CAPCO

FINANCIAL INCLUSION

EVOLUTION AND THE DIGITAL PUSH

CONTENTS

1. INTRODUCTION

In this paper, co-authored by Capco Brazil and Capco India, we have outlined:

- What is financial inclusion and why it is important?; key challenges faced by emerging countries
- Role of tech and digital in improving financial inclusion
- Policy and regulatory support
- Future of financial inclusion

Spotlight on Brazil and India:
Emerging economies, such as Brazil and India, have been the growth drivers for the world economy. The fintech sector is emerging strongly in both countries, and the successful combination of technology and entrepreneurship has been fundamental to address the increasing demand for financial inclusion and the modernization of the respective economies.

In the spotlight section of this paper, we have summarized the status of financial inclusion in Brazil and India, including various initiatives taken by both countries to push the financial inclusion agenda, includingdigital payments, infrastructure, mobile penetration, and regulatory programs.

2. FINANCIAL INCLUSION OVERVIEW

Financial inclusion aims to make financial services accessible to all individuals in a responsible and sustainable way. Financial inclusion is considered a key driver of economic growth and poverty alleviation the world over. Several countries across the globe now look at financial inclusion as the means to more comprehensive growth.

2.1. What is Financial Inclusion? The World Bank defines financial inclusion as "individuals and businesses having access to useful and affordable financial products and services that meet their needs – transactions, payments, savings, credit and insurance – delivered in a responsible and sustainable way."

This definition can be broken down into the following components:

- Universal access to financial services – digital and physical
- Easy to use and affordable – easy user interface, usage and set up costs
- Providing a basic bouquet of financial services – accounts, payments, lending, insurance
- Consumer protection, regulatory support

2.2. Why is it important? Financial inclusion is a key engine for economic growth. It contributes to social welfare and business growth. It has significant effects in the overall development of underprivileged populations across the world.

1. **Participate in a formal economy**
2. **Provide unique identity**
3. **Promoting Gender Equality**
4. **Reduce Income Inequality and Poverty**
5. **Increased Economic Activity**

2.3. Status of Financial Inclusion in the World. While major strides have been made in financial inclusion globally, close to one-third of adults worldwide – 1.7 billion people – are still unbanked according to the latest Global Findex data. Millions of women and low-income communities around the world remain financially excluded.

- **About half of the world's unbanked adults reside in Asia.**
- Account ownership is nearly universal in high-income economies; **virtually all the unbanked adults live in the developing world.**
- **By percent of population, Africa and Latin America are the most unbanked.**
- Amongst the total **global unbanked adults,** 46% are males while **54% are females, with some countries facing a large gender gap.**

2.4. Key Challenges. Various factors inhibit the access of individuals and firms to financial services. While some unbanked people and firms exhibit no demand for accounts, most are excluded because of physical, economic, administrative, and psychological barriers, such as cost, distance, amount of documentation, and lack of trust.

World Bank 2017 data suggests various reasons people have quoted for not having a formal bank account:

- 60% of adults in low-income economies listed the **lack of disposable money** as the reason for having no accounts compared to 28% in developing economies.
- More than 50% of the unbanked population in **countries like Cambodia, Egypt, and Myanmar** (which have >65% unbanked population) quoted **maintaining minimum balances** as key reason for not opening bank accounts.
- **LATAM countries** like Mexico (27%), Peru (24%), Argentina (15%), and Chile (15%) topped the list of countries that cited **'lack of trust' (in the financial institution/system) to open an account.** Countries like Mexico and Peru registered unbanked adult populations (%) in 2017 of 63% and 57%, respectively.

As per a MasterCard report, **a limited number of banks in rural areas and low financial literacy** coupled with growing mobile literacy, **a cash economy** without the need or motivation for consumers to be banked, and the **low incentives for commercial banks** to support the financially excluded are among the main drivers for the number of unbanked people.

Refer to Tables in Appendix for global view of unbanked population.

3. ROLE OF TECHNOLOGY AND DIGITAL IN IMPROVING FINANCIAL INCLUSION

With the ability to reach financially excluded and underserved populations at a lower cost-to-serve compared to physical branches, digital financial services play a pivotal role in meeting the goals of financial inclusion. Essential components of digital financial services are digital platforms for payments and transactions, devices connectivity, and technology support.

3.1. Mobile Adoption. Mobile phone ownership is widespread among the unbanked. As per the Word Bank 2017 report, more than 50% of unbanked people in India and Mexico have a mobile phone; in China 82% of the unbanked population have a mobile phone.

Mobile banking has been the main channel for financial institutions since 2016. For example, out of 1.3 billion banking transactions done in Brazil in 2020, 25% were done through mobile devices and online banking.

Rise of Mobile Money: With the rapid uptake of mobile telephony in developing countries, mobile money deployments can offer financial services to rural and marginalized areas. **Take the case of M-PESA, the phone-based money transfer service** launched by Vodafone and Safaricom in Kenya. Within five to seven years, M-PESA had 22.5 million active subscribers with more than 10.3 million transactions every day. With more than 167,000 mobile money agents in March 2019, M-PESA was linked to several banks and could be accessed via many ATMs, significantly improving financial inclusion in Kenya.

3.2. Instant Payments. Instant payment is a method of immediate money transfer between bank accounts processed 24 hours and 365 days a year. Real-time payment services are transforming the global financial landscape.

The UPI (Unified Payments Interface) launched by the National Payments Corporation of India in 2016 works by instantly transferring funds between two bank accounts on a mobile platform. Transaction volumes over the Unified Payments Interface (UPI) more than doubled over a year, touching 2.73 billion in March 2021 compared to 1.25 billion a year ago.

Pix, the instant payment system created by Brazil's Central Bank and launched in 2020, makes it possible to transfer money between people and companies in up to 10 seconds, 24 hours a day, seven days a week.

3.3. National Digital Identity Systems. The World Bank estimates that roughly 1 billion people lack an official foundational identification. These 1 billion people are unable to prove their identity (ID), and millions more have forms of identification that cannot be reliably verified or authenticated, resulting in exclusion from economic opportunities

A reliable ID is integral to providing and obtaining financial services. **In 2009, the Indian Government launched Aadhaar, a biometrically verifiable identification number for each individual. Today, 1.2 billion Indians – including over 99% of the adult population – are enrolled.** In 2013, the government launched another program DBT (Direct Benefit Transfer - Benefits of Automatic Transfer). Through it, millions of Indian citizens began receiving state benefits more quickly.

3.4. Digital Currency. Digital currencies can lower transaction costs and drive financial inclusion. Retail Central Bank Digital Currencies (CBDCs) can help remake the financial system into one that is more accessible to the unbanked and underbanked. Retail CBDCs are issued by a central bank directly to people without going through traditional bank accounts. In this system, individuals have CBDC accounts directly on the central bank core ledger.

Recently, Brazilian Central Bank announced guidelines for the implementation of a CBDC (Central Bank Digital Currency). It's expected that this project will be discussed for two to three years before being implemented, but guidelines suggest an important feature: offline payments.

4. POLICY AND REGULATORY SUPPORT

Policy and regulatory support are key enablers for financial inclusion in any country. As per the World Bank study, countries that have progressed forward toward financial inclusion have policies delivered at scale, infrastructure for digital financial services, welcomed new business models, have a national strategy for financial inclusion, and laws for consumer protection.

4.1. Regulatory Initiatives. Tedious regulations can be a barrier to financial inclusion. Many governments have moved to ease rules for opening bank accounts.

Brazil, Peru, Colombia, and Mexico reduced KYC documentation for small balance accounts. One of the key regulations in India to bank the unbanked occurred in 2014 when the **Indian government enabled the opening of no minimum balance bank accounts under the Pradhan Mantri Jan Dhan Yojana (PMJDY).** As of Jan. 27, 2021, as many as 417.5 million accounts have been opened under PMJDY.

Brazil's emergency response benefit has driven the creation of bank accounts by users in order to get the benefit deposit. **Americas Market Intelligence shows the unbanked population all over Latin America has been reduced by 25% due to the social benefit programs created to minimize the effects of COVID-19.**

4.2. Building Technology Infrastructure and Last Mile Connectivity. Infrastructure readiness and technical systems are key to growing digital financial services. **Regulation should promote interoperability of platforms** or even shared infrastructure to reduce operational costs and increase networks and financial access. Interoperability allows for a collaborative financial system, enabling users on multiple digital networks to transact across platforms. **In Brazil efficiency through interoperability could save 0.7% of GDP per year, according to the World Bank.**

Sufficient access to internet and mobile is key for increasing banking options in rural areas. In India, a large chunk of India's unbanked population is spread across states and vast rural territories lacking technology infrastructure and access to mobile devices. **To bridge the gap in last mile connectivity, the Reserve Bank of India has permitted banks to engage business correspondents/business facilitators to provide the cost-effective delivery of services through ICT based solutions.** India also has USSD (Unstructured Supplementary Service Data) based mobile banking facility using basic feature mobile phone without the need to have mobile internet data facility.

In Brazil, 10.1% residences in the country do not have a mobile internet connection available and 22.1% do not have an active broadband connection. **Program North Connected** was launched by the federal government and aims at establishing a structure in the North of the country and bringing digital inclusion to people in the Amazon region. **Law of Antennas:** decree which regulates Law 13,116/2015 will make it easier to install mobile network antennas in Brazil. In the initial phase, a 650-kilometer optic fiber section will be built.

4.3. Financial Literacy. Financial literacy is the ability of a person to understand the basics of managing money and use of financial products to meet their own financial goals. Creating a financially literate population is key for the economic development of a country. Providing financial education and targeted financial information to a poor and unbanked population can help them increase savings and income in the future.

According to a Standard & Poor's survey, only 33% of adults worldwide are financially literate. Women's financial literacy levels are lower than men's. Governments need to play an important role in promoting financial literacy around the world. Institutionalization of financial training in the education system, outreach programs outside the school system, and leveraging social networks to disseminate information could help boost efforts in this area.

In Philippines, the Bangko Sentral ng Pilipinas (BSP) has stepped up its financial education program by initiating an ambitious program that brings together all financial leaders and decision-makers from the government and private sector.

In India, the Reserve Bank of India (RBI) recently launched the National Centre for Financial Education (NCFE) to promote financial literacy in India

5. FUTURE OF FINANCIAL INCLUSION

There are different models of financial inclusion emerging in countries around the world. Each country context varies, including in terms of availability of data and diagnostics, institutional capacity to implement reforms, financial market structure, level of financial infrastructure, and political priorities.

While financial inclusion has seen significant growth in all economies, many emerging economies still have some distance to cover to convert their unbanked population to banked. We have highlighted below some key areas which need attention and action from governments and financial institutions to meet their financial inclusion agenda.

a) Role of Fintech: Based on a Catalyst Fund survey of 177 start-ups and 33 impact investors, around **$23 billion in funding has gone into fintech investments in Asia, Africa, and Latin America in the last five years.** Tech-enabled financial solutions, such as mobile phone technology, data analytics, new digital products and approaches, and the deployment of agent networks, have the potential to radically enhance and foster financial inclusion.

b) Microfinance Institutions: Microfinance is now available in most of the developing world, with the most extensive consumer base being in South Asia. Microfinance institutions are adopting modern and future-proof digital technologies in partnership with fintech and mobile companies.

c) Credit Risk models: Innovations in alternative credit scoring models bridge the gap for lenders to be able to take credit underwriting decisions using proprietary algorithms. New models use non-traditional data, such as digital footprints obtained from social media and mobile phone usage, to calculate a credit score. **Psychometric evaluations (being used by Janalakshmi in India)** to assess an applicant's integrity, beliefs, loan repayment behavior, business acumen, and ethics are being leveraged for the assessment of propensity to pay off borrowers. **In Mexico, Konfio** is an online lending platform that measures credit worthiness of MSMEs through a proprietary algorithm.

d) Digital Infrastructure: Good digital infrastructure is key for promoting financial inclusion. **Interoperable switches, APIs, and potentially an emerging group of data aggregators** are all vital for digital platforms. **5G connectivity** could disrupt the banking industry. As per a Standard Chartered report, banks will be able to deploy 5G-enabled digital kiosks anywhere, entirely wireless with no need of any physical infrastructure.

e) Rethinking products and services: Spanish lender Banco Bilbao Vizcaya Argentaria (BBVA) identified seven key ways for achieving financial inclusion through tech solutions: 1) Develop an attractive and significant customer experience, 2) Socialize financial products and services (peer to peer funding sites), 3) Communication platforms between banks and their customers 4) Boost access to banking resources and help improve customer's financial health 5) Blockchain 6) Big Data and 7) Alternative user-identification and authentication methods such as iris recognition and selfie facial recognition not only make access to financial services easier but ensure user security is maintained.

f) The LATAM story: A joint research conducted by Mastercard with Americas Market Intelligence has revealed that 40 million people in Latin America have been banked in the last five months. **LATAM has witnessed many non-traditional players, such as neobanks and digital wallets, emerging** to help close the inclusion gap in Latin America. Neobanks encourage the use of digital financial services by reducing and exempting fees, facilitating bank account opening requirements, and offering a complete mobile experience.

Americas Market Intelligence research shows that **early government subsidies have been critical to increasing access to the banking system. The Coronavoucher program (Brazil), Ingreso Solidario (Colombia), and Ingreso Familiar de Emergencia (Argentina)** forced users who previously used only cash to open a bank account. The study states that thanks to the social benefit programs during COVID-19, the unbanked population throughout Latin America will have been reduced by 25%.

6. SPOTLIGHT ON BRAZIL AND INDIA

6.1. Financial Inclusion in Brazil and India – Fast Facts

BRAZIL	
Country Data	213 mn people 84 % of adults owned a transaction account in 2021 (16% unbanked population). In 2017, unbanked population was 30% 68 % of females owned a transaction account in 2017
Digital Payments	1.3 billion Real time payments transactions in 2020 Electronic/Real time payments constitute 25% of total payment volumes An average of 3.59 debit, credit and charge cards per adult
Internet and Smartphone Penetration	78% internet users in the country (age10+) 81% smartphone penetration (age 10+)
Instant Payments System	PIX – Launched in 2020 by Brazil's Central Bank, Brazilians can now pay and send funds 24/7 (including holidays), via mobile banking, online banking, and ATMS, and between individuals and organizations Payment is enabled through Address keys (phone number, e-mail address or other alphanumeric as their alias), QR Codes, NFC User data is maintained in centralized directory at the central bank of Brazil
Regulations for Financial Inclusion	No-fee checking account for lower income group since 2007, Brazilian central bank has allowed financial institutions/FinTechs to offer digital payment accounts, a simpler version of a checking account, with significantly lower regulatory demands Banks have requirements to direct 65% of savings deposits to mortgage and agricultural lending, to foster activity on those sectors, and reduce housing deficit

Table Sources: World Bank Report (Findex), Statista, ACI Payments Report, BC, Febraban, IBGE

INDIA	
Country Data	1.3 bn people 80% of adults owned a transaction account in 2017 (20% unbanked population) 77% of females owned a transaction account in 2017
Digital Payments	22.5 billion Real time payments transactions in 2020 Electronic/Real time payments constitute 34% of total payment volumes An average of 1.13 debit, credit and charge cards per adult
Internet and Smartphone Penetration	53% internet users in the country 40% smartphone penetration
Instant Payments System	UPI = Launched in 2016, instant real-time payment system developed by National Payments Corporation of India. The interface is regulated by the Reserve Bank of India and works by instantly transferring funds between two bank accounts on a mobile platform. UPI uses VPA (Virtual Payments Address) which looks like an email address that is linked to your bank account and is used to transfer funds online in real-time without entering information like account number, IFSC Code, and Account Name
Regulations for Financial Inclusion	The National Strategy for Financial Inclusion 2019-2024 sets forth the vision and key objectives of the financial inclusion policies in India -Jan Dhan Yojana – a no-frill savings bank account. Priority sector lending target for banks at 40% of adjusted net bank credit -Central bank issued licenses for new small finance banks with priority sector lending target of 75% and requirement of opening at least 25% of its branches in unbanked rural centers

Table Sources: World Bank Report (Findex), Statista, ACI Payments Report.

6.2. Key Financial Inclusion Initiatives – Brazil. In the past 10 years, Brazil has witnessed an increasing evolution in financial inclusion and use of digital. According to research done by Americas Market Intelligence, the number of unbanked Brazilians has been reduced by 73% in the past five months as 11.8 million people have initiated a relationship with a financial institution during the pandemic.

Mobile banking has been the main channel for financial institutions since 2016. According to the World Bank, out of 1.3 billion banking transactions done in Brazil in 2020, 25% were done through mobile devices and online banking.

There are currently 332 financial start-ups in Brazil, according to Radar FinTech Lab. Moreover, quarantine has boosted e-commerce and the use of new technologies by Brazilian consumers. Payments using tap and real-time payments using PIX are now part of the population's reality through fintech and digital banks.

Since 2019, Central Bank of Brazil and the Brazilian government have been developing the Agenda BC#, a set of actions with the purpose of promoting the country's financial democratization in five dimensions: inclusion, competitiveness, transparency, education, and sustainability.

Pix and Open Banking: Recent changes to the country, both in the regulations with Open Banking and creation of PIX, as well as in the acceleration of population digitization, look promising, albeit challenging.

Amongst the several Brazilian government Agenda BC# initiatives, the highlight is the instant payment system, PIX, under the competitiveness pillar. Instant payments are defined by Central Bank as electronic transfers in which the payment order and funds availability are in real time and the service is available 24/7. This process is done straight from the payer's account to the payee's account, hence, there is no intermediary needed. Thus, there is a reduction in the cost of the transaction.

Currently, there are more Brazilians with smartphones than Brazilians who are unbanked. This offers a potential adoption of PIX by the low-class population, mainly considering the experience of payment digitization in other countries (especially instant payments) and how they resulted in noticeable financial inclusion.

6.3. Key Financial Inclusion Initiatives – India. Extending financial services to the underbanked has been a goal of successive governments and private institutions in India. With a population of more than 1.3 billion, India has many people who are still out of the formal financial system.

India has a great opportunity for adoption and growth of digital payment systems in a historically underbanked market with heavy reliance on cash payments. According to a recent study by ACI Worldwide on Digital Payments across 48 global markets, India retained the top spot with 25.5 billion real-time payments transactions, followed by China with 15.7 billion transactions.

In 2013, the government launched a program DBT (Direct Benefit Transfer - Benefits of Automatic Transfer). Through it, millions of Indian citizens began to receive state benefits more quickly.

In 2015, Government of India launched the 'Digital India' campaign in order to ensure the government's services are made available to citizens electronically by improved online infrastructure and by increasing Internet connectivity or making the country digitally empowered in the field of technology

According to a Standard & Poor's survey, over 76% of Indian adults lack basic financial literacy. The Reserve Bank of India (RBI), India's central Bank, recently launched the National Centre for Financial Education (NCFE) to promote financial literacy in India. This initiative will run various programs to improve the financial literacy including collaborating with schools and developing new curriculum to include financial management concepts.

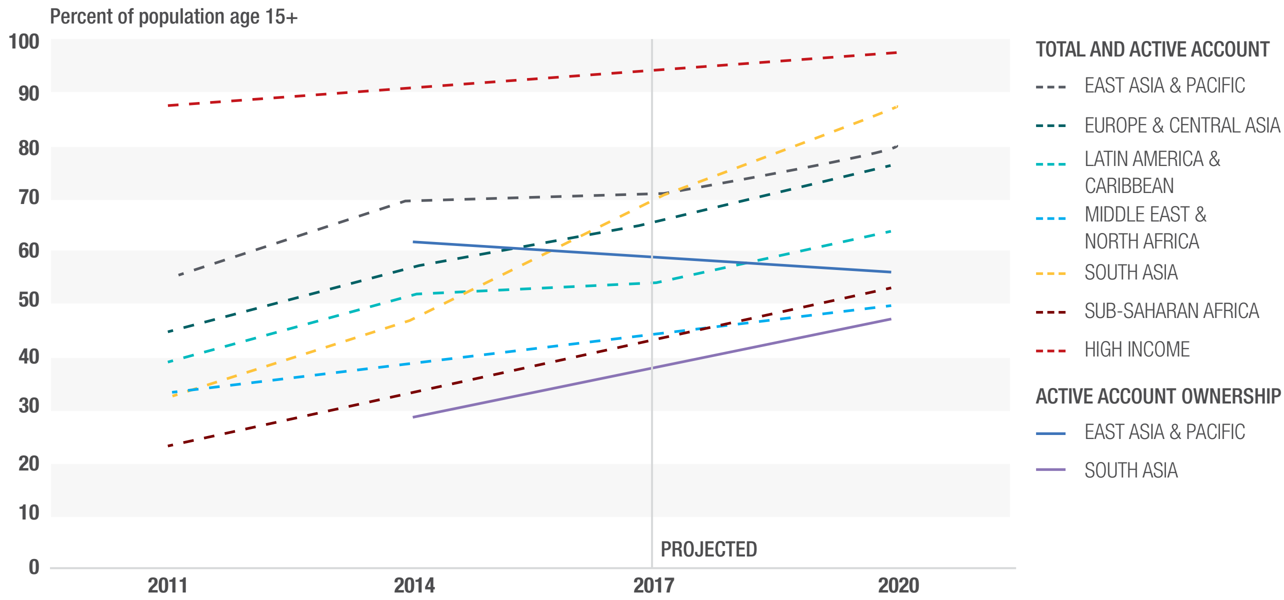
Another step to deepen financial inclusion in the country has been the launching of India Post Payments Bank (IPPB) in September 2018. IPPB is leveraging the vast network of Department of Posts to further scale up financial inclusion initiatives in the country.

7. APPENDIX

7.1. Charts/Tables

Global view of Unbanked Population

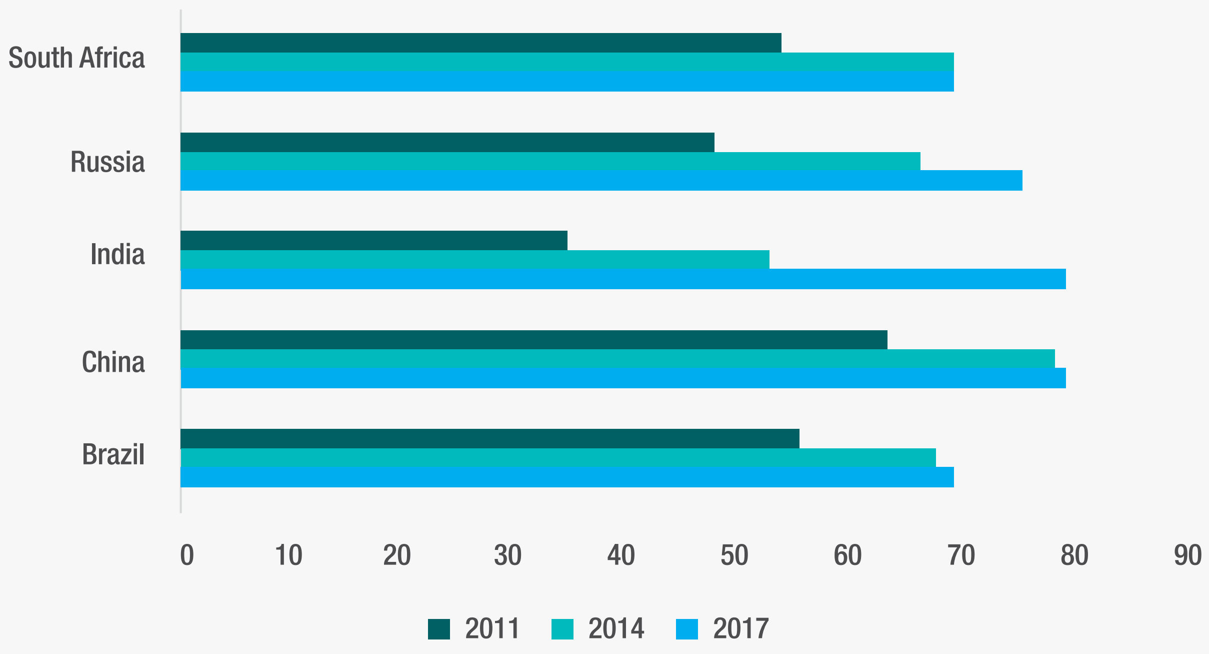
Total and Active Account Ownership by Region, 2011-2017, Projected to 2020



Source: World Bank, Global Findex database

COUNTRY	TOTAL POPULATION (MILLIONS)	UNBANKED POPULATION (%)
Mexico	129	63%
Nigeria	206	60%
Brazil	213	30%
Russia	146	24%
India	1380	20%
China	1439	20%
US	331	7%
UK	68	4%
Japan	126	2%
Germany	84	1%

Source: World Bank Global Findex database, Merchant Machine



Source: World Bank, Global Findex database

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AUTHORS

Arun Vasan, India, arun.vasan@capco.com
Alexandre Bueno, Brazil, alexandre.bueno@capco.com
Aline Lemos, Brazil, aline.lemos@capco.com

ABOUT CAPCO

Capco, a Wipro company, is a global technology and management consultancy specializing in driving digital transformation in the financial services industry. With a growing client portfolio comprising of over 100 global organizations, Capco operates at the intersection of business and technology by combining innovative thinking with unrivalled industry knowledge to deliver end-to-end data-driven solutions and fast-track digital initiatives for banking and payments, capital markets, wealth and asset management, insurance, and the energy sector. Capco's cutting-edge ingenuity is brought to life through its Innovation Labs and award-winning Be Yourself At Work culture and diverse talent.

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