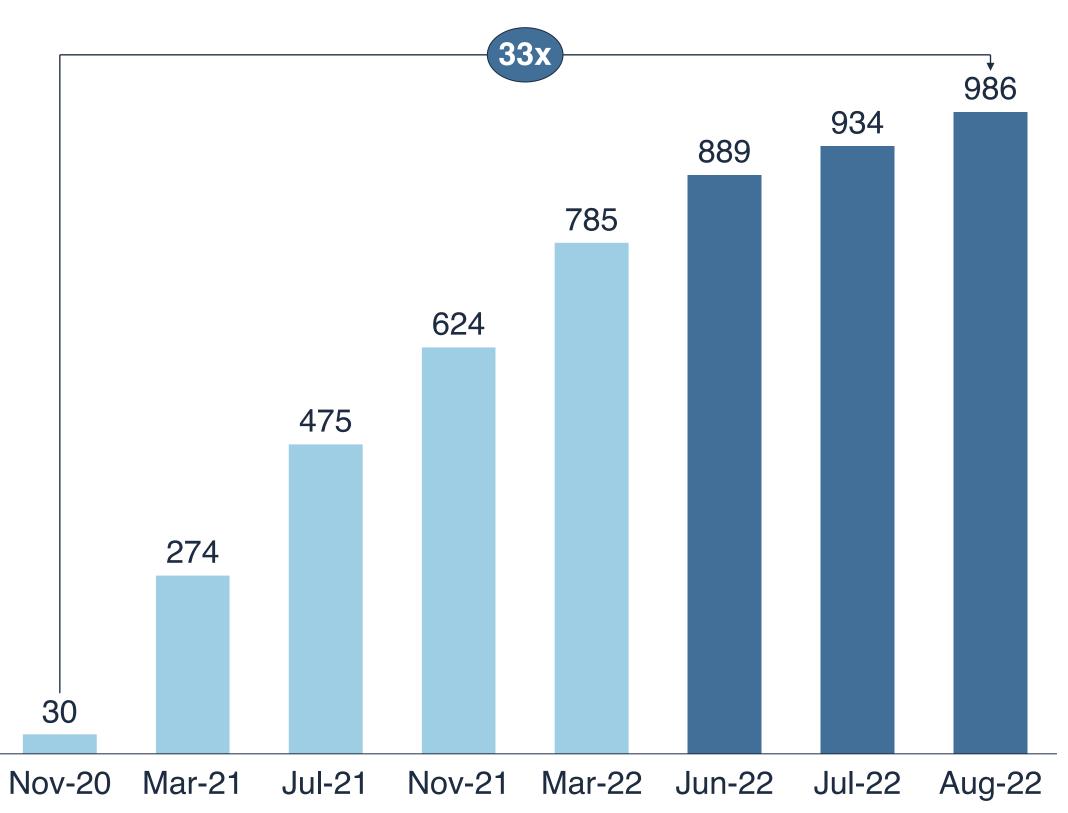
Pix. It's that simple.





Pix is eating digital payments in Brazil

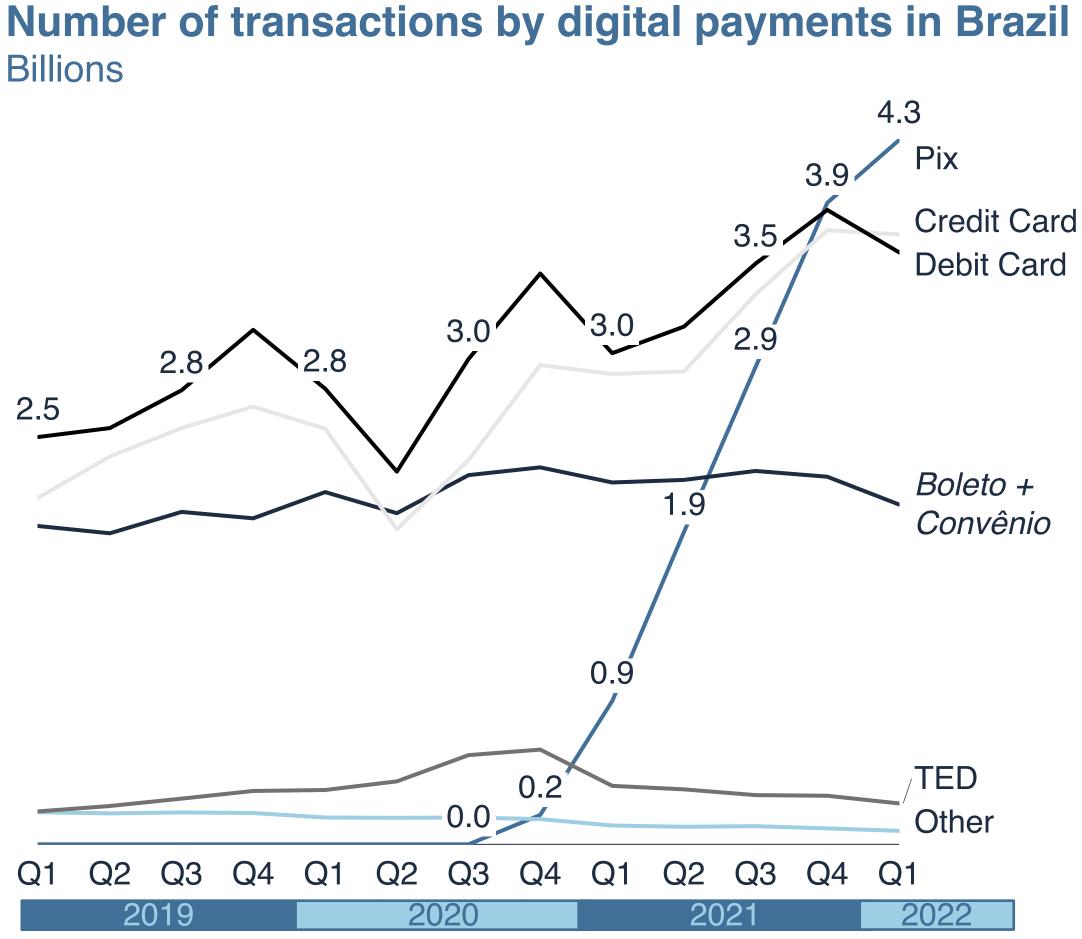
Pix total payment volume R\$ B



Note: (*) The US Dollar to Brazilian Real exchange rate on August 12, 2022 was 5.08 and averaged 5.12 in 2022 66 Source: Banco Central do Brasil



Billions



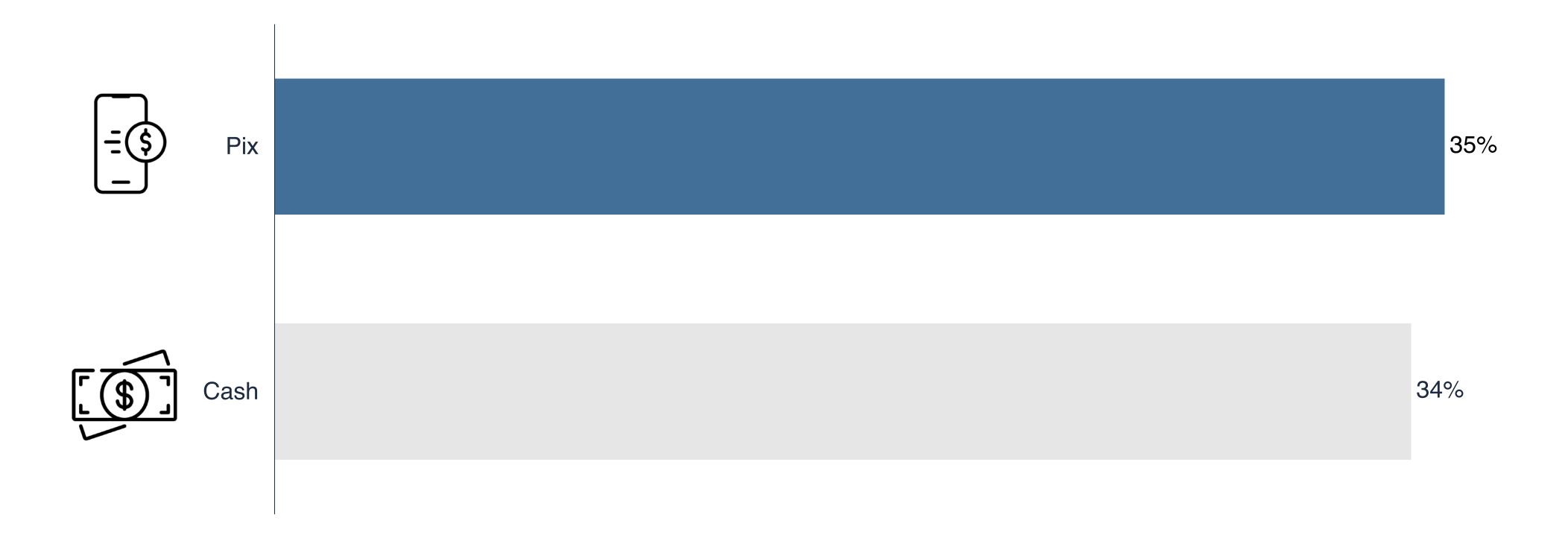






Pix is eating digital all payments in Brazil

Pix is tied with cash for daily frequency of use in Brazil % of population



Source: Atlantico and AtlasIntel Brazil survey 2022, collected from Aug 1st to Aug 28th (representative of population, n=2,262, 67 2p.p margin of error at 95% confidence level)



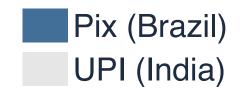


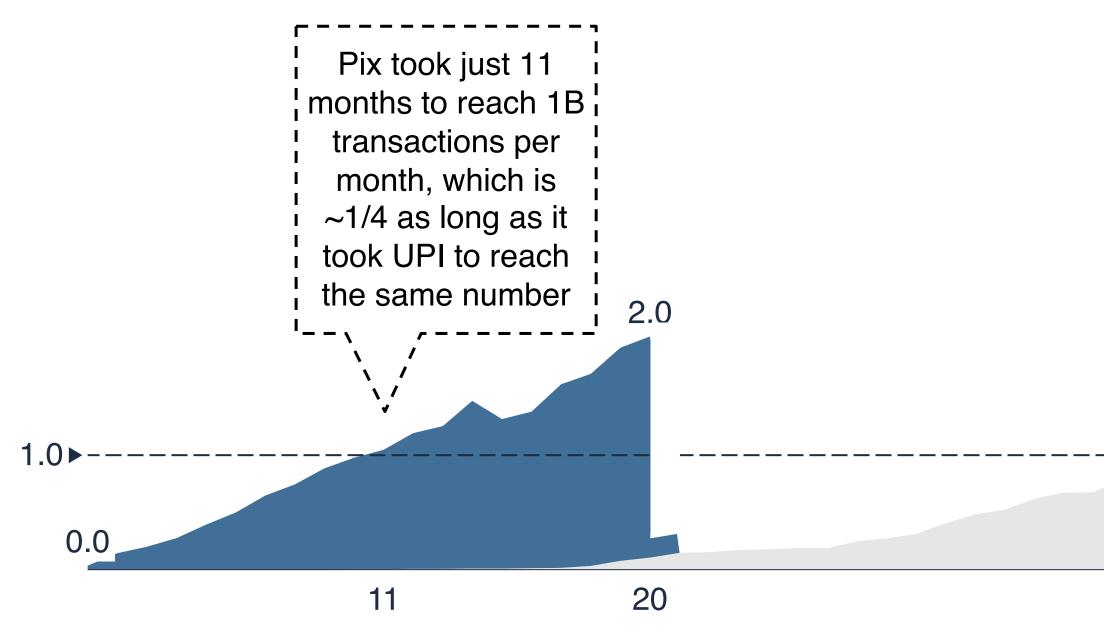




Pix's adoption has significantly outpaced the early traction of India's UPI, which was launched 4 years earlier

Monthly transaction volume by number of months post-launch^{1,2} **Billions**





Source: (1) Banco Central do Brasil; (2) National Payments Corporation of India





Months Post-Launch

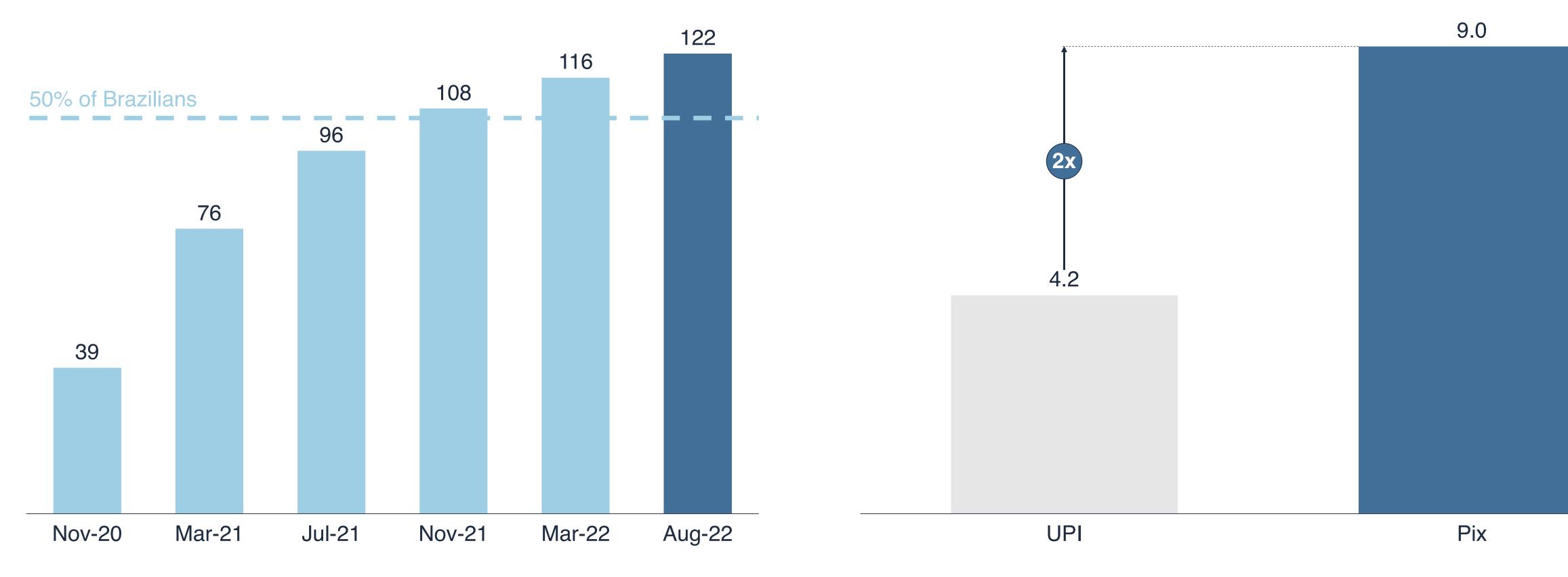






Pix is already used by most of the Brazilian population and at a much higher frequency than UPI in India

Number of Pix users^{1*} Millions



Note: (*) Excluding registered businesses 69 Source: (1) Banco Central do Brasil; (2) National Payments Corporation of India; (3) World Bank Per capita monthly transaction volume, June 2022^{1,2,3} *#* of transactions









Reinforced by its prompt adoption, Pix has an extensive roadmap of features that will unlock new opportunities

Post-launch features released



QR codes enable Pix users to make transfers at a faster rate



Pix integrates with phones' contact list



Select types of Pix transfers are capped at R\$1000 between 8:00pm and 6:00am, citing safety concerns



Two new Pix modalities, Withdrawals (Saque) and Change (Troco), enable consumers to exchange Pix transfers for cash at stores

Note: (*) Up until June 31st, 2022; (**) Boletos are a popular cash-based post-pay method in Brazil 70 Source: Banco Central do Brasil, Atlantico Analysis

Features to come



New forms of payment initiation, including NFC, Bluetooth, **RFID** and facial recognition



Collection (cobrança) will enable businesses to generate dynamic QR codes for Pix payments that include information such as value and due date, potentially replacing boletos**



Guaranteed (garantido) will enable consumers to use Pix for installment payments, as they would with a credit card, by having their financial institution guaranteeing the payment



International (internacional) will enable Pix to be used for international transfers

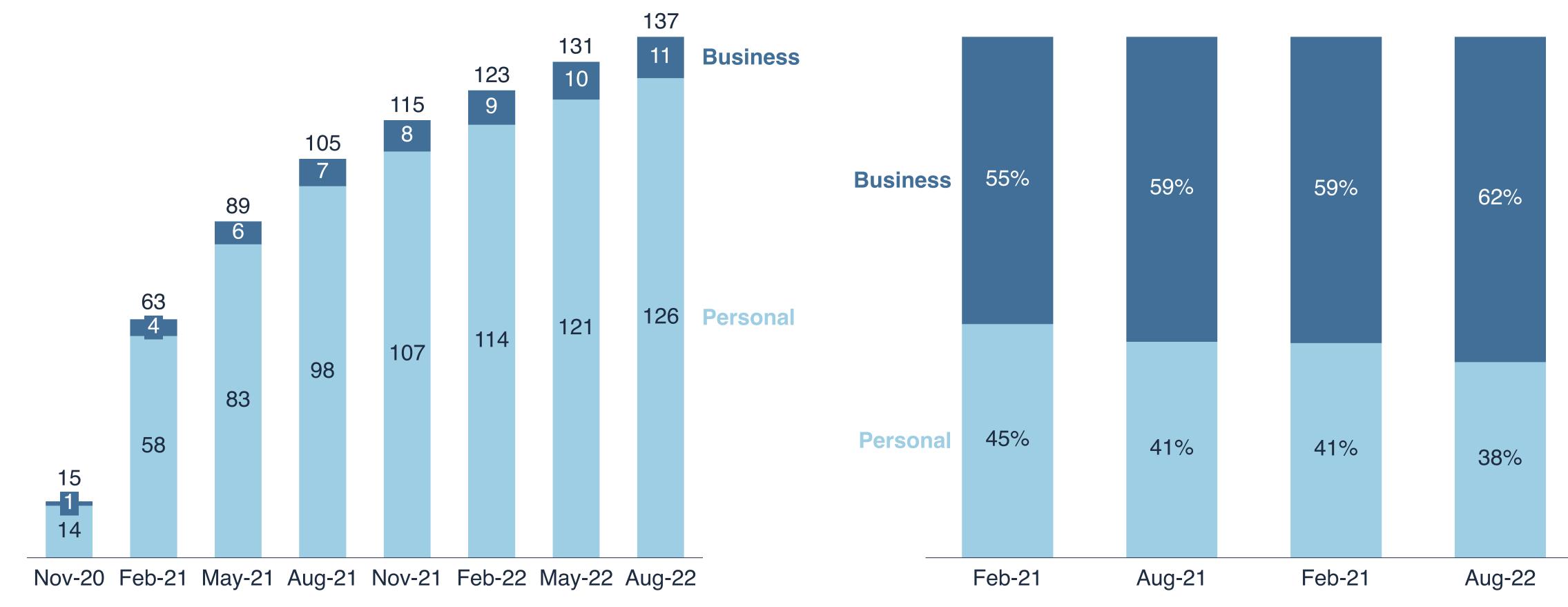






Pix had its early adoption driven by individuals and is now increasingly being used in business transactions

Total registered accounts by type of user* Millions



71 Note: (*) In this case, "accounts" means keys, which are payment addresses that can each be linked to one sole bank account at a time by a Pix user Source: Banco Central do Brasil

Payment value volume by transaction nature %







www.atlantico.vc