

CAPCO

PIX IN BRAZIL

LANDSCAPE AND OPPORTUNITIES

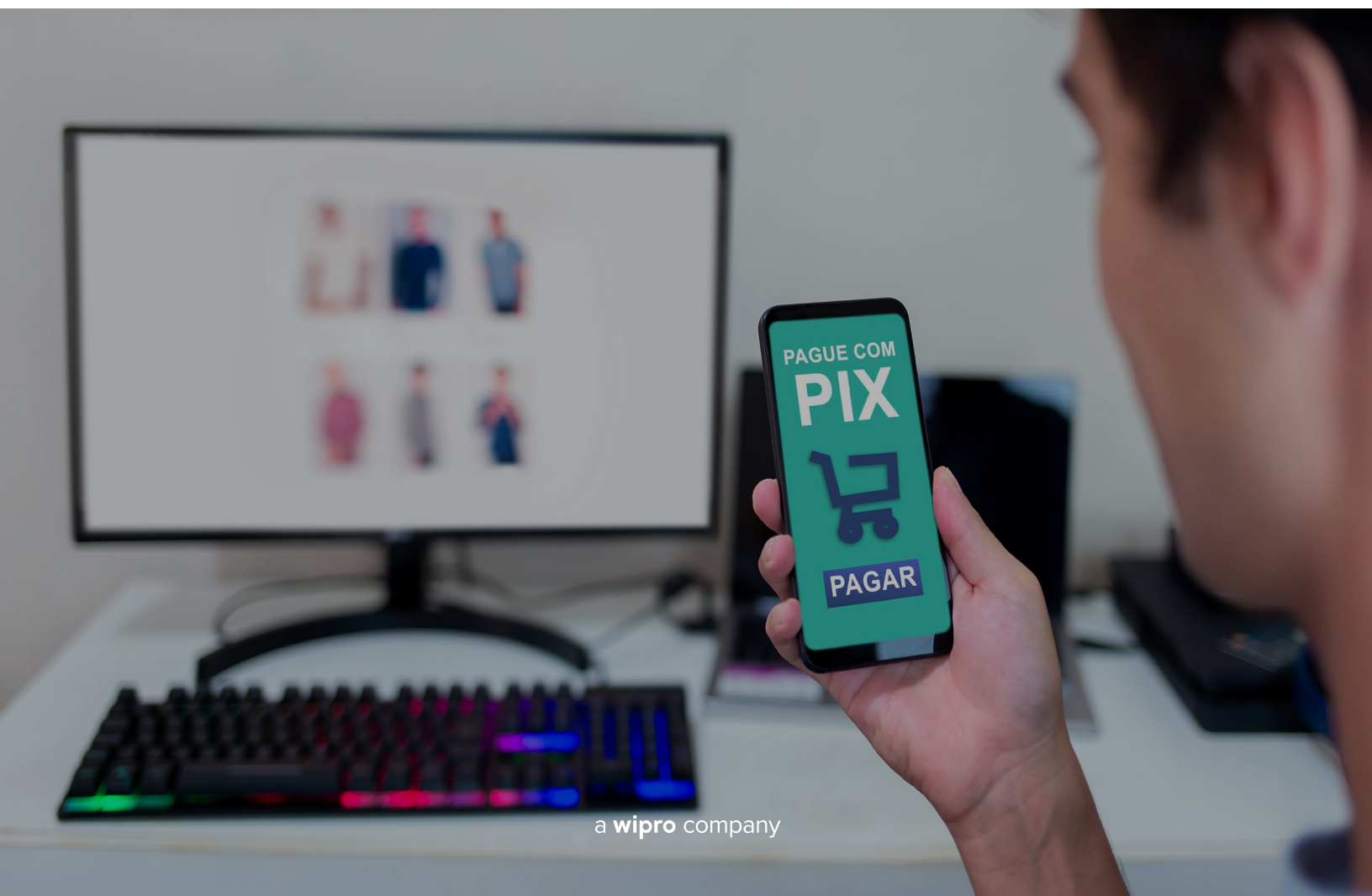


TABLE OF CONTENTS

Introduction.....	4
Executive Summary.....	4
PIX is not the preferred payment method of the Brazilian population.....	5
Four critical points that must be studied for the evolution of PIX in the retail sector.....	5
PIX Current Overview.....	7
Capco Survey.....	7
Market penetration.....	9
Relevant advantages of using PIX for self-employed and informal worke.....	10
In the retail segment, PIX is not the preferred payment method.....	10
Challenges with PIX acceptance in the retail sector.....	10
Financial Education.....	11
Digital Inclusion – Internet Access.....	11
The Future of PIX.....	11
Increase the number of features.....	12
Improve the current user journey.....	13
Partnerships with big techs, fintechs, startups and big institutions.....	14
Investments in financial literacy.....	14
A Global Perspective on Instant Payment Implementation.....	11

INTRODUCTION

In operation since November 16, 2020, PIX has quickly become popular in Brazil and, in the first half of 2021, was already the most used transfer method in the country. In March 2021, PIX was being used more than DOCs and TEDs (electronic transfer methods in Brazil) combined. The PIX system works uninterruptedly, including on weekends and public holidays, and payments are processed instantly: within a few seconds, funds go from one account to another.

PIX is one of the many initiatives emerging around the globe to make the payment and financial transfer process easier and more inclusive. Solutions for instant payments and tools that make transfers feasible without any type of touch, combined with increasing new technologies, such as 5G, and the implementation of more robust security layers have changed the way we make payments on a daily basis, with the potential to transform our economic model as a whole.

In order to deepen our understanding of PIX and explore concepts that may be used to support the quick use of this payment method, Capco conducted an online survey all over Brazil between February and March 2022, as well as many interviews with microentrepreneurs and small and medium-sized companies. After analyzing the results and official data from Brazil's Central Bank, it is clear there is a big opportunity to increase the use of PIX, mainly by companies, as well as the need to improve or change the PIX journey in order to enhance the user experience.

According to official data from Brazil's Central Bank, Brazil currently has 774 financial institutions registered with the PIX system, which allows all their checking account holders to make PIX payments even if they have not registered an identification key (known as "PIX key"). Data about the month of February 2022 show there are more than 400 million PIX keys registered, 122 million users registered – most of them (93%) individuals – and over BRL 1.3 billion transactions made. In other words, it is possible to estimate that around half of the Brazilian population has already registered a PIX key.



EXECUTIVE SUMMARY

Capco conducted an online survey with approximately 1,000 people all over Brazil, as well as some interviews with business owners of small and medium-sized companies from the main cities in the country, to better understand their habits and feelings regarding PIX. Based on our survey and analysis, we have identified a few important aspects related to the use of PIX.

PIX is not the preferred payment method of the Brazilian population

- 55% of the respondents said they use PIX once in a while or hardly use it, and prefer other payment methods available;
- 82% of the respondents state they would rather make payments using credit cards due to reward programs;
- 66% of the respondents say they prefer credit/debit cards over PIX, if both payment methods are available.

Four critical points that must be studied for the evolution of PIX in the retail sector

- Frauds and guarantees for receiving payments
 - Develop solutions that enhance fraud prevention, such as redesigning payment receipts;
- Integrate with POS software
 - Integrating PIX with a higher number of POS systems may encourage the use of this payment method;
- Speed in customer service
 - Higher speed in customer service at physical locations is crucial to increase the use of PIX;
- PIX Journey
 - Optimize payment journeys to reduce friction and the time users spend when making transactions at brick-and-mortar stores.

Capco has conducted an online survey with approximately 1,000 people all over Brazil, as well as some interviews with business owners of small and medium-sized companies from the main cities in the country, to better understand their habits and feelings regarding PIX. Based on our survey and analysis, we have identified a few important aspects related to the use of PIX.

ELDERLY PEOPLE DO NOT USE PIX OR DO NOT USE IT OFTEN

Although they represent 14.6% of the population in Brazil, people over 60 years-old account for 4.1% of PIX users only.



+60 YEARS OLD



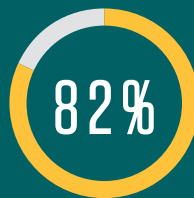
20-39 YEARS OLD

On the other side, people aged between 20 and 39 represent 31.9% of the Brazilian population, and the use of PIX among them is fairly higher: 64% of the total transactions.

PIX IS NOT THE PREFERRED PAYMENT METHOD OF THE BRAZILIAN POPULATION



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PIX IS NOT THE PREFERRED PAYMENT METHOD OF THE BRAZILIAN POPULATION



Frauds and guarantees for receiving payments

Develop solutions that enhance fraud prevention, such as redesigning payment receipts.



Integrate with POS software

Integrating PIX with a higher number of POS systems may encourage the use of this payment method.



Speed in customer service

Higher speed in customer service at physical locations is crucial to increase the use of PIX.



PIX Journey

Optimize payment journeys to reduce friction and the time users spend when making transactions at brick-and-mortar stores.

CAPCO SURVEY

To understand Brazilians' perception of the use of PIX and look for solutions to leverage the growth of this important payment method, Capco conducted an online survey in March 2022 with 1,000 people over 20 years-old living across capital cities all over Brazil. The purpose was to understand the current profile of PIX users.

Market penetration

HAVE YOU EVER PAID FOR A PRODUCT OR SERVICE USING PIX?	%
Yes	94
No	6

Table 3

However, although PIX is used quite often, there is a long way to go. 26% of the respondents point out they hardly use PIX, and 29% use it only once in a while.

HOW OFTEN DO YOU MAKE PAYMENTS USING PIX?	%
Hardly ever	26
Once in a while	29
Many times	36
Whenever possible	9

Table 4

As previously mentioned, 72% of the PIX transactions are made among individuals (person to person) and may be described more as peer-to-peer transfers rather than payment methods per se. Therefore, we still see plenty of opportunity to increase the use of PIX for payments of products and services, as we will further address in this paper.



Relevant advantages of using PIX for self-employed and informal workers

Our survey shows a positive scenario regarding the use of PIX by self-employed and informal workers. PIX has been widely used by this group. 66% of the respondents have already paid self-employed and informal workers using PIX. This happens because only a minority of these professionals use terminals or structured systems (POS), for cost-related reasons. In many cases, the bank accounts used by these professionals are not corporate bank accounts, also because of the costs involved.

Prior to PIX, these professionals were paid through other methods, such as DOC or TED transfers, which potentially generated costs for payors, so cash ended up being the most feasible payment option. Therefore, PIX became a natural choice which simplified and unburdened the process.

In the retail segment, PIX is not the preferred payment method

In our survey, 66% of the respondents said they prefer making payments using debit or credit cards over PIX. The main reason behind their preference is related to rewards:

- 82% of the respondents say they would rather make payments using their credit cards due to reward programs;
- 70% of them would migrate to PIX only in exchange for discounts or cashback.

In other words, most Brazilian consumers choose the payment method that potentially offers more financial benefits. However, it is possible to identify a risk in this model for the use of PIX: we have seen many financial institutions provide clients with rewards for using PIX or for activating accounts. This strategy can have

good results in the short term but does not ensure clients will be loyal after the benefit period, entailing potential risks. And, as for the companies, the difference in fees when it comes to using PIX or cards is significantly small, especially if we consider debit cards and PIX: at times, this difference is no higher than 2%.

It is important to highlight a few comments made during the survey: some respondents reported that, by making make payments using PIX, they are in charge of a process that, previously, was carried out by stores or commercial establishments (after all, the mobile and internet used during the PIX payment are the customer’s responsibility). Thus, these customers expect to be rewarded for taking on this “new role,” in the form of discounts, cashback or scores.

The demand for payments in installments, quite often used by Brazilians, is also something to consider. 40% of the respondents say they would be more prone to migrate their credit card payments to PIX if they could make PIX payments in installments. This feature, referred to as “Guaranteed PIX,” will have its implementation reviewed by Brazil’s Central Bank in 2022.

Finally, 30% of all respondents – and 44% of the group that prefers to pay using cards – said they would fell more encouraged to use PIX if the payment experience was optimized and simplified. Currently, these consumers are not open to switch their payment method – debit or credit cards – to PIX because they find it complex to use.

IF BOTH PAYMENT METHODS WERE AVAILABLE, WOULD YOU RATHER PAY FOR PRODUCTS AND/OR SERVICES USING PIX OR CARDS?	%
Debit/Credit Card	66
PIX	34

Table 5

Challenges with PIX acceptance in the retail sector

The use of PIX depends not only on the customer that makes the payment but also on the beneficiary's decision to accept it. In our survey, we noticed a lack of homogeneity in the customers' perception of PIX acceptance by companies and service providers.

Respondents pointed out that PIX is more accepted or encouraged on websites, small brick-and-mortar stores, service providers

(either formal or informal workers) and donation campaigns. On the other hand, we have noticed PIX is less accepted in grocery stores, chain stores and malls.

After the results have been analyzed, Capco's team of experts listed four critical points that must be studied so that PIX ecosystem as a payment method can evolve over the next few months.

IN WHICH ESTABLISHMENTS/SERVICES DO YOU REMEMBER SEEING PIX OFFERED AS A PAYMENT OPTION? (CHECK ALL THE ITEMS YOU REMEMBER)	%
Online shopping websites	67
Service providers (cleaning services, house maintenance services, etc.)	66
Street vendors	61
Coffee shops and snack bars	60
Meal delivery services	58
Stores in shopping malls	55
Donations for specific fundraising campaigns or entities	47
Donations in general	47
Supermarkets	43
Beggars seeking "handouts"/donations on the streets	28
Churches and religious temples	22
Travel agencies	14

Table 6

1. Integration with POS software

Retail commerce — especially big chains, franchises, shopping mall stores and establishments in big cities — has been using software to help with commercial management and to simplify the sales chain as a whole. These types of software already offer resources for the acceptance of several payment methods, however many of these solutions have not incorporated the PIX system as a payment method yet. In these cases, PIX is accepted outside the company's integrated system, which makes banking and account reconciliation difficult.

Our analysts indicate that having PIX as a payment method at the main POSs in the market may be a factor to encourage the use of PIX.

2. Speed in customer service

As previously mentioned, our survey shows that places which need payments to be made quickly, such as supermarkets, do not encourage payments using PIX.

Our analysis indicates the time customers take to make PIX payments can be twice the time it takes them to pay using other methods. Therefore, we believe it is crucial that financial institutions optimize their PIX operation journeys, reducing the time needed for PIX payments to be made.

3. Frauds and guarantees for receiving payments

In the field survey conducted with small retailers across the country, we have identified a concern about the use of PIX to receive payments: scams committed by criminals over the last few months. Brazil's Central Bank has been constantly working to address this issue and has created new mechanisms, such as limiting PIX use based on a person's profile and the time of transaction, blocking transfers as a precaution and refunding PIX payments. However, despite these efforts, scams continuously evolve based on what happens in the market and require our regulator's constant attention.

On this paper, it is relevant to highlight two scams that were frequently mentioned in our survey:

- Criminal mocks a PIX transfer, but they actually schedule a PIX transaction. The receipt displays the scheduled transaction, but if the employee does not look into the receipt details or does not check whether the transfer has been made to the checking account, they wrongly assume the amount has already been paid and ship the product, incurring the loss on the transaction.
- Criminal uses a stolen cell phone. With access to the smartphone passwords, the criminal makes a PIX transfer. However, the person who got the cell phone stolen makes a complaint and asks for their money to be paid back, generating a loss for the store that accepted the payment.

These scams have led to a lack of trust among retailers, making PIX increasingly less accepted by such retailers. Financial institutions, in their role of financial services providers, need to deliver safe solutions for the involved parties, such as a fraud prevention model able to detect early any suspicious activities. Another important action could be redesigning payment receipts — which should highlight the type of transaction made — and triggering an immediate and effective alert in the system once any amounts are received in the beneficiary's account.

4. The PIX Journey

The efficiency in the PIX payment process, especially with the QR code, is directly related to a well-designed screen journey. Many financial institutions offer a PIX payment process that requires additional steps — and takes longer — if we compare it to other payment methods, such as cash or cards.

Problems such as the ones mentioned above may reinforce two pieces of data obtained in our survey:

- 28% of the respondents said they have never made a PIX payment using a QR code, although they have already used PIX;
- 57% of the respondents do not recall having seen any signs in supermarkets saying PIX payments are accepted.

PIX with QR Code

For PIX payments that are made in stores and commercial establishments in general, it is recommended that QR codes dynamically generated be used to identify the transaction being made, in which case customers need to point their cell phone camera to a digital code. This solution is safer for business owners, especially from a speed and bookkeeping perspective, however it requires financial investments to ensure the payment process has good usability.

We have seen that many business owners have implemented PIX as a payment method, without making the necessary changes though, which affects the experience realized by payors.

How to use a QR Code

QR codes are widely used in Brazil mainly through links captured from the internet. This functionality is already embedded in mobile operating systems (Android and iOS), and users just need to turn on their smartphone camera and point to the QR code to receive and instantly click an access link.

However, in the case of PIX payments with QR code, customers need to take additional steps – click their bank's app, login, enable the PIX function and select this type of payment. Such additional steps involved in PIX payments with QR codes create a barrier to PIX adoption. In our survey, many business owners reported cases in which customers point their cameras to the QR code expecting the transaction to initiate, but the error message received for not logging to their bank's app leads to frustration.

Reducing the friction of this process is crucial to increase the use of PIX payments with QR code. Examples such as the one in India – to be further described in this paper – can help look for a solution.

Screen or Monitor

In many cases, retailers generate the QR code on the computer monitor of the cashier, who is facing the customer. This may be uncomfortable for customers and cause dissatisfaction, as they need to point their mobile camera in a complex way or give their cell phone to the cashier so that he/she can scan the QR code, something customers may not trust.

Additional problems occur when the internal screen is not an anti-glare monitor, as reflections of objects around the monitor may cause considerable difficulty in capturing the image, leading customers to feel more frustrated due to the significant delay in the payment process.

In terms of usability, it is possible to obtain better results by providing a customer-facing anti-glare screen that displays the QR code the moment customers are making the payment. However, this feature generates additional costs for business owners who sometimes do not understand the cost-effectiveness of this investment.

POS Software

For companies that use market ERPs, the payment journey is usually embedded in the solution. Thus, providers must include PIX in the ERP solution, in which case, business owners usually pay additional fees for using PIX. There are cases in which establishments provide a separate PIX key, outside the ERP (email or CNPJ, i.e., Brazilian Register of Corporate Taxpayers, for instance), however we noticed this makes the company's reconciliation account process more complex.

Financial Education

Federal government's incentive programs in Brazil targeted at economically vulnerable people, specifically the Emergency Assistance distributed to make up for losses arising from COVID-19, have significantly reduced the number of unbanked people in Brazil.

However, this does not mean that this group of the population is prepared to properly benefit from the products and services offered by the financial market. Many of these users immediately withdraw the funds deposited as benefits and do not carry out other transactions in their digital accounts, therefore, they cannot be considered as real banked users.

It is worth highlighting the IEF, Brazilian acronym for Financial Literacy Indicator, which is published by Brazil's Central Bank and considers dimensions such as debts, delinquency, and deposits. On a scale of 1 to 100, this indicator provides an average result of 35, with the North and Northeast of Brazil showing figures lower than 26.

This situation directly affects the use of PIX, especially in the North and Northeast of the country and cities far from the big centers. The population that has a low financial literacy rate or does not make many transactions in bank accounts struggles to use digital payment platforms, which directly affects the use of PIX across many regions in Brazil.

Developing intuitive and easy PIX journeys, investing in financial literacy at schools and community centers, offering educational programs and advertising on the radio and TV channels are ways to explain, to the most vulnerable people, the benefits of using PIX on daily transactions.

Digital Inclusion – Internet Access

According to a recent study conducted by IBGE/PNAD, 21% of the households do not have access to the internet. There are many reasons for that:

- failures on the network coverage and slow internet speed, especially in cities located far from big centers, due to the lack of antennas;
- 25.4% of people living at houses with no internet connection report that internet costs are the main reason for them not accessing the network;
- 24.3% of the people who do not access the internet in Brazil report they don't do so for lack of knowledge of how to use it.

Thus, the use of PIX, especially for payments in the retail sector, is directly affected by the fact that users are responsible for the access and costs during the transaction. This specifically affects the most vulnerable groups and regions that are farthest from big urban centers and is one of the biggest obstacles to increasing the number of people using PIX and to consolidating PIX as the main payment platform in Brazil.

payments to PIX if they could make PIX payments in installments. This feature, referred to as "Guaranteed PIX," will have its implementation reviewed by Brazil's Central Bank in 2022.

Finally, 30% of all respondents – and 44% of the group that prefers to pay using cards – said they would feel more encouraged to use PIX if the payment experience was optimized and simplified. Currently, these consumers are not open to switch their payment method – debit or credit cards – to PIX because they find it complex to use.

THE FUTURE OF PIX

There is no doubt about the success of PIX. With over 120 million registered users and the increased use of PIX as an inclusive payment channel, it is clear that PIX has already won a place in the market and will keep growing for a long period of time. Capco's survey confirms these indicators, as 94% of the respondents have already made payments using PIX.

This success is results from the great efforts made by Brazil's Central Bank and from the maturity of the Brazilian financial system, which is constantly looking for safety, modernity, and social inclusion.

However, just like in any complex solution of this magnitude, it is possible to envision enhancements that may accelerate the use of PIX and make this important project even more successful.

Although Brazil is a country with unique characteristics – high banking rates, low levels of financial literacy, considerable use of credit cards, especially in big cities, a market with many fintechs – we can use lessons learned from countries like China, India, and the United Kingdom to enhance our model.

Based on this, we can define a few major steps to be discussed in order to consolidate the success PIX.

Increase the number of features

Since PIX has been launched, new features have emerged, and Brazil's Central Bank has a timeline with some new features for PIX. "Payment request" and "Pre-authorized Debit" are expected features for this year. However, a constant demand from many people is the possibility of having chargebacks in case of transfers or payments incorrectly made. Frauds have become a problem due to PIX popularity, with Brazil's Central Bank and financial institutions still facing the challenge of preventing them.

Improve the current user journey

There is still a lot of room for improvements in the PIX payment journey, mainly when it comes to its use in brick-and-mortar establishments. Using PIX as a payment method requires more steps than payments made using cards, especially if we think about contactless payments. Integrating PIX with this type in technology (NFC) would make the process more practical, but would it actually offer consumers an advantage, compared to credit and debit cards?

Partnerships with big techs, fintechs, startups and big institutions

Integrating with tools with which customers are already familiar with is a practice that can accelerate the use of PIX and ensure safety for people. The Chinese example can inspire us in this regard: when WeChat Pay was launched in 2014, it benefited from a communication platform that already counted on 396 million users. WeChat currently has 1.2 billion users, and most of them make payment transactions using the tool with no need to open a new application to shop online. Therefore, the experience observed by users is optimized.

Another good example is the one in India. The UPI platform can be easily integrated with tools such as Google Pay and WhatsApp, which already have billions of users registered, thus facilitating the shopping experience.

It is worth highlighting one point of attention – those partnerships and integrations bring benefits in terms of usability but entail risks of market concentration. The Chinese government has expressed considerable concerns about the payment market being in the hands of two companies only: Tencent and Alibaba. Tight regulations must be adopted to ensure market competition.

Investments in financial literacy

Actions focused on making the population aware about the importance of planning, saving, and using credit and on better explaining the benefits of financial products and services are crucial for us to expand payment digitization and increase the use of PIX.

We can take the example in India, with the creation of the National Centre for Financial Education (NCFE), which significantly leveraged the use of UPI with courses for the most vulnerable population.

Offering subjects related to financial literacy at schools and forming support groups for the elderly population can be crucial to make PIX even more successful.



A GLOBAL PERSPECTIVE ON INSTANT PAYMENT IMPLEMENTATION

Although Brazil is a country with unique characteristics – high banking rates, low levels of financial literacy, considerable use of credit cards, especially in big cities, a market with many fintechs – we can use lessons learned from countries like China, India, and the United Kingdom to enhance our model.

The technology that allows for implementing instant payments, such as PIX, is being gradually adopted by most countries worldwide. In 2021, the number of global transactions through instant payments reached 118.3 billion, an updated growth of 64.5%. This number is expected to be a little less than 200 billion by 2024.

Besides bringing innovation and improvements in the payment infrastructure, instant payments are considered, in some countries like India, as a financial inclusion tool, making it easier for the population that was excluded from the ecosystem to access the financial system. India has already been working to expand its Unified Payments Interface (UPI) platform to other countries, including Bhutan, Singapore, and United Arab Emirates.

The Asia-Pacific region is winning the race to integrate instant payments, and India stands out for the number of transactions carried out in the country. In 2022, Indian citizens have made over 48 billion transactions using an instant payment method (in many aspects, very similar to PIX). In China, solutions like WeChat and Alipay have more than 1.2 billion users. According to the report published by GlobalData (The Status of Instant Payments in 2022), one of the reasons for the success in the implementation of this type of payment in developing countries, such as India and Thailand, is the technology which, apart from being innovative and faster to develop, offers lower costs for consumers and companies. Moreover, the limited number of payments made through cards in those countries has also helped instant payments play a role in filling a gap. Also, according to data published by GlobalData, most Western countries are taking longer to adopt instant payments, in comparison to developing countries, because cards are still the main payment method¹.

1. The Status of Instant Payments in 2022 - February 10, 2022 – GlobalData - <https://www.businessofapps.com/data/wechat-statistics/>



India

India is one of the world's most populous countries, with 1.3 billion people, and has substantial social inequalities. Only 53% of its population is connected to the internet, and 76% of Indian adults lack basic financial literacy, according to a survey conducted by Standard & Poor's.

To overcome this challenge, the Reserve Bank of India (RBI), India's Central Bank, has launched in 2016 the UPI, an instant payment platform very similar to PIX, one of the similarities being an identification key to make transactions.

Since its launch, the UPI has maintained a strong growth. The success of the UPI platform can be explained by many factors, especially the fact that the platform is easy to use and free of charge. Just like PIX, the UPI platform allows consumers from all over the country to directly access their wallets and make transactions online and on brick-and-mortar stores, by using a key or QR code, without the need of POS terminals (which would increase costs for business owners, especially small ones). But the key to UPI's rapid growth is the possibility of (and governmental incentive for) integrating the solution with the ecosystem of digital banks and wallets, forming a unique and integrated ecosystem. Therefore, the main digital wallets, such as PhonePe and Paytm, and the solutions provided by big techs, such as Google Pay and WhatsApp Pay, are directly integrated with the UPI, making its use significantly easier for the general population. Thus, Indian citizens can easily and quickly use platforms they are already familiar with, by taking only few steps to complete a transaction.

In March 2022, the number of transactions made on the UPI platform exceeded five billion per month for the first time. This means more than two thousand transactions per second!

Additionally, and in a strategic way, 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 was crucial to increase the use of UPI and ensure citizens safety on this payment model transition.

The UPI platform is being enhanced to allow for international transactions, including to nations outside ASEAN (The Association of Southeast Asian Nations). The RBI (Reserve Bank of India) and MAS (Monetary Authority of Singapore) have been working together to integrate the UPI and PayNow, an instant payment service widely known in Singapore. This project is expected to be launched in July 2022 and aims at facilitating low cost and instant transactions between the two countries. UPI customers will be able to make transfers and payments to PayNow users, directly from their mobile devices, without sharing their bank account information, as a mobile number will be enough for them to carry out the transactions. Besides its connection with Singapore's PayNow, the government of India made a partnership with the government of Bhutan to launch the Bharat Interface for Money UPI (BHIM-UPI). The BHIM is a digital wallet app issued by the government and integrated with the UPI platform which allows people from Bhutan and visitors from India to directly use the BHIM-UPI.



United Kingdom

The United Kingdom has a highly banked population (97%) with high financial literacy levels. 69% of the English citizens own credit cards, and the use of cash has significantly dropped, representing 17% of the payment transactions in 2020 and only 15%, in 2021.

The COVID-19 pandemic has accelerated the use of contactless payment methods, which represented 27% of all payments made in 2020. Besides using contactless cards for payments, the English are quickly embracing digital wallets such as Apple Pay, Google Pay and Samsung Pay – 32% of the population have signed up to use these solutions in 2020, an increase of 75% in comparison with the previous year. Success in this case comes from the fact that it is possible for users to include their own debit and credit cards in these platforms and enjoy an optimized payment experience, by using their mobiles and NFC technology, without the need to carry their physical cards with them.

Younger people are the ones that use them the most – 56% of people aged between 16 and 24 use this type of solution, compared to only 11% of the population older than 65.

Additionally, English people can also count on a solution called Faster Payments, an instant payment system in the United Kingdom that has been jointly developed by the banks and the government. Launched in 2008, this system was quickly adopted as a payment method by the British and has grown year after year. According to GlobalData, the United Kingdom will reach 5.8 billion instant payment transactions in 2026.

Total volume of payments in the United Kingdom – 2020

- Contactless debit card - 8,412 - 24%
- Debit card - 7,400 - 21%

- Cash - 6,075 - 17%
- Transfer between accounts - 4,507 - 14%
- Faster Payments - 2,952 - 9%
- Bacs Direct Credit - 1,945 - 5%
- Credit card - 1,611 - 4%
- Contactless credit card - 1,216 - 3%
- Others - 1,474 (3%)

Volume of transactions

However, unlike the UPI in India, which was developed as a platform focused on payments, Faster Payments is mainly a P2P tool that has been integrated with the banks' infrastructure in the United Kingdom. This integration enabled customers to make transactions online using their phones. Although the number of transactions through this type of payment is still lower in comparison to that of payment cards, the total transaction amount through Faster Payments (US\$ 2.8 trillion) is more than twice the transaction amount paid using cards (US\$ 1.1 trillion)¹. This shows that, in the United Kingdom, instant payments are mostly used for larger amounts, whereas payment cards are preferred for smaller amounts.

The result of all these actions and changes in the English people's mindset has led Faster Payments and the contactless technology in cards or digital wallets to represent 35% of all payment transactions, with these being the most used payment methods in the country.

1. The Status of Instant Payments in 2022 - February 10, 2022 – GlobalData



China

China has a population of 1.4 billion people; 20% of them are considered unbaked. This group of people with no banking relationship is particularly concentrated on rural areas, with limited access to the internet.

It is also important to stress out that only 21% of the Chinese population has access to credit cards, and 67% has access to debit cards.

In this scenario, it is no surprise that instant payments through mobile devices have significantly stood out in the country. According to Global Data, in 2021, 77.8% of the payment transactions in China were made through apps. However, unlike India, the United Kingdom or Brazil, China does not have an official solution regulated by the Central Bank. China's market is concentrated on the big techs, giants of the technology world, and on the solutions of Alipay (from Alibaba group) and WeChat (from Tencent), which account for more than 80% of the transactions in the country².

Alipay and WeChat are what we call "SuperApps," applications that offer a wide range of services and tools using the same interface. This type of application attracts users more easily,

as almost all their social and commercial needs are met in one place, with the same user account and experience.

Besides making payments and transfers, users of SuperApps can buy and sell products and services, among other things, such as call a cab, do grocery shopping, or schedule a doctor's appointment. This makes it convenient for users to keep their money in their digital wallets.

As a result, 92% of the people who live in big Chinese cities use WeChat or Alipay as their major payment methods. Another relevant indicator is that 74% of the Chinese make payments using mobile devices every day.

The Chinese model has been successful for a variety of well-made decisions: as it is based on apps with greater market penetration, the payment system was born with millions of native customers already. The fact that transactions are free of charge has attracted a group of small and medium business owners that were not able to increase their investments in technological infrastructure, such as POS terminals. And, equally relevant, using QR codes as part of an easy and simple user journey has made the payment process easier. With QR codes, business owners do not need any additional equipment to accept this payment method; they just need to print a QR code and put it on a counter.

1. The Global Payments Report – FIS | Worldpay

It is important to highlight that China has adopted the strategy of considering a full view of the ecosystem: a successful solution depends not only on payors but also on payees – retailers, business owners or individuals. The strategy used by both AliPay and WeChat was to offer their users a complete ecosystem, thus increasing the value realized by users of the service. Besides investing in both the payor and payee, the solutions have digital wallets that provide easy access to services such as transportation, payment of bills, general services and online shopping, as well as offers of financial products, such as investments and insurance.

Finally, China has also taken up the challenge of providing a quick and low-cost internet infrastructure. After converting places located in big centers with an established infrastructure, China's next step was to convert establishments located on the outskirts and cities in the countryside, where the internet

connection infrastructure is poor. For that purpose, both AliPay and WeChat have started several programs that help and support business owners in this venture. AliPay recently started a support action to convert 40 million retailers that have low or no internet connection, in order to help them go through the digitization process and, therefore, start accepting instant payments. In parallel, many tests and initiatives are being launched to allow for payments in places with intermittent internet connection. Again: there is a full view of the ecosystem, and not only of the payment process itself.

The support and incentives from governmental bodies is, therefore, a key element for success.



STEPS TAKEN BY CUSTOMERS WHEN MAKING PAYMENTS ON BRICK-AND-MORTAR STORES



- 1 User checks purchase amount
- 2 User inserts their card in the terminal
- 3 User enters their password
- 4 User waits for payment to be made



- 1 User checks purchase amount
- 2 User holds their card near the terminal
- 3 User waits for payment to be made



- 1 User checks purchase amount
- 2 User logs into their bank app
- 3 User looks for option "Pay using PIX"
- 4 User points their smartphone camera at the QR code
- 5 User checks the details displayed
- 6 User uses their fingerprint or enters their password
- 7 User confirms the payment



- 1 User checks purchase amount
- 2 User logs into their bank app
- 3 User looks for option "Pay using PIX"
- 4 User enters the merchant's PIX key
- 5 User checks the details displayed
- 6 User uses their fingerprint or enters their password
- 7 User confirms the payment
- 8 User shows the receipt to the merchant

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AUTHORS

Alexandre Bueno, Managing Principal

Aline Lemos, Senior Consultant

Mathias Mattos Alves Caixeta, Senior Consultant

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