



# ***Brazil Fintech Deep Dive 2018***

**A3FIN  
TECHS**  
associação brasileira de fintechs





# Presentation



**Rodrigo Soeiro Ubaldo**  
President  
ABFintechs

An extremely fertile market for innovation with a high level of concentration and nascent regulation is creating a unique window of opportunity for local and international investors in Brazil's fintech segment, which is now Latin America's biggest.

Under current conditions, Brazil has the potential to become a key consumer and exporter of financial technology solutions worldwide, but to make that leap we still have to go forward on some fronts. One of the main obstacles is the lack of quality data on the fintechs' role that is needed to provide assurance for decisions made by investors, entrepreneurs and regulators.

In an effort to fill this gap, ABFintechs joined PwC to conduct a reliable survey of the companies that are revolutionizing the financial technology solutions segment in Brazil. Our Brazil Fintech Deep Dive 2018 survey was the first to profile Brazil's fintech entrepreneurs and listen to what their executives had to say about key challenges facing these innovative firms.



**Dorival Dourado**  
Advisory board member  
ABFintechs

An analysis of the data shows that even in a favorable exchange-rate scenario with perhaps greater opportunities than more developed markets, entrepreneurs with high level qualifications and experience still meet with many difficulties when accessing venture capital. Funding is scarce in Brazil and when it is available, slow disbursement often affects the feasibility of promising business ventures that have huge potential to produce economic and social impacts.

Having taken this initiative, we hope the survey data will help reduce uncertainties in the Brazilian market over the performance of fintechs and their disruptive technologies thus enabling investors, regulators and entrepreneurs to move forward more confidently.

Our aim is to help foster a healthier and more innovative business environment with more competition and collaboration and better and cheaper services for consumers. Our thanks to everybody who replied to the questionnaire or gave interviews and helped us compile the fintech data shown below.





**Alvaro Taiar**  
Partner and Financial  
Services Leader  
PwC Brasil

Technology has been a key ally in the development of financial services for over 60 years. Technological advances have enabled us to create secure self-service solutions and new service channels such as ATMs and internet banking, but these innovations have been honed or appropriated by industry giants without greatly disrupting their market dominance. However, this may change as fintechs grow.

Fintechs, which emerged from the interaction between financial services and technology, are here to break paradigms and possibly redesign the industry. Their strategy focused on customer experience trigger profound changes in payments, credit, insurance, and personal finance advisory services. In the course of process, they not only challenge current financial institutions but also unveil new markets and business models.



**Luís Ruivo**  
Partner and Financial  
Services Consulting Leader  
PwC Brasil

These are opportunities that may cut operating costs while offering new services, thus converting customers from the huge mass of the unbanked or better relationships for new generations of consumers accustomed to digital experiences offered by giants such as Google, Amazon, Facebook and Apple and more averse to traditional services models.

In this context of accelerated and far-reaching change, there are huge business opportunities for fintechs in Brazil, but information about this market's real characteristics is still scarce. To help solve this problem, PwC joined ABFintechs to conduct a pioneering survey of these ventures' profiles and entrepreneurial vision for this market.

We hope the information below will add to our knowledge of fintech ecosystem in Brazil.



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# Key messages

On analyzing our survey data, we drew a number of conclusions regarding fintechs in Brazil that we shall proceed to highlight.

1



### Scenario and opportunities:

Current market conditions feature high levels of concentration and banking spreads, **high service tariffs and the prospect of regulatory modernization**, while a large portion of the population is still lacking access to financial services, make Brazil particularly attractive for investing in fintechs offering innovative solutions.

2

**Entrepreneurs say lack of visibility in the market is the main barrier to accessing capital.** This helps explain why the industry still has limited impact on the economy and is well below its potential. Only 12% of companies say they post more than R\$10 million annual revenue.

Participants say **the current scenario of economic and political instability** hinders business too. Added to this there is bureaucracy, a high tax burden and complex tax legislation.

**The vast majority of companies have high expectations for growth, but little more than half had access to capital:**



- **95%** of fintechs surveyed predict revenue growth in 2018.
- **41%** of the participants did not get incoming investment-obtaining capital for projects still being developed is very difficult.
- Over half the companies that **have reached break-even point have not gotten any investments**. Half of those who have not yet reached this point intend to do so this year.

3

Contradicting the myth of startups founded by young people leaving university, we **find professionals with solid background and business experience** heading Brazilian fintechs.



**97%** have a bachelor's, graduate, master's or doctoral degree.



**47%** are aged 30 to 39.



**70%** had started another venture before a fintech.

## Survey sample

Founders of **224** Brazilian financial technology companies across the country who answered the survey questionnaire from **February 15 to June 8, 2018**.

4

**Incubators and accelerators still attract few of the fintech entrepreneurs surveyed.**



**39%** have never tapped these collaborative initiatives.

**76%** do not intend to tap them in the future or have not yet made a decision in this respect.

5



**Future differentiation between fintech solutions will require reinvention focused on emerging technologies.**

Cloud, data analytics and mobile technologies are the key developments behind the solutions provided by fintechs, but they are becoming commodities. If companies aim to continue offering innovation in financial products and services, they will have to invest in technological reinvention. The participants wager to differentiate themselves in the future are chiefly **artificial intelligence** and **blockchain**.

6



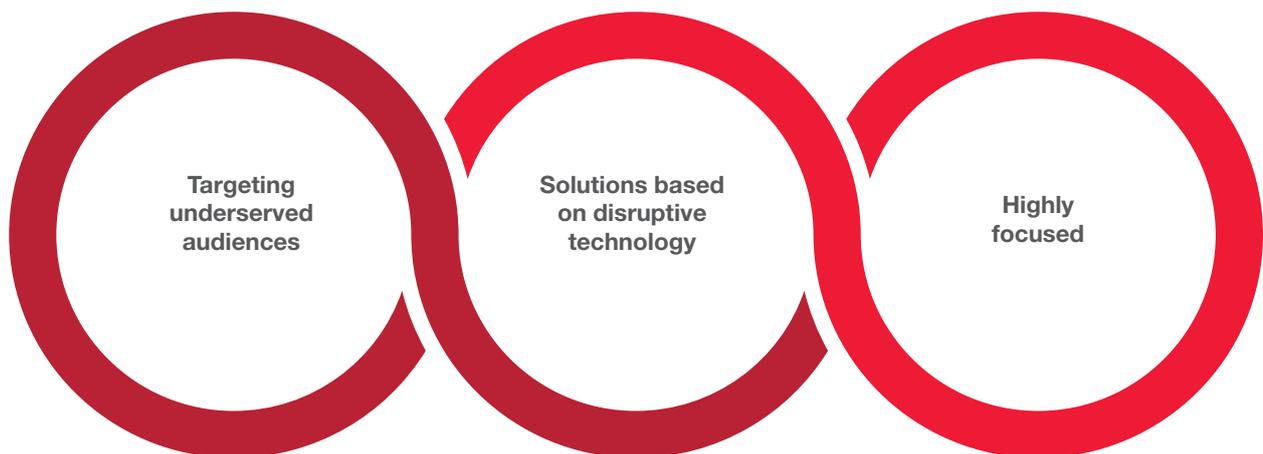
**Business opportunities and competition tend to grow with open banking and BigTechs.** Open banking is already underway in Europe and Asia, but there are no specific regulations for it in Brazil as yet. The model encourages major industry players to seek partnerships with fintechs or develop public APIs (Application Programming Interfaces) to facilitate digital platform integration for their legacy systems, but it also tends to accelerate the entry of BigTechs (Amazon, Google, Apple and others) into the financial services segment. These companies have well-known brands, scalability and a broad and loyal customer base - precisely the biggest challenges that fintechs are now tackling.

Note: Some percentages shown on charts in this survey report have been rounded so they will not always add up to 100%.

## Fintechs are...

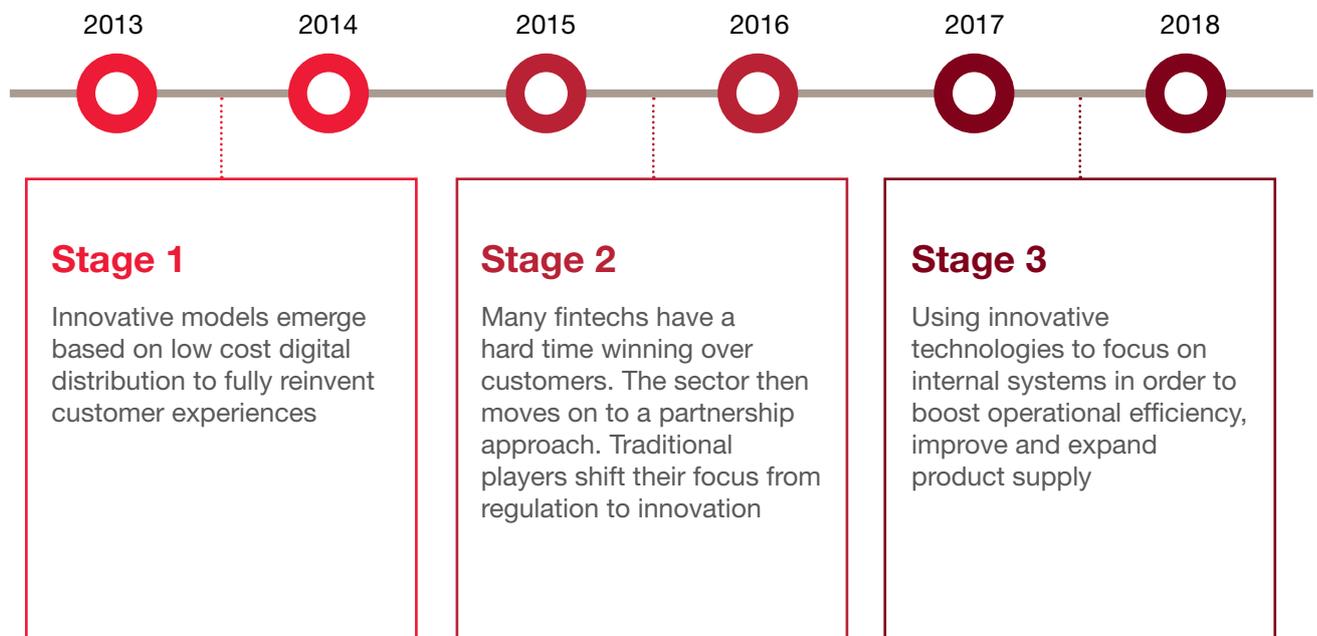
... a segment of companies on the intersection between the technology and financial services sectors that are adopting scalable business models to innovate in products and services targeting particular customer needs.

## Key features



Three key attributes characterize the companies that took part in our study:

- They are **highly focused** businesses. They set out to solve a known problem or consumer demand that has been met and step up their efforts to develop innovative solutions. They start out from a narrow portfolio that is usually based on a small group of products and solutions.
- They direct their solutions to an **underserved audience** in order to fill gaps left by traditional institutions due to restrictive access or prices, or even to demand that has potential yet to be discovered or prioritized by traditional players.
- They provide their solutions based on **disruptive technologies** such as blockchain, big data, cloud, IoT, among others.



**Fintechs have been able to:**

- reformulate user experiences
- alter customers' expectations
- accelerate the pace of innovation



**Fintechs have not been able to:**

- earn measurable market share
- conquer a new customer base

# Brazilian fintechs' profile

Brazil's South and Southeast regions host 93% of the 224 Brazilian fintechs we surveyed. The state of São Paulo alone hosts more than half (58%) of these firms. Three-quarters of them were founded less than four years ago, and most of them focus on means of payment, credit and financial management.

## Concentrated in the South and Southeast

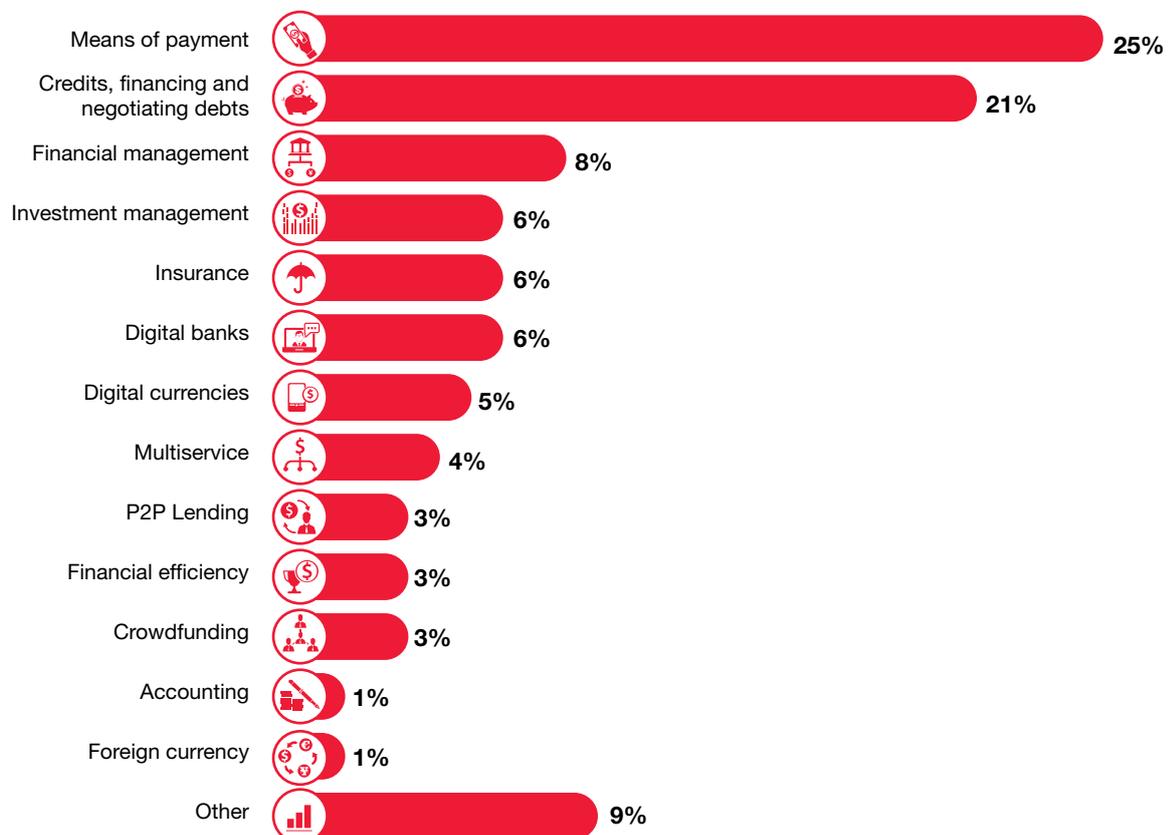
Percentage of companies by region





### Means of payment and credit are key segments

Q: Which is the main financial vertical/segment your fintech operates in?



As an indicator of the newness of this market, 46% of fintechs covered by our survey were founded after 2016 and 51% are start-ups, while 8% are at the proof-of-concept stage or validating a minimum viable product and do not have any customers yet. Some two-thirds of these companies posted less than R\$1 million revenue in 2017 or no sales at all.

Because they are mostly start-ups having difficulty in accessing capital but having a strong technological base, the sector is very focused on efficiency and productivity and generates relatively few jobs: 87% of fintechs employ less than 50 people. As they mature, their job creation potential increases naturally: 76% of those reaching the consolidation stage have more than 50 employees.

## Stages of fintech maturity

**Idea/concept** - Still reviewing model.

**MVP (minimum viable product)** - No customers, in the process of validating.

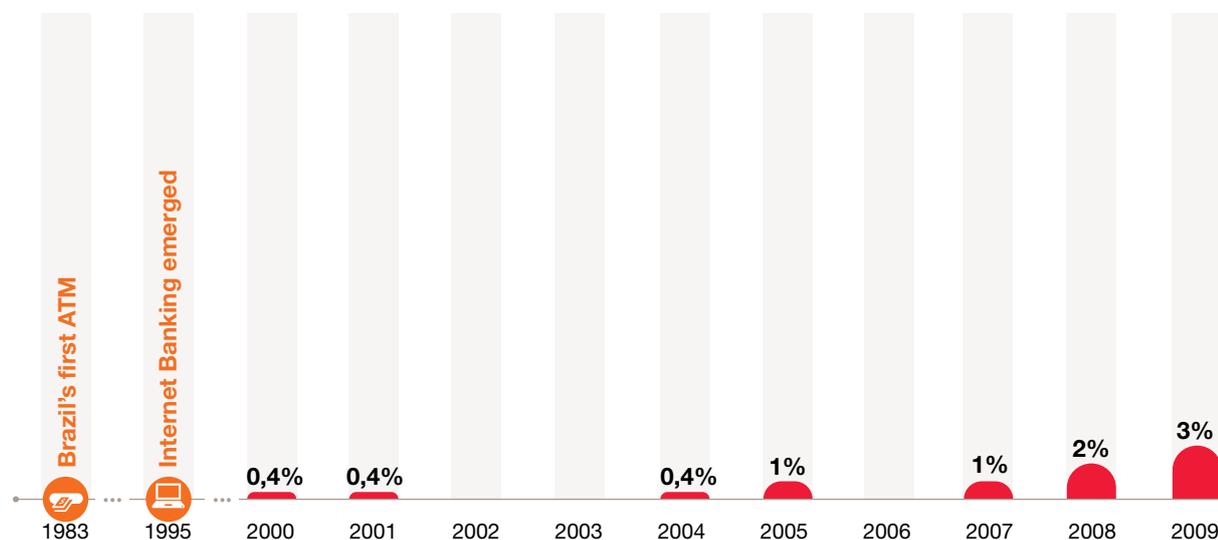
**Start-up operation** - Have customers and revenues and/or investment.

**Expansion** - Have customers, have been validated by the market and have revenues/investment.

**Consolidation** - Have customers, been validated by the market and have revenues/investment over R\$20 million.

## 46% of these companies were founded after 2016

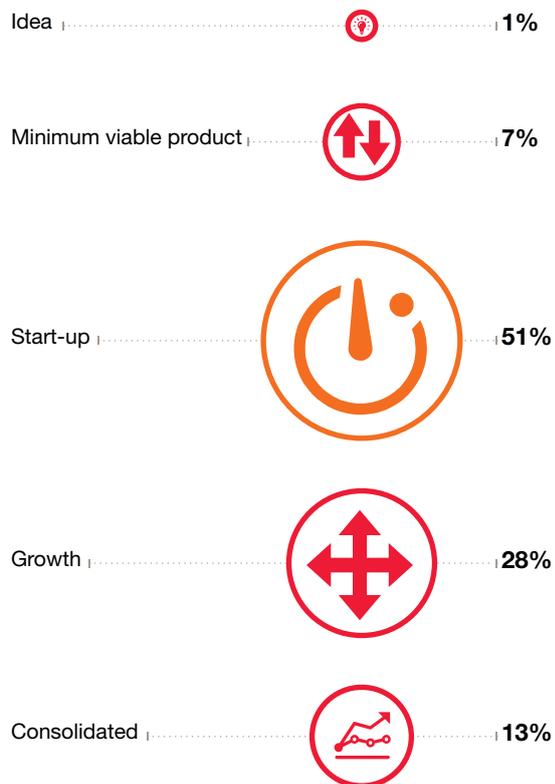
Percentage of companies by year founded



Note: 2% of the companies were founded in 2018, but not included in the graph to avoid distortion, since the survey ended in early June and data are not available for the remainder of the year.

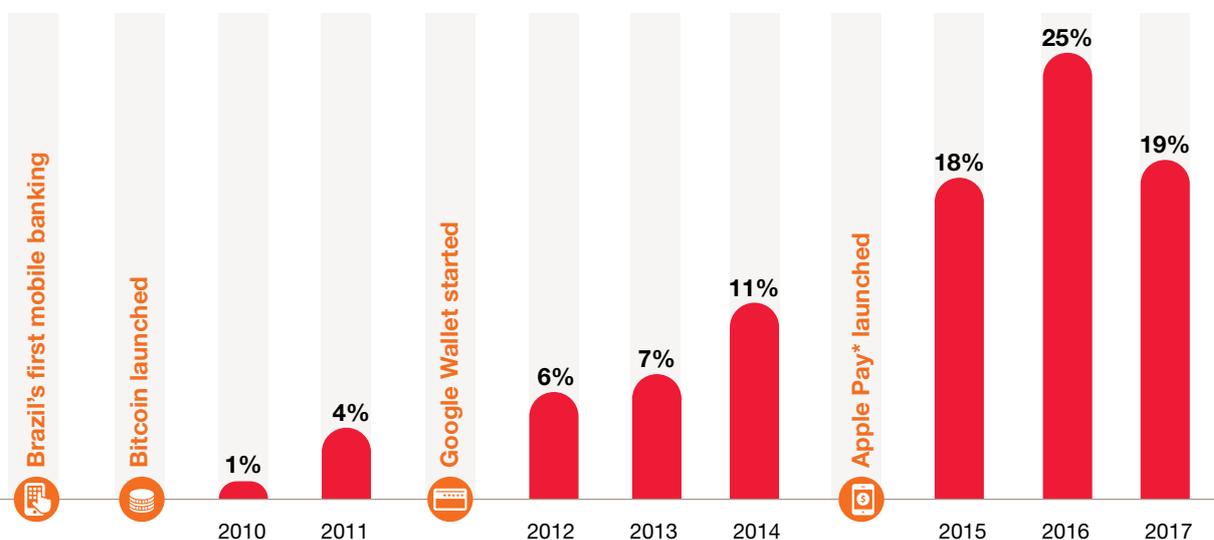
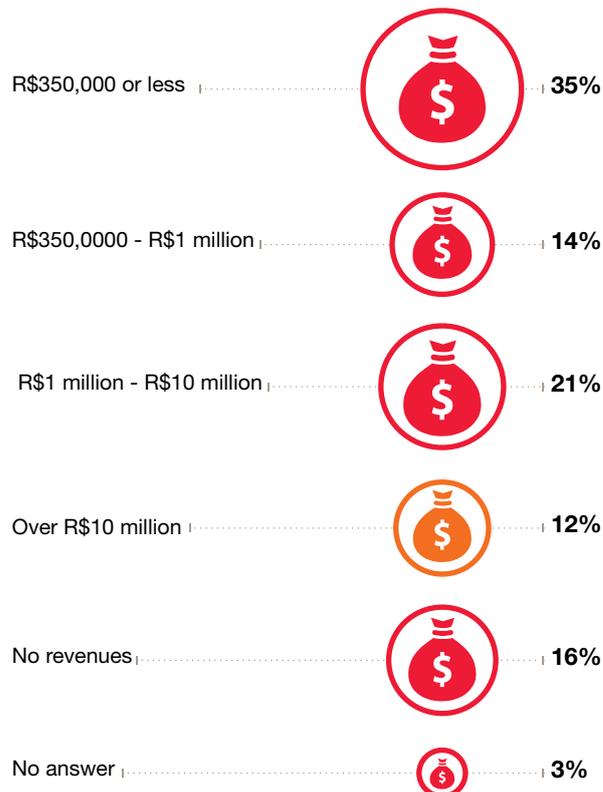
### More than half are start-ups

Q: What stage has your fintech reached?



### 12% are billing more than R\$10 million

Q: What was your gross revenue for 2017?

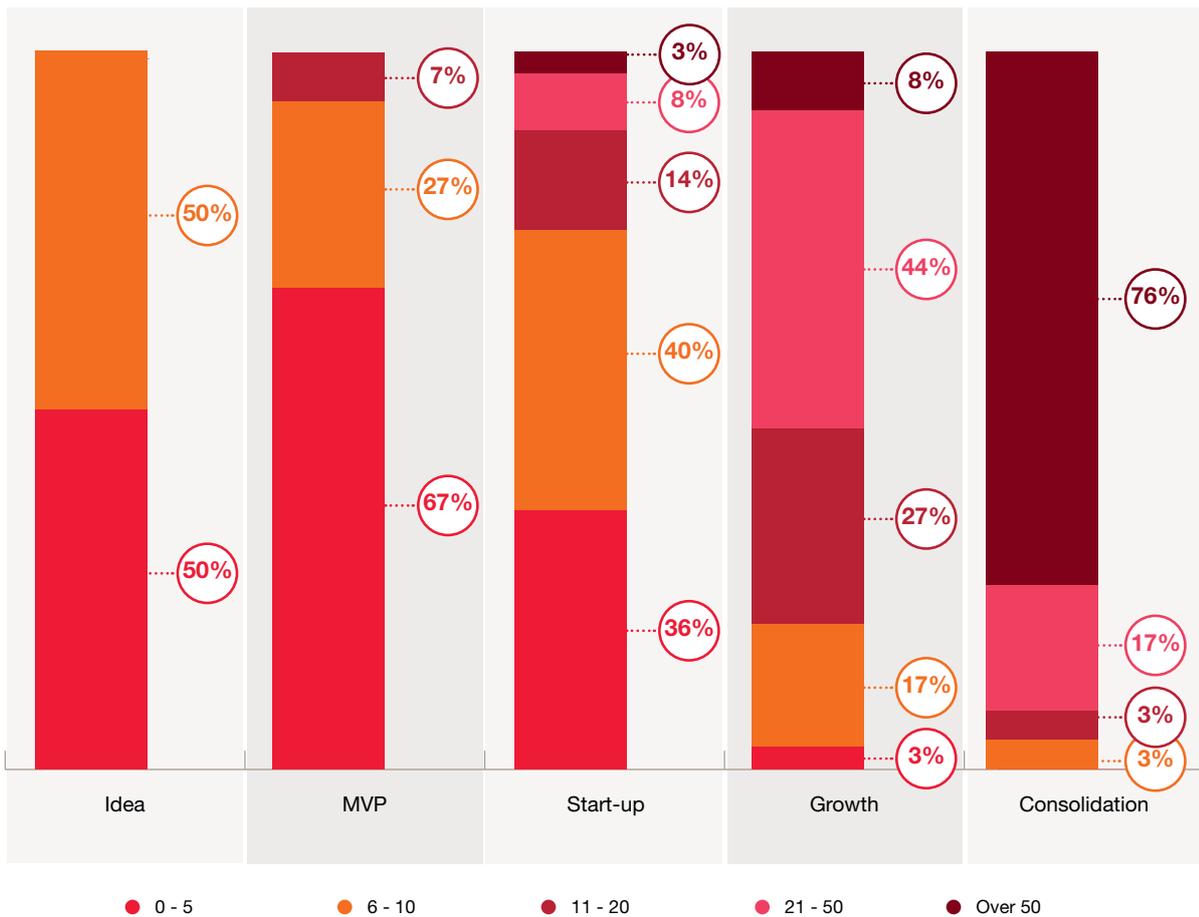


\* Not until 2018 in Brazil.

## By stage of maturity and number of employees

Q: How many employees does your fintech have?

Q: Which stage has your fintech reached?



“We give people a chance to invest in something that was previously only for the very rich. It has social impact. Anyone can invest R\$500 in an entrepreneur. If they succeed, it creates a connection, a very strong bond. In our view, this is a huge social promoter.”

**Frederico Rizzo**, founder of Kria, crowdfunding platform for investments



## What are entrepreneurs like

Professionals who are mature, well qualified and experienced as entrepreneurs are heading most Brazilian fintechs we surveyed. Almost all have a degree or other higher education diploma, while 86% speak English. Most have studied administration or IT, more than half have international experience and more than 60% have had another venture before starting their current fintech.

This educational profile contrasts sharply with the one identified in the broader universe of Brazilian entrepreneurs - about one-third have incomplete elementary education and only 16% reach higher education, but are not always able to graduate according to 2014 DataSebrae.

Almost half the founders are aged 30 to 39 and have worked in the corporate sector before starting their own business, either in fintech (41%) or another segment (46%). Attraction for professionals from other areas may be explained by the recession scenario of recent years which has encouraged industry executives to migrate to the services sector.

The overwhelming majority are male, a proportion that differs sharply from the broader scenario of new ventures in Brazil, where women are the majority (51%), according to the *Global Entrepreneurship Monitor (GEM) 2017/18* survey.

“Our market is very technological and historically not many women in Brazil have been involved in technology. They also tend to be more conservative in their investments and there are fewer early adopters than among men”, explains Ingrid Barth, head of New Business and Partnerships at FoxBit bitcoin brokerage, which estimates that about 7 percent of their investors are women.



### Age

**47%** ..... **30 - 39**

|     |       |         |
|-----|-------|---------|
| 25% | ..... | 41 - 49 |
| 19% | ..... | 20 - 29 |
| 8%  | ..... | 50 - 59 |
| 1%  | ..... | Over 60 |



### Level of schooling

**42%** ..... **Postgraduate**

|     |       |           |
|-----|-------|-----------|
| 39% | ..... | Graduate  |
| 14% | ..... | Master's  |
| 3%  | ..... | Secondary |
| 2%  | ..... | Doctorate |
| 0%  | ..... | Primary   |



### Gender

**90%** ..... **Male**

|    |       |            |
|----|-------|------------|
| 7% | ..... | Female     |
| 3% | ..... | Not stated |



### Education

**31%** ..... **Management**

|     |       |             |
|-----|-------|-------------|
| 27% | ..... | IT          |
| 21% | ..... | Other       |
| 11% | ..... | Engineering |
| 10% | ..... | Marketing   |



**Previous experience**

**49%** ..... **Active in other corporate sector segment**

40% ..... Active in corporate sector, same branch as Fintech  
 11% ..... Not active in corporate sector

# Growth prospects

Mostly young companies posting annual revenues of less than R\$1 million, Fintechs usually employ small teams (52% have less than 10 employees) and most (58%) have not yet reached break-even point. Overall, 75% reported growth in 2017 and the growth rate was over 30% for half of them.

Among those with positive results, almost all expect to

continue growing in 2018, and over 90% believe that this growth will be as fast or faster than the previous period's. More than half the companies that have not reached break-even point are expected to do so this year.

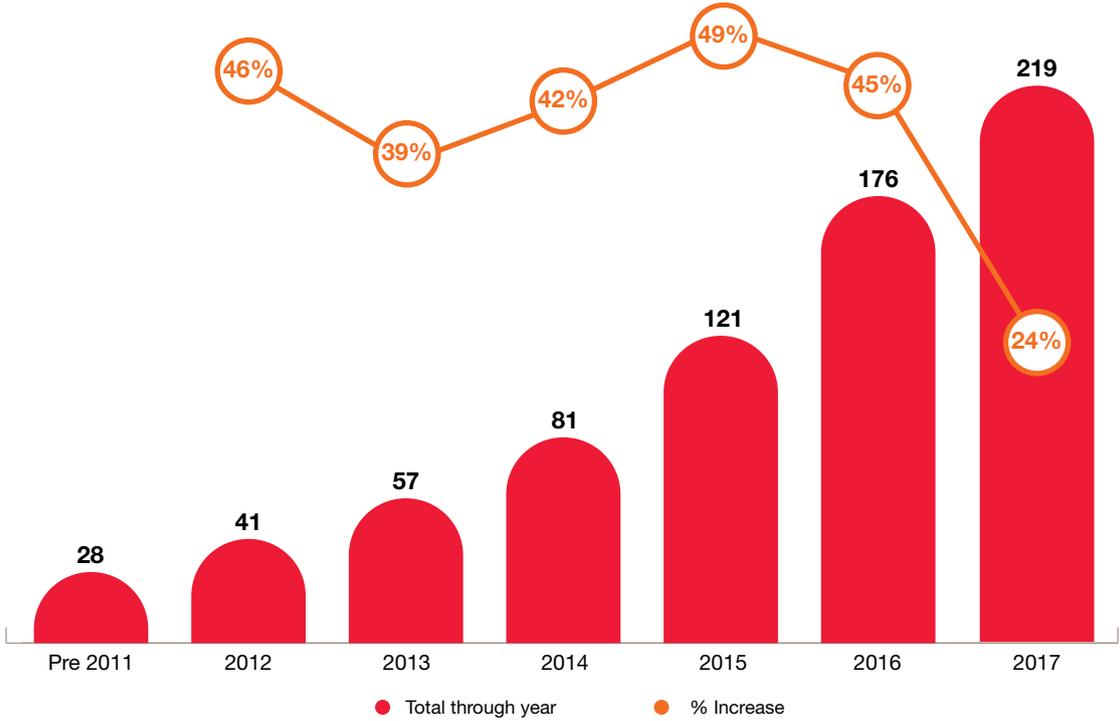
The market is extremely dispersed and it is growing fast. Taking our sample, the annual increase in the number of fintechs has always been double digits in this decade.

**“In Brazil, we now have more cryptocurrency exchange users than stock exchanges. This shows that people are not seeing options to invest. (...) There are no regulations for companies dealing in cryptocurrencies. Everything we do is more about good practices because we want to have a positive attitude towards the market. Not having clear rules is an issue for us, especially in relation to banks. And our registration procedure is more elaborate than banks' and is totally technological and paperless.”**

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**Ingrid Barth**, head of New Business & Partnerships at FoxBit, a bitcoin brokerage firm that posted R\$3 billion of transactions last year

**Cumulative total of fintechs by year founded and variation in the number of new companies (sample surveyed)**



\*In 2018, our survey only covered fintechs that had been open before the month of June. We did not record the annual variation to avoid distortions.

**“We have a lot of space to grow more in the corporate segment. Taking Central Bank data only for this segment we are operating in, which is working capital, there is a market of more than R\$150 billion for us to work with. If I had 1% of this market, I would be very happy and I would still not bother the big banks.”**

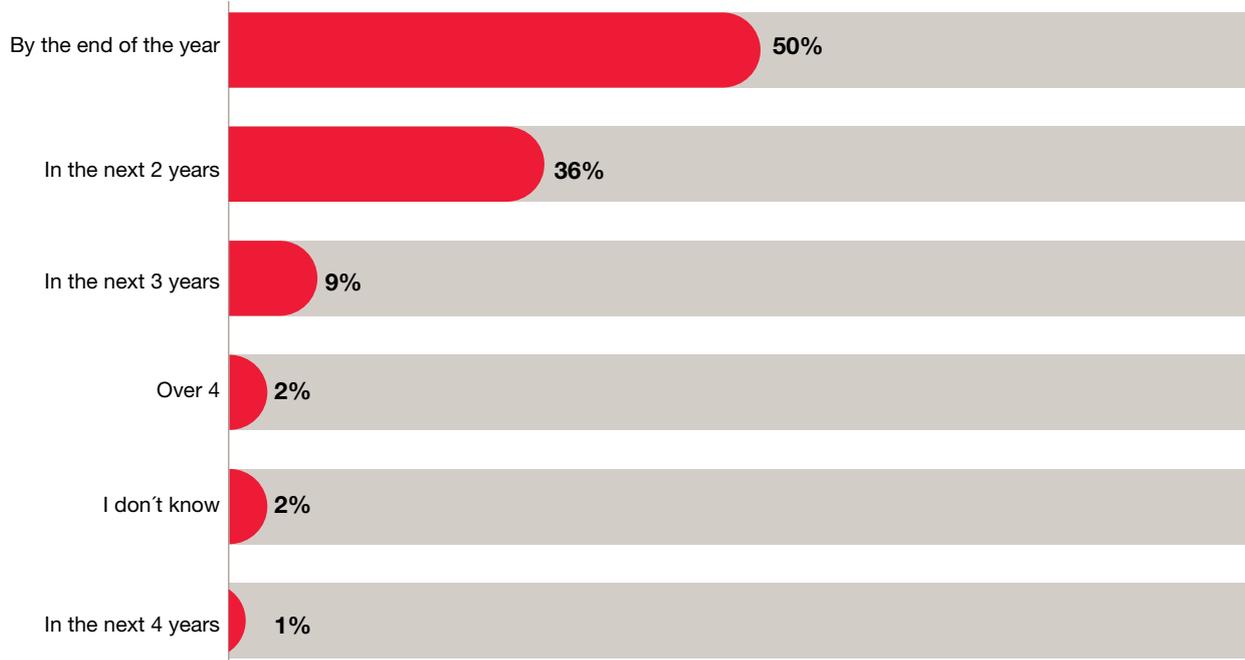
**Fábio Neufeld**, founder of Kavod Lending, specializes in P2P for business



**58%**  
*have not yet reached  
break-even*

**Expectation of financial equilibrium**

*Q: If break-even point has not been reached, when do you expect it will be?*

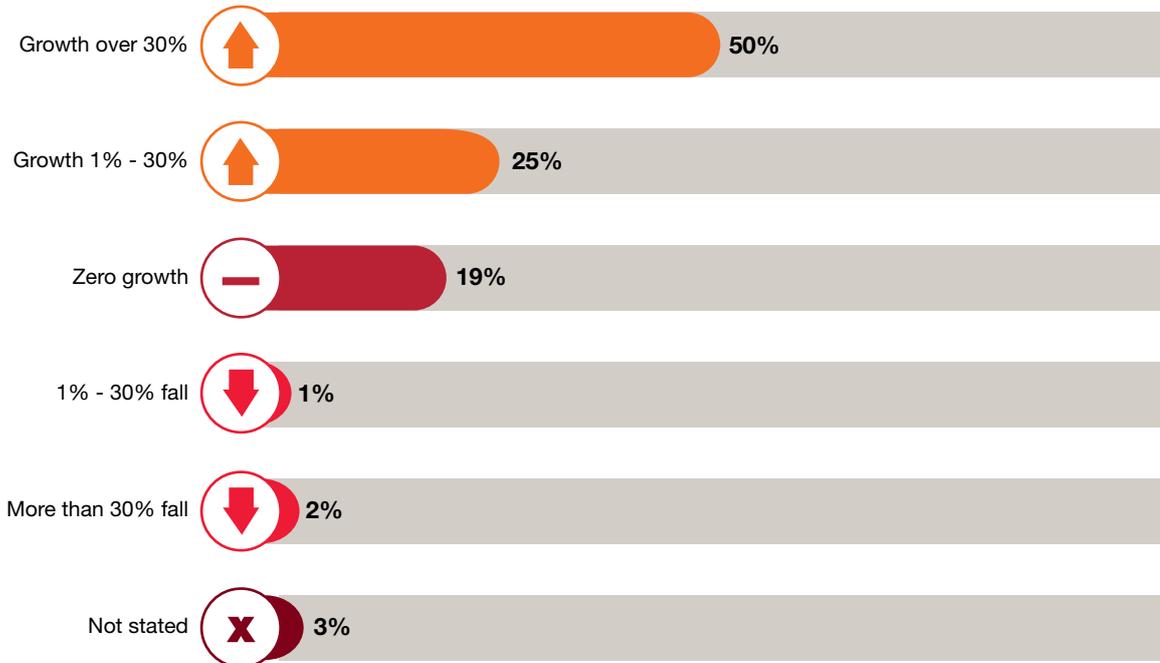


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## Growth in 2017

Q: What growth rate compared to 2016 did you post?

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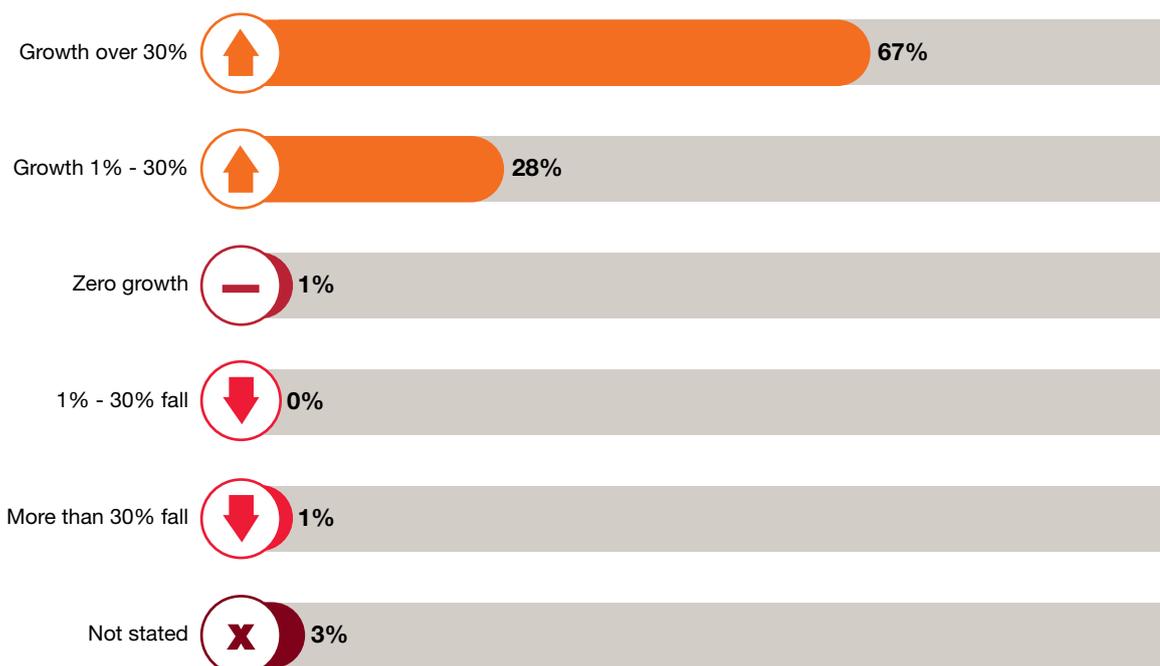


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## Expected growth for 2018

Q: What gross revenue growth are you expecting for 2018?

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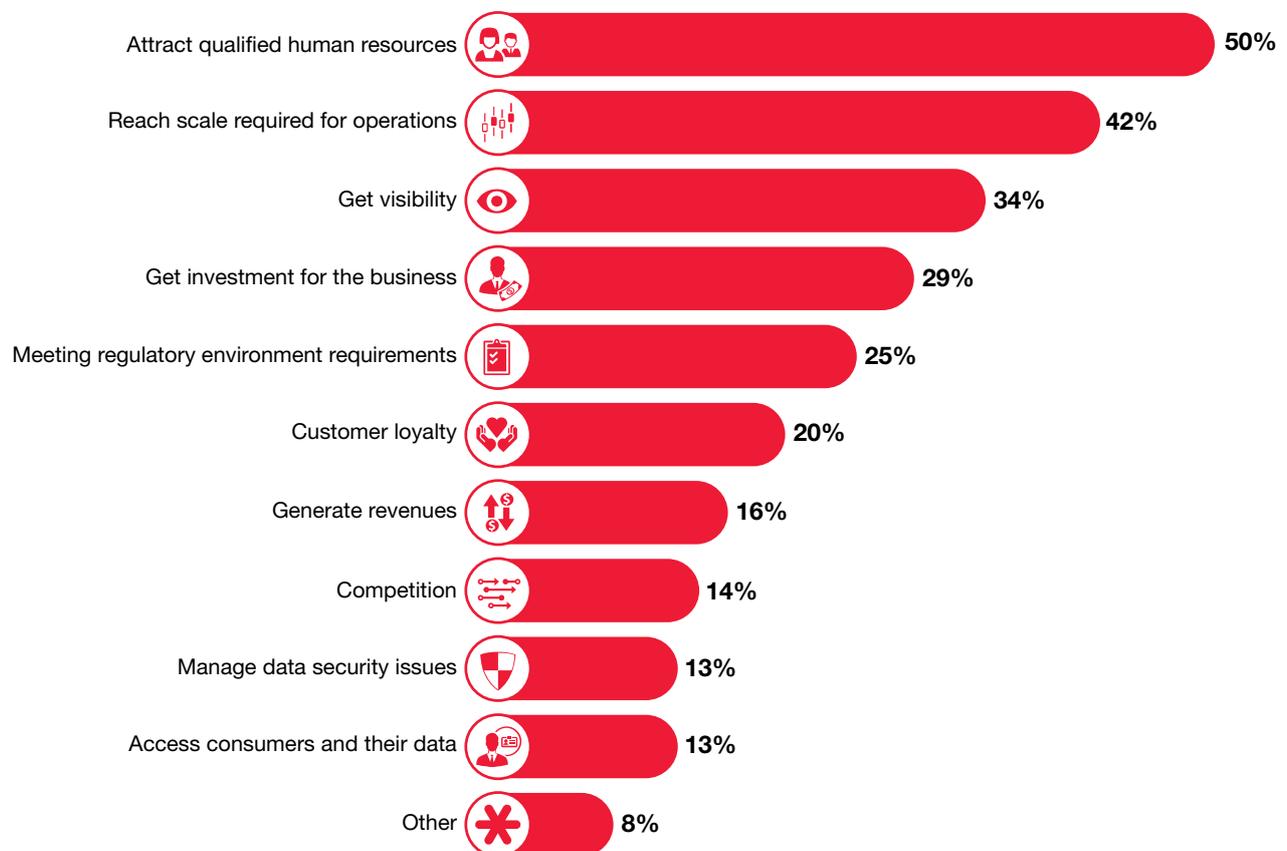


# Main challenges and barriers

Attracting and retaining qualified talent, gaining market visibility to capture new customers and investments, and meeting regulatory requirements are the main barriers cited by our survey participants when managing their companies.

## What makes fintech management more difficult

Q: What are the main barriers for managing your business?



## Attract talents

Attracting and retaining qualified talents is a concern for most companies in Brazil and worldwide, not just in the fintech segment. PwC's *21st Annual Global CEO Survey* released this year showed that 70% of Brazilian executives and 50% of global executives think it is difficult or extremely difficult to find professionals with digital skills.

Fintechs, however, have a natural advantage over traditional companies in the quest for this skilled workforce: their more flexible and diverse culture and concern for the social impact of their operations tends to attract the new generation of talents who have the skills needed to drive innovation in these companies. However, the lack of more mature professionals with adequate knowledge of rigorous and complex regulations governing the financial services sector in Brazil may be an obstacle for these companies' progress.

**“It is very difficult to compete in a segment that has the regulatory and security characteristics of Brazil’s financial sector and understand aspects of the transactional process when you do not know much about the market or at least people you could access to obtain this knowledge. Entrepreneurs have a long way to go in this respect. Another weakness is information security. It is important to create a culture of investing more in this aspect from the outset when fintechs are founded.”**

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**Alexandre Liuzzi**, co-founder and CSO of BeeTech, an infrastructure provider for the international payments market. He is also CEO and founder of Mar Ventures

## **Attracting capital**

Over half the fintechs reported receiving investments, which were concentrated in amounts below R\$1 million (40%) and from R\$1 million to R\$5 million (29%). Nearly two-thirds of the companies expect to obtain funding in 2018: about 90% of those who reported that they expected to do so hope to raise more than R\$1 million.

To attract more investment in volume terms, companies want and need to expose themselves more to consumer markets and internal and external investors. In all, 26% see their businesses’ low visibility in the market as one of the main challenges when attracting capital. The lack of investors and turbulence in Brazil’s economic and political environment were next on the list.

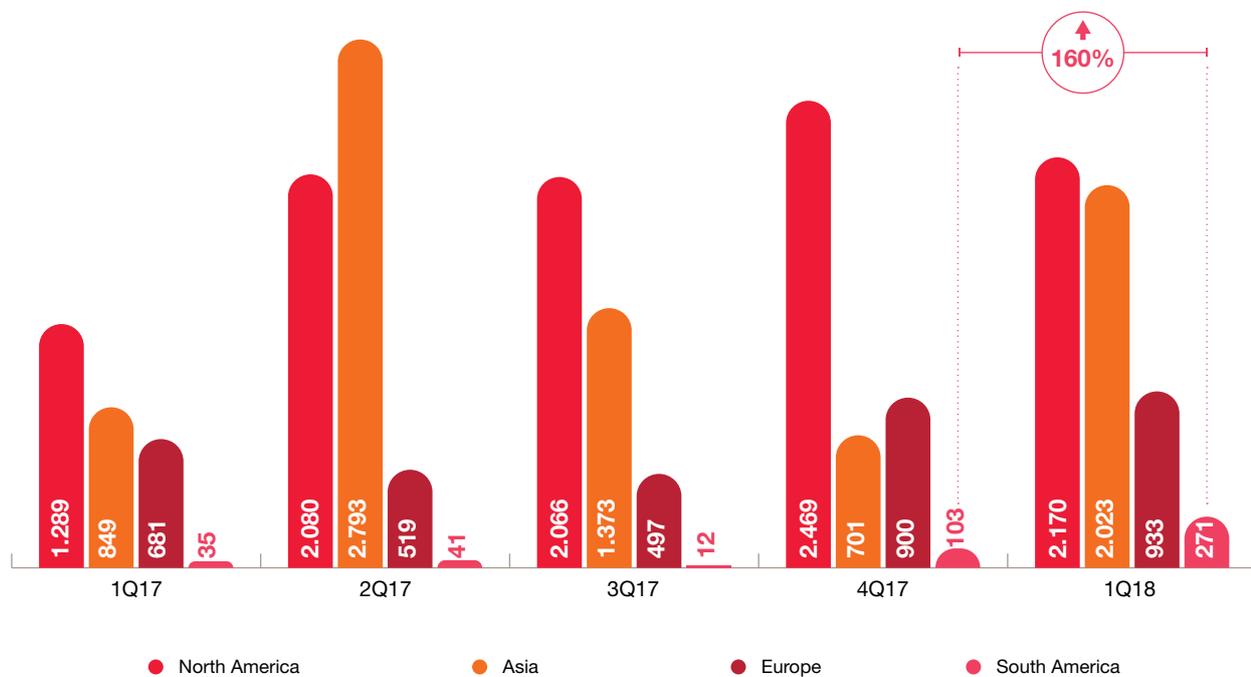
Entities representing businesses, such as ABFintechs, the Brazilian Cryptoeconomy Association (ABCripto) and the Brazilian Digital Credit Association (ABCD), to name just a few of them, show there is important effort to give companies a more institutional presence in the market while advocating their interests before regulatory and supervisory bodies and gaining consumers’ trust.

Financial education initiatives are also relevant to inform people of new products and services. FoxBit, for example, holds lectures in Brazil and has invested in FoxBit Education, an online short-course on cryptocurrencies and blockchain.

## The Brazilian market's significance

Brazil has more fintechs than any other country in South America, with a significant advantage over Mexico and Colombia (coming second and third respectively), according to Finnovista data. New ideas and companies proliferate on the continent there are fewer venture capital investments in fintechs than elsewhere in the world, according to CB Insights.

### Venture capital investments in fintechs by continent (in US\$ million)

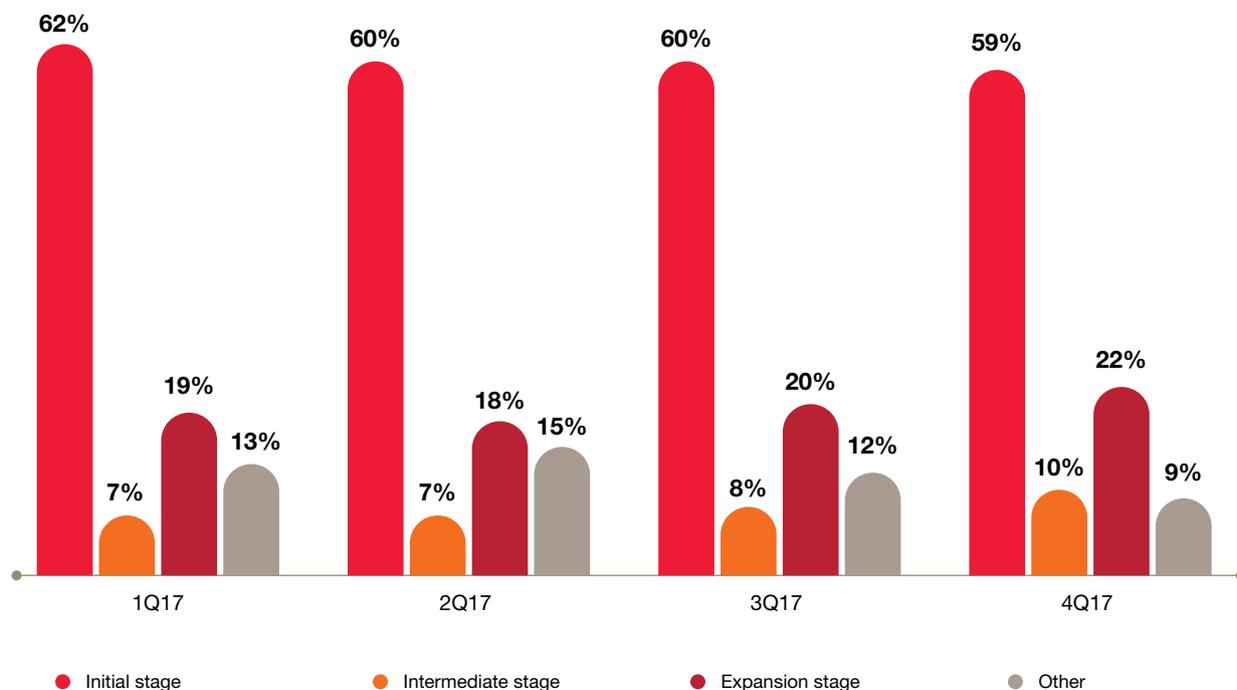


Source: CB Insights - Global Fintech Report Q1 2018

As the above chart shows, North American and Asian ventures attract more investment of this type than other regions of the world, while South America historically has received the lowest levels. In the first quarter of 2018, for example, although there was more than 160% growth on the previous period, its total of US\$271 million was the lowest of any continent. The high number was due to the amount of US\$150 million invested in one single company (Nubank).

The data highlight the main challenge entrepreneurs mentioned for attracting capital: the lack of visibility of their businesses. Although the Brazilian market is fertile terrain for new ideas, consumers and investors are not fully cognizant of the fintech options available to them.

## Percentage invested by stage of company development



Source: CB Insights - Global Fintech Report Q1 2018

CB Insights reports that venture capital investments in fintechs around the world are often made during the company's initial stage (pre-operating or post-conceiving the idea). In recent years there has been a slight increase in investments in more mature companies, but most of them are still in the early stages. In Brazil, however, the reality is usually different. Entrepreneurs report difficulties in attracting investors willing to take on business risks. In general, they show no interest in investing until a company has reached break-even point.

Our survey shows that just over half of the companies that have achieved financial equilibrium have not received any investment. Of these, 17% do not intend to raise capital within the next 12 months. This shows that there is space for venture capitalists: profitable and resilient companies in a market with great opportunities to grow without investing.

State support for innovation may be an alternative to this scenario. An example of this model is Israel, which has become a global reference and in 2018 will be allocating US\$500 million for startup investments through the Israel Innovation Authority, a public agency. In addition to helping to introduce new technologies into traditional sectors of the economy, it acts as a real private equity fund or angel investor, usually for segments that private capital sees as high risk in terms of short-term returns, but which may be essential for innovation in the future.<sup>1</sup>

<sup>1</sup> Valor Econômico. "Sem recursos naturais, Israel aposta em inovação", ["Lacking natural resources, Israel is wagering on innovation"] July 6, 2018.

“In Brazil, venture capital is scarce and since the supply of investment is not heated, negotiations take time. It may take up to 15 months for an entrepreneur to get access to funds. Meanwhile, there are startups failing to attract investment and going bust. Another aspect that may mean that fintechs have to adapt to this shortage is the fact that more than 70% of them are B2B or B2B2C operations, because if they acted as B2Cs they would have more capital intensive outlays.”

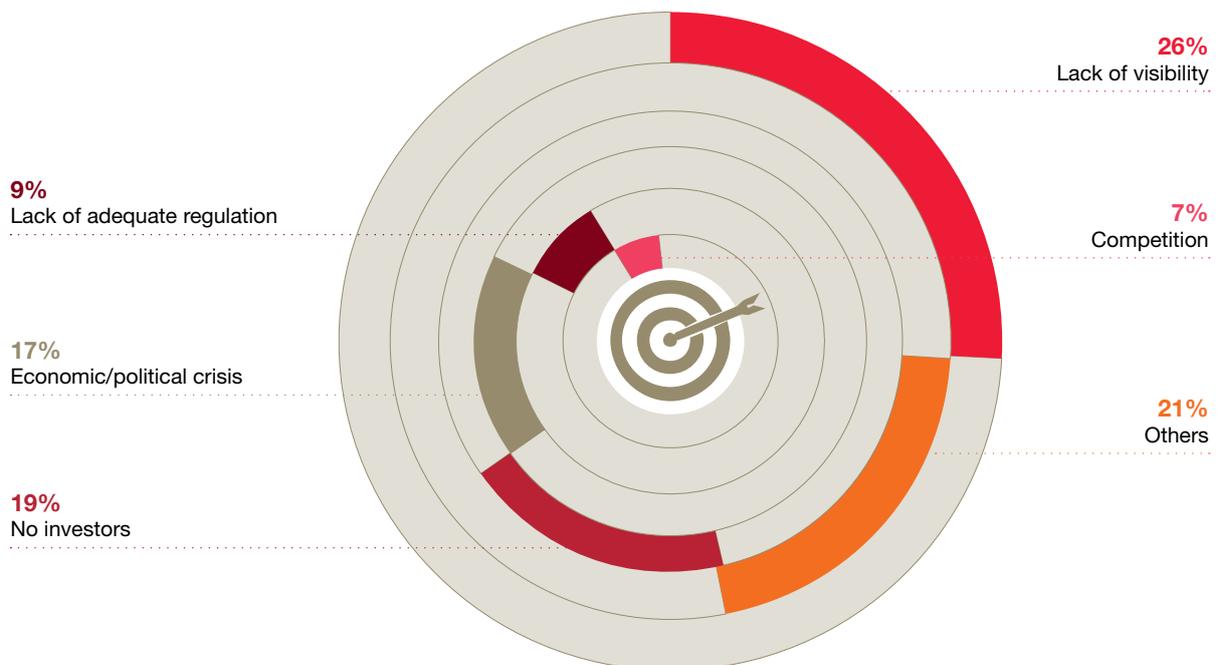
Rodrigo Soeiro, president of ABFintechs and co-founder of Allgoo

**57%**  
*reported receiving  
investments*



## Fintechs looking for greater exposure

Q: What are the biggest challenges when raising capital?



## Value perception - incubators and accelerators

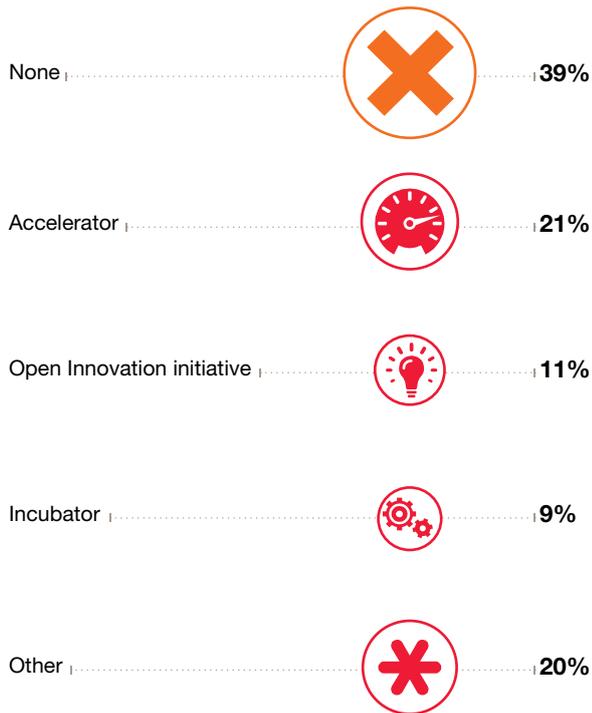
Almost 40% of the companies did not tap incubators or accelerators for collaboration. 75% did not know about this resource or did not intend to use it in the future. The data show that there may be scope for improving these initiatives in Brazil, making them more attractive for a larger universe of startups, which will tend to have a positive impact for fintechs.

Possibly because they are experienced and qualified professionals, for the most part, these entrepreneurs do not realize how using these resources could actually lead to some added value. In addition, says ABFintechs president Rodrigo Soeiro, “Brazilian accelerators and incubators ask for a larger share of equity than in other countries, which tends to reduce the appeal of these initiatives for entrepreneurs.”

Among the companies that used some form of collaboration, the reasons were mainly to build relationships or validate business models, get access to know-how and investments.

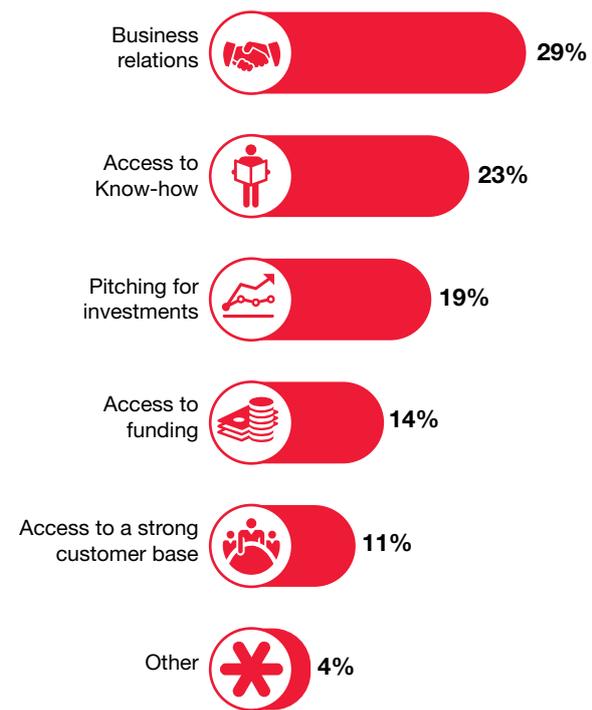
### More than a third have never tapped incubators or accelerators

Q: Which of the following forms of collaboration have brought more results for your company?



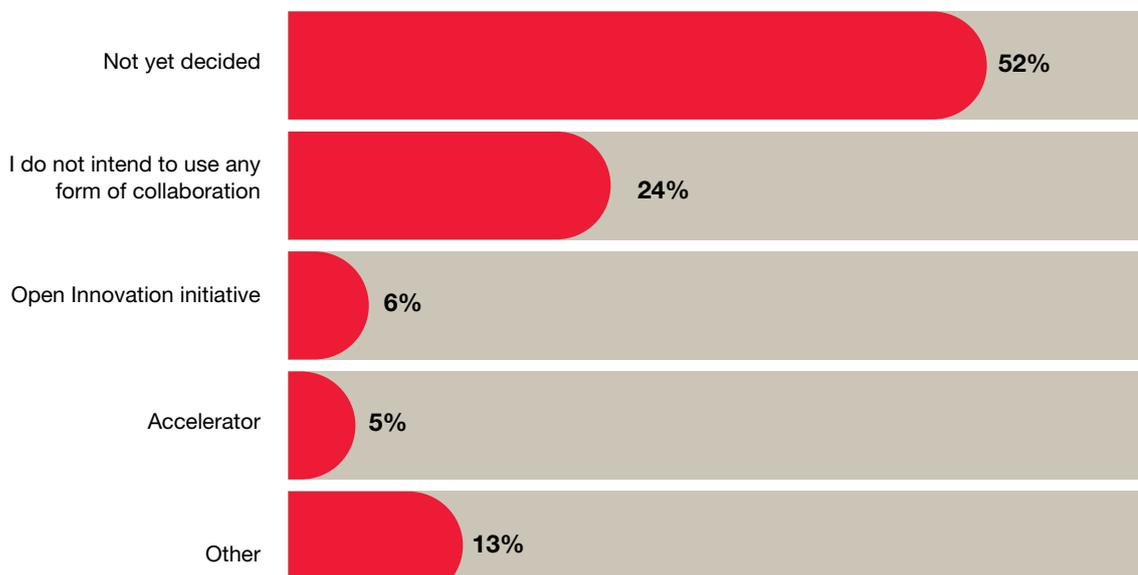
### Making relationship is what most attracts those who seek collaboration

Q: What were the main reasons that led you to use collaboration? (one or more options)



### More than half do not plan to use collaboration

Q: Do you envisage using any form of collaboration in the future? Which?





## Regulations and bureaucracy

One in four of the fintechs surveyed mentioned the difficulty of regulatory compliance requirements as a barrier to growth. Complex legislation, especially for taxation, and the legal uncertainty it generates repels investors and poses an important barrier to entry for any new venture.

**“This segment has very high levels of complexity and regulatory requirements, which in many cases prompts fintechs to partner with financial institutions or even become one of them. When you work with a financial institution, however much it has been digitizing and automating processes, you have to deal with this institution, which often has a poor technological and operational legacy. This comes at a cost for both fintech and customer, since your hands are tied behind your back. In the European and American markets, I have seen fintechs being authorized to deal with customers directly without becoming financial institutions, as they have in Brazil’s credit and payments market. We expect regulations in our segment to evolve too.”**

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**Alexandre Liuzzi**, BeeTech’s co-founder and CSO

In April of this year, there was a positive modernizing effort for the regulatory environment: new rules were voted for two types of credit sector fintechs: the direct credit company (*Sociedade de Crédito Direto*, or SCD) and the interpersonal or peer-to-peer loan company (*Sociedade de Empréstimo entre Pessoas*, or SEP). While some improvements in the new rules may be arguable, the initiative does enhance security for both consumers and those interested in investing in these companies.

Another important initiative making for closer relations between regulators and fintechs was the new Financial and Technological Innovation Laboratory (LIFT) set up by the Central Bank of Brazil (BCB) in May this year in partnership with the National Federation of Central Bank Employee Associations (Fenasbac) with support from technology companies. In a virtual environment, representatives from academia and the market will collaborate to develop innovations, exchange knowledge and assess the outcomes of their experiments.

The Central Bank of Brazil's Banking Economy Report (REB) stated that the initiative shows this institution's willingness to foster technological innovation for Brazil's financial system and it will assist the entity's role in this respect.

The document states: "The opportunities created during this transitional process of innovation will be better seized - and their gains better distributed - if the regulator's role is neither inhibitive nor permissive." It goes on to add: "The gains and risks associated with the fintech phenomena are not fully known, nor are they measurable. Perhaps they will continue to be so until innovations are assimilated into society's economic-financial routine. Therefore, virtue for the regulatory and supervisory authority will always be equilibrium based on transparency, collaboration and rapid response capability."

The Private Insurance Superintendence (Susep) follows a similar line of thought. "Innovations are most welcome, especially when they seek to enhance relations between all market agents - consumers, businesses and brokers - but they have to move in line with the insurance industry, which is a regulated market," says Susep superintendent Joaquim Mendanha de Ataídes, who adds that the institution "has sought to drive a proactive agenda in this respect."

Last year, Susep set up a special standing commission to discuss innovation in the sector and the insurtechs. Members include Susep's board and technical staff in addition to the most representative insurance sector entities. "The objective is to discuss local and international best practices for the insurance industry and discuss possible regulatory advances," said Ataídes, noting that as a result of these discussions in December last year, the National Private Insurance Council (CNSP) accepted Susep's vote in relation to remotely managed insurance and social security operations by publishing CNSP Resolution No. 359 - a milestone in the use of digital technologies to market and sell these products.

Together with other Ministry of Finance supervisory bodies, the entity takes part in a regulatory sandbox known as the Financial Innovation Laboratory launched last year by the Brazilian Development Association (ABDE), the Inter-American Development Bank (IDB) and the Brazilian Securities Commission (CVM). One of the initiative's four working groups is covering fintechs.

**“Although there is a series of initiatives and the money is there, Brazil’s innovation and entrepreneurship infrastructure does not have a level of productivity that could match market demand and our capacity. Orchestration and organization are lacking. Nor are there close relations between private enterprise and academics. Setting up cooperation programs is also very difficult. Then we have problems accessing funds and issues with bureaucracy. The development money is there and it is subsidized, but to ensure their survival, companies have huge funding needs to get working capital and sell their projects, and Brazil’s country cost is still an obstacle that not everyone can overcome when it comes to attracting investments.”**

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**Dorival Dourado**, member of the ABFintechs advisory board and startup investor

Regulatory bodies are making an effort that will facilitate the business of the smaller financial institutions and fintechs in the form of the New Invoicing Platform (NPC) for “*boletos*” or payment slips designed to simplify banking services.

It started operating in July 2017 and full deployment is due by November this year. Payment slips (*boletos*) for any amount are centrally registered with details such as issuer, billing and payer data, thus facilitating control and automatic calculation of fines and charges after their due date. The platform will be processing up to 8,000 payments per second and this will help reduce fraud and enable smaller institutions to issue and pay these payment slips.

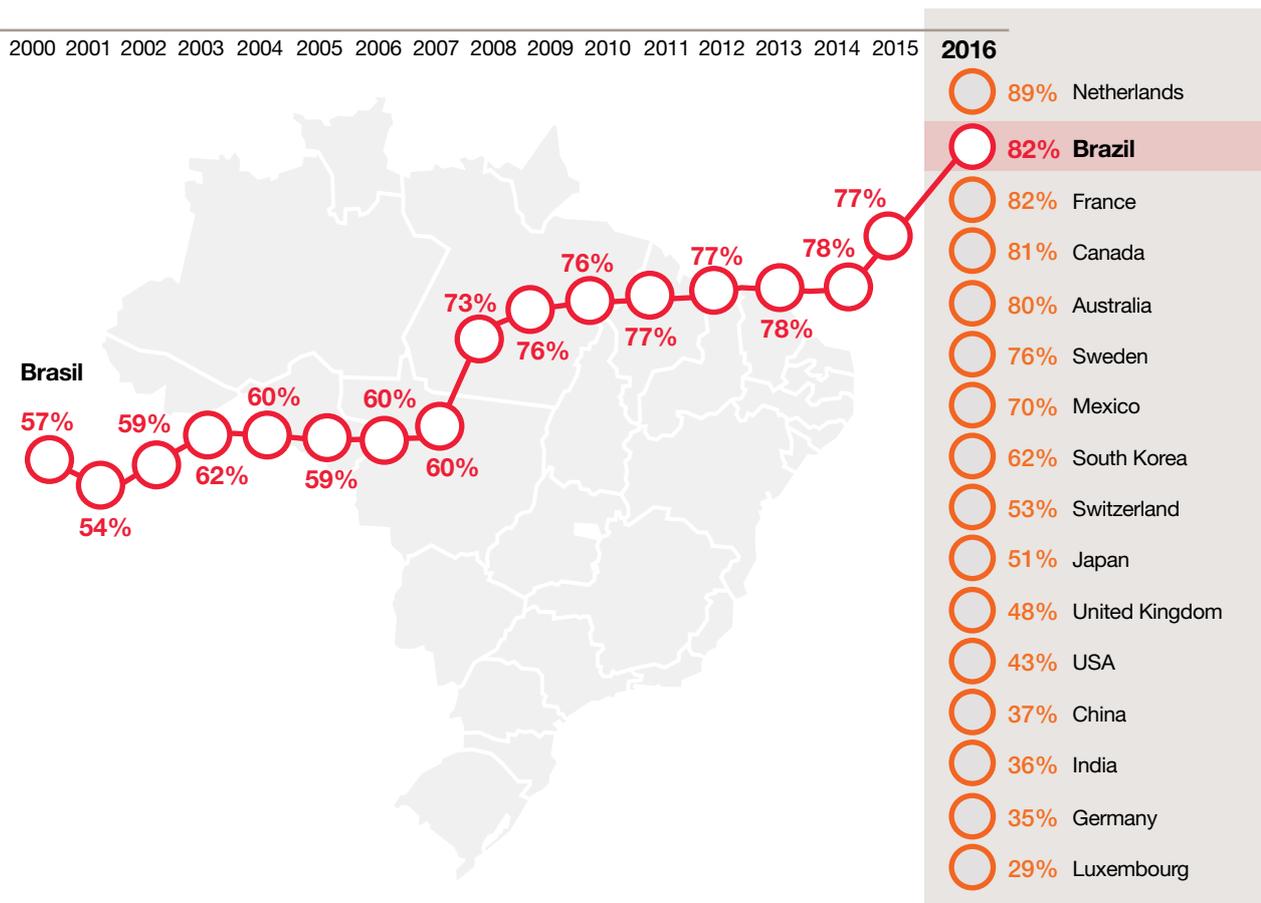
# Fintechs' opportunities and benefits

Technology eliminates intermediaries and gives consumers more decision making power. As a decentralizing force, fintechs operate in niche markets and break up the highly concentrated supply of services by traditional financial institutions.

Although highly developed and well regulated with high-level technology, Brazil's banking industry is highly concentrated, a factor obviously enabling inefficiencies to emerge. Brazil's five biggest institutions hold 82% of its financial assets, which makes Brazil one of the world's most concentrated markets.

## Evolution of banking concentration in Brazil

Share of the top five banks in the system (by percentage of total assets)



Source: Bank for International Settlements (BIS), 2016 data.

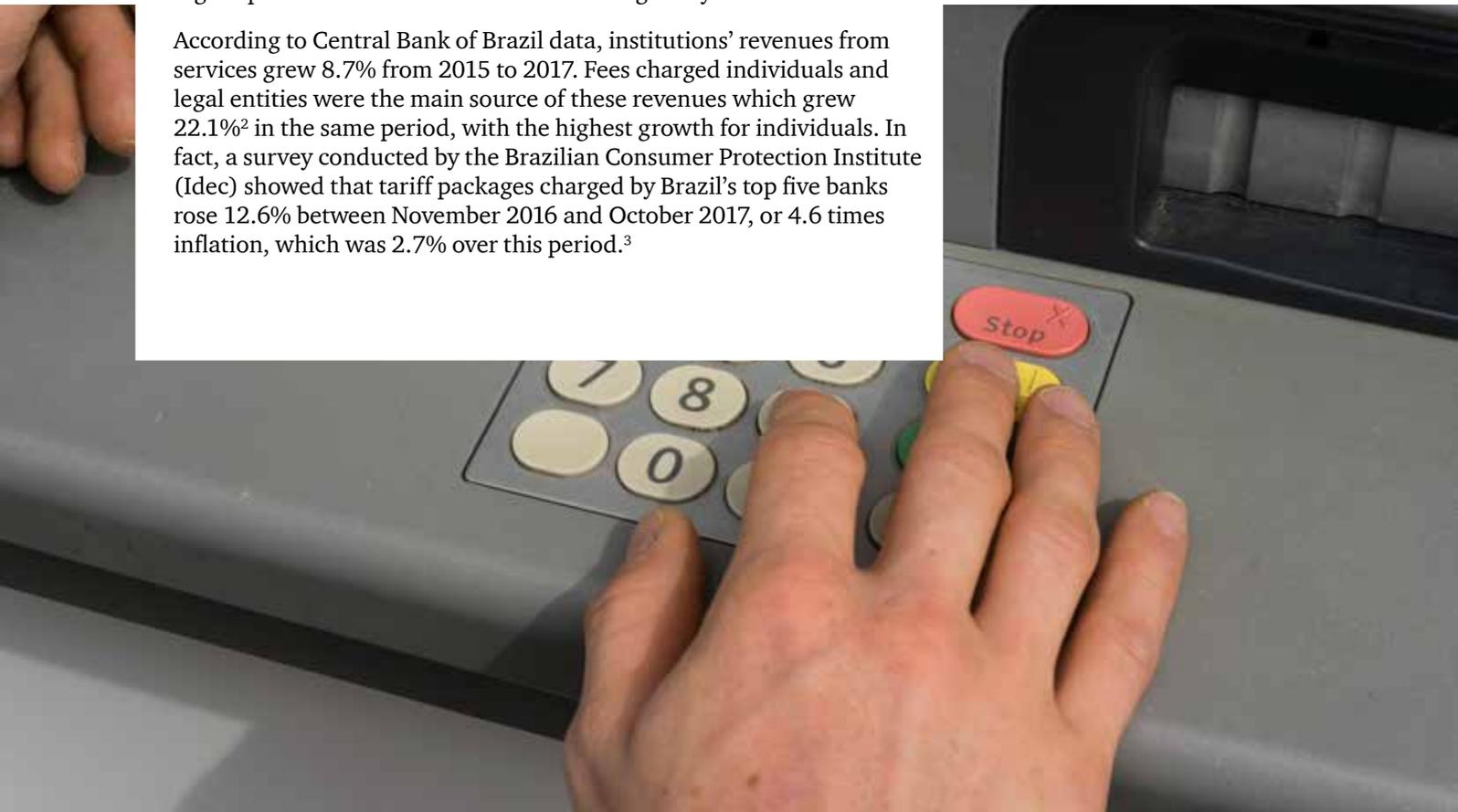
**“The insurer’s vision of products is based on what they know of the market and their statistics. Our technology does not look at what is there now, but what might be happening. To change this market once and for all, the best way is to open the sandbox to test new insurance models. For an insurer in today’s world, how can you think outside the box if you are in it yourself?”**

**Cristiano Maschio**, founder of Next One, which transformed real estate brokers into insurance distribution channels

## Costs and offering services

Traditionally, financial institutions’ relationships with the public were based on high-capillarity bank branches distributing services throughout Brazil. Over recent years, banks have tended to charge higher prices for their services while shutting many branches.

According to Central Bank of Brazil data, institutions’ revenues from services grew 8.7% from 2015 to 2017. Fees charged individuals and legal entities were the main source of these revenues which grew 22.1%<sup>2</sup> in the same period, with the highest growth for individuals. In fact, a survey conducted by the Brazilian Consumer Protection Institute (Idec) showed that tariff packages charged by Brazil’s top five banks rose 12.6% between November 2016 and October 2017, or 4.6 times inflation, which was 2.7% over this period.<sup>3</sup>

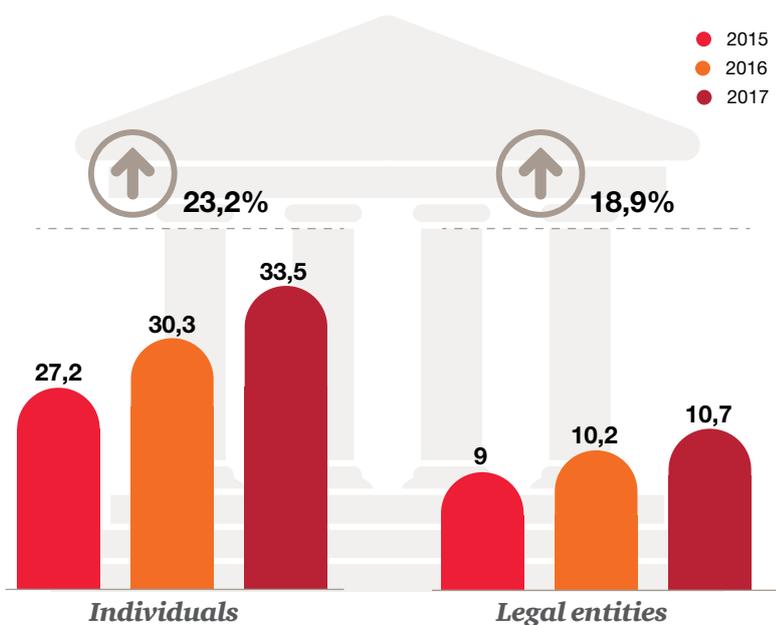


<sup>2</sup> Bacen, *Relatório de Economia Bancária 2017* [Central Bank of Brazil. Banking Economy Report (locally REB) 2017].

<sup>3</sup> Idec. “Pesquisa do Idec mostra que tarifa bancária subiu bem mais que inflação”. <https://idec.org.br/idec-na-imprensa/pesquisa-do-idec-mostra-que-tarifa-bancaria-subiu-bem-mais-que-inflacao> [Idec survey shows bank charges outstripped inflation]



### Banks' revenues from tariffs (R\$ billion)

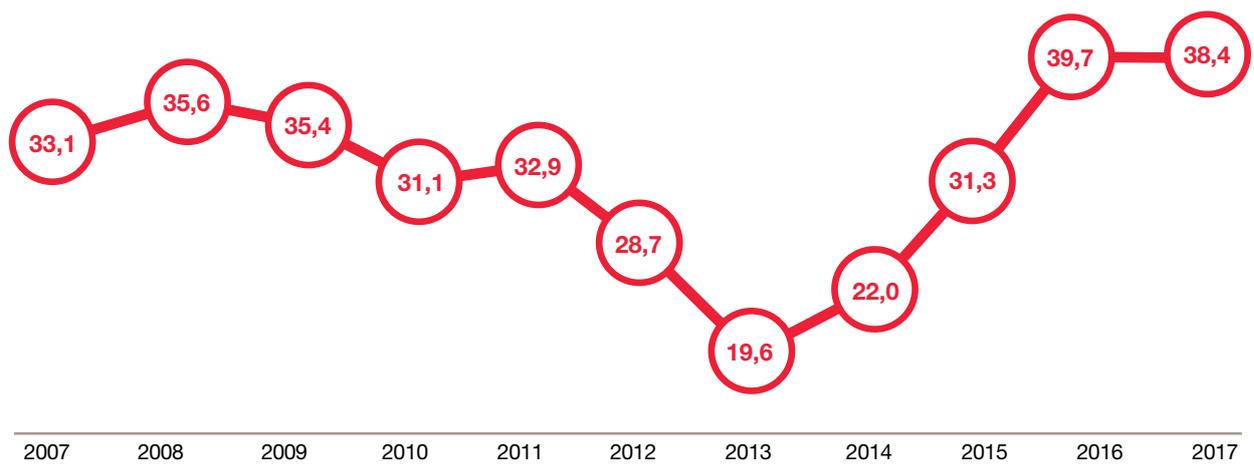


In relation to lending, a more favorable economic scenario and lower Selic interest rate in 2016 and 2017 helped to reduce the average interest charged on loans and the banking spread (difference between funding and lending costs). Nevertheless, Brazil still tops the world ranking of spreads second only to Madagascar, according to International Monetary Fund (IMF) data compiled by the World Bank.

Source: Bacen, Relatório de Economia Bancária 2017



### Banking spread in Brazil - Evolution

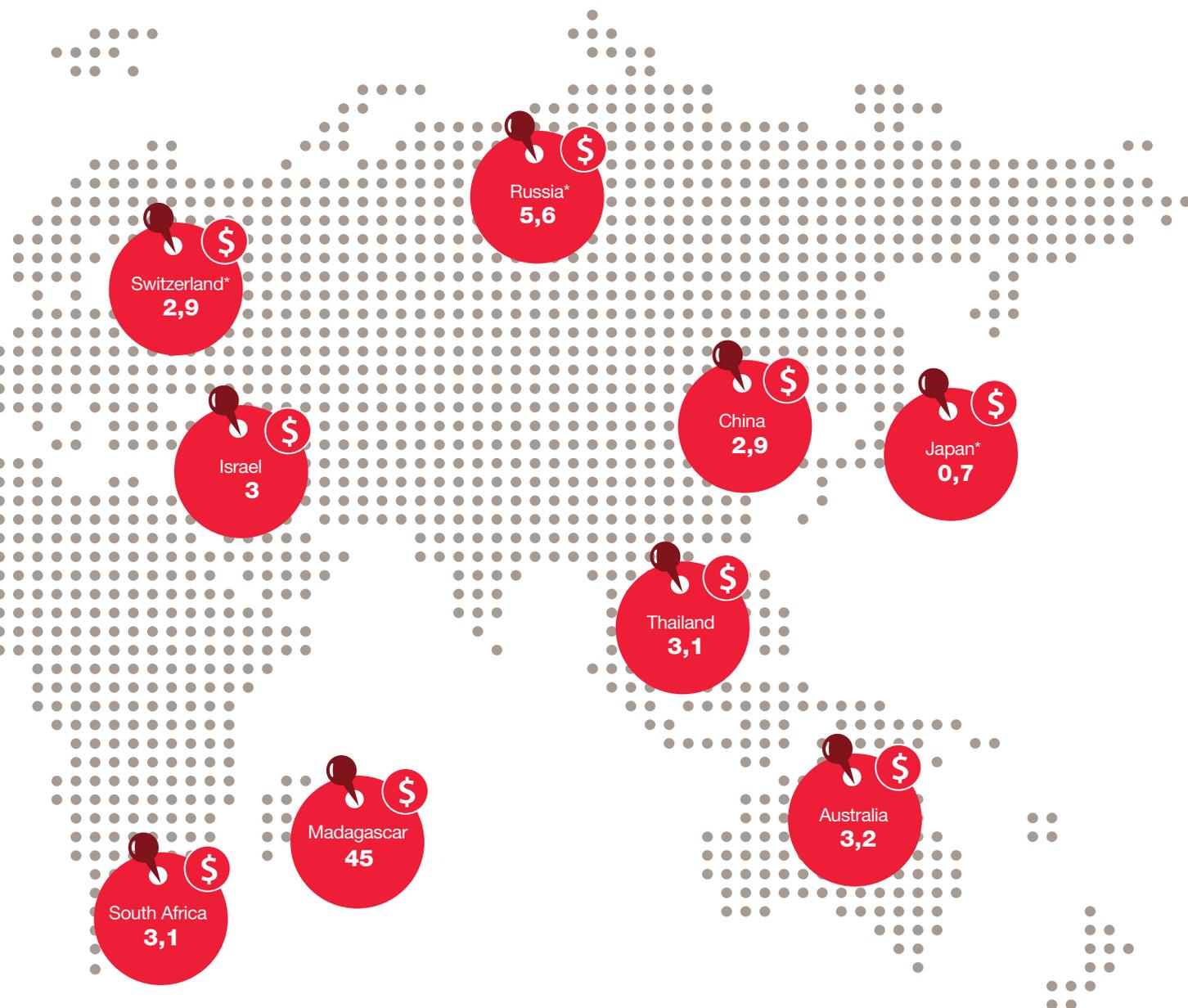


Source: World Bank, based on International Monetary Fund (IMF) data

## Banking spreads internationally



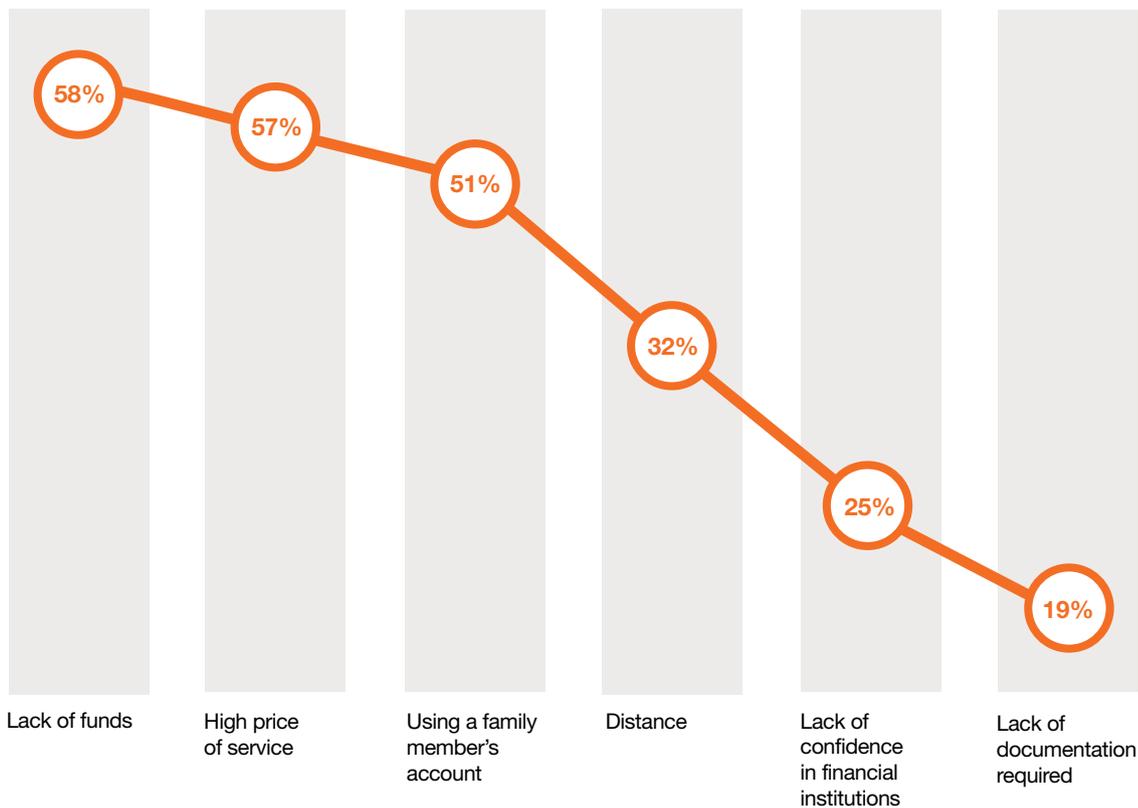
Source: World Bank, countries selected from those supplying data as per International Monetary Fund (IMF) parameters.  
(\* Data for 2016)



Brazil now has about 11 bank branches per 100,000 inhabitants, compared with an average of 44 in Europe (Eurozone) and 26 in the United States. In the northern and northeastern states of Brazil, this ratio falls to just over 6 branches.

The data for high-income layers show that the penetration of financial services in Brazil is around the same level as more mature markets, but is drastically lower for low-income layers. The World Bank reported that although persons lacking access to banking services account for less than one-third of Brazilian adults, 58% of the unbanked population come from the poorest 40%.<sup>4</sup>

### Why some Brazilians do not have bank accounts



Source: World Bank, 2017 Global Findex Survey

<sup>4</sup> World Bank, 2017 Global Findex Survey. This publication states that 70% of Brazilians aged over 15 had a bank account with a financial institution in 2017, against 68% in 2014.



## Today's customers are mobile

Growing numbers of mobile devices in Brazil pose the key opportunity for fintechs. Since 2014, Brazil has had more cell lines than inhabitants. Data from the National Telecommunications Agency (Anatel) show there were 236 million lines active for an estimated population of 207 million people the end of 2017. In addition, 60% of the unbanked population have cell phones or Internet access.<sup>5</sup>

Using their digital model and simplified access combined with low cost operations, these companies are in an advantageous position to boost inclusion for the large mass of people living on the fringes of the financial system or feeling dissatisfied with traditional institutions.

The rapid penetration of technology in Brazil has radically transformed consumer habits. Mobile banking transactions now account for a third of the total and are growing fast according to Febraban's 2018 Banking Technology Survey. In just one year, the number rose 38%. Mobile and Internet banking accounted for 57% of all bank transactions in 2017. Despite a 10% increase in volume banking transactions in Brazil from 2016 to 2017, the share of physical branches in this volume fell for the first time since 2011 - from 5.6 billion to 5.5 billion transactions, less than 8% of the total.

## Connecting with new generations

Over the next few decades, wealth will change hands: US\$30 trillion worldwide will be transferred from baby boomers to the millennium generation by the middle of this century. An important point to note is that two-thirds of these young adults usually fire their financial advisors when they inherited wealth.<sup>6</sup> To retain their connection with this group, financial institutions have to learn to speak their language.

As heavy users of smartphones and social networks, members of the new generation expect practical solutions and direct connections. They want transparency, convenience and easily accessible products and services. They do not cultivate brand loyalty and are averse to bureaucracy. They amount to a large pool of consumers willing to share private information and in return they expect a personalized experience for a low cost or zero cost. By 2020, they will probably account for 50% of the global workforce.

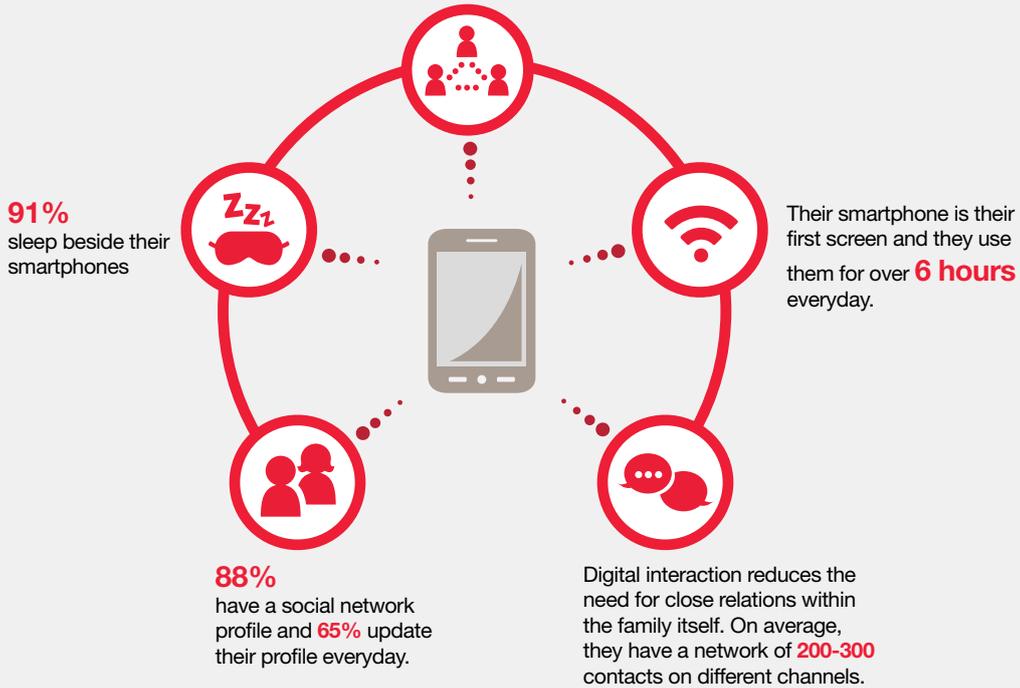
In Brazil, which still has a significant proportion of young people in its population, changing consumer behavior tends to be accentuated. According to PwC's *Global Consumer Insights survey*, the percentage of participants aged 18 to 34 who shop at least once a month via smartphone jumped from 19% in 2013 to 48% in 2018. In addition, 29% of them see mobile site navigating as a key experience for purchases, while 28% use mobile means of payment such as Apple Pay or Google Wallet.

<sup>5</sup> Idem.

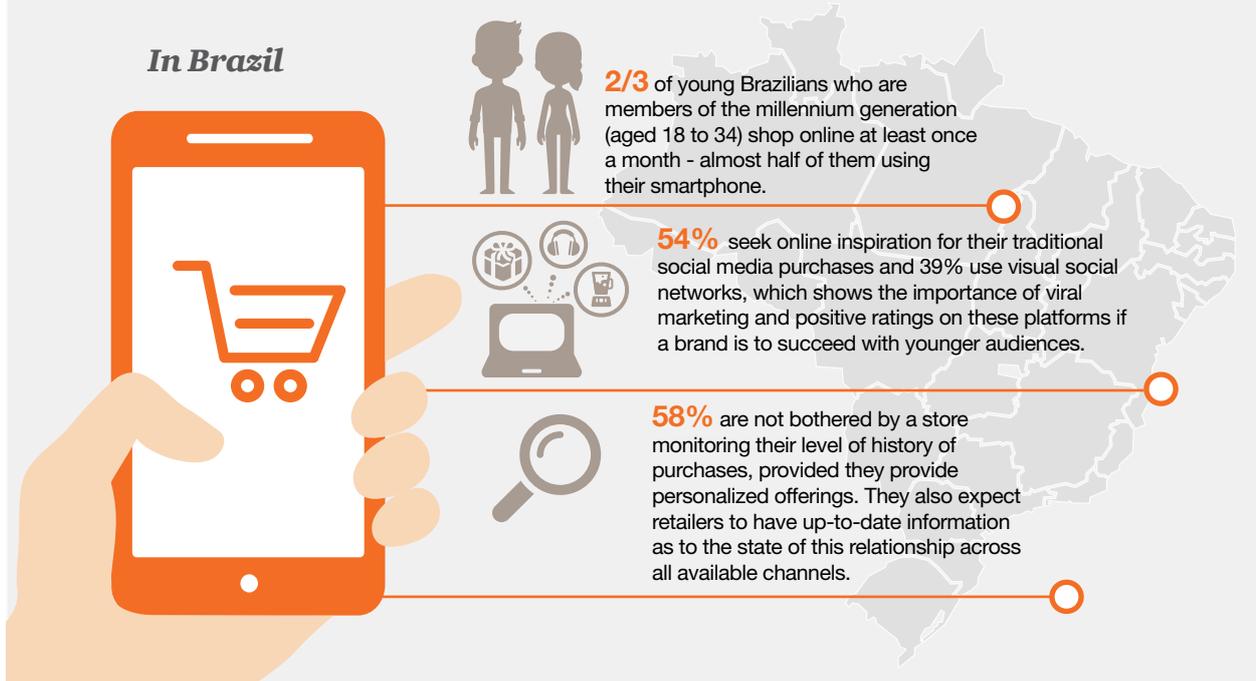
<sup>6</sup> InvestmentNews Data. "The great wealth transfer is coming, putting advisers at risk". <http://www.investmentnews.com/article/20150713/FEATURE/150719999/the-great-wealth-transfer-is-coming-putting-advisers-at-risk>

## The connected generation

As digital natives, they appreciate mobility and connection, and they enjoy being part of **online communities**.



### In Brazil



Source: *Global Consumer Insights 2018*, PwC (Brazil data), and Generation C, Google YouTube.

To engage this audience, traditional operators have to take a more human attitude and convey more credibility by using the digital tools that are part of the everyday lives of the new generation.

The Millennial Disruption Index shows that 53% of these users do not believe their bank has special offerings; 71% prefer going to a dentist to listening to a bank and one in three are ready to switch banks within the next 90 days. Of the total, 73% would be more excited by a new offering of financial services from companies such as Google, Amazon, Apple, PayPal or Square than a traditional bank offering from their own country. In order to grow this customer base, they will have to foster a sense of connection and social purpose.<sup>7</sup>

The savings goals of these millennials are less focused on accumulating wealth than previous generations. They are more inclined to save for travel than to ensure a comfortable retirement. Life choices such as marriage and having children are postponed and a concern to put away savings takes longer to emerge.

Therefore offering better service experience through digital channels can make a difference. If millennials rely on their social networks and other new wealth management channels, such as robot-consultants, for example, they will not hesitate to let go of the services of traditional consultants.

## The power of partnerships with banks

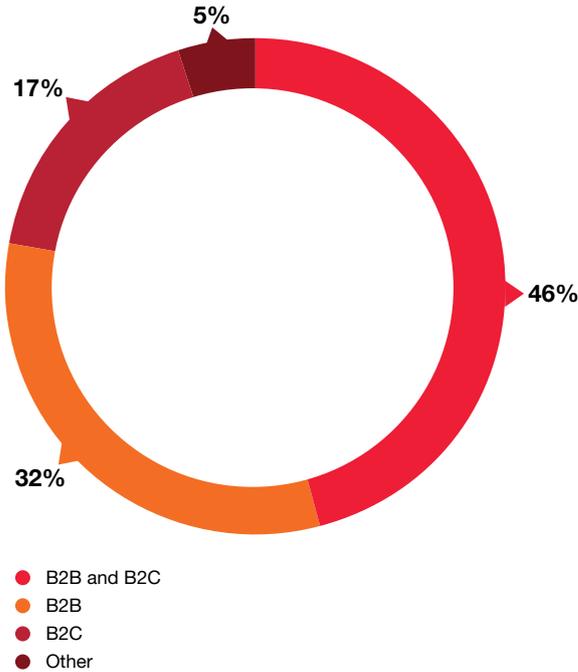
Our survey shows that only 17% of Brazil's fintechs serve only individual customers (B2C). The overwhelming majority of survey participants target a corporate niche that is not well served by big banks or insurers and financial institutions themselves are customers in this niche.

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### Companies are important customers

*Q: Which is your fintech's focus?  
(select only one option)*

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<sup>7</sup> The Millennial Disruption Index. Viacom Media Networks. <https://www.bbva.com/wp-content/uploads/2015/08/millennials.pdf>

With innovative payment solutions, loans and currency, among other products, fintechs attract mainly small and medium sized companies by offering a differentiated service experience. But they have also emerged to deal with a problem afflicting financial institutions - legacy systems. They focus on open-source development and Software-as-a-Service (SaaS) solutions to facilitate system integration, streamline operational capabilities and move toward digital/mobile distribution.

**“I see a high level of complementarity in the offerings of services from fintechs and major players. Since they have emerged more recently and have no legacy systems, these startups have different processing infrastructure and are able to leverage cost-benefit ratios. People in this segment are allocated by their specialization so there is space for companies that have special competences and specialize in a particular segment to do a better job and charge less.”**

**Dorival Dourado**, member of ABFintechs advisory board and startup investor



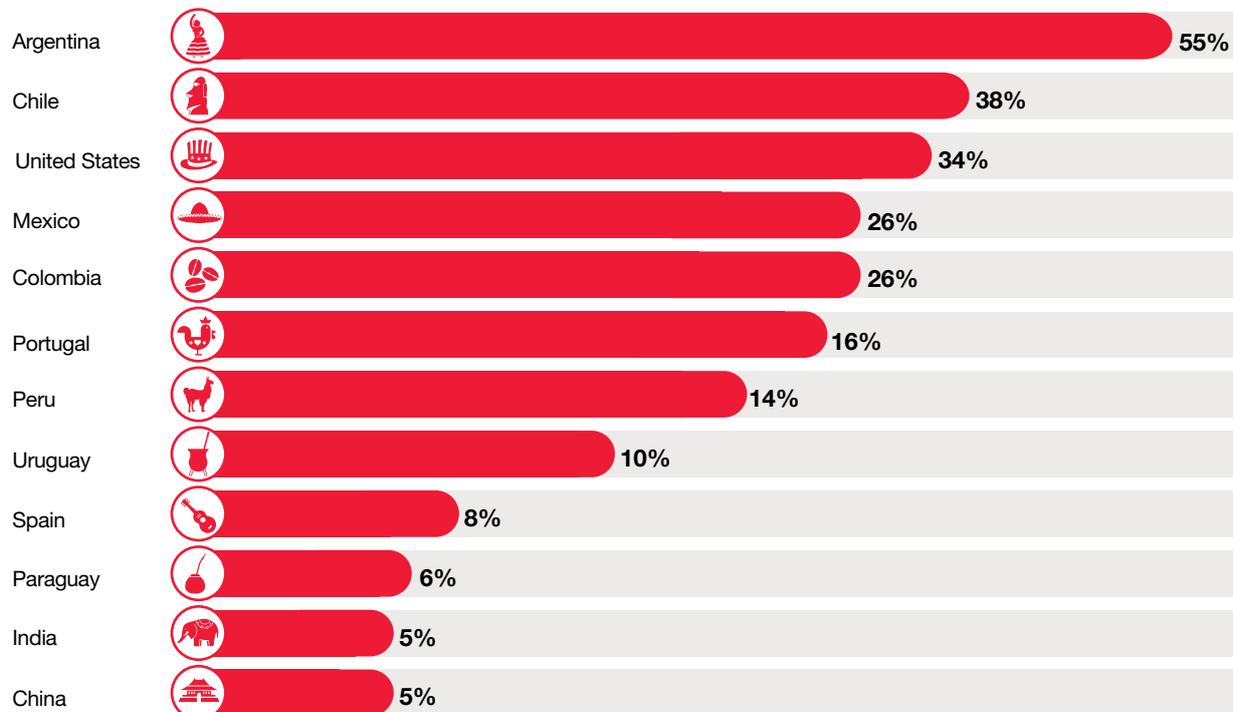
## International growth

Latin America's cultural market-related affinities make it the main target for fintechs planning to internationalize. Other markets pose significant barriers to entry for Brazilian companies due to regulatory aspects in particular.

Platforms that can overcome these differences enjoy an advantage in relation to foreign markets. Another possible obstacle for internationalization projects is the high cost of Brazil's infrastructure, which makes operations more expensive and lowers the competitiveness of Brazilian fintechs. Many of them will have to settle elsewhere in order to leverage international opportunities.

### Key countries for growth

Q: Do you intend to work in other countries? If so, list up to three of them



**“I see growth opportunities for means-of-payment fintechs in the international market, but not in the short term, especially for countries that have unmet banking needs. This is the case of the Latin American countries in which the banking system is expensive or does not serve customers well.”**

**Paulo Kulikovsky**, CEO of Acesso, a fintech that issues, processes and manages prepaid cards

# Industry trends

## Technological reinvention

Future technologies will not be the same as those that have driven fintechs until now

Cloud, data analytics and mobile are the key technologies behind the solutions currently supplied by fintechs. But this reality will have to change if these companies want to continue honing their offerings of financial products and services. To ensure they will develop in the future, our survey participants will have to master artificial intelligence and blockchain.

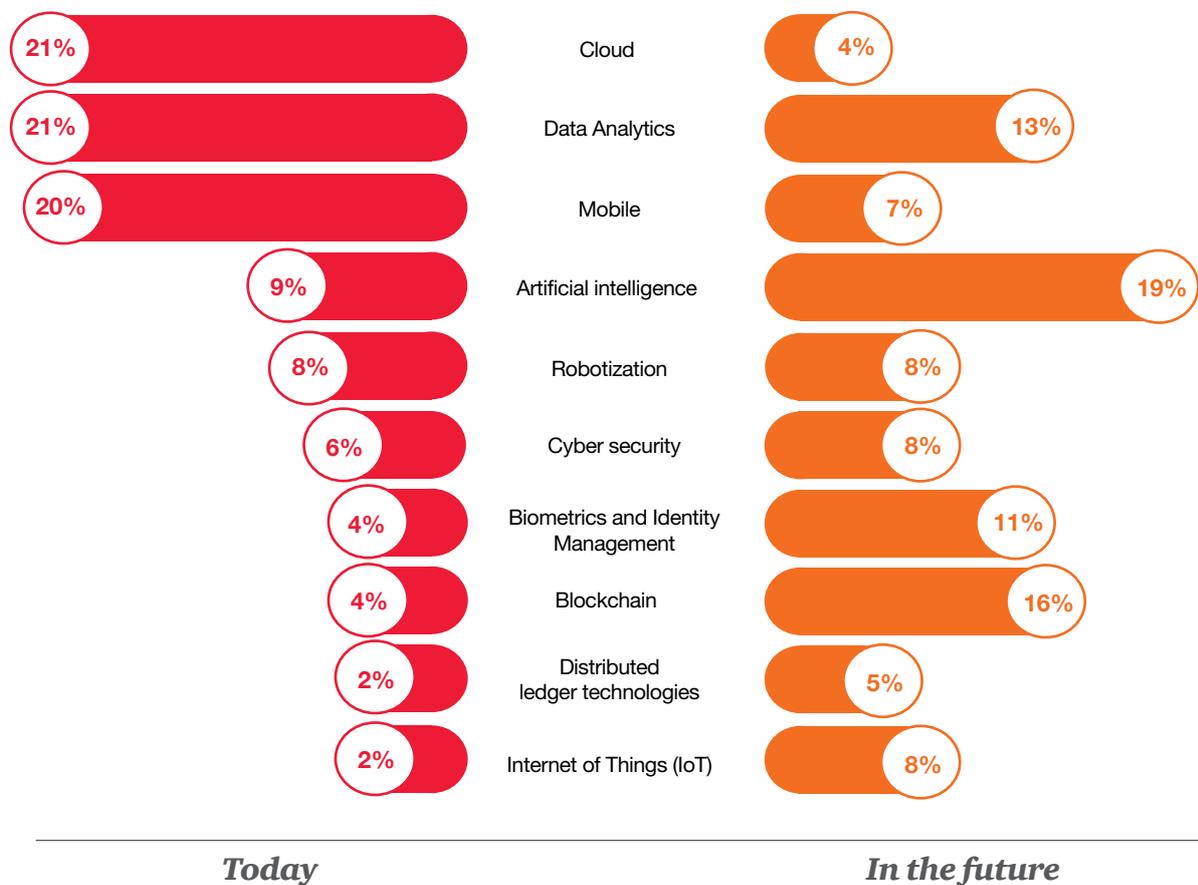
Cloud and mobile services are becoming commodities in this segment. In addition, traditional financial institutions have also been able to enhance the quality of the experience offered their customers, which has been one of the key factors for the fintech's success.

Major players are using investments, partnerships or acquisitions to deal with competition heightened by fintechs in some sectors, especially in means of payment. Technological reinvention will therefore be essential to ensure that fintechs enjoy a competitive edge in future markets.

## Key technologies today and for the future

Q: Which of these technologies does your company currently master?

Q: Which of these technologies is your company planning to have in the future?

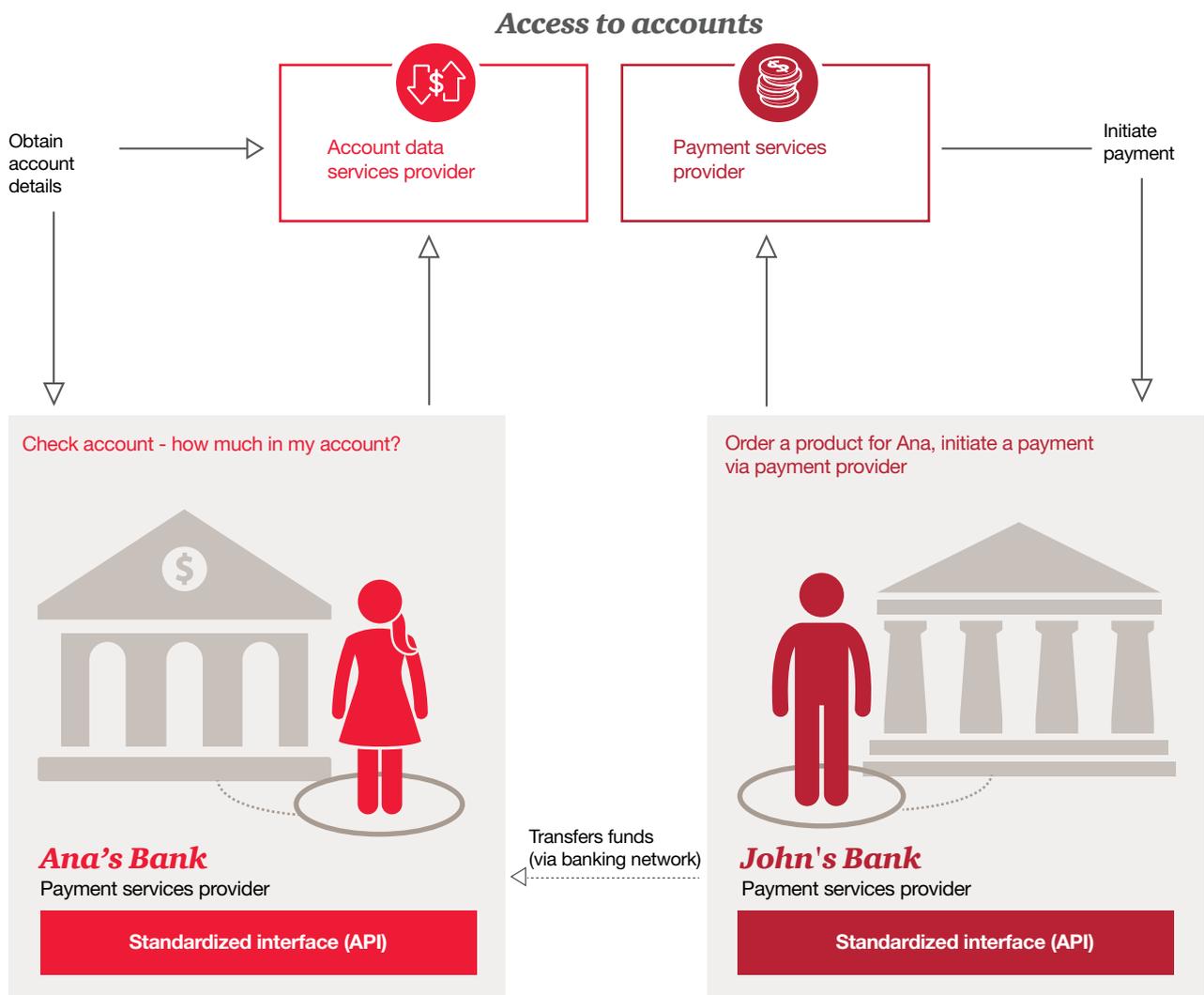


## Competition tends to increase with open banking and BigTechs

Much more power to choose for customers

Distribution of banking services is rapidly migrating from traditional physical channels to digital ones; open banking (secure sharing of customers' financial data with third parties via digital channels) poses a huge opportunity for fintechs, which have mature and open digital platforms, and low customer acquisition costs. This model is already working in Europe and Asia, but there is still no specific regulation for it in Brazil.

Change encourages industry players to go for partnerships with carefully selected fintechs or to develop public APIs that facilitate the integration of digital platforms with their legacy systems. These partnerships tend to be important factors for synergies that help build a network of financial institutions and fintechs with appropriate service offerings.



An obvious consequence of this trend will be yet more empowerment for customers. It should foster personalized offerings and help develop solutions that will facilitate choice of banking services. Fintechs emerging to offer simplified services for a digital public will be at the forefront of this development.

Banks tend to leverage the confidence and solidity they enjoy to act more as “data guardians.” Consumer could then share specific information subject to pre-approval or general identity information to open or access other services.

The environment is conducive to the development of platforms that combine different offers of services and financial products and make a connection with companies that are now outside the financial system, thus transforming them into new sales channels for products and services, such as social networks, health services, travel and retail sites.

This development will tend to accelerate BigTechs (such as Amazon, Google or Apple) entering the financial services segment. These companies have well-known brands, scalability and a broad and loyal customer base - precisely the biggest challenges facing fintechs today.

## Trust is an essential asset

### Cybersecurity has to be addressed before it becomes an urgent problem

CEOs from the world’s financial services industry point to cyber risk as the biggest threat for their organizations’ growth, according to PwC’s 21st annual CEO survey. However, only 13% of Brazilian fintechs mentioned data security as one of the biggest challenges for management. Diversifying channels, spreading cloud services and the move toward open banking will tend to make cyber-security an even more challenging issue in the future. New digital trends unarguably provide enormous benefits for consumers, but they also give rise to valid security and privacy concerns for data that must to be carefully managed.

Traditional financial institutions enjoy a competitive advantage over new players in the industry because their mature, highly regulated control environment and solid internal governance confer more trustworthy attributes than fintechs.

In addition to the usual concerns for data breaches and unauthorized access, companies will have to develop secure authentication models that take into account a wide range variables such as public wi-fi networks, mobile or desktop access, various operating systems (Windows, Android, iOS, etc.), as well as specific types of APIs.

There will be a need to easily identify who sent a particular set of data, why they did so and what they did with them. The aim is to ensure that third parties who are not banking institutions but store customer financial data will protect data properly. Wrongful use or misuse means a high reputational risk for all involved, whether or not they are part of the financial system.

This scenario reveals a clear opportunity to apply blockchain technology to record transactions, as well as artificial intelligence resources for predictive behavior analysis and fraud prevention.



*To avoid reputational risks, open banking will require a secure model to identify which data has been shared with whom*

There are clearly challenges to tackle. Any decision to share data through public APIs, for example, will be risk-based. In addition, economic models may have to be revised, technology architecture may change, and compliance problems have to be re-assessed. This is a radical but inevitable transformation driven by changing consumer behavior, digitized financial services and competitive dynamics.

## Power of creative destruction

Having first unbundled services, fintechs are preparing to rebundle their offerings

Fintechs split apart banking services to provide highly focused products to meet customers' specific needs. This was the phenomenon we call unbundling. Customers today no longer need to rely on just one bank to meet all their financial needs. They can choose specialized services and get superior experiences. But the maturation of these companies should naturally lead to the regrouping of financial services around a few players - a trend known as rebundling.

So far the banking model has never actually been threatened by a big fintech offering a comprehensive range of services. Because of the rebundling

trend, however, this situation is tending to change. Focused on specific services, fintechs are already starting to venture into new territories and offer different products and services. If they can leverage their agility as digital companies to succeed with a broad portfolio of products and services, they will be well positioned to compete with the industry's major players.

"Let us recall, however, that behind many successful Fintechs there is a big bank partnering them so they can lead rebundling initiatives to get competitive edge for their services," says PwC financial services consultancy partner Luís Ruivo.

He points out that alongside this trend, Brazil should begin to see more competition with international fintechs: "The Brazilian fintech market has great opportunities and it is going through a maturing stage not only because of its characteristics including concentration, the country's young and unbanked population and high spread, but also the trend toward modernizing the industry's regulations. We have to prepare for rebundling and the arrival of international players."

**"The Brazilian fintech market has great opportunities and it is going through a maturing stage not only because of its characteristics including concentration, the country's young and unbanked population and high rate spreads, but also the trend toward modernizing the sector's regulations. We have to prepare for rebundling and the arrival of international players."**

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**Luís Ruivo**, PwC financial services consultancy partner

# Conclusion

Due to our highly qualified local entrepreneurs and certain historical aspects of our development, we believe Brazil is set to become an important hub for local consumption and exporting technology in financial services. This development will depend on making progress in terms of regulations and incentives, but mainly on fintechs taking up a more strategic position to reach out to their consumers and accelerate the adoption curve for new solutions.

This movement will provide them with the exposure needed to influence investor and regulator decisions since it will show the gains that fintech may provide for society in terms of a better balance between supply and demand, or more access to better services, or generating new opportunities to develop business and innovative services.

In an accelerated disruption scenario such as the one we are now experiencing, predicting how the market will evolve over the next few years is difficult, but a highly probable trend is consolidation between fintechs themselves or between large banks and fintechs. New disruptive solutions such as open banking and blockchain finance, or international players entering the Brazilian market are set to trigger a high-turbulence competitive environment in the near future, further diversifying the market and eliminating centralizing agents.

The purpose of this survey, which we intend to repeat annually, is to start analyzing the performance of the Brazilian fintechs that we see as crucial to the process of maturation and strengthening of this market. Future issues will broaden and deepen our database to provide an increasingly clearer view of Brazilian technology companies for participants in this market.

# Methodology

*Brazil Fintech Deep Dive 2018 Survey* was conducted by the Brazilian Fintechs Association (ABFintechs) and PwC based on answers to an online questionnaire sent to representatives of financial technology companies specializing in financial services in Brazil. From February 15 to June 8, 2018, we gathered responses from 224 fintechs and held in-depth interviews to better understand the challenges and business context for these companies in the Brazilian market.

Our sample includes companies of different sizes from several sectors. ABFintechs and PwC specialists analyzed the data. Responses were treated in a strictly confidential manner and analyzed collectively. There are no references to individual companies in the results or analysis of the data.

Our thanks to all the companies that took part in our survey and to the entrepreneurs and investors who gave interviews and helped with our far-reaching look at Brazilian fintechs in their operational context.

## ABFintechs

Founded in October 2016, with 360 members, it represents the entities that promote major innovations in financial services for the benefit of Brazilian society.

## PwC

Our network of firms is present in 158 territories and we have over 236,000 professionals providing quality auditing and assurance, tax and corporate consulting, business consulting and transaction advisory services.

# References

Banco Central do Brasil. *Relatório de Economia Bancária*, volume 1, nº 1, 2018.

Buch, C., and Dages, G. *Structural changes in banking after the crisis - the nature of regulatory capital requirements*. Basel, Switzerland: Committee on the Global Financial System, Bank for International Settlements, 2018.

CB Insights, *Global Fintech Report Q1*, 2018

DataSebrae, “Perfil dos empreendedores”. <http://datasebrae.com.br/perfil-dos-empresarios/>

Demirgüç-Kunt, Asli, Leora Klapper, Dorothe Singer, Saniya Ansar, and Jake Hess. 2018. *The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution*. Washington, DC: World Bank. doi:10.1596/978-1-4648-1259-0. License: Creative Commons Attribution CC BY 3.0 IGO.

Global Entrepreneurship Research Association (GERA). 2017/18 *Global Entrepreneurship Monitor (GEM)*.

InvestmentNews Data. *The great wealth transfer is coming, putting advisers at risk*. <http://www.investmentnews.com/article/20150713/FEATURE/150719999/the-great-wealth-transfer-is-coming-putting-advisers-at-risk>

PwC, *21st CEO Survey: Banking and capital markets*. <https://www.pwc.com/gx/en/ceo-survey/2018/pwc-banking-capital-markets-ceo-survey.pdf>

PwC, *Global Consumers Insights Survey*, 2018. <https://www.pwc.com.br/pt/setores-atividade/varejo-consumo/gcis2018.html>

PwC, *Global Fintech Report 2017 - Redrawing the Lines: Fintech’s Growing Influence on Financial Services 2017*.

PwC, *Opening the bank for a new era of growth*, junho/2018. <https://www.pwc.com/us/en/financial-services/publications/assets/pwc-fs-digital-open-banking.pdf>

Febraban, *Pesquisa FEBRABAN de Tecnologia Bancária 2018*.

Viacom Media Networks. *The Millennial Disruption Index*. <https://www.bbva.com/wp-content/uploads/2015/08/millennials.pdf>

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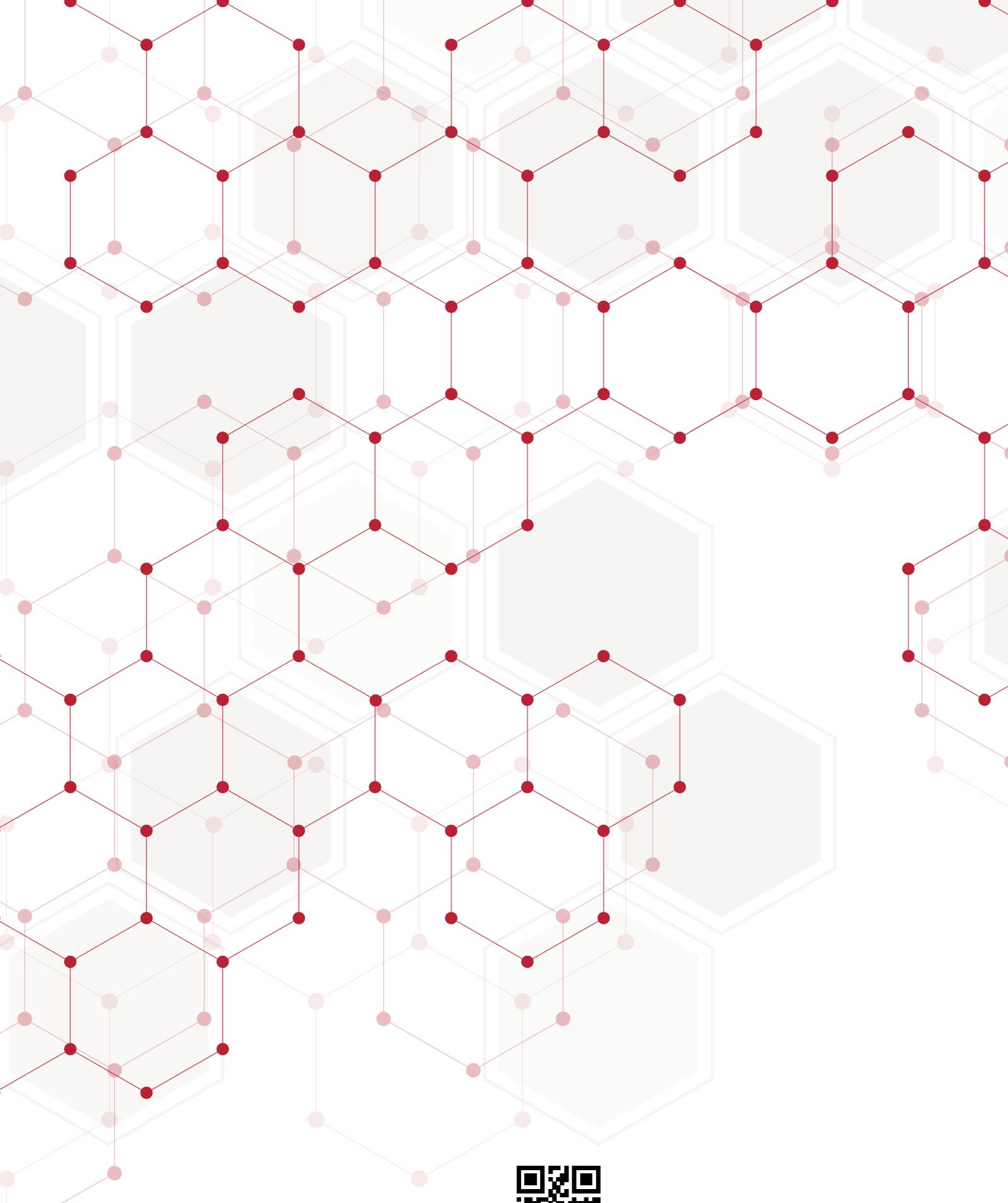
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