Pix revolution: get to know the Brazilian instant payment method that put the country at the forefront of global financial innovation

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Do you have a cell phone? Great. That's pretty much all you need today to make a payment using **Pix**, the Brazilian instant payment method that has been widely adopted in the country, especially for smaller amounts and everyday transactions. **Pix** is now in the daily lives of self-employed workers, such as electricians or daily maids, and even small businesses, such as grocery stores or neighborhood beauty salons, who started to adopt **Pix**. After all, besides the convenience of having to carry a payment terminal, with **Pix** they didn't need to worry about transaction fees.

<u>Pix</u> payment happens in a very simple way: one has just to inform a <u>Pix</u> key — which can be a phone number, the equivalent of an ITIN (Individual Taxpayer Identification Number) or an FTIN (Federal Taxpayer Identification Number), an email, or even a QR Code — and indicate the amount to be paid. In a matter of seconds, the payer makes the transfer and the amount is instantly deposited into the recipient's account.

The beauty of the process is that it was exactly this kind of ease and inclusion that <u>Pix</u> wanted to offer when it was imagined by the **Brazilian Central Bank (BCB)** in collaboration with representatives of financial institutions and payment services in <u>Brazil</u>. One of the main premises of <u>Pix</u> was to extend financial inclusion while making it possible to transfer resources from one account to another in a few seconds. An unprecedented payment channel emerged: <u>Pix</u> was incredibly easy to use on mobile phones, allowing users to quit debits in real-time, 24/7, any day of the week.

To be able to proceed with the plan of financial inclusion, it was established from the beginning that <u>Pix</u> would be a tax-free transaction for individuals and individual entrepreneurs. They would be able to send and receive values via <u>Pix</u> without paying any fees — those could only be charged to corporate accounts, and the fees would be negotiated directly with their service providers.

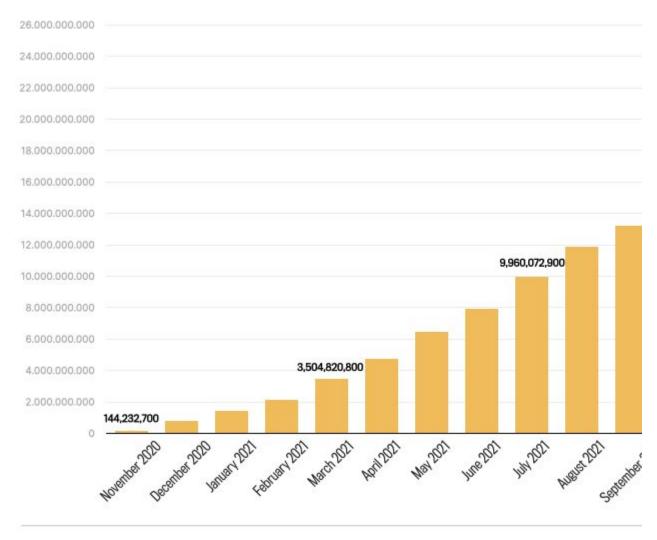
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And it was following these guidelines that this innovative payment method reached the Brazilian market in November 2020, right in the middle of a pandemic, and it quickly became a huge success. In just over a year of operation, the majority (70%) of adult Brazilians had already made a Pix, according to the Brazilian Central Bank. "It would be reductive to say that the pandemic was the key point that made Pix a success, but it certainly acted as a catalyst for the adoption," analyzes **João Bragança**, an economist and financial market expert at **Roland Berger** consulting, while mentioning the benefit of being able to make free transactions, without leaving home, in a time of social isolation.

The figures confirm Bragança's vision, and even with the relaxation of social distancing measures, <u>Pix</u> continued to advance vigorously. Until mid-May 2022, <u>Pix</u> had as its flagship the (free) transactions between individuals, although BCB statistics point to strong growth in the

usage of <u>Pix</u> also in transactions between merchants and consumers, indicating that businesses were moving to adapt to the new payment method.

Pix transactions between individuals and businesses increased by 614%



Source: Flourish

Part of <u>Pix</u>'s speed of adoption, according to Bragança, reflects a well-done communication about the product. "<u>Pix</u>'s benefits became clear very quickly for most of the public," emphasizes the consultant. In addition to the instantness of receiving money and the savings that were possible by the absence of transaction fees, small entrepreneurs and self-employed professionals also saw an opportunity to reduce costs related to POS terminals and other types of <u>payments</u>, such as credit or debit cards. It might seem something small, but it was revolutionary for both the beneficiaries of <u>Pix</u> and also for those who were observing <u>Pix</u>'s development on the global stage.

"Internationally, <u>Pix</u> is being perceived as a transformation milestone for payment systems. What the Brazilian Central Bank has managed to do is being seen as a reference not only for real-time <u>payments</u> but for the eventual emergence, in a second or third phase of this revolution, of a Digital Real or Digital Euro," says Bragança.

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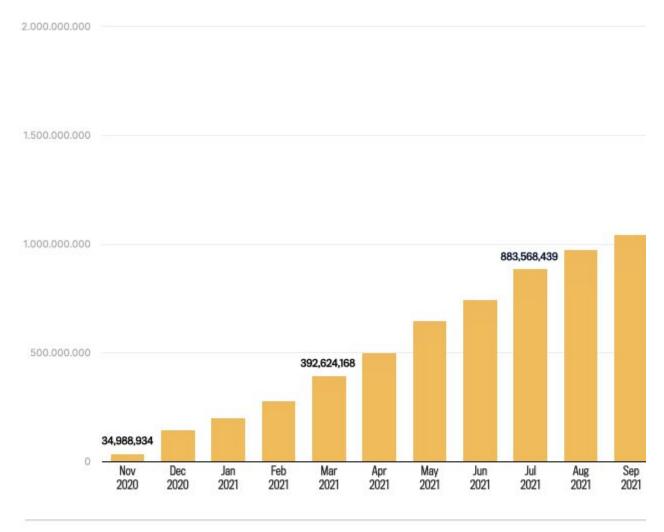
Anyhow, it's a fact that Pix's ability to revolutionize the financial system in <u>Brazil</u> also has its roots in an important previous Digital Transformation, which made smartphones widely present in the country. Data from the **National Telecommunications Agency (ANATEL)**, reports the existence of more than 258 million smartphones in <u>Brazil</u> in March 2022, an average of more than one phone per person. This high density of phones combined with the arrival of <u>Pix</u> in the apps of banks, fintechs, and other payment services also explains why the vast majority of transactions (98%) have happened on mobile devices, representing about 70% of the volume transacted via <u>Pix</u>, according to data from the Brazilian Central Bank obtained by EBANX.

Impressive growth in just 18 months

Pix's quick adoption rate pressed merchants and businesses to move fast to adapt to the new payment format. **Willer Marcondes**, a partner and financial services specialist at **PwC**, explains that this was already expected to happen since the success of a new payment method is directly related not only to its usage but also based on who's offering this option for <u>payments</u>. "There are always two sides: someone who's paying and someone who's receiving. There is no point in being willing to pay using a payment instrument that is not received, as there is no point in offering a payment method that no one wants to use," he summarizes.

The synergy between supply and demand for Pix seems to be aligned. In 2021, the first year of its full operation, Pix presented the highest growth among the payment methods available in Latin America. In the last month of March 2022, the total number of transactions reached a new record, with more than 1.6 billion transactions carried out and more than 438 million Pix keys registered. "These numbers prove the efficiency and acceptance of Pix, which brought convenience and easiness for customers in day-to-day financial transactions," says **Walter Faria**, deputy director of services of the **Brazilian Federation of Banks (Febraban)**.

Pix transactions continue to grow since its launch



Source: Brazil's Central Bank

Considering this kind of growth, it seems undeniable that <u>Pix</u> is a successful case, "both in the light of adoption and of technology used", agrees **Lauro Gonzalez**, researcher, professor, and coordinator of the **Center for Studies in Microfinance and Financial Inclusion of Fundação Getulio Vargas (FGV)**.

Not even the higher usage rates among individuals destabilize the celebration of the specialists in the sector, who were unanimous in evaluating the adoption till now as a positive sign. "It is important to remember that <u>Pix</u> is free for individuals and can have taxes charged between legal entities. Thus, it is natural to expect that growth would be faster among consumers," says **Rafaela Nogueira**, chief economist at **Zetta**, an association of technology companies operating in the financial and <u>payments</u> sector in <u>Brazil</u>.

READ ALSO: From open banking to instant payment: what's going on in Latin <u>America</u> In addition to the gratuity that encouraged P2P (person to person) transactions, <u>Pix</u> had its debut at a peak retail moment in <u>Brazil</u>, where from November onwards merchants deal with important shopping events, such as Black Friday and Holidays sales. In that scenario, any kind of adaptation to <u>payments</u> systems could become a big risk for retailers, recalls **Ricardo Pandur**, **Accenture**'s senior strategy, and business manager. "Many acquirers waited until the beginning of the following semester, when the peak sales would be over, to start making their adjustments," he explains.

Pandur, who has been following the evolution of instant payment systems in European countries such as the UK and Sweden, says <u>Pix</u> has been adopted pretty fast in comparison to countries in the Northern hemisphere. "<u>Pix</u> was the instant payment method that grew the most globally and is already the second-largest in the world in just 1.5 years," points out Accenture's expert. <u>Pix</u> is just behind India, considering the number of users, and the United Kingdom, when considering the volume transacted.

As <u>Pix</u> reaches its second year of full operation by the end of 2022, the expectation is that it will grow among merchants and businesses of various sizes and types, who have been adapting to <u>Pix</u>'s instantness. "There are some back-end processes, such as conciliation, settlement, and inventory write-off, which were not ready to be done in real-time," says Pandur, highlighting that <u>payments</u> in credit, debit, and even boleto take longer to be settled. As soon as these processes are adjusted, the greater the impact of financial and consumption inclusion caused by <u>Pix</u> should be.

A payment framework that seems like public policy

More than an innovative proposal for instant <u>payments</u>, <u>Pix</u> was also designed to function as a tool for financial inclusion, which makes the framework gain public policy contours. According to Gonzalez, who has been following the impact of <u>Pix</u> in the country since its announcement, this happens because <u>payments</u> are part of four financial services considered important for financial inclusion, along with credit, savings, and insurance. "There is a relationship between those services. For instance, <u>payments</u> could be used to build new credit risk assessment models, and in this sense, a payment model such as <u>Pix</u> can contribute in the long term to improve credit and microcredit solutions ", explains the professor.

This is why, in his assessment, it is reasonable to say that <u>Pix</u> ends up having effects similar to a public policy, as it can create improvements to a significant part of the population that used to spend high amounts when making <u>payments</u>. "For those who made larger transactions, the costs were diluted, but they were too high for those who made small transactions. After all, it is one thing to pay BRL 10 in taxes to send BRL 5.000 to another person, and another completely different is to pay BRL 10 in taxes to send BRL 100," Gonzalez exemplifies.

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The savings that were made possible by zeroing out transaction fees were especially important for beneficiaries of income transfer programs, such as Auxílio Brasil (former Bolsa Família). "These resources could be used with less cost via <u>Pix</u>, which probably had a positive effect on the well-being of the low-income population since smaller transactions strongly characterize their daily lives," recalls Gonzalez. According to aggregated data coming from Zetta, the savings in transaction fees among the 90 million accounts existing among its associated companies would add up to approximately BRL 60 billion, equivalent to 67% of the estimated cost of Auxílio Brasil for 2022.

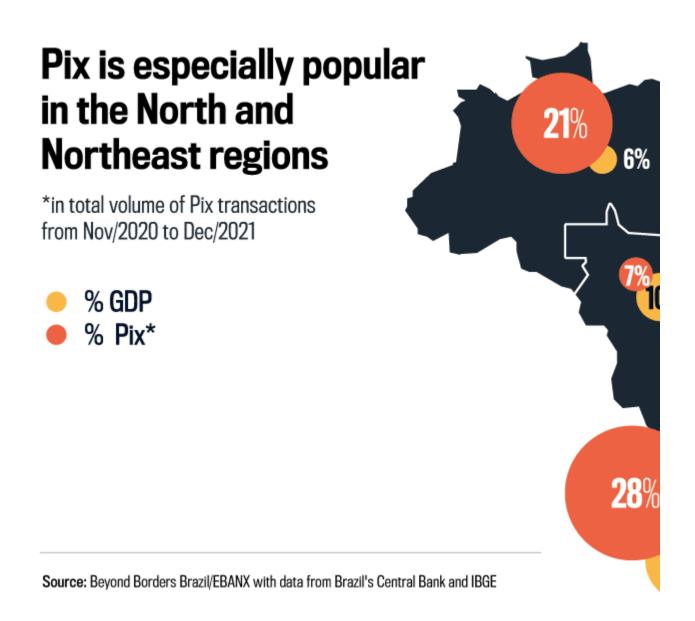
In addition to freeing these resources, which gave greater purchasing power to a segment of the population, <u>Pix</u> also promoted greater access to banks among Brazilians. Recent data revealed that about 110 million people had a <u>Pix</u> key registered in the country, while the number of people with access to banks added up to around 80 million people. "There is a gap of 30 million people using <u>Pix</u> that were previously considered unbanked", Pandur calculates, citing as a reason for this the possibility of using <u>Pix</u> not only through banks but also on digital wallets.

Part of the difficulty in accessing banks has to do, once again, with the costs involved in the process. In his master's thesis at Fundação Getulio Vargas (FGV), researcher **Arthur Smolarsky** listed, based on aggregated data from **World Bank's Global Findex**, that 58% of unbanked Brazilian adults said they had no bank account because "didn't have the money for it". "A 2013 World Bank report indicated three reasons for the Latin American population to remain unbanked, which were 1) not having enough money, 2) considering having an account too expensive, and 3) not seeing a reason to have a bank account," recalls Smolarsky.

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He emphasized that most unbanked people usually live in the informal <u>economy</u>, which tends to deal more with cash and have less access to digital payment methods. So much so that, according to Global Findex, a significant part of the Brazilian population continues to pay its consumption bills (such as water and electricity) in cash, even though the percentage has been decreasing over the years, falling from 61% in 2014 to just over 40% in 2017.

Smolarsky also points out that statistics suggest that this unbanked population seems to have been effectively reached by <u>Pix</u>. "BCB data show that <u>Pix</u> growth has been proportionally higher among the lower classes. Just to give you an idea, among all income segments, <u>Pix</u>'s advance was around 52%, while the increase in low-income users was 131% in paying accounts," says the researcher, who considers <u>Pix</u>'s decentralization among Brazilian regions something impactful, with strong adoption in the North and Northeast — together, those regions already account for 40% of <u>Pix</u> transactions in the country.



Data from Accenture corroborates this inclusion of people who previously based their transactions on cash: the consultancy company found out that cash flow in <u>Brazil</u> has decreased, going down from 45% of transactions in early 2021 to about 35% at the end of that same year. In the same period, <u>Pix</u> started to represent around 10% of transactions, according to Accenture.

Financial inclusion brings a new segment of consumers and creates benefits for e-commerce

In addition to the financial inclusion that helps bring access to banks to a significant part of the country's population, <u>Pix</u> also created another important kind of inclusion: consumption inclusion, especially on digital shopping platforms.

This happens because Brazilian e-commerce has been relying heavily on credit cards as one of its main means of payment for online purchases. Those who had a hard time with credit had to rely on boleto, a kind of Brazilian bank slip that can be paid in cash on ATMs, and which can take up to three business days to be settled by the receiver. "Despite all the inconvenience, boleto remained for a long time as one of the only ways for many people to pay for online purchases. It represented 20% of the e-commerce share until five years ago," contextualizes **Erika Daguani**,

EBANX's vice president of product.

However, with the arrival of fintechs, new payment accounts, digital wallets, and, more recently, the opportunity to use <u>Pix</u>, the scenario has changed. "The arrival of new means of payment started to bring an unbanked audience to the digital world," says the executive.

This was noticeable in the analyzes made by EBANX, which revealed that among more than 1 million Pix transactions made by its platform in the last quarter of 2021, 62% were new consumers, who had not yet made purchases in that specific application or website in that year. These new consumers accounted for almost 40% of the volume paid via Pix in that quarter, representing an average increase of 20% in the sales volume of the companies that received Pix payments through EBANX. "Pix brought a pent-up demand that we didn't know existed. It's a new audience, buying for the first time in e-commerce," commented **Wagner Ruiz**, co-founder and chief risk officer of EBANX in the **Beyond Borders 2022** report.

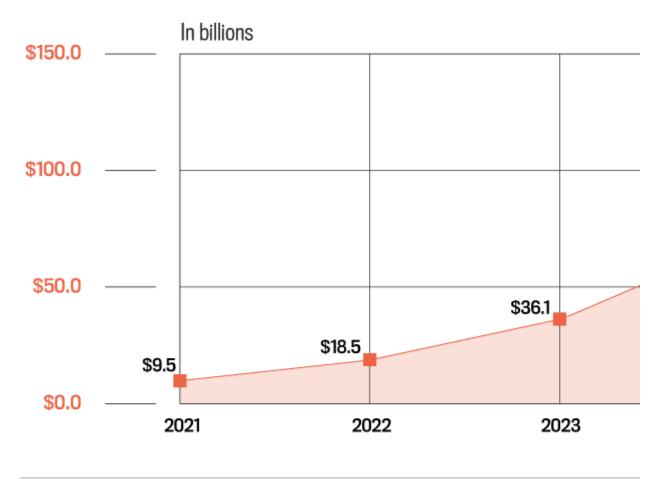
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These analyses, added to the statistical evidence that Pix penetration among Brazilians is greater than that of the credit card (51% vs. 25%, according to World Bank data), demonstrate Pix's potential to reach new demographic layers of consumers, who may have been distant from online purchases due to difficulties with the ways available for them to make their payments.

And if the arrival of a new consumer audience was already good news for online stores, Bragança also highlights the advantage of reducing logistic costs for merchants who decide to use <u>Pix</u>. This is because those who are forced to use boleto as their last resort for online <u>payments</u> also create complicated logistics for merchants, who need to freeze their inventories for two, three, or even up to 10 days to be able to fulfill that customer's order paid for with boleto. "Instant settlement simplifies logistics chains and allows e-commerce costs to be lower, which also boosts the industry," points out Roland Berger's consultant.

It is no wonder that Pix is expected to have an exponential usage in e-commerce in the coming years, growing at an average of 95% per year until 2025, when it could represent almost 10% of the total volume of online purchases in <u>Brazil</u>, according to estimates by **Americas Market Intelligence (AMI)**.

Pix transaction volume in Brazilian e-c is expected to double every year until



Source: AMI (American Marketing Intelligence)

As innovative and revolutionary as it may be, Pix was not a magic trick done solely by the Brazilian Central Bank. Its creation involved a series of small and incremental steps over the last decades, in collaboration with key stakeholders of the country's financial system. They have been working together to reach agreements that have turned into reports, resolutions, recommendations, and laws that have opened up the space that was needed for Pix to become this huge success.