McKinsey & Company

Brazil 2020 Opportunity Tree





We all know the world is living interesting times, with lots of challenges. And Brazil naturally is part of this world. On top of that, Brazil has its own challenges. But our objective with this document is not to talk about them. There are plenty of reports that get released around this time of the year that talk about the main risks and challenges of the year ahead.

We are not asking you to ignore the problems nor challenges. It's about the power of "and" - solving the problems and supporting new solutions that are emerging, just like small seeds in the ground. If we give them the water (investments), sun (attention) and care (continuous support and collaboration for impact) they need, we will help them grow. All of us can make a difference and it starts by looking at all the seeds around us that sometimes have already become low hanging fruits, ready to be harvested.

We also all know that every challenge presents an opportunity - this is how all inventors, innovators and entrepreneurs have always succeeded. And this is the spirit of this report. To offer some perspectives about opportunities we envision for Brazil.

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This report is based on our accumulated experience over the past 30+ years operating in Brazil, and contributions received from a substantial number of our 700+ colleagues currently working for McKinsey & Company in Brazil and from a number of prominent global and local leaders. In this period, we have been humbled by the great fortune to have served some amazing companies, government institutions and NGOs in the country. These people and organizations have inspired and motivated us.

The pace of change in the world has accelerated dramatically and will never be this slow again - and this is also true for Brazil. This is why we would like to present the opportunities that might be out there for individuals, companies, institutions and the country.

We by no means have the intellectual arrogance to imagine that this report is exhaustive and comprehensive of all opportunities in the country for the year ahead. Yet, we hope it serves as a good starting point to map some trees of the forest of opportunities, and as a source of inspiration for others to complement what we inevitably have missed.

We wish you a productive reading, and hope that after reading it you get as excited as we are about the year and the decade ahead, and be compelled to add another tree to the forest.

Cheers,

Nicola Calicchio and Reinaldo Fiorini

Reinaldo Fiorini Managing Partner for



Nicola Calicchio

Client Council

Chairman of the Global

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About this document

The Objective

This document presents a perspective of Brazil's potential opportunities in 2020. The facts show that Brazil offers many exciting opportunities in several areas.

The Audience

This document is intended for all those who can play a part in driving an opportunity agenda in the country – entrepreneurs, investors, public and private institutions, business leaders and intellectually curious Brazilians.

The Methodology and Source of Information

This is a curated compilation of public information and selected proprietary McKinsey data, such as newspapers, articles, interviews with experts and McKinsey partners.



This document provides an overview of Brazil's opportunities for 2020 in several topics, including innovation and technology; infrastructure, industry and agriculture; people and talent; consumer and citizen; education and culture and others



20+ Opportunities for 2020

- The endless possibilities enabled by cheaper and cleaner energy, Kevin Nobels, Sergio Canova Marcelo Aude
- **Brazil's key role to feed the world,** *Nelson Ferreira, Mikael Djanian*
- Consumer centricity at its peak,
 Bruno Furtado, Luiz Lima
- The multi-billion market for innovation and start-ups, Yran Dias, Roberto Marchi, Paula Castilho. Jordan Lombardi
- The financial market is reinventing itself,
 Alexandre Sawaya, Elias Goraieb
- The reshaping of Brazil's infrastructure is likely to become a reality, Roberto Fantoni, João Guillaumon, João Pedro Branco
- 7 Insurance: Brazil's financial-services gem, Bruno Batista, João Bueno
- The power of the engineering and tech talent pool, Heloisa Callegaro, Henrique Ceotto, Erick Colares

- The potential of increasing productivity to improve quality of social and public services, Vijay Gosula, Pepe Cafferata, Rafael Siqueira, Aluizio Goncalves
- A new wave of Brazilian multinationals is bringing innovation to the world, *Tracy Francis*, *Leonardo Cabral*, *Bernardo Ferreira*
- 11 The recovery of the real estate market, Roberto Fantoni, Gustavo Tayar
- The new media landscape: opportunities for advertisers, *Marina Cigarini, Cristiano Fontes, Marco Dyodi*
- Tech-enabled productivity should not wait,
 Marina Cigarini, Paulo Fernandes, Wagner Gramigna,
 Lucas Pinz
- Informal and distance learning are transforming the Education landscape in Brazil,

 Nicola Calicchio, Marcus Frank
- The next wave of disruptions in the healthcare industry, *Tracy Francis, Monica Szwarcwald, Mauricio Cepeda*
- Brazilian workers want to innovate and feel ownership of the business,

 João Pedro Branco, Anita Baggio

- São Paulo as a global hub,
 Nicola Calicchio, Henrique Teixeira
- Consumers call for action in sustainability,
 Fernanda Hoefel, Carla Vorlander
- The multiple (and not so obvious) opportunities in consumer growth, Jose Carluccio,

 Beatriz Federico
- Boosting the growth of small and mid-sized cities in Brazil, harnessing fragmented trade,

 Fernanda Hoefel. Carla Vorlander
- The values of Brazil's new generation are a source of inspiration, Tracy Francis, Fernanda Hoefel, Kevin Nobels, Fernanda Mayol
- The underrated power of Brazilian soccer,

 Bruno Furtado, Pedro Mendonça, Luis Cerqueira
- 20 (not so known) inspiring Brazilians in their 20's, Massimo Mazza, Marina Mansur, Paulo Cunha, Luisa Pereira

At a time when disruption is

McKinsey & Company

01

The endless possibilities enabled by cheaper and cleaner energy

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Brazil's power market shall receive investments and increase price competitiveness



Renewable energy prices have dropped and renewable capacity shall represent most of the capacity addition over the next decade



National Oil Regulator (ANP) and Federal Government are working to promote competitiveness in Brazil's Natural Gas sector

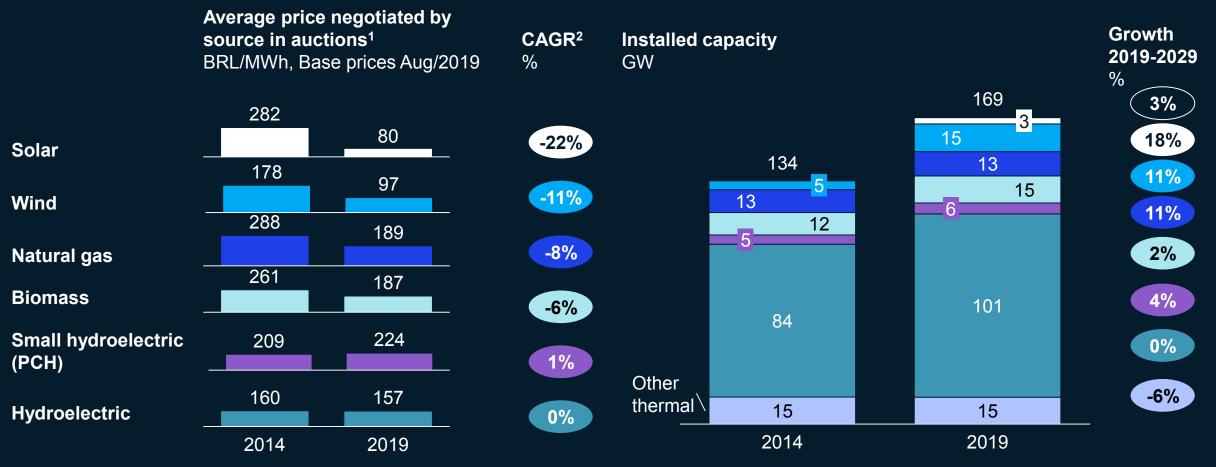


National Power System Regulator (ANEEL) has proposed an 11% tariff reduction over the next 4 years



Brazil plans to invest ~USD 120 Bn in transmission and distribution capacity until 2029

The cost of renewable energy has dropped in recent years, solar energy being the cheapest in 2019



- Government sets energy volume quotas for each technology in auctions
- Renewable energies have traded most of the energy volume, followed closely by natural gas plants

^{1.} Power generation costs only. Does not include taxes or sector charges

^{2.} Compound annual growth rate

National Energy Council (CNPE), National Oil Regulator (ANP) and Federal Government are working to promote competitiveness in Brazil's Natural Gas sector

Historically closed, ANP has been studying changes that aim to open the market more to competition

New resolutions will help drop natural gas prices in Brazil



Define clear guidelines to open the natural gas market

Create uniform and transparent rules that allow customers to switch to the unregulated gas market, purchasing their supply from other natural gas companies



Establish criteria for carrier independence

Establish minimum separation criteria for gas pipelines in order to promote competitiveness



Coordinate the development of Network Codes

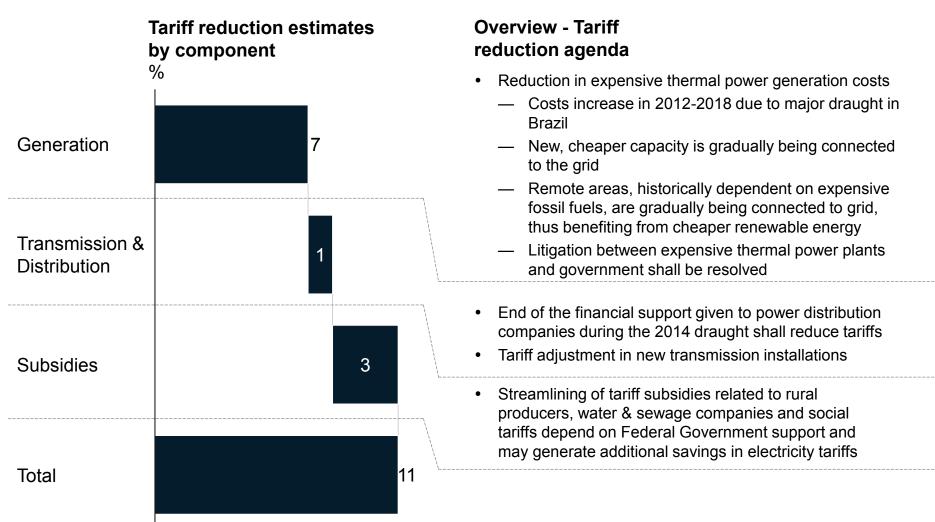
Focus on developing guidelines for collaboration among multiple gas-transmission agents



Ensure price competitiveness of new and existing pipelines

Review regulator acts related to: loading, access to transportation system, criteria for calculating transportation tariffs, and criteria for characterizing the expansion of transport capacity of transportation pipelines

National Power System Regulator (ANEEL) has proposed an 11% tariff reduction over the next 4 years



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Brazil plans to invest ~USD 120 Bn in transmission and distribution capacity until 2029

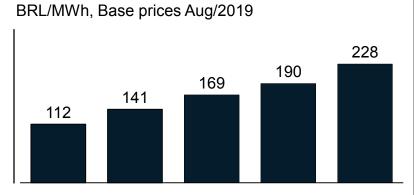
Average price negotiated by source

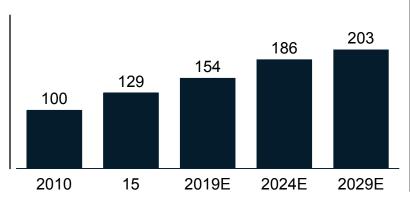
Generation capacity

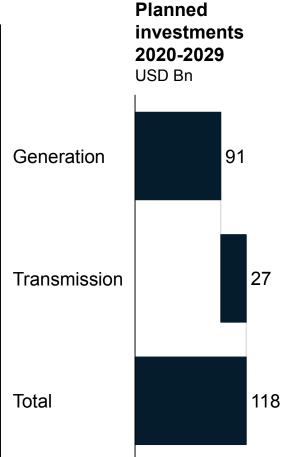
Transmission

lines

000 km







Investments shall add

~60 GW of generation capacity to the power grid in the next decade

- 40 GW of renewables
- 20 GW of thermal power

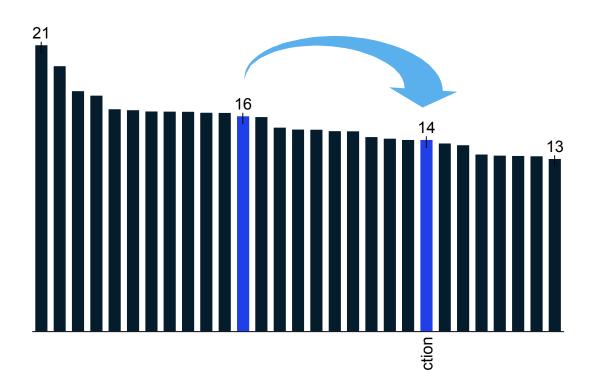
~50,000 kms of power transmission lines

in auctions

Proposed measures will improve Brazil's position in the tariff ranking...

Industrial energy tariffs after the 11% reduction

USD cents/kWh

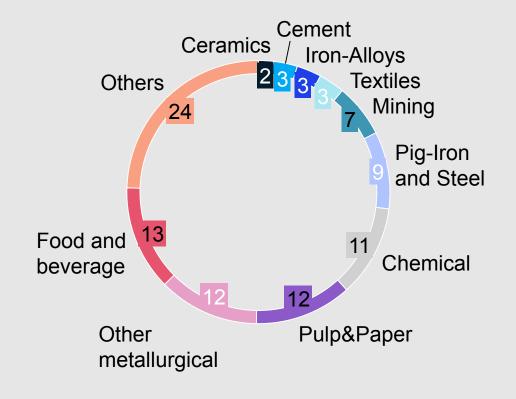


Barbados Senegal Italy Cyprus Hong-Kong Japan Singapore Australia Malta Colombia Brazil - today Kenya Panama Nigeria El Salvador Germany Morocco Slovakia Cambodia United Kingdon Brazil – after re Belgium Portugal Ireland Ghana

... making energy-intensive industries more competitive

Industrial power consumption

%, total = 201GWh



Mining, chemical, steel and other energy intensive industries shall benefit from higher international competitiveness



2020 will be a year of great opportunities for Brazil. The reality of the new (and lower) benchmark interest rate is accelerating the Energy Transition in Brazil - all components of the electricity supply chain - Generation, Transmission and Distribution are in full transformation towards renewables and energy efficiency and resilience. The Oil & Gas industry, for its part, is changing in terms of the number of players and major companies' strategy along the entire value chain.

André Clark
President and CEO

Siemens Brazil

Brazil presents numerous opportunities in several sectors of the economy. The Energy Outlook 2019 indicates that the country's energy consumption will grow by 65% by 2040, faster than global growth, which will be 32% over the same period. Renewable energy, which includes biofuels, will have the largest share in this growth, accounting for almost 40%, followed by gas, with 23%. Bioenergy will be an essential part of advancing towards a low carbon future and Brazil is leading the way in demonstrating how it can be used successfully at large scale.

Mario Lindenhayn
Head of Country
BP Brazil

02

Brazil's key role to feed the world

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Global demand for food/protein will grow ~2x until 2050



Brazil is the **only large country with favorable conditions to increase supply at scale** and can be the **#1 Agri/food exporter** in the next decade

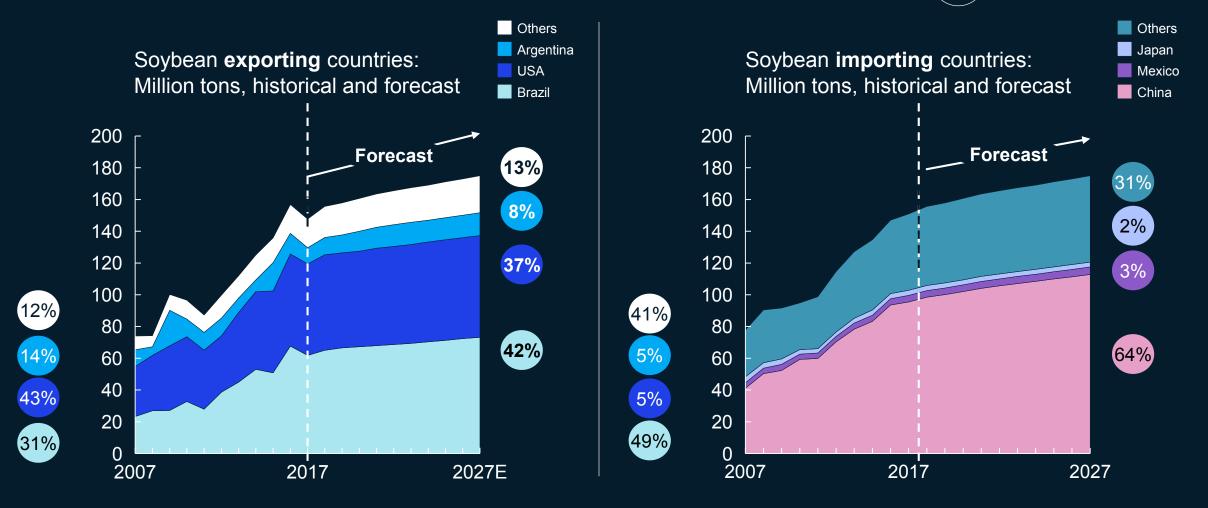


Brazil is the **natural testbed for the +1,000 AgTechs globally** and the country has already seen investments soar last year



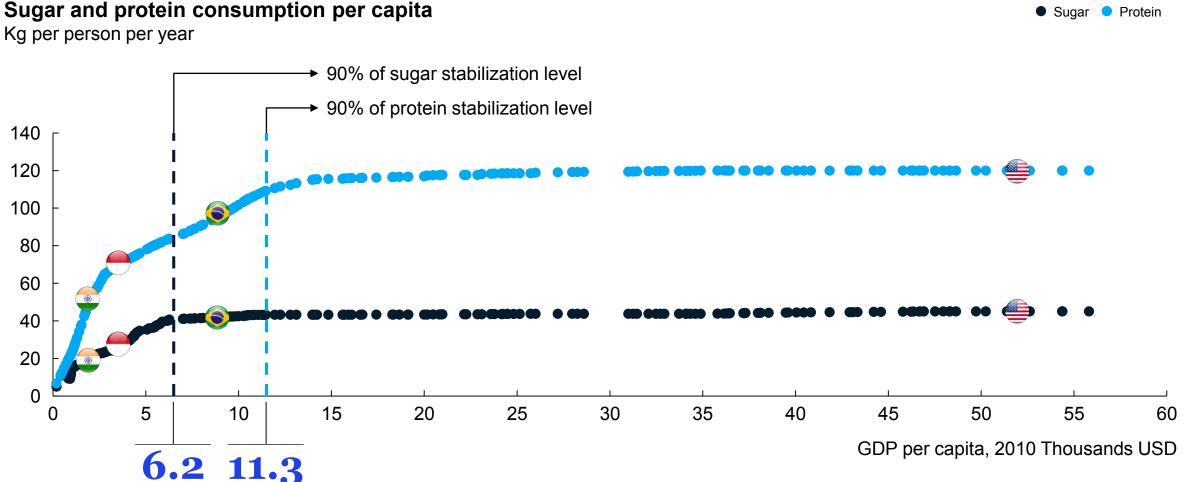
New protocols, services and forms of certification need to emerge to ensure the sustainability demanded by consumers





Market share over global trade

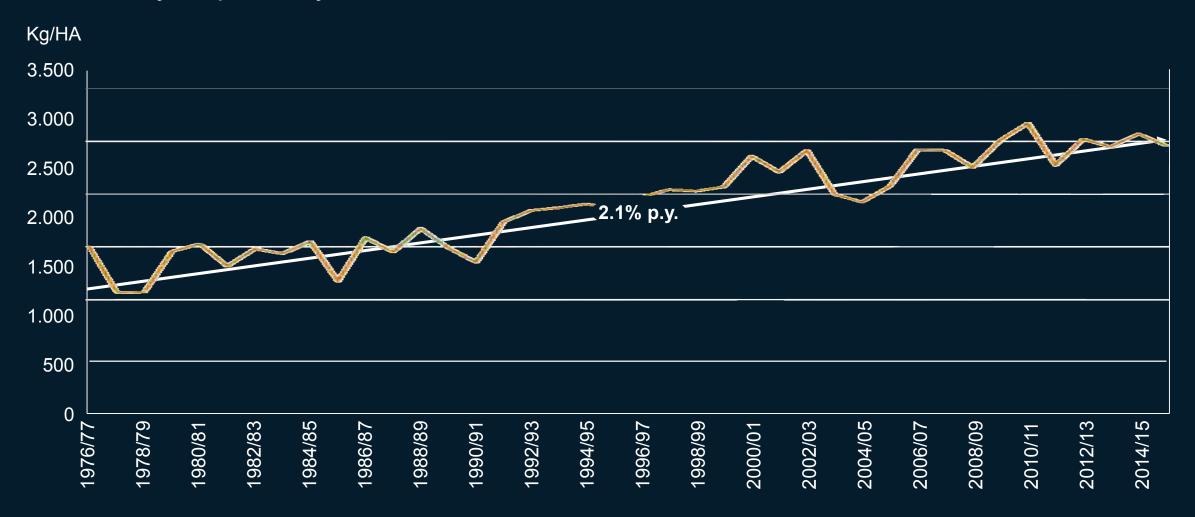
In general, countries stabilize sugar consumption at lower level of income than meat consumption



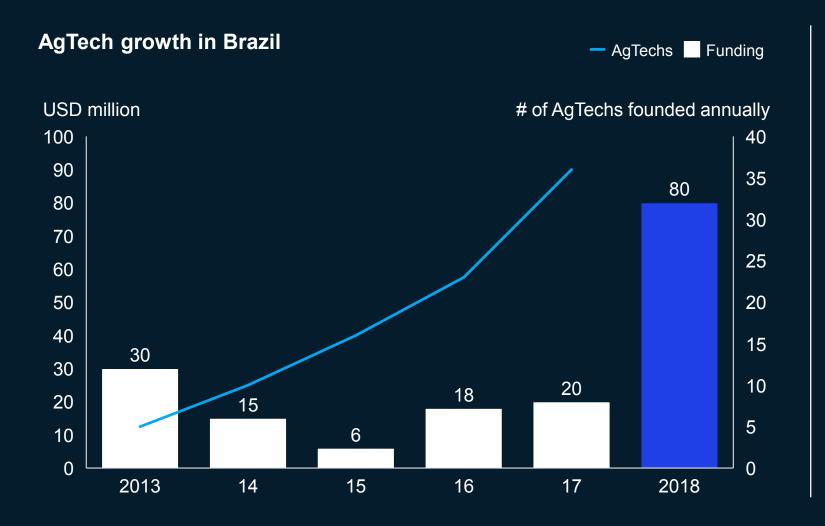
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Brazil has experienced unparalleled consistent growth in grain productivity

Evolution of soybean productivity in Brazil



AgTechs are booming



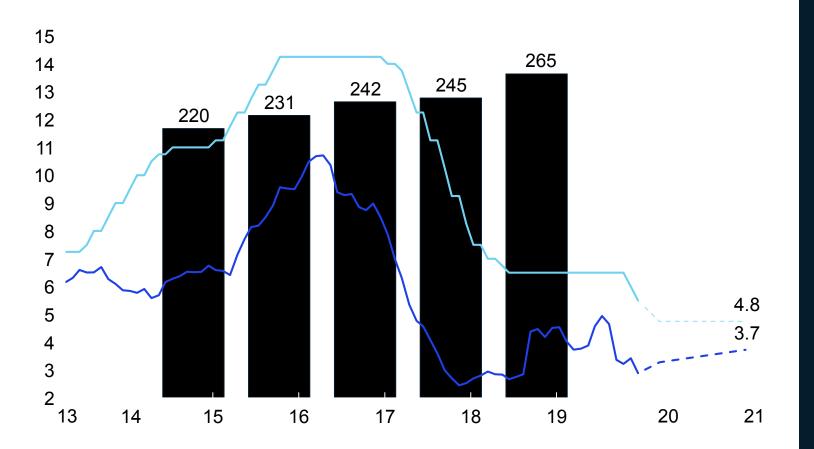
Brazil is the natural MVP market for the +1,000 AgTechs globally

The new generation of farmers is more sophisticated and an early adopter of new technologies

Low interest rates and credit availability will foster long-term investment

Rural credit outstanding volume (BRL Bn), Selic and IPCA rates





New crowdfunding platforms and AgFintechs are disrupting traditional Ag value-chain financing









New certification and tracking schemes along the value chain should be developed to ensure the sustainability demanded by consumers

Building on their sustainability and zero-deforestation efforts



Shares the CGF¹ commitments for zero net deforestation by 2020

One of the first companies to declare a ZD commitment & to report a comprehensive strategy to eliminate deforestation



Joined the TFA by launching a public commitment to eliminate deforestation associated with soybeans, palm oil, paper, and meat with zero net deforestation



Took on a public commitment to promote zero deforestation in Brazil's soybean, meat and wood chains



Endorsed the New York Declaration on Forests in 2014

In 2015, it announced its commitment to eradicate deforestation by 2030

1. Consumer Goods Forum

Source: WWF, Ag News, Mongabay McKinsey & Company 25

New certification Schemes are expected to emerge along the value chain



Farmers

markets

Access to restricted

Grain and oilseed companies

Improved brand positioning, go-tomarket strategy and revenue model



Food and consumer goods

Increased relevance for sustainability agenda



End consumers

Traceability of origin of consumption products



McKinsey & Company

Brazil has the most valuable environmental assets in the world, and could become the global leader in green finance. This includes infrastructure and agribusiness, where the funding gap is huge and long term investment opportunities are unique.

Sylvia Coutinho

Country Head UBS Bank Brazil

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I have always believed in the huge opportunities Brazil can offer. There is no doubt in my mind that innovation is here to transform the world, people and society. I believe that, in 2020, Brazilian agribusiness will be embarking on innovative projects. We will witness an unprecedented acceleration in technology, continuing the legacy of Brazilian agribusiness and placing it in an increasingly solid leadership position, preparing the nation to meet the challenge of significant consumer demand. Brazilian agribusiness is, and always will be, at the core of world economies. It plays a fundamental role in the development of society and is a key contributor to the sustainability of our planet. This will be the start of a historic decade.

Fabio Venturelli
Chief Executive Officer
Sao Martinho SA

5 2020 will be a year of great opportunities for Brazil as we have a diversified agenda of reforms, a diversified economy, a relevant internal market, we are one of the biggest producers and exporters of food in the world and, last but not least, a macroeconomy with first-world inflation and interest rates.

Pedro Parente
Chairman of The Board
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03

Consumer centricity at its peak

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Consumer centricity is a huge opportunity for Brazilian companies

To find out more use the QR code to access

McKinsey – The future of personalization





Brazilian consumers are ready for technology-led disruption – rapidly increasing internet penetration and the 2nd highest online engagement in the world are huge enablers for customercentric value propositions



Incumbents are reacting by deploying technology to engage their customers with the ultimate goal of increasing LTV



The proliferation of customer-centric startups are **revolutionizing the way consumers interact** with companies and raising the bar for incumbents



We expect this movement to continue over the next years, with a huge opportunity at stake for companies that can truly deliver on customer centricity



This race for customer centricity is not unjustified – global companies with high customer satisfaction scores outperform peers across multiple financial metrics

Brazilian consumers are ready for tech-based disruptions



71% of Brazilians own a smartphone



~9.5 hours spent per user, per day, on the internet – 2nd most-intensive internet users in the world



76% internet access for lower middle class¹ in 2018, up from 56% in 2015



24-hour instant QR code payment pilot will be launched by the Central Bank in 2020



Tech startups are disrupting several industry verticals through a consumer-centric approach

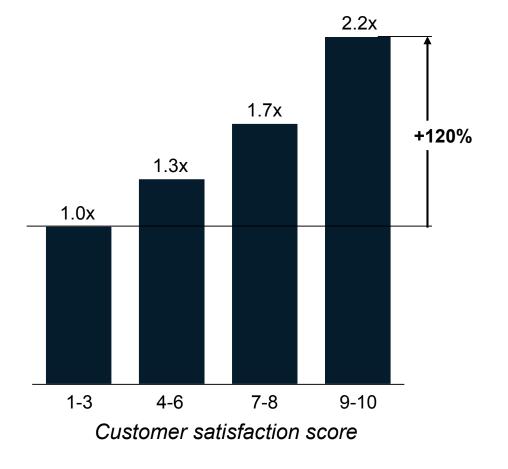
Transportation 99 Uber grow	Startups pr	Startups proliferation are revolutionizing the consumer journey	
Delivery Uber Fats Loggi	Rappi	One-stop-shop allowing consumers to order almost anything, even cash, seamlessly	
Health and Education arco	Gympass	Allows companies to provide nationwide access to gyms for its employees	
FinTech coo inter pagseguro magnetis	MUbank	Nubank's customers saved more than USD 1.1 billion in fees over 6 years	
Others hotmart CARGOX madeiramadeira	5. QUINTO ANDAR	Reduced time spent to rent a property to less than half the time of traditional channels	

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Companies with very high customer satisfaction scores outperform their peers

Revenue per customer by satisfaction score







You've got to **start with** the customer **experience** and work back toward the technology - not the other way around."

S. Jobs, former CEO of Apple



...to be **Earth's most** customer-centric company..."

Mission statement



Focus on the user and all else will follow."

L. Page and S. Brin, Founders

Incumbents are reacting to sustain and engage their customers

From...



Traditional Banking value proposition



Consumer connection primarily at moment of purchase (offline and online)



Very low frequency – car insurance purchased 1x per year



High frequency grocery segment, looking to increase engagement and loyalty

...То

Digital native banking offer and experience Free online payments for clients, unbanked people and non-Itaú account holders



"Membership" mindset and connection to engage consumers continuously, based on their preferences and passions (e.g., SNKRS for collectors; NRC for runners)



Leveraging telematics to understand customer **behavior** and offer discounts



Offer additional products and services to increase frequency such as electrician service and credit card

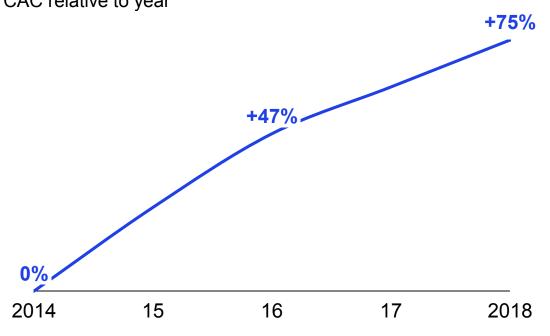


Offers **personalized discounts** through the app. Partnered with Raia Drogasil to build the coalition program 'Stix' to increase loyalty and cross-sell # stix

The real battle is for client acquisition...

CAC has increased 75% globally in the last 5 years driven by market saturation

Customer Acquisition Cost (CAC) - Worldwide CAC relative to year



... and Lifetime Value (LTV)

Example





Rappi is growing its platform to boost LTV through

- Higher purchase frequency (more diverse partners)
- Higher average ticket (more valuable partners)
- Decrease in churn (fast expansion and leading UX)

The winners of the LTV battle will be companies that are able to find new ways to engage customers

Through multiple touchpoints, "Ana" is generating relevant data that allows businesses to tailor offers and experience



Company offers 15% off juices in grocery stores in the area

Smooth ordering experience

Improves order interface and flow, automatically based on time of day and "Ana's" habits

Dietary preferences & wellness

Company knows "Ana" is a vegan so it adds almond milk to her smoothie

Partner loyalty programs

向

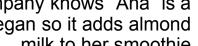
Company recognizes that "Ana" is a premium customer at a Cosmetics Company and adds beauty-based vitamin shots

Social media

Company analyzes who "Ana" follows and customizes drink aesthetics

Wearables

Company tracks "Ana's" activity level and adjusts calories accordingly¹



1. With Ana consent



"Segment of one": businesses leverage data across touchpoints to gain unprecedented insights



... Starbucks will be able to deliver a one-of-a-kind experience

Other examples



Personalizes every user's homepage - generates 10-30% added revenues



Adapts film covers so that a customer sees the actor or actress they are most familiar with

- Businesses are collecting sophisticated data across multiple touchpoints with the client
- This gives them a previously unattainable level of insight into a customer's behavior, preferences and expectations
- The General Data Protection Regulation (LGPD) was approved in Brazil in 2018 and it will probably take effect in 2020 to regulate the use of personal data



The customer-centric opportunity is massive – but there are imperatives to capture the value at stake

- Offer higher frequency services that fulfill customer needs across multiple aspects of their daily life
- Monetize the user base, driving customers from low to high value services by working as an innovation powerhouse
- Structure internally to enable end-to-end management of customer journey and KPIs even if it means self-disrupting
- Build the required user-centric and tech capabilities to truly deliver an **unparalleled user experience**



With more reforms and greater confidence, I see a path for strong and sustainable growth to return, impacting all layers of society, especially the poorest, which are the ones that suffer the most in all crises. A more thorough discussion about inequalities can also help conscious capitalism advance, which I have defended for years. A country with a huge population like ours needs to increase the population's purchasing power to be able move up to a new development level.

Abilio Diniz

Chairman of the Board of Directors Península Participações



I could not be more enthusiastic about Brazil! There are more investments, technology companies are evolving into unicorns and dominating the world and, more importantly, building an optimistic and rational longterm vision for the nation.

Cesar Carvalho

Co-Founder and Global CEO Gympass

We are living in a positive era in Brazil with historically low benchamark interest rates and an agenda of reforms that addresses Brazil's structural problems. In this scenario, private investment and consumption will be the drivers of growth going forward.

José Olympio Pereira

President Credit Suisse Brazil

04

The multi-billion market for innovation and start-ups

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Contributors: Priscilla Licht, Marina Xandó

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Several important elements are favoring innovation and the creation and growth of start-ups in Brazil



Consumers have a high level of digital utilization

- 70% of Brazil's population is connected to the internet
- Brazilians spend +9 hours a day online, one of the highest globally



Brazilians are open to innovation and entrepreneurship

- Innovative solutions are booming in Brazil's market
- Brazil is a country of Entrepreneurs (~40% of workforce)



Venture Capital funding in Brazil exploded in 2018 to

USD 1.3 Billion

- >10,000 startups
- Brazil joined the Unicorns rank of leading countries



Favorable changes in regulation and public policy are creating a new window of opportunity

- Regulatory Sandbox allows
 Fintechs to test their products
- Telemedical Assistance

To find out more use the QR code to access

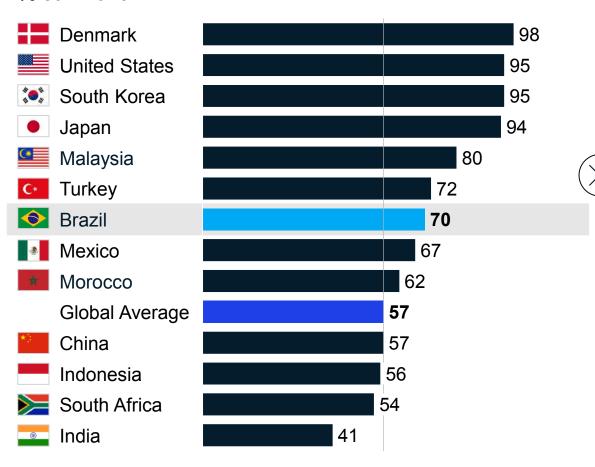
McKinsey Brazil

Digital Report

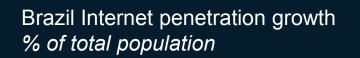


70% of Brazil's population is connected to the internet

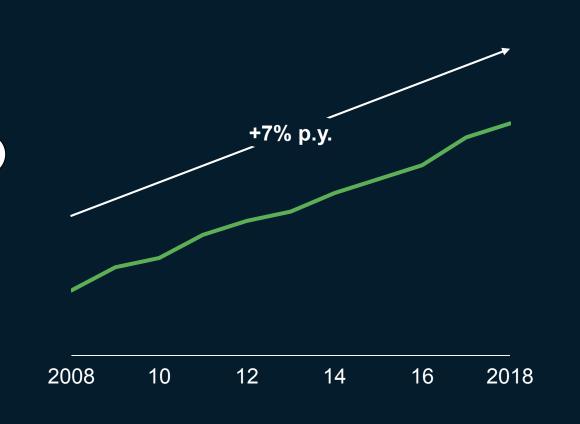
Internet penetration by country % Jan 2019



Internet access has grown significantly this decade

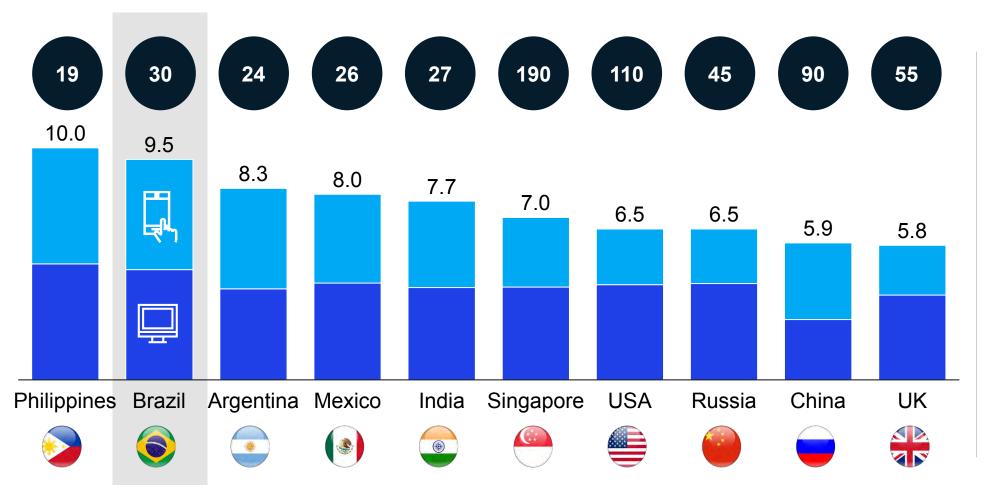






Despite serious infrastructure limitations, Brazilians are among the most intensive internet users globally

Average time per day spent online vs. connection speed, Jan 2019 Hours



Mobile
PC or Tablet
Internet connection speed, MBPS

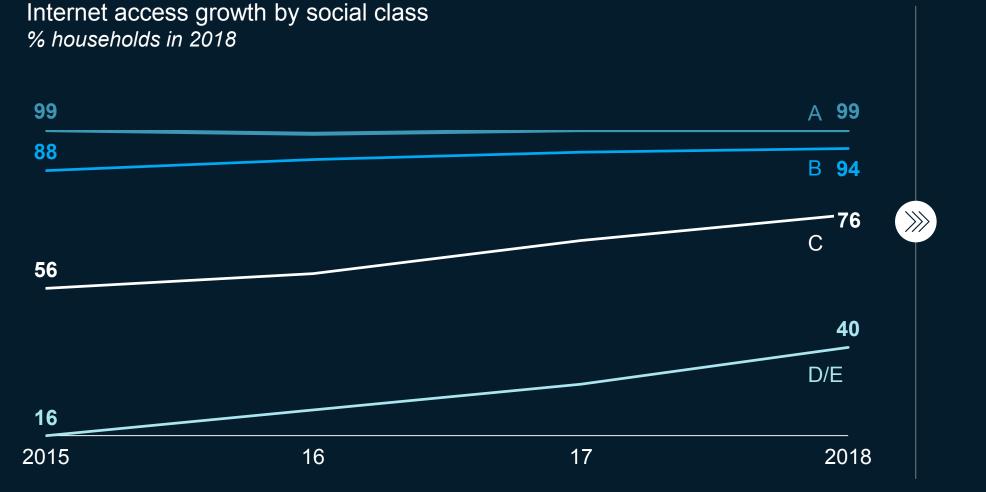
To find out more use the QR code to access McKinsey Report "Habilidades Digitais no Brasil"



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The connectivity of the lower income class is increasing





There was higher percentage growth in internet connectivity in classes C, D and E, which were at the lowest starting points

Brazil already provides an ideal environment for local and global companies to develop and test new digital products and solutions



39% of the population was classified as "early adopters" of digital apps in a 2015 report – one of the highest proportions in the world and a top market for innovative apps



78% of Brazilians connected to the internet tuned into subscription services like Netflix at least once a week in 2019 – the second most engaged country



5.7 M SP Detran app downloads for digital CNH since launch. Forecasts indicate that digital public services generate savings of BRL +750 M per year



40.8 M internet users used taxi or transportation apps in 2018



~3:45 h daily Time Spent on Social Media, second country most connected to social networks in 2019



4X increase in the number of iFood orders throughout Brazil in the last two years (~20 M orders in July 19), with +500 cities covered by the service



The Coffee – Enhanced instore digital experience



Grab and go. Simple.



The Coffee

- Brazilian MicroCoffee shop that focuses on the *To Go* Culture
- Compact, minimalist and technological
- Order through a Self-Service Tablet or Mobile App
- Compact stores up to 5 m² with no table or chair
- Differentiated customer experience



RankMyAPP – Revolutionizing the digital marketing mobile market

RankMyAPP

- Brazilian ASO Solution (App Store Optimization) to improve user acquisition solution for mobile apps
- Uses advanced technology and intelligence to enhance digital marketing
- +600 customers in 17 countries
- Has served Itau, Sephora, 99taxis, Multiplus, G1 and Catho

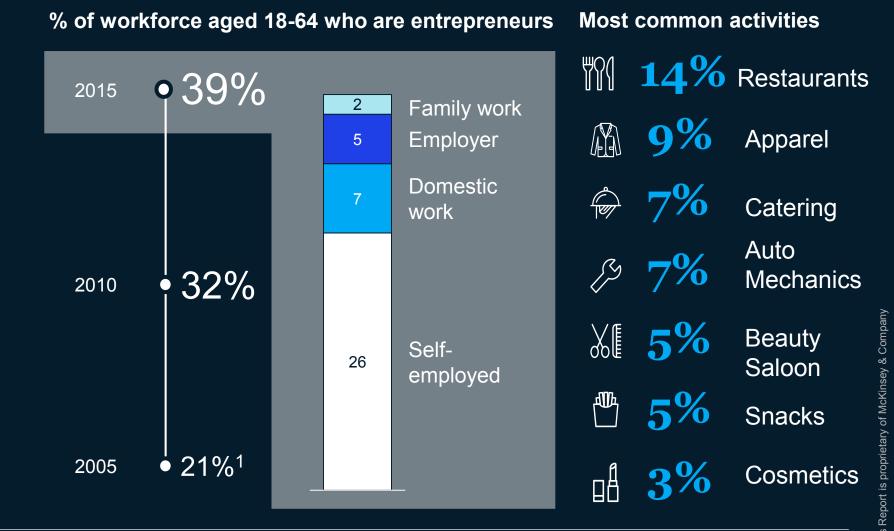
More visibility, more downloads

In the broader sense of the term, Brazil is a country of entrepreneurs

Entrepreneur

en·tre·pre·neur/ ¡äntrəprəˈnər noun

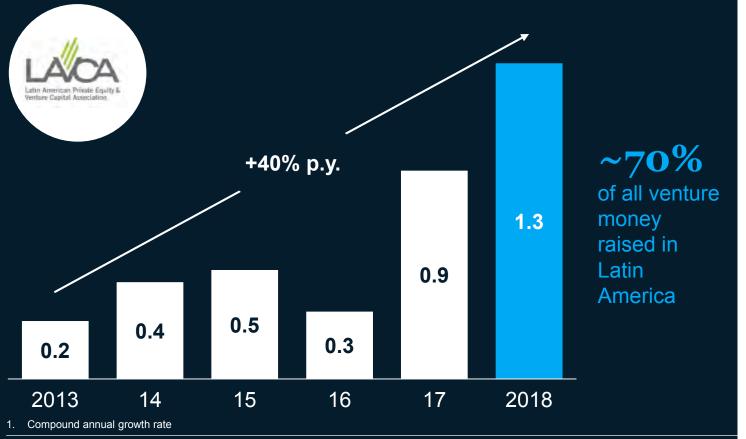
An entrepreneur is someone who, rather than working as an employee, founds and runs his or her own business, assuming all the risks and rewards.



Source: McKinsey Digital Report

Venture funding in Brazil exploded in 2018 to US\$1.3 Billion – CAGR¹ +40% p.y.

VC Investment into Brazilian Startups *USD Billions*



The Brazilian start-up scenario



With its first unicorns, Brazil joined the rank of leading countries

11 Unicorns¹























1 Considers disclosed private investments over US\$1bn, recent IPOs from companies with market cap over US\$1bn, and non-disclosed investments with market perspective over US\$1bn
2 CB Insights criteria



Global unicorns²



Favorable changes in regulations and public policy are creating new windows of opportunities

New regulations should drive fintech expansion even further



Instant payment replaces cash and wire transfers (TED and DOC) by offering 24/7 payment at lower cost



Regulatory Sandbox allows Fintechs to test their products on selected customers, while regulatory agencies monitor their success to determine whether they can have permanent authorization to operate



Open banking enables integration between financial institutions through APIs, increasing competition amongst financial institutions

Regulations that enables telemedical assistance are expected for 2020



Context - Regulates and authorizes remote/ online medical appointment



Key potential benefits

- Reduced waiting time for an appointment / diagnosis
- Increased access to healthcare in remote and / or in worse socioeconomic conditions
- Avoidance of unnecessary displacement for patients and doctors
- Enhanced optimization of healthcare spend and diagnosis

Low interest and a stable economy are major levers to foster entrepreneurism, and for the first time we have just that in Brazil. We are excited about what lies before us going forward.

Guilherme Benchimol

CEO e Founder XP Inc.

opportunities. The Brazilian entrepreneurial ecosystem has never been so vibrant. Innovation is perceived as key to build competitive advantages and, for the first time in history, there is long term oriented capital to finance good projects.

Ari de Sá

Founder and CEO Arco Educação

05

The financial market is reinventing itself

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Elias Goraieb

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Contributor: Christopher Craddock



Brazil's banking sector maintains a consistent story of soundness, growth and profitability, being at the forefront of the global industry





Interest rates are dropping, reaching historical lows. This favorable environment should become a key trigger of credit growth for consumers and corporations



With this scenario improvement, new opportunities arise in unexplored segments such as SMEs, mortgage and low-income population



New technologies and fiercer competitive dynamics will continue to bring positive benefits for users such as faster credit approval, better rates and greater financial access



The doors have opened up for the advancement of Fintechs, which are gaining popularity, capturing industry growth and proving to be highly valued

Brazil's banking industry has been amazingly resilient



Price/Book ratios have recovered

Average multiples

LTD Ratio,%

0.9x

2014



1.4X

2018

Banks are increasing their liquidity

155%

2014



127%

2018

Productivity continues to improve

Cost/Asset Ratio, %

3.2%

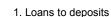
2014



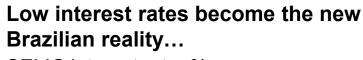
3.0%

2018

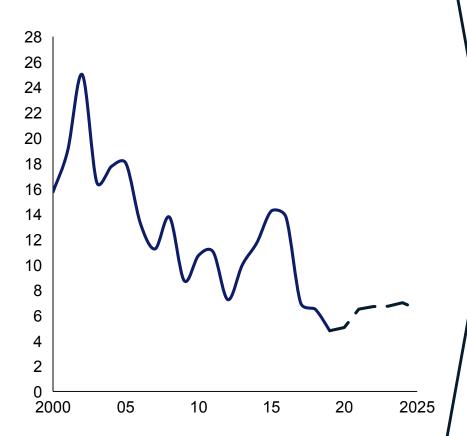




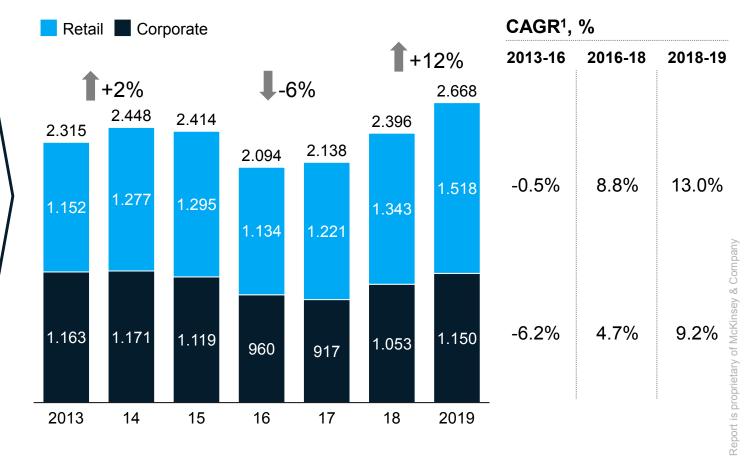
Benchmark interest rates are at their lowest level ever and should continue for a prolonged period, driving credit demand



SELIC interest rate, % p.y.

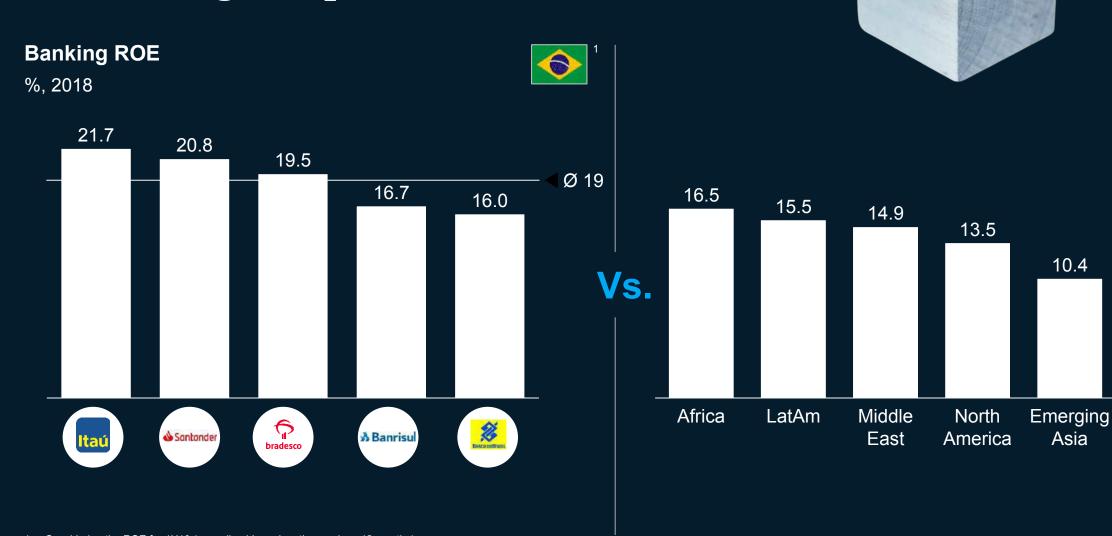


Credit granting – considering the first 8 months of each year Jan-Aug, BRL Billion



Compound annual growth rate

Brazilian banks have been performing better than global peers



^{1.} Considering the ROE for 1H19 (annualized based on the previous 12 months)

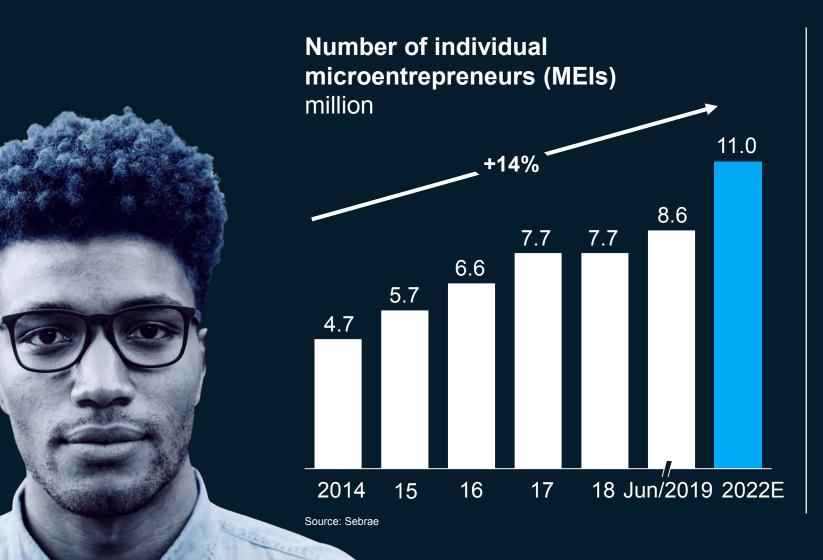
Source: company reports; SNL; McKinsey Latin America Banking Database; Global Banking Pools; McKinsey analysis

5.7

Western

Europe

The number of MEIs is expected to grow, increasing the segment's relevance in the Brazilian economy



Relevance of Micro and Small Enterprises



of total wage paid in Brazil



of Brazil's GDP



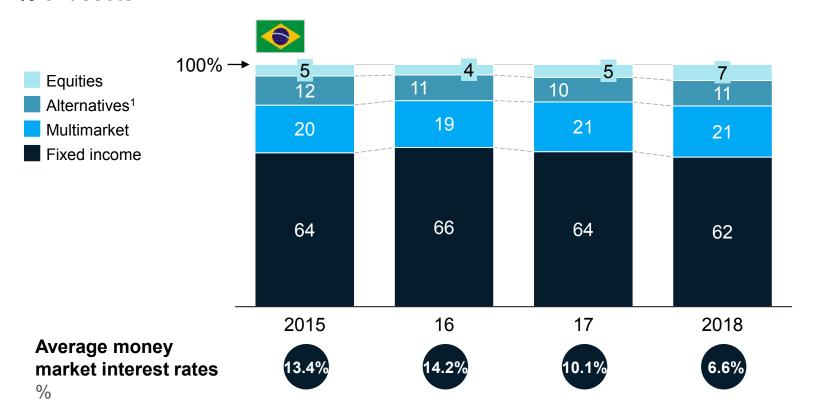
of Brazilian companies



76% of Brazilian job positions

Asset allocation should gradually converge to international patterns, with an increasing volume migrating out of fixed income

Asset Management allocation of mutual funds % of assets





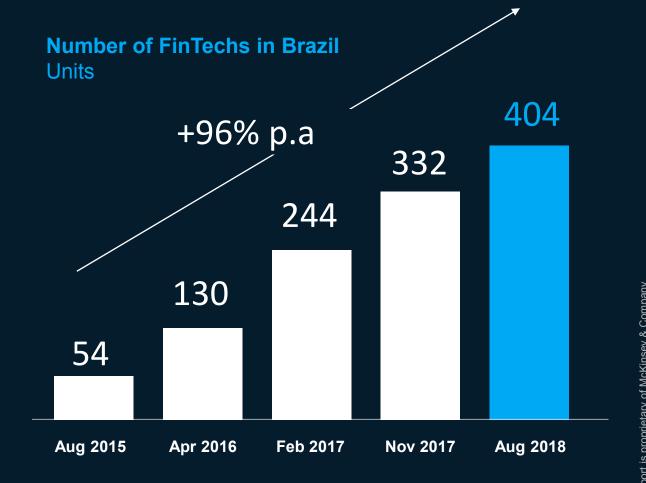
^{1.} Including ETF (Brazilian market also includes FX funds, FIDC, Real Estate Funds, Equity Funds)

^{2.} Assuming North American asset management allocation



FinTechs showing increasing growth in Brazil







There will be a profound transformation of the financial industry, which will have a major influence on the cost of running a business in Brazil. For the first time we have single-digit benchmark interest rates, while the government is committed to important structural reforms and is improving its entrepreneurial culture and environment. Brazilian youth is increasingly excited to participate in this new economy and work for ethical companies with a true purpose.

Andre Street
Co Founder
Stone

Brazil is addressing several of the issues, hurdles and bottlenecks that dragged its growth rate for decades and created an immense social deficit. A friendlier business environment, low inflation and the lowest benchmark interest rates ever, coupled with technological innovations, are gradually increasing business and consumer confidence and putting in motion a sustainable economic recovery. The opportunities for 2020 and beyond are very attractive.

Antonio Quintella

Chairman of the Board of Directors B3

06

The reshaping of Brazil's infrastructure is likely to become a reality



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The current investment environment reflects a recent (timid) recovery, but may offer several opportunities



Brazil still lags in infrastructure quality and needs a significant increase in investments to eliminate current gaps. The need for investment is observed in all segments



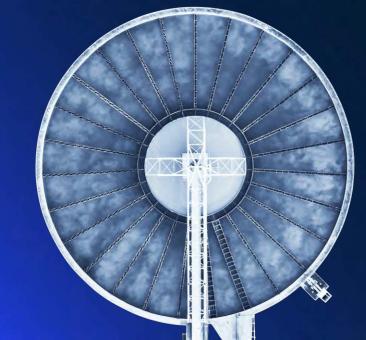
The Federal Government's infrastructure investment agenda for the next few years has a pipeline of more than BRL 150 billion in investments



Brazil's waterway transport uses only a third of the potential usable network



Only 66% of homes are covered by the sewage system

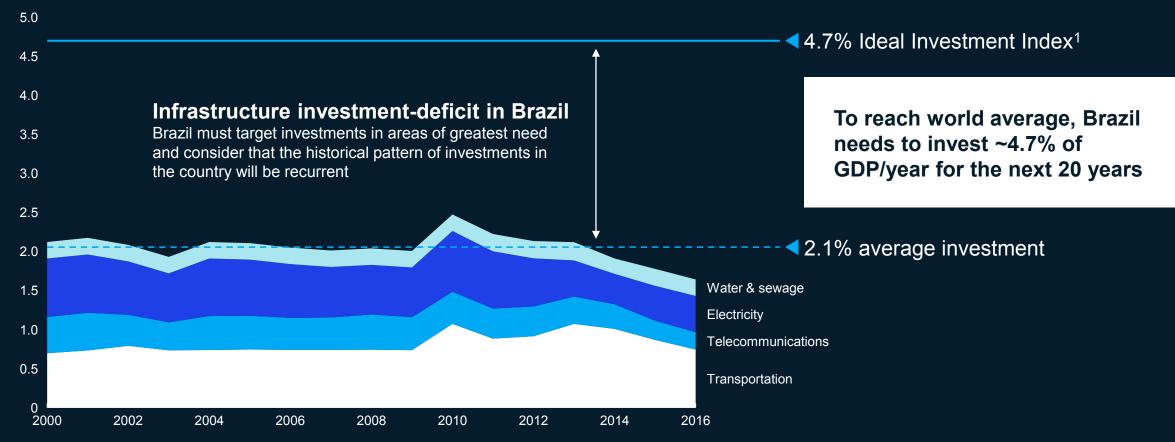


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Brazil still lags in infrastructure quality, and there is huge potential to increase investments to eliminate current gaps

Historical infrastructure investment

Infrastructure investment as % of GDP

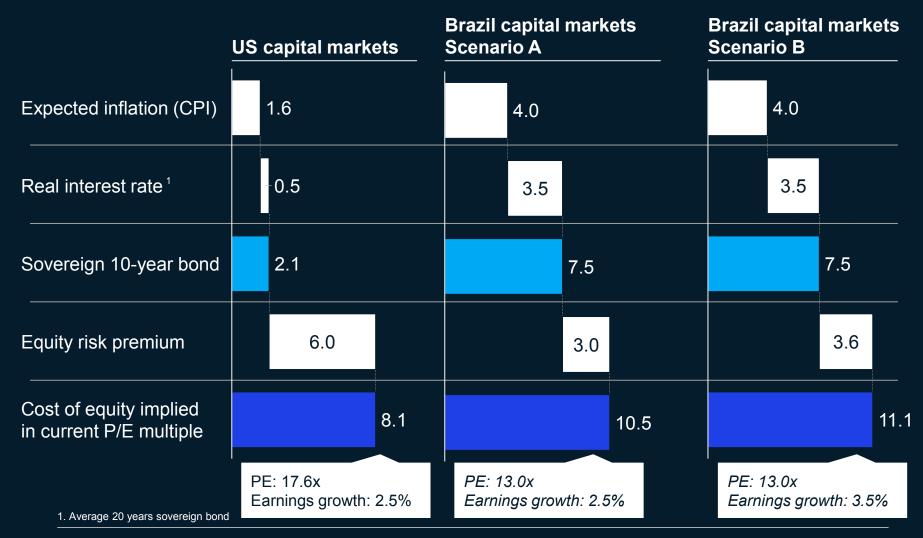


^{1.} Estimated in order to cover depreciation of existing infrastructure inventory and close the gap to the average infrastructure level of countries in the world

Source: ISSA; Tendências; WEF; McKinsey analysis

Seport is proprietary of McKinsey & Company

Infrastructure and Real State investments in Brazil might be a good vehicle to capture the long term interest rate of the economy



- Equity risk premium over sovereign rate possibly reflects a mean-reversion in real interest rates
- Main potential upside for broad equity investments in lowering real interest rates and accelerating growth rates
- Potential focus on assets mainly priced based on interest rates and providing some protection to institutional risks, such as infrastructure and real estate

The need for investment is observed in all segments

Infrastructure by sector- 2018





Highways



10.2% of Brazil's road network is under private administration

The quality of 57% of paved roads in Brazil is moderate, low or very low



Airports



Over the last 9 years, the government has made airport concessions – transferring airport operations to **private administration has promoted new investments and capacity growth**



Ports



Players in the ports sector have issues such as **high bureaucracy**, slow pace of operations, problems with cargo flow and lack of specialized workforce



Railways



Railways represent 18% of total cargo flow, compared to 37% in the USA

There are criticisms and barriers for structuring a **new concession model for the sector** – e.g. open access regulation



Sanitation



Almost half of the population still does not have a proper sewage system



Waterways

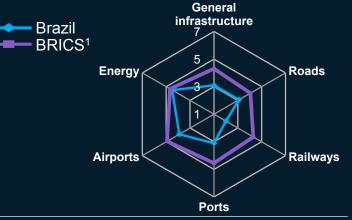


Brazil has only 2.3 km of economically usable inland roads per 1,000 km², while countries of similar size, like China and United States, have 11.5 km and 4.2 km per 1,000 km². of area, respectively²

Competitive index Historical comparison



Comparison with peer countries 2017-18



. Average of Russia, India China and South Africa 2. CNT

Investments could unlock ~BRL152 Bn in value and new routes

Portfolio of federal-concession projects in infrastructure¹ – November/2019

Sector	Projects in the pipeline	Expected CAPEX ² BRL billion
Highways	12	60.7
Railways	9	59.7
Energy ³	5	19.2
Ports	19	5.6
Airports	3	5.0
Others ⁴	21	1.9



According to the PPI, the only waterway project is the "Support for the environmental licensing of Pedral do Lourenço (Tocantins River Dredging and Overturning)" under an environmental licensing model

In addition to federal concessions, there are regional, state and city concession projects

- 1. Consists of active federal projects in the "Investment Partnerships Program" (PPI), including new concessions and extensions of current contracts
- 2. Recent auctions not included in the total value (e.g. airports, North-South Railway, Vila do Conde Port)
- 3. Energy sector includes hydropower generation, thermonuclear plant, and power transmission and distribution
- 4. Others include mining, oil & gas, etc.

Source: Investment Partnerships Program (PPI)

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The huge untapped potential of Brazil's waterways

Brazil can benefit from a step change in the use of waterways in the future:



There are many social and economic advantages in the use of waterways



There is huge potential



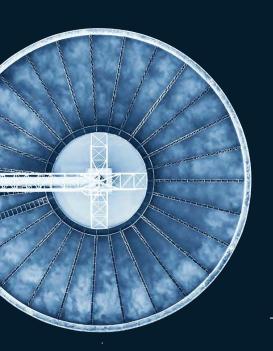
The timing is appropriate as the economy recovers

- The cost is 60% lower than road and 30% lower than rail
- The required investment per km is 85% lower than rail and 70% lower than road
- CO₂ emissions are 80% lower than road and similar to rail
- One ferry boat can take more than 170 trucks off the roads

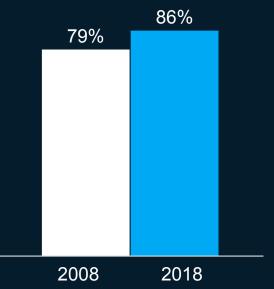
- Although the total volume transported by waterways increased 35% between 2010-18, the length of waterways used decreased 7%
- According to a study conducted by the National Transport Confederation, Brazilian waterway-transport uses only a third of the potential usable network,

- Brazil's GDP is projected to rise again
- The transportation sector has high elasticity with GDP and typically grows fast after crises
- The main commodities
 exported by Brazil are highly
 suitable for waterways
- Relatively small investments can have a significant impact on the sector

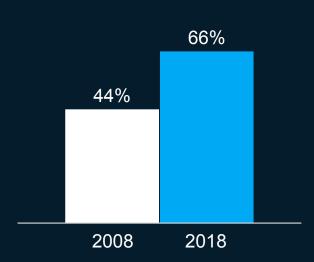
Brazil has achieved significant progress in sanitation over the last 10 years, and there's a huge opportunity for sewage systems







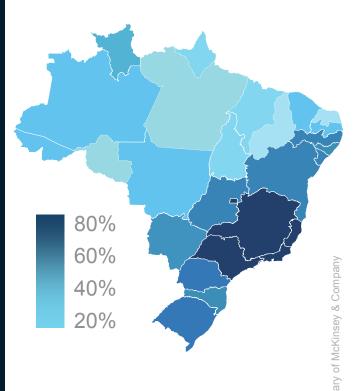
% of homes covered by the sewage system



This segment can be one of the largest if investments to ensure universalization are made possible

Sewage system coverage, 2018

% of residences in the state



I have always been a glass half-full person. Most things in Brazil have room for improvement. I would focus on the more basic sectors.

Arminio Fraga

Founding partner Gávea Investimentos





The structural reforms and a responsible public spending coupled with several concessions of infrastructure programs are already bringing a positive demand growth and investments in the airline sector we had not seen in the last 4 years.

Jerome Cadier

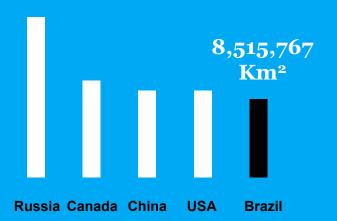
CEO Latam Airlines Brasil **5** The new reality of low interest rates in Brazil and in the world, combined with the reforms and measures promoted by the current government, will bring us good opportunities for direct investment next year - one of the engines for the resumption of economic growth. In this scenario, I highlight projects related to infrastructure, a sector in which the country has a huge shortage, has good projects and private agents with an appetite for long-term investments in the country.

Andre Dorf

CEO Arteris S.A.

Interesting Facts Do you know: How big Brazil is?

Largest countries in the world





07

Insurance: Brazil's financial services gem

Bruno Batista

Partner bruno_batista@mckinsey.com

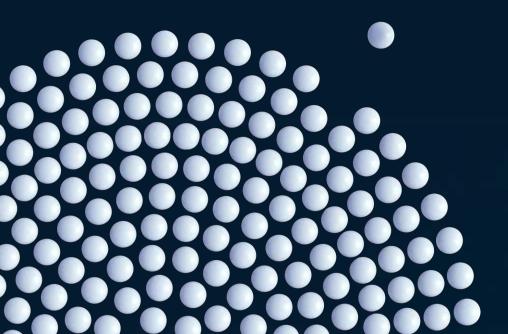
João Bueno

Partner joao_bueno@mckinsey.com

Contributor: Christopher Craddock



Insurance in Brazil shall resume double-digit growth and help strengthen the fabric of its society and economy





Economic growth should propel the insurance market since insurance industry-size is directly related to a country's GDP per capita

The insurance industry is expected to continue **growing double digits over the next years**



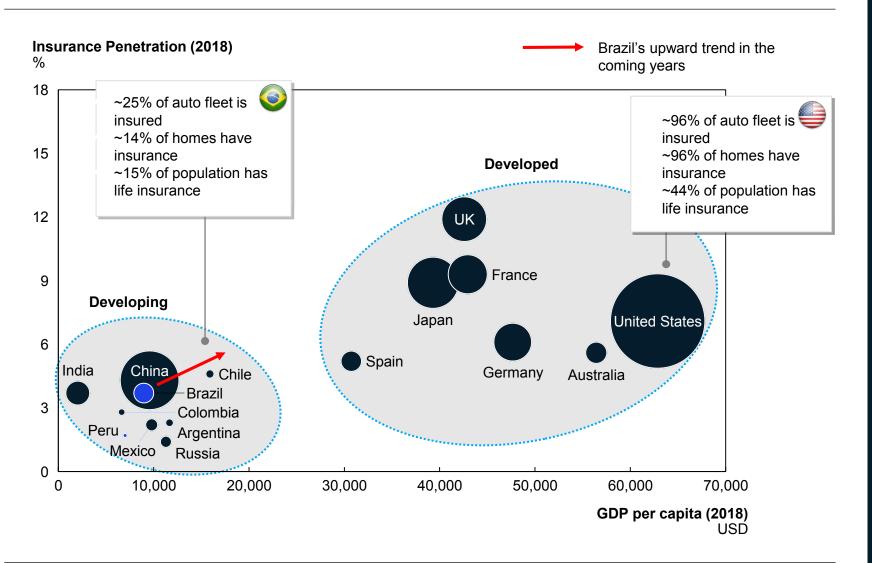
Revised regulations expected in the short/mid term will further foster the insurance market



Growth of the insurance industry helps strengthen a market economy and provides safety for a balanced society

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Insurance industry-size is directly related to a country's GDP per capita



Future outlook is promising

- Economy will pick up, increasing both GDP per capita and disposable income
- Willingness to buy insurance and aspirational aspects of insurance products will continue to increase

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Potential regulatory changes in the short / mid term...



Regulatory changes



Introduction of on-demand insurance with reduced contract and intermittent period



Creation of an industry sandbox to foster innovation with lower capital requirements (soon to be released)



- Increase of co-participation in procedures
- Implementation of portability for health insurance products



Approval of the Reform and more flexible pension products

... may further foster the insurance market



Impact on the insurance industry

Emergence of new products for specific moments, incentivizing new solutions and technologies such as "Pay per Use" in auto insurance

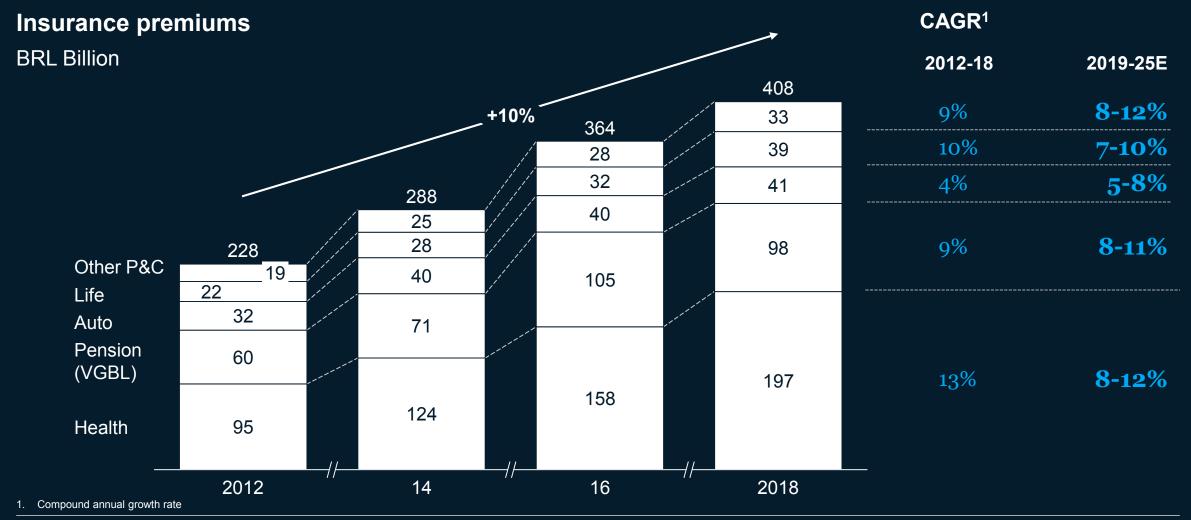
Increased market competition, attracting new companies and <u>Insuretechs</u>, leading to lower insurance prices and opening doors for new customers

- Increased economic feasibility of mid and low-ticket products
- More flexibility for consumers, exempting grace periods in health plan migration, forcing insurers to maintain high quality services and competitive prices

Drive demand for pension products, increasing the sense of insurance awareness, long-term protection and education

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The insurance industry is expected to continue its consistent growth in the coming years in all business lines



Growth of the insurance industry helps strengthen a market economy and provides safety for a better and more-balanced country

Brazilian Insurance Market – 2025E

Insurance industry will protect¹ ~20% of GDP

Economic GDP per prosperity capita Higher safety Higher for business insurance transactions spend **Greater society** protection

Increase in

Insurance industry will return

~BRL 320 Bn in paid claims back to society

Assuming industry total reserves over the GDP

Insurance premiums per capita

continue growing GDP per capita

Insurance

density² will

two times

faster than

The expectations regarding the new government are becoming reality: check the approval ratings for the pension reform and PLC 79. The Petrobras auction and privatizations are clear signs of this direction. Low interest rates and institutional security will encourage domestic and foreign investments in 2020.

Luiz Alexandre Garcia

Chairman of the Board of Directors Grupo Algar

Brazil has always been a nation of the future, and the time has come to make it happen. We are cleaning up our act and I am optimistic with the opportunities we envisage for the coming years.

Rubens Menin

CEO e Chairman MRV Engenharia



08

The power of the engineering and tech talent pool

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Erick Colares

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Brazil's tech environment is helping create distinctive companies and technologies



Brazil has a tech talent pool that is continuously growing and being filled with distinctive students every year



Recognized research institutions are helping create new technologies



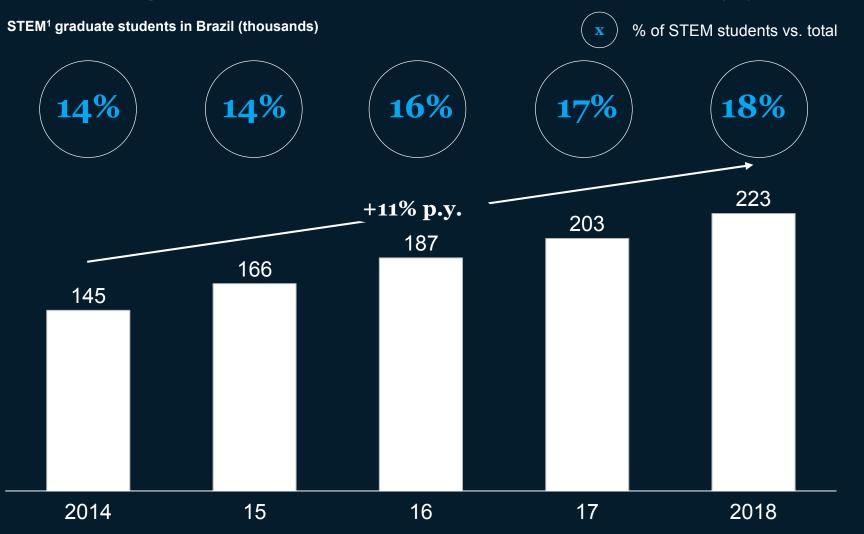


Brazil's engineering and tech pool is also accessible, having one of the most competitive costs globally



There is adequate structure to accelerate and generate distinctive innovation, with more than 40 innovation parks

Brazil has a tech talent pool that's continuously growing and being filled with distinctive students every year ...











Additionally there is a growing demand for tech talents coming from multiples companies

1. Science, Technology, Engineering and Mathematics

... and recognized research institutions that are helping create new technologies

- + 140 public and private research institutes rank Brazil in the:
- Top 25 of scientific publication scores
- Top 30 in R&D spend (%GDP)
- Top 15 of research institution prominence











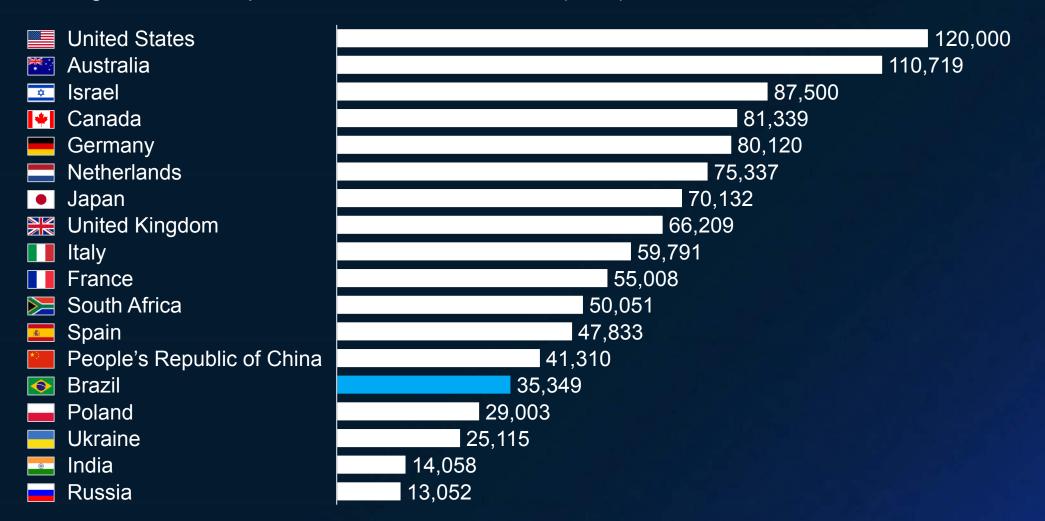




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Brazil's engineering and tech pool is also accessible, having one of the most competitive costs globally

Average annual compensation for Data Scientists (USD)



Brazil's innovation ecosystem is robust across the country...



40+
innovation
parks

offer opportunities for companies to transform research into products, bringing knowledge centers (universities, research centers and schools) closer to the productive sector.

SanPedro

More than 120 startups incubated



More than USD1.3 bn in corporate R&D projects



Top 20 university incubator programs in the world

... and companies are taking advantage of this unique opportunity...

Companies are investing in R&D and innovation in Brazil



vocês/a

GOOGLE seeks engineers to increase its Belo Horizonte's team

Do you want a new job with global impact? Know the day of a Brazilian software engineer at Google center1.

Carreira - Você SA

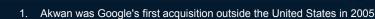


03/09/2017 11h53

With the support from Investe SP, P&G announces new innovation center in Brazil

Center will cover the whole Latin America and will be responsible for the development of product and process innovations to consumers

Investe São Paulo



Source: Forbes / Investe São Paulo / Você SA / G1 Portal



... which creates a very rich environment for innovation







business incubators

businesses incubated and+USD 5 Billion in accumulated income since 2013

unicorns¹































99 TAXIS



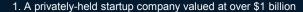












Recent years were marked by numerous transformations, and people empowerment was a major achievement. The only possible way to long-term success is an economy that focuses on people, and I believe 2020 will be just that. I am convinced that this coming year will be one of actions and making things happen. It will be about changing the consequences of the past and changing the outlook and possibilities for the future.

Sofia Esteves

Chairwoman of the Board of Directors Grupo Cia de Talentos

Maybe in the future we will remember these vears as the age of the Great Transition: to a new carbon-free energy scenario, to an entirely digital economy, to a greater presence of the people in the public decisions and to the highest rate of introduction of new technologies in the production sector and in the domestic life. For all those aspects Brazil presents bright possibilities to be in a leading position. We are creative, we are not reactive to changes, we are open to new ideas. On the other hand we are tackling decades-old problems of fiscal unbalance, tax reforms, pension funds reforms and corruption, providing a stable macroeconomic background for a new development era. Population growth and migration to big cities make us foresee a future of sustainable infrastructure improvement. And we breath a more open attitude towards the market now pervasive in all society. 2020 will be "the year" that Brazilian society, free from the overwhelming presence of the State, will take the future in its hands.

José Luis Alquéres

CEO
JLAlquéres Engenharia Consultiva Ltda

09

The potential of increasing productivity to improve quality of social and public services

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Contributors: Rogério Campos, Omar Seguel

Public sector is pursuing an agenda to increase productivity and apply better practices. Additionally, the digitalization of public services is increasing efficiency dramatically



Reforms seek to diminish public deficit, increase flexibility and attract investments



Brazil's digital strategy is becoming a reality with **400** services already digitized through a single portal, with more planned



Governments at different levels are promoting measures to decrease bureaucracy



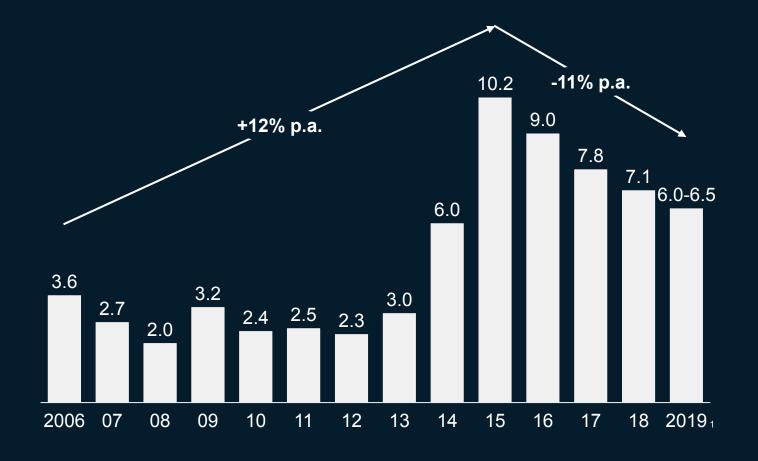
There is an opportunity for Brazil to reach digital mastery and new frontiers, focusing on improving citizen and business satisfaction, government productivity (e.g.: e2e digital processes, analytics) and transparency (sharing and publication of data)



Public deficit has consistently decreased over the last 4 years

Nominal primary result of public sector consolidated – deficit % of GDP





Reforms seek to diminish public deficit, increase flexibility and attract investments

eform	Statu
erorm	•

Social Security



Approved and enacted on November 12, 2019

Administrative



Proposal already formulated, to be presented to Congress before the end of 2019 / beginning of 2020

Federal pact



Proposal already formulated, to be presented to Congress before the end of 2019 / beginning of 2020

Tax system



Proposal structured in 4 approval waves. First one already sent to Congress

Potential impact

BRL800

billions in 10 vears

Reduce spend on social security and increase investments in other areas

Decrease **public spending** and **increase flexibility** on resources management for public bodies



More flexibility for public spending and an increase in resources for local governments

Simplification of tax structure and reduction of **tax load** for employers

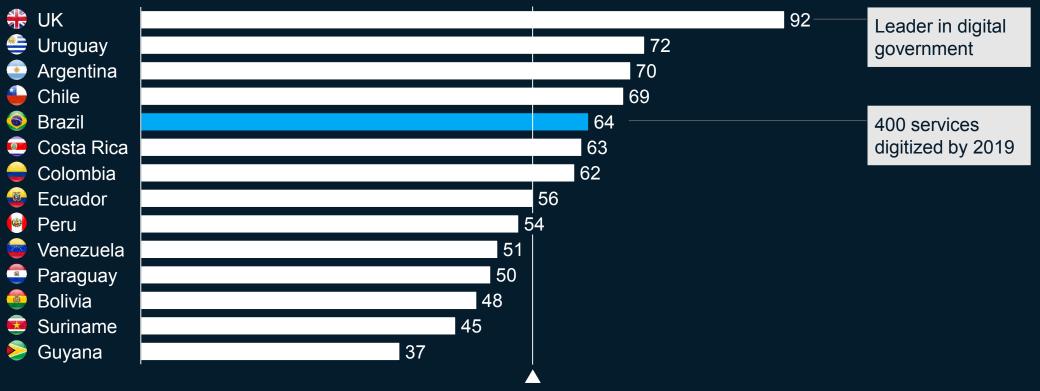
Measure	Key points
Law of economic freedom	Simplification of processes for opening and closing down businesses and measures to increase flexibility in operations (ex: digitalization of legal processes and flexibilization of work shifts)
Green-yellow program	Elimination of compulsory professional registration for 8 professions and flexibilization of work shifts
Environmental licensing	Minas Gerais launched an online platform for environmental licensing that streamlines the process by up to ~30%
Digitalization of services	Digitalization of ~1,000 public services by the end of 2020, covering ~80% of federal public services
Driver's license process	Suspension of mandatory use of driving simulators and less practice lessons
Rules for sugarcane planting	Simplification of regulations and elimination of planting zoning restrictions for sugarcane

Deport is proprietary of McKinsey & Compan

Even though it's in line with Latin America, Brazil is still distant from the global leaders in digital government

Digital government development index

Composite index (x100), 2016 (Latin America and Caribbean, plus reference country)



56 – Latin America and Caribbean average

Penort is proprietary of McKinsey & Compan

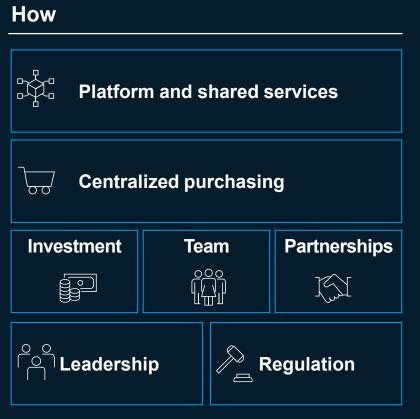
The Brazilian government has had a digital strategy since 2016 and over the years started to improve digitization in the country

How to transform government to become 100% digital?

online registration

(Government digital strategy)

Mission Goals Transform government, Publish 1,000 new leveraging digital, digital services promoting effectiveness of policies, quality of services and gaining Consolidate 1.500 the trust of Brazilians @gov.br websites Launch a new digital identity Simplify business registration and allow



Impact

Launch of a unified portal of government services (www.gov.br)

400 services digitized in 2019 (BRL 350 million in savings; 24 entities)

Brazil is already best practice in processes such as tax filing, voting and transparency regulations

Work with government in discussions surrounding regulations for startups

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The public sector is driving innovation and creating apps for citizens

Public initiatives to foster innovation



The Colab-i initiative is part of the Audit Court's Research and Innovation Center, which supports innovative projects through cooperation and skill-building



iGovLab seeks solutions to increase efficiency and scope of state management policies. It is linked administratively to the São Paulo state government



Inovagov seeks to foster creative solutions, promote a more humane focus on user experience and integrate the efforts of different sectors, resulting in better processes and services in the public sector's innovation culture

Government apps



In the e-Proinfo app, students can view their courses and detailed information on institutions, courses and classes, as well as participate in discussion forums



CAIXA's Bolsa Família app shows payment dates for state welfare and allows citizens see what payments have been made



In the **Educação Conectada** app, users can see a school's technology adoption on a scale of emergent, basic, intermediate or advanced



The Receita Federal app helps people file income tax returns. The free platform automatically stores user data and allows forms to be filled out in stages

Others



Source: Press clippings; Institutional websites

GovTech startups are booming across areas and types of problems

TRANSPARENCY



STATISTICS AND DATA ANALYTICS



COMMUNICATION



TRANSPORTATION



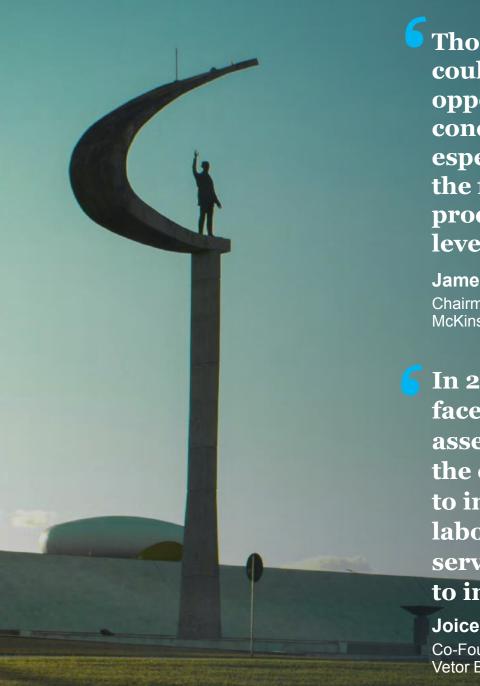


EFFICIENCY / OPERATIONS









Though Brazil's recent track record on productivity is less than it could be and needs to be, excess capacity in the private sector and opportunity for catch-up in the public sector create unique conditions for rapid productivity growth in the near term, especially if increased connectiveness to the global economy and the full potential offered by digitization are leveraged to drive productivity and innovation at organization and economy-wide levels.

James Manyika

Chairman and Director/ Senior Partner
McKinsey Global Institute (MGI)/ McKinsey & Company

In 2020, we will reflect on the real problems that every citizen faces in their daily lives. The municipal election is a time to assess policies that have improved (or not) the life quality and the economy in cities and reward public leaders who have dared to innovate. Over the last four years, our large real-life laboratory, called Brazil, has created new ways to deliver public services in a crisis environment. We can leverage these lessons to insert the country in a new economic cycle.

Joice Toyota

Co-Founder and Executive Director Vetor Brasil

10

A new wave of Brazilian multinationals is bringing innovation to the world

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Leonardo Cabral

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Bernardo Ferreira

Expert Associate Partner bernardo_ferreira@mckinsey.com

Contributors: Paulo Cunha, Felipe Boaretto



The current wave of Brazilian global champions leverages distinct approaches to business model, technology and innovation to compete on the global stage



Brazil has plenty of leading companies in their industries - we list here only a small subset of these leaders



Embraer is leading global segments by building the most technological military-transport aircraft and by developing the Uber drone



Natura &Co has become a global beauty leader, through a mixture of organic expansion, and more recently bold acquisitions.

Natura &Co is a business model innovator, combining the pursuit of profit and purpose



Moura and WEG are working with Volkswagen to deliver 1,600 units of a **100% electric truck** to Ambev by 2023, ensuring the technology is developed and produced in Brazil



Wildlife is the largest mobile-gaming company in Latin America and has launched more than 70 titles and exceeded the 1.5 billion mark of downloads

Embraer is leading global segments by building a new generation of military transport aircraft and by developing the eVTOL aircraft to tackle the urban mobility ecosystem

The C-390 MILLENNIUM is a new generation transport aircraft with multimission capabilities which combines highly flexible platform with the lowest life cycle cost in the medium airlift market. The C-390 is capable of missions: medical evacuation, search and rescue, humanitarian search and rescue, humanitarian aerial refueling, aerial fire fighting and assistance.

transporting and launching cargo and troops and performing a wide array of

> "The C-390 is a highly capable aircraft. Its unrivalled combination of speed payload and rapid reconfigurability for multi-mission operations are the cornerstones of its excellent productivity".

Jackson Schneider, president and CEO of **Embraer Defense & Security**

EmbraerX unveiled a **new electric flying vehicle** concept to make the urban aerial ridesharing vision a reality. The aircraft concept, with electric vertical take-off and landing capability, known as eVTOL, is part of the EmbraerX multi-project approach. Embraer's disruptive business subsidiary is working on a collaborative effort with Uber Elevate Network to enable and accelerate the urban mobility ecosystem



"As a market accelerator committed to developing solutions to transform life's experiences, we have been combining human-centered design thinking with our 50-year history of building and engineering expertise in a unique manner."

Antonio Campello, President & CEO,

Natura &Co's distinctive business model

Natura &Co has developed a multi-brand model that pursues synergic business growth on a global scale based on the offer of innovative, sustainable products through multiple sales channels.

Natura &Co strives to structure the activities in a circular manner. Processes are designed to harness the full potential of the resources involved, to drive greater productivity, to reduce environmental impact and to boost positive social impact. It is a model that is interconnected and self-renewing.

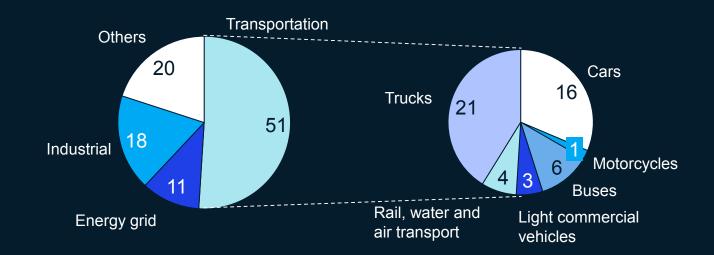
Expanding its successful M&A strategy



Deport is proprietary of McKipsey & Company

Moura and WEG are working with Volkswagen to deliver 1,600 units of a 100% electric truck to Ambev by 2023

GHG emissions from fuel combustion in Brazil %





E-Consorcio is a group of companies that's jointly developing a 100% electric truck in Brazil

The group of companies is led by Volkswagen and includes two Brazilian companies (Moura and WEG) and four multinationals (Siemens, CATL, Bosch, Semcon)

Ambev has already agreed to purchase

1,600

units of these electric truck by 2023





Wildlife is among the 10 largest mobilegaming companies in the world, and the largest in Latin America

The Brazilian creative studio was founded in 2011, and today has a **team of more than 400** people spread around several countries like Argentina, Brazil, Ireland and the United States

Throughout its history, the company has launched more than 70 titles (including Tennis Clash and Zooba) and exceeded the 1.5 billion mark of downloads, ranking among the 20 largest app publishers in the world

5 2020 is the year of opportunity for Brazil! Brazilian companies are world class at moving in times of uncertainty with agility and boldness. As we start 2020, the conditions are right for bold players to reshape their industries and even cut across industry boundaries to capture new opportunities. Let's make 2020 the year Brazilian companies will take bold action!

With low inflation and low interest rates, 2020 may be a year in which retail in Brazil will take off, especially for players who are able to surf the wave of digital transformations.

Antonio Carlos Pipponzi
Board Chairman
Raia Drogasil

Bob Sternfels

Senior Partner McKinsey & Company



11

The recovery of the real estate market

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Contributors: Pedro Paganella, Vitor Sena, Bárbara Castro, Amanda Zambianco

Brazil's real estate market is growing again





After the recession in 2014-16, Brazil's real estate market has shown strong signs of recovery in property sales and launches



There is increased confidence on the part of construction professionals and investors, with key construction players growing +50% in market value in 2019



Low interest rates, more disposable income and capacity for new offerings have been key drivers for growth in this industry

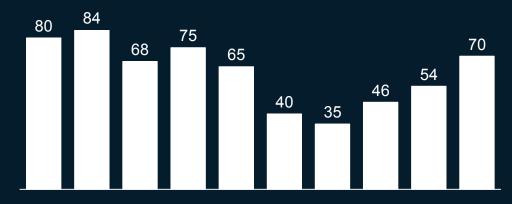


Moreover, continuity of housing programs, coupled with economic recovery, may support real estate growth for lowincome housing

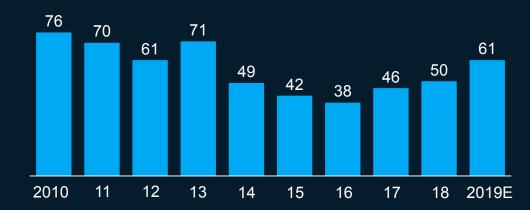
After the recession in 2014-16, Brazil's real estate market has shown strong signs of recovery in property sales and launches

Real estate market in Brazil¹

Number of new properties launched '000



Number of new properties sold '000

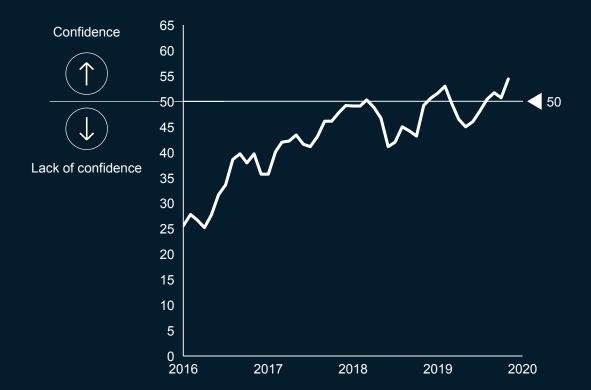




1. Considering information from a few states and associations: SECOVI-SP, ADEMI-GO, ADEMI-PE, ADEMI-RJ and SINDUSCON-RS Source: SECOVI, ADEMI and SINDUSCON.

There is an increased confidence on the part of construction professionals...

Confidence of construction professionals Index #



... and investors, reflected in the market value of key players

EZTEC — MRVCyrela — EVEN

Stock value of top construction players Stock value BRL, base 100 at January 2, 2017

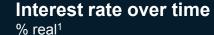


Low interest rates, more disposable income and capacity for new offerings are key drivers for growth in the industry



Interest rates

Brazil reached its **lowest interest rate in history**, stimulating both property purchases and **credit financing** for builders and developers





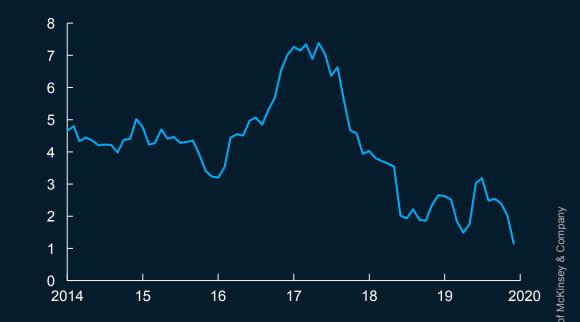
Disposable income

Real income growth per capita after the 2015-17 crisis, coupled with lower unemployment-rate projections, should support industry growth



Capacity for new offerings

The inventory over monthly sales ratio is 10.5², lower than last decade average



^{1.} SELIC adjusted by inflation

^{2. 2018}

Moreover, continuity of housing programs, coupled with economic recovery, may support real estate growth for low-income housing

Continuity of the Federal Government's social programs for low-income housing...

... coupled with economic recovery due to tax reforms ...

The Federal Government announced that it has approved BRL 443 million for the MCMV program today.

EBC, November 2019

With Congress' approval of the reform, the country will adopt minimum age as a mandatory retirement rule for urban workers...The base text approved by the Senate on Tuesday night estimates savings of BRL 800.3 billion in 10 years.

Reuters, October 2019

... can support demand for lowincome housing, which increased after the crisis in 2015

The country's housing deficit, which was already high, increased by more than 220.000 properties between 2015 and 2017, breaking a record...

The majority deficit is composed of families that earn up to three minimum wages per month, but the demand for housing also reaches middle income consumers.

Estadão, January 2019

Denort is proprietary of McKinsey, & Company

Real Estate recovery can create benefits and opportunities for Brazil



Job creation

Civil construction was the **activity that most contributed to job creation in Brazil in 2019** (110,000 jobs between January and September)

Formal employment in the sector is expected to intensify in 2020 if the macroeconomic scenario remains favorable

Approval of the social security reform also tends to reduce uncertainties in the coming months



GDP growth

The expectation is for **construction GDP to grow 4.2% in 2020**, driven by the real estate market

The sector is the main component of investments in Brazil, being an important contributor to the country's GDP



Increase in mortgage

Mortgage lending is expected to **grow 5-10%** in **2019**, vs. 4% CAGR of previous years

Banks are competing for this demand, which causes a **drop in interest rates** and facilitates access to mortgages

Digital leveraging access to financing is improving mortgage approval processes and user experience

5 The coming years in the Brazilian economy are promising, especially given the new historically low real interest rates. This is a unique moment that will give rise to numerous opportunities to invest in a real economy - real estate development, private equity and venture capital, among other areas. I am convinced that this, combined with corporate and financial sustainability elements that are becoming more and more important - will result in a significant wave of rapid and sustainable growth in Brazil, starting next year.

Daniel Izzo

Co-Founder and Executive Director Vox Capital

There is a new cycle of growth in the Brazilian real estate industry due to improved macroeconomics and recent changes in capital markets. Real assets have become more attractive as investment targets, and easier/better mortgage terms just confirm this as an example of an opportunity for Brazil in 2020.

Marcos Lopes

President Director Lopes

Report is proprietary of McKinsey & Company

I believe 2020 will be an excellent year for Brazil's economy. We will grow at least 2.3 -2.5%. Reforms will continue to evolve, and the fiscal situation will significantly improve due to spending control (a smaller State), improved income (higher GDP), and lower cost to carry the internal debt (lower interest rates). Right now, the level of interest rates is transformational, encouraging people to migrate from financial investments to actual/productive assets. It has also significantly reduced the cost of company liabilities. Lower interest rates will enable leaving behind long-standing or directed funding mechanisms, and will encourage industries such as infrastructure and realestate. Our generation has never experienced a monetary environment such as this one and, as I said before, we will witness major changes in the behavior of economic agents.

José Berenguer

President JP Morgan Brazil The main characteristics of the Brazilian economy are the internal market dynamic that is short on demand and the diverse social levels, which represent investment opportunities in basic sanitation and infrastructure – strong allies in income generation via employment. Pension reform is an opportunity to clear the country out of its environment of uncertainty in the long run. In the short term, the promise of administrative and tax reforms, in addition to the already noticeable effects of labor reform, signal the recovery of consumer and business confidence, which will respond with private investment. It is expected that in 2020 the resilience of the Brazilian economy will be confirmed.

Cristiano Teixeira

CEO Klabin

12

The new media landscape: opportunities for advertisers

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Contributor: Carlos Dare



Media industry will continue shifting its focus to new formats, with strong implications for marketing and advertising in other industries



Share of audience will continue to migrate to digital medias, with on-demand audience already reaching 43%



Independent digital influencers on open platforms gaining disproportionate relevance



Local content production is increasing and is expected to receive large investments over the years ahead



Digital marketing is becoming the new norm, with investments growing at 5x the rate of traditional media

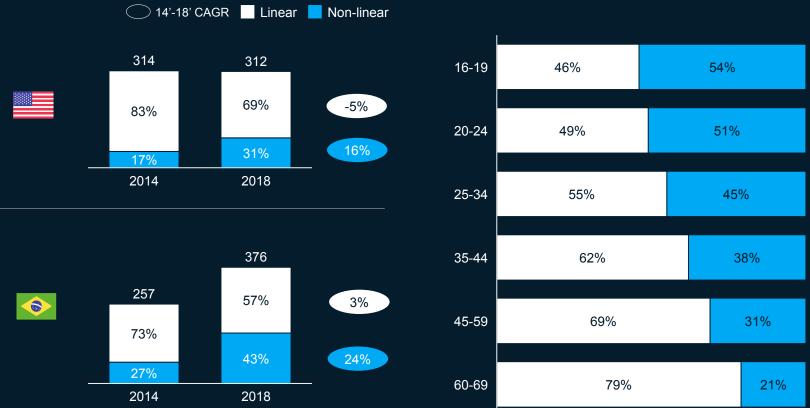
Share of audience will continue to migrate to digital medias, with on-demand audience reaching 43%

Brazilians prove to be one of the most digitally savvy populations

Linear video has been losing share in consumption...

minutes/day

... with younger age¹ ranges already consuming primarily non-linear²



Population of 16-69 years old who watch television at least weekly and have broadband connections in the following countries: Germany, Brazil, Canada, China, South Korea, Spain, USA, India, Italy, United

already has 12.5

million subscribers in Brazil vs 16.5 million in paid TV, which has been losing subscribers over the past years, 1.3M in 2018 alone

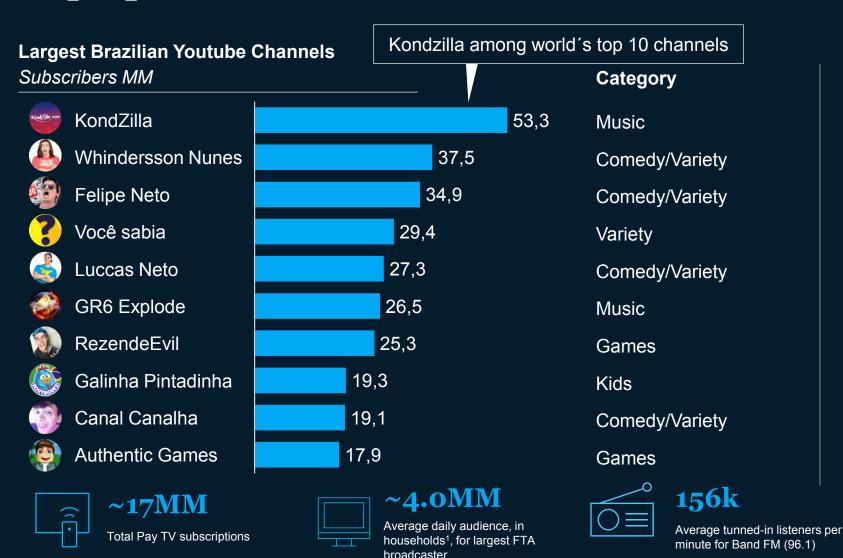


of Brazilians already mention Youtube as their preferred video viewing platform, vs. 8% only for broadcast TV

Linear - Broadcast / Non-linear - on demand

Deport is proprietary of McKinsey & Company

New independent content producers leveraging open platforms gain disproportionate relevance



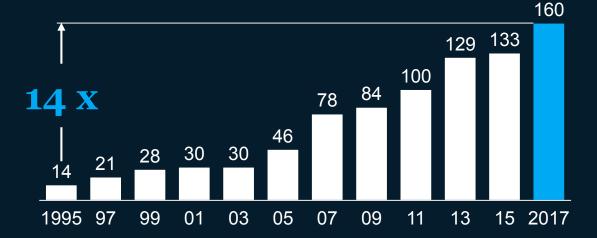
Kondzilla, Whindersson Nunes and Felipe Castanhari have been signed by NETFLIX to co-create, direct and produce in its platform.

Nathalia Arcuri's success as host of Brazil's largest financial education channel, has created significant opportunities in other media

- Bandeirantes, 3rd largest FTA, signed her to host a show on broadcast TV
- Easyinvest, digital
 investment platform signed
 her as spokesperson on
 financial education

Local content production increasing and receiving large investments...

Yearly Brazilian movie releases # of movies



US\$ 350 MM BRL 4,2 Bn

Netflix² claims Brazil has extraordinary talent and a long tradition of great storytelling, announcing investments in local content production Over the next 4 years, our investment in entertainment production (...), both between content we produce ourselves and those that we curate from the market¹

– Jorge Nóbrega, Globo CEO **

Over the next 4 years, our investment in entertainment in entertainmen

- 1. www.meioemensagem.com.br/home/midia/2019/08/09/o-novo-momento-da-globo-com-o-mg4.html
- 2. exame.abril.com.br/tecnologia/netflix-vai-investir-350-milhoes-de-reais-em-conteudo-brasileiro/

... also in digital media and varied content

Examples of digital-first/exclusive content on platforms

Sessão de terapia Pais da nova era

O mecanismo De folga da fama

Aruanas Ilha de ferro

Sintonia Feliz dia dos shippados







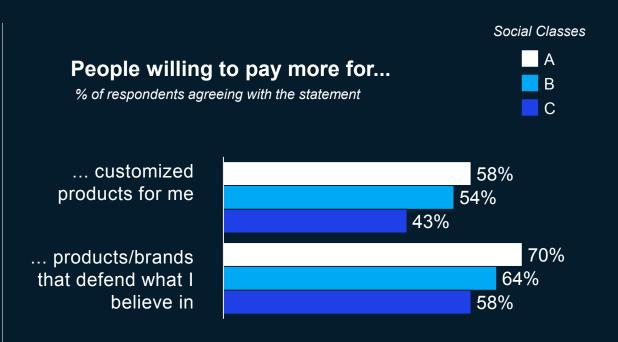


Shifts are closely connected to the characteristic of Gen Z...

Hypercognitive

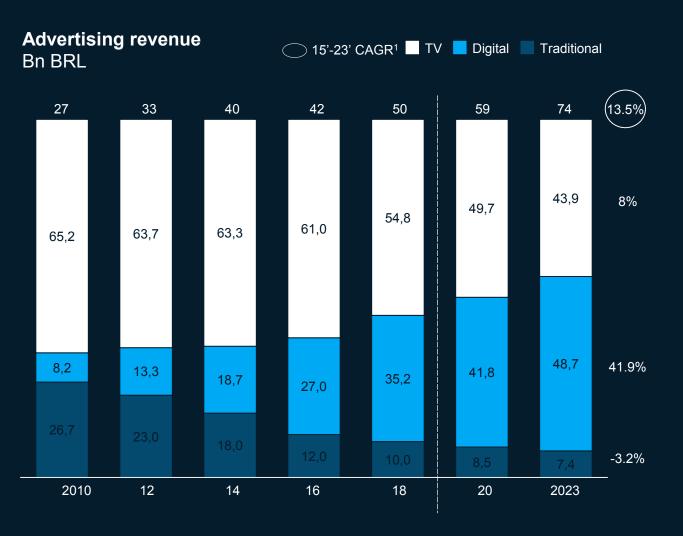
- Experience multiple real and digital realities at the same time
- Consume and cross reference a lot of visual and complex information
- Possess infinite resources to control each step of their lives

... which changes the ways they relate to content & brands



35% do not mind sharing data if there is a perceived counterpart given in exchange by the company

Digital marketing is the new norm, with investments growing at 5x traditional media



Digital marketing is becoming the new norm investment doubled between 2014-17 while traditional media remained flat

In 2021/22, the spend in digital media will surpass traditional media, following the similar trend in developed markets (US/Europe)

Main digital content platforms will become more expensive, as companies consistently look for the same high traffic content

Traditional media

(newspapers, radio) has already seen a steep drop in revenues, while TV recovered growth in 2018, but with increasing risk as consumers continue migration to digital media



The shift in the media industry opens up new opportunities for advertisers...

Reach segments where the traditional media has been losing relevance (e.g. younger audiences)

Improve ROI by using personalization at scale to reach microsegments





... that will need to evolve their marketing capabilities to capture the benefits

From:

Main channel for marketing activities still **offline** channels (i.e., TV)

Shift to digital

To:

Shift of budget to digital
Offline channels starting to convert
to online (digital radio, TV etc.)

Long-term planning before launch, and performance measurement **after campaign**

Real-time view

Real-time logic Programmatic and RTB buying are becoming a major part of digital ad spend, making data and IT an essential part of the new marketing P&L

Silo thinking: Brand versus digital performance marketing

Integrated analytics

Integrated journey view with offline and online performance marketing

Managing **few** channels at a time with mainly creative agency support

360° journey view

Working with multiple external partners for excellence in various channels

Decisions based on **gut feeling**, experience and on market research

Automation

Automated decision-making based on big customer data

Source: McKinsey analysis



5 I am excited about 2020. I see a country striving to modernize itself and create more and better opportunities to do business. A country that is renewing itself! I believe we have evolved as a society. There is greater clarity from various key players in this context, but if we wish to advance, we need to work in a coordinated manner, acknowledging that lowquality education and inequality are problems that need to be tackled on a daily basis by all of us. Within this context, our sector is also being transformed, making use of the new technologies out there to unite the physical and online worlds.

Carlos Jereissati

CEO

Iguatemi Empresa de Shopping Centers

6 Brazil is a country rich in natural and human resources that powerful new communication technologies will make increasingly productive.

Pietro Labriola

CEO TIM With the structural reform agenda started with the social pension and other micro reforms, in a low interest and controlled inflation environment, Brazil has room to boost its economic growth and resume a consistent cycle of generating more jobs, reducing the social gap. In addition, the country has the opportunity to accelerate its digitization, considering that 30% of the population does not yet access the internet. Connectivity is the basis for the evolution of all sectors of the economy now and in the future.

Christian Gebara

President/ CEO Telefônica Brazil

13



Tech-enabled productivity should not wait

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There is no excuse for delaying productivity gain

To find out more use the QR code to access Estudo "Internet das Coisas: um plano de ação para o Brasil"





Data, computing power, storage, algorithms, connectivity - all there and cheaper



There is a clear gain associated: the impact of AI applications is already tangible, IoT implementations correlated with financial impact



Tech-enabled gains are at the top of CEO and Entrepreneur agendas



Hands down on unlocks: more tech talent, eye on data quality and cybersecurity, lots of cultural change...

Data, computing power, storage, algorithms, connectivity - all out there and cheaper

The Impact of Data around the world



Connectivity and processing power

Billions of connected individuals; increasingly unconstrained computing power, unprecedented storage [capacity] and access to knowledge



Disruptive Innovations

Disruptive models are enabled in numerous fields (AI, robotics, IoT, 3D printing, nanotechnology, etc.)



Much cheaper storage

1 GB of Hard Drive storage cost 10,000 Dollars in 1990. Now it is available for less than 1 Dollar



Accelerated change

Exponentially faster rates of change

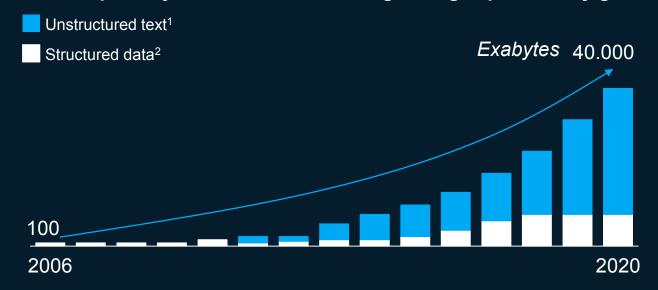


Amplifying effects

Technologies mutually amplify their impact in the physical, digital and biological world

- 1. Examples of unstructured texts: e-mails, media, call-center audio, mobile data
- 2. Examples of structured data: RDBMS systems, SQL databases, socioeconomic data

Data, especially unstructured data, is growing exponentially globally







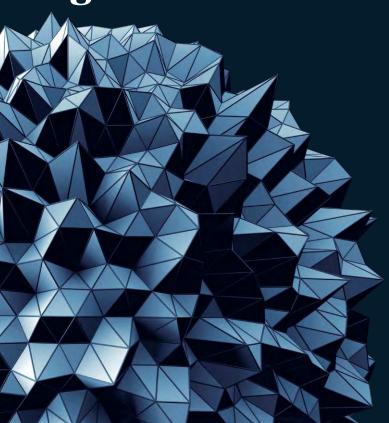
Facebook shares each month (+25 TBs log data each day)





of data is created for every person on the planet, every minute

Fast maturing software stacks are powered by increasingly sophisticated algorithms





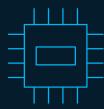
Process Automation (robotization)

Optimizing the collection process for a technology player led to a 15% cost reduction and 7% reduction in accounts receivable balance



Smart Workflows

At a healthcare institution, hypertension and strokes were detected in 98.9% of tests using a simple verification process to predict the onset of chronic diseases



Deep Learning

At a leading hospital group, 93% accurate surgery outcome forecasts improved the chances of patient survival



Natural Language Processing

Currently, 60% of all millennials and Gen Xers have interacted via chatbot - conversations simulating human interaction



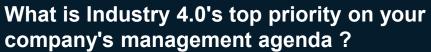
Cognitive Agents

Combining image processing techniques, the accuracy of pitstop time measurements in Formula 1 racing dropped to <0.001 seconds

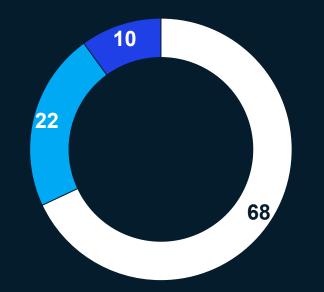


Tech-enabled gains are at the top of CEO and Entrepreneur agendas: Industry 4.0 example

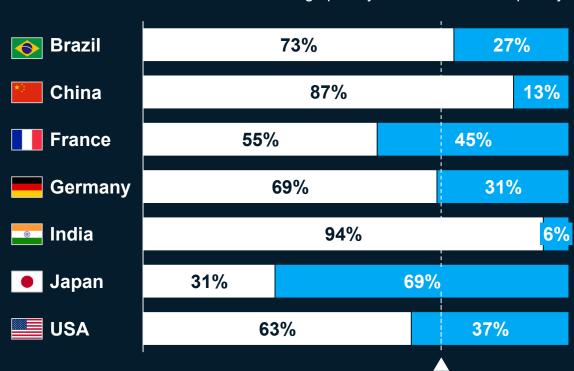








Brazil is putting Industry 4.0 as high priority Percent



Average top priority: 68%

High priority Medium or low priority

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Gain associated: AI applications are starting to provide efficiency and convenience to businesses and people in Brazil



Al Capabilities

Brazilian examples

Machine Learning



Dasa uses ML algorithms to analyze thousands of medical records to diagnose diseases in a faster way

Computer Vision



N2B has an app that evaluates pictures of food dishes from customers to check for their dietary requirements

Virtual Agents



Bradesco launched BIA, its AI-based assistant to solve day-to-day customer questions

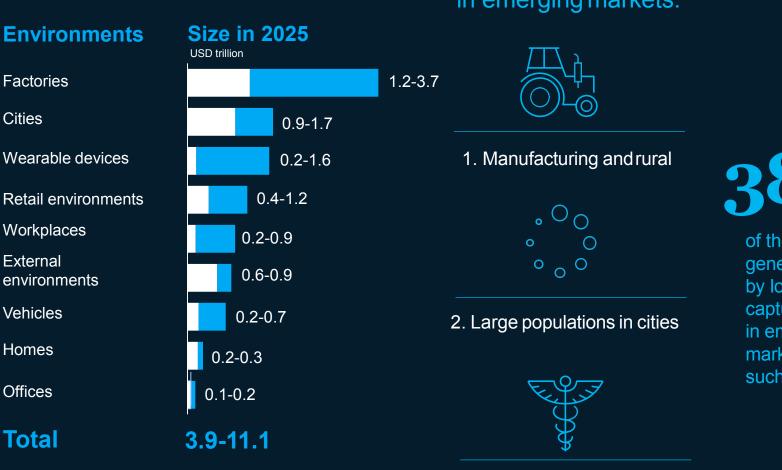
Robotics



Gerdau implemented an RPA solution to automate several back office processes, reducing costs and increasing speed and reliability

Gain associated: by 2025, IoT could add USD 4-11 trillion to the global economy and up to USD 200 billion to Brazil's economy

Three IoT impact levers in emerging markets:



of the value generated by IoT will be captured in emerging markets such as Brazil

3. Social welfare – healthcare, safety, etc.

Conservative estimate

Optimistic estimate

The National IoT Plan ratifying the potential of Industry 4.0 for national competitiveness, and an estimated impact of up to USD 200 Bn in the next 5 years

The potential for IoT in terms of productivity and improving critical services in Brazil could reach USD 200 Bn in 2025, considering the use of IoT in all environments IoT generates this return by adding value to export products and reducing expenses on low-value activities involving the country's products and services ("Brazil cost")



billion

Preliminary impact in 2025



USD 5-39 billion

Preliminary impact in 2025

Healthcare





Rural



Preliminary impact in 2025

billion

USD 11-45

In order to unlock these opportunities, several roadblocks need to be addressed - Hands down on the unlocks



Data-driven culture and adoption: lots of behavioral changes needed... 80% of the problem is cultural



Priority to tech talent (in a context of shortage) to build and train modern AI for production: in recruiting, integration and people processes



Data infrastructure set up: data quality (to avoid "dirty data") and data lakes



Regulation and cybersecurity to protect privacy, confidentiality and safety



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Brazil is a true leader in the tech space: a buzz with innovative startups, ahead in mobility, and a test bed for the big global tech players. At a time when others are navigating the challenges of tech disruption, Brazil is out in front capturing the opportunities.

Kate Smaje

Digital & Analytics Global leader McKinsey & Company

5 2019 was a challenging year where the foundations and platform for growth were reestablished. The Brazilian population is very tech savvy, open to new ideas which creates a lot of opportunities for business who are landing the digital transformation. In 2020 we should see a significant adoption of technology that will drive recovery and growth in all industries.

Marco Stefanini

Global CEO and Founder Stefanini

14

Informal and Distance Learning are transforming the Education landscape in Brazil

Nicola Calicchio Neto

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Marcus Frank

Senior Practice Expert marcus_frank@mckinsey.com

McKinsey & Company

Contributors: Priscilla Licht, Eliziario Barbosa, Omar Seguel

Private Education plays a crucial role in Higher Education in Brazil, representing ~83% of enrolled students

To find out more use the QR code to access "McKinsey's report on Future of Work "





Brazil is a world leader in Private **Higher Education**, with 3 top players in terms of the number of students enrolled in 2019



Online non-regulated & Informal courses have become increasingly important as learning tools, especially among Youtubers



The private K12 education segment also offers opportunities



There is a massive potential for the Higher Education Market in Brazil to grow in 2020, with **Distance** Learning being a main growth driver, CAGR ~20% p.y. in the last decade



The focus of 21st Century skills for students is shifting from the application of core skills to character traits and creativity

Brazil is a world leader in Private Higher Education, with 3 top players in terms of the number of student enrolled in 2019

Students Enrolled in 2019, *Thousand*



1 Cogna Higher Education¹

2 Laureate Education

3 YDUQS (Estácio)

American Public Education

Grand Canyon Education

Ser Educacional



866

865

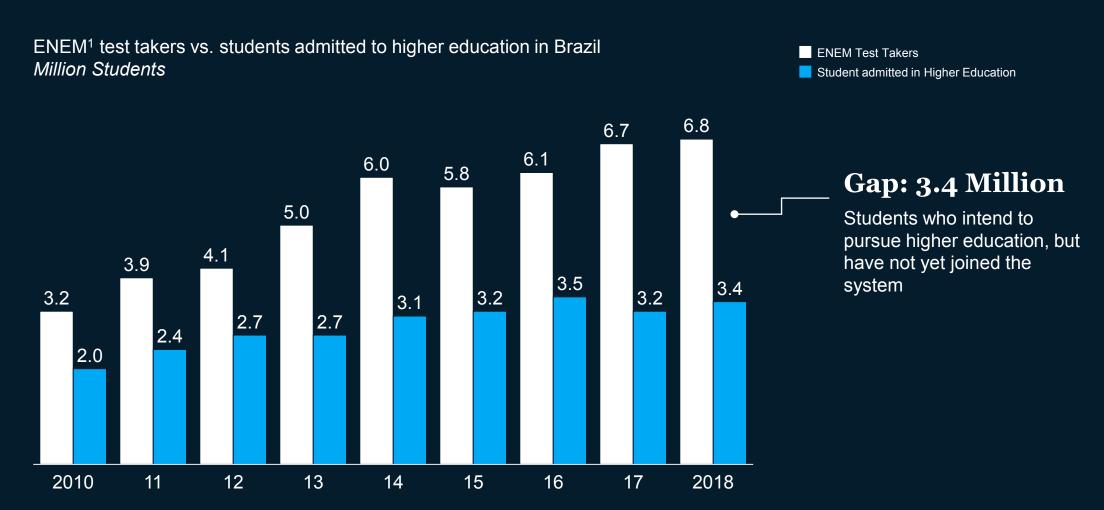
1. Considering Kroton 825K undergraduate students and Platos 41K graduate students

~50% of

students are enrolled in Distance

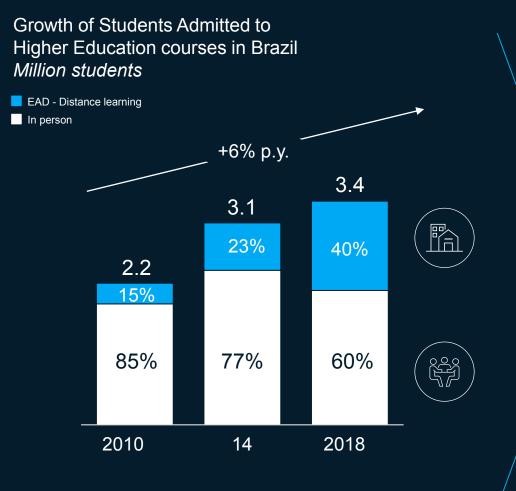
Learning Programs

The gap between students admitted and ENEM test takers indicates a potential demand for Higher Education in Brazil



^{1.} ENEM is the National High School Examination - The most used test to apply to higher-level education in Brazil

Distance Learning is a growth driver of higher education in Brazil, representing 40% of students in 2018, with a CAGR¹ ~20% p.y.



per year CAGR¹ growth in distance learning in the last decade, representing growth a driver for higher education growth in Brazil

of higher education students in Brazil attended private schools in 2018

The lower price and greater capillarity of Online Education has broadened the geographic reach and affordability, democratizing access

Average ticket in 2019



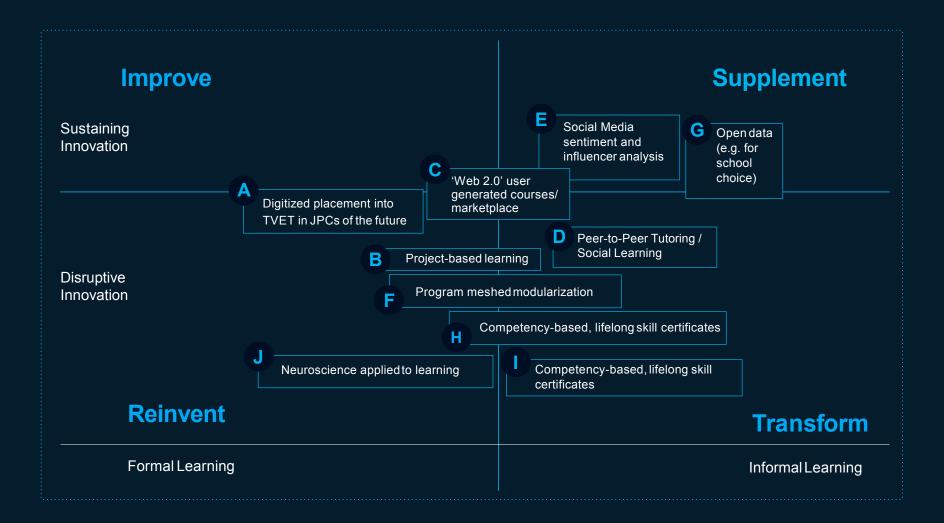
Percent of municipalities with offer



1. Compound annual growth rate

Donort is proprietory of McKingy, 8

Innovative approaches are emerging that might help address some of the challenges, and complement existing programs



Online non-regulated & Informal courses have become increasingly important as learning tools in the life-long learning journey

Brazilian Market for Informal Education



Base value 2018

CAGR⁴ 2018-21

Total Market

BRL 14Bn 4.8-8.8%

Online Market

BRL 5Bn 8.6-12.6%

748 EdTechs emerged in Brazil¹

USD 67 M

Invested in the last 18 months²



75%

of teachers believe that digital learning content will totally replace printed textbooks within the next 10 years

+2.6 million³

Brazilian public school students registered for free in the Brazilian Khan Academy platform. created in partnership with The Lemann **Foundation**

12 FabLabs

are open to the public in São Paulo – This is the largest network of public digital manufacturing laboratories in the world. Free collaborative and creative spaces with 3D printers and laser cutters

Youtubers are transforming the Informal Online Education Market

The market for Youtube teachers is booming

90%

of Youtube users in Brazil access the platform to study and search for education content

hotmart

Brazilian Platform to sell and distribute digital products such as Youtube content, online courses, e-books and

podcasts +7 Million users

Famous Youtube Teachers in Brazil

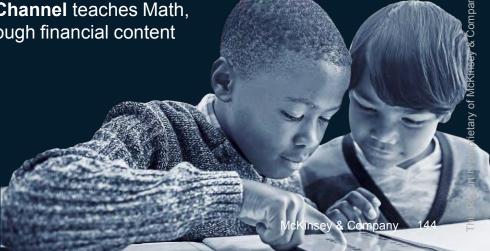
Noslen Borges' Channel teaches Portuguese and Literature to young students from São Paulo, Rio and the Northeast

+2.5 Millions subscribers

Débora Aladim's Channel has preparatory History classes for ENEM, sponsored by Santander

+2.4 Millions subscribers

The Ferretto Matemática Channel teaches Math, from basic percentages through financial content +2.3 Millions subscribers



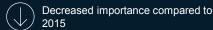
ort is proprietary of McKinsey & Company

The focus of 21st century skills for students is shifting from the application of core skills to character traits and creativity









Key Fact:

Strong education in next-generation (life) skills is one of the top 3 elements that parents prioritize when searching for a school¹

Applying core skills

Skills required in 2015 stress the application of skills to everyday tasks

- 1 Complex problem solving
- ² Coordinating with others
- 3 People management
- 4 Critical thinking
- 5 Negotiation
- 6 Quality control
- 7 Service orientation
- 8 Judgement and decision making
- 9 Active listening
- 10 Creativity



Navigating dynamic environments

In 2020, the focus is increasingly on character traits and the creativity required to navigate dynamic environments

1	Complex problem solving	\bigcirc
2	Critical thinking	\bigcirc
3	Creativity	\bigcirc
4	People management	\bigcirc
5	Coordinating with others	\bigcirc
6	Emotional intelligence	
7	Judgement and decision making	\bigcirc
8	Service orientation	
9	Negotiation	
10	Cognitive flexibility	

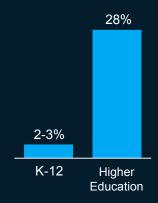
1 K12 national survey, what parents want, Fordham Institute, 2013: tps://edex.s3-us-west-2.amazonaws.com/publication/pdfs/20130827_What_Parents_Want_Education_Preferences_and_Trade_Offs_FINAL.pdf

The private K12 education segment also offers opportunities

Compelling drivers for investing in K12 (first grade through secondary school) in Brazil

Highly fragmented market

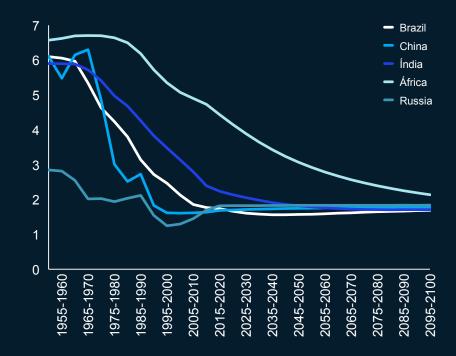
Market share of top 5 players, # of students



 Potentially attractive margins – Market average <10% but optimized institutions achieve >25% EBITDA Growing appreciation for education and a reduced birth rate increased household ability to invest in next generation education

BRICS are converging towards low fertility rates

Estimated fertility rate from 1950-2030, *Children per women*



Winning will require new business models and skills

- Great opportunity to create scalable and replicable models, especially to serve the mass B & C class segments
 - Low operating costs
 - Perceived quality that justifies parental investment
- Consolidation of strong-branded local players, requiring knowledge and track record of integrations that are different from other industries

Gamification of education can lead to greater student motivation, engagement and persistence

Context

- In India, primary schools use mobile-phone games to help students from rural, low-income households learn English
- Aided by local teachers, researchers devised a simple game to develop listening comprehension, word recognition, sentence construction and spelling
- Test scores of students using the mobile-phone games improved by nearly 60%

Attractiveness

- Gamification focuses on content mastery via practice and drill, and increasingly also integrates assessment and feedback
- Simple games on small devices are particularly useful for building basic skills and background knowledge



I see infinite opportunities in 2020. This will be the year that education companies in Brazil will ramp up their plans to help the people improve life standards even more, and contribute to the nation's development.

Eduardo Parente

President YDUQS



Brazil is entering a new era, with low interest rates and inflation under control, although economic growth is slow, it is visible. Given this, I believe companies will start to make investments that had been on hold and accelerate their journey to reinvent themselves in 2020. Following the pension reform, the possibility of other structuring reforms brings opportunities for the country. Renewed growth should have a positive impact on employment, leading to a positive scenario for education. This in turn will feed a virtuous circle of value creation. We all know that the sustainable development of any nation necessarily includes education.

Rodrigo Galindo

CEO Cogna Educação

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The next wave of disruptions in the healthcare industry

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Benort is proprietary of McKinsey & Company

There is great opportunity for change in Brazil's healthcare system through digital transformation

To find out more use the QR code to access "Coalizão Saúde" Publications





The healthcare system in Brazil may benefit from change, leading to the pursuit of a **new momentum**



Digital Transformation is helping healthcare providers to **better know their patients** and to **streamline their processes**



Patients will benefit from a new era of experience and access to treatments that will improve longevity and quality of life

The healthcare system in Brazil may benefit from change, leading to the pursuit of a new momentum



People lost private coverage during the crisis (2014-2019)

25%+

Estimated healthcare spend in 2035 (as % of GDP)



Providers

Reduction in the number of private hospitals (2014-2018) 3.8%

Claims management from payers to major hospitals. Besides, new payment models are being imposed (though immature)



Employers

Annual medical cost increase, which is attempted to be charged back to employers (2019)



Patients

Triple burden of disease: chronic. infectious and violent

Patients do not trust the healthcare system, in spite of being a top priority for them

Digital solutions are needed to coordinate players towards integration and an effective endto-end patient journey

Digital transformation is helping healthcare providers to better know their patients and to streamline their processes

NON-EXHAUSTIVE

Digital transformation addressing patient needs...

Monitor patient health though wearable devices (e.g., heart rate, irregular heartbeat, ECG)



Monitor physical activities to help patients achieve their health goals



Connect patients and psychologists though online platform







Google Fi

... while streamlining healthcare system processes

- Al applied to diagnostics to increase precision, turnaround and economics
- Capture of medical records to increase security of information and efficiency
- ePrescription for faster and safer prescribing
- Supply chain electronic integration, for better purchasing and product flow
- Data capture and analytics for enriched market intelligence



As a result, patients should benefit from a new era of experience and access to treatments that will improve longevity and quality of life



- Improved offerings, through end-to-end view and better patient insights
- Lower costs, due to better management and efficiency
- Increased longevity and quality of life through the use of disease prevention tools







- Primary care incorporated
- to improve journey in the system
- Automated journey experience
- New adapted costeffective payment models

In 2020 Brazil will start to sequence the genome of its population, which will reveal our genetic diversity and create numerous opportunities for research and development in Precision Medicine in this country.

Lygia da Veiga Pereira

Professor and researcher Universidade São Paulo

In these years of unstable economy, healthcare has been one of the few more resilient sectors, and we are optimistic about 2020, with an improved economy and more employment. We believe the industry will return to 2-digit growth. Having a government based on technical criteria further improves this outlook.

Cleiton Marques

CEO Biolab Sanus Farmacêutica



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Brazilian workers want to innovate and feel ownership of the business

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Brazil has opportunities when it comes to unleashing the power of its people – in driving innovation and sense of ownership





Brazil stood out for the 2nd consecutive year in the ability to innovate and adapt in a global organizational-health benchmark study



What motivates Brazilians are leaders who provide a sense of ownership and rewards in a transparent way



5 of the 10 most innovative enterprises in Latin America, as ranked by Fast Company, are Brazilian. One even making the top 50 worldwide

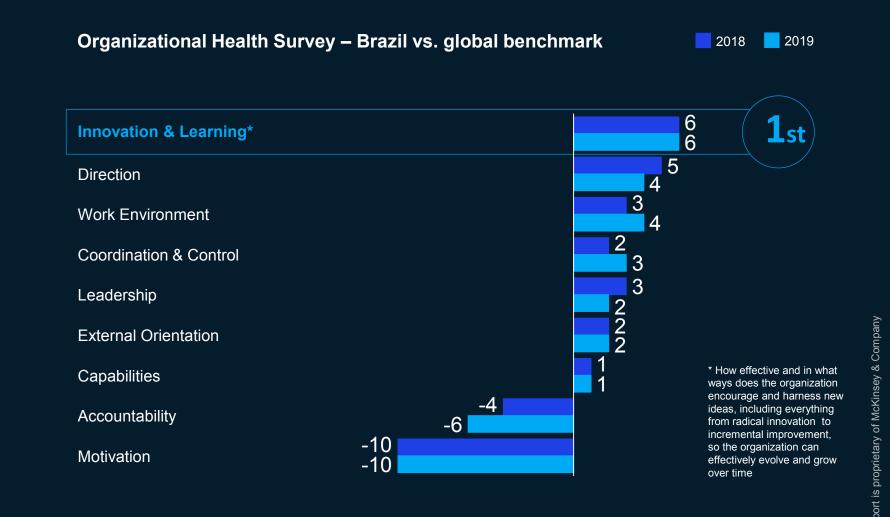
For the 2nd consecutive year Innovation & Learning in Brazil ranks higher than the global average

+80
Brazilian companies in the benchmark

+170,000 Employees interviewed

18
Sectors represented

~1.2 Mn
Individuals represented



5 of the top 10 most innovative companies in Latin America are Brazilian; one of them also is in the Top 50 globally

Fast Company, Most Innovative Companies 2019 – Latin America

	Company	Area	Why are they innovative Ranked 36th in Fast Company's Global list
1	MUbank	♦ Finance	For giving thousands of Brazilians access to banking
2	grow ¹	Mobility	For creating last-mile transport alternatives
3	apli	HR	For leveraging AI to give income-generating opportunities
4	magazineluiza	Consumer	For experimenting with using AI to track inventory and serving customers
5	Rappi	Consumer	For one-stop shop offering: multitude of products or services, all under one roof
6	⊗ Cliengo	Tech Services	For providing a cost-effective chatbot for small businesses
7	movile	Tech Services	For making one app for everything you need
8	pagseguro	Finance	For helping Brazilian businesses manage their finances
9	Selina	* Hospitatility	For turning spaces no longer used like factories and asylums into funky hotels
10	ECOANDINO	Consumer	For processing and marketing Andean superfoods while conserving biodiversity

^{1.} Result of the merge of Grin and Yellow

Source: Fast Company



Motivation in Brazil is driven by providing a sense of ownership through challenging leaders that reward in a transparent way

1

Personal Ownership

Accountability driven by a strong sense of individual ownership and personal responsibility

"This is my organization"

2

Challenging Leadership

Leaders encourage employees to take on challenges and do more than they thought was possible

"Growth starts beyond the comfort zone – failures are part of learning"

3

Performance Transparency

Emphasizing results and achievement, with a healthy sense of internal competition to drive performance

"We can all perform better when there is transparency and a bit of healthy competition; it energizes people to perform"

Personal ownership is the main behavior driving higher motivation in Brazilian organizations, followed by a leadership that constantly challenges employees to deliver more than expected while building a performance-oriented environment

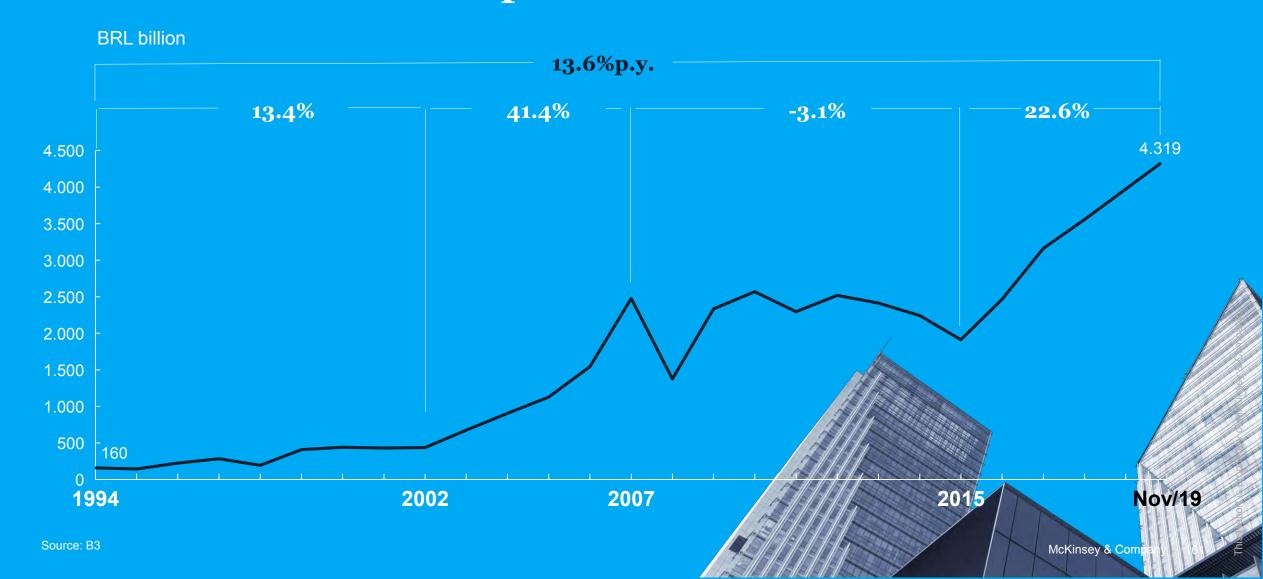


Brazil is getting back on track to growth through a modern and sustainable economy police. We have a huge domestic market with companies tech initiatives and a lot of venture capital being invested in new business models. We have an excellent management standard, with plenty leadership, and an optimistic people that don't collapse easily. I truly believe that 2020 will be the start of a new opportunity era for Brazil and for whoever does business here.

Eugênio Mattar CEO Localiza Brazil Brazil is a country where everything is yet to be done. Because of this, 2020 and the years that follow will be years of major opportunities! José Eduardo Carneiro Queiroz Partner Mattos Filho

Interesting Facts

Brazil's stock market capitalization



17 São Paulo as a global hub

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Report is proprietary of McKinsey & Compar

São Paulo is distinctive in many different ways



70% of the top 20 companies in Brazil are based in São Paulo

Top Companies in BrazilRanked by Net Revenues, 2018

- 1 Petrobras
- ² JBS
- 3 Vale
- 4 Raízen
- 5 Ultrapar
- 6 Cosan
- 7 Brasken
- 8 Atacadão/Carrefour
- 9 Ambev
- 10 GPA

- 11 Gerdau
- 12 Cargill
- 13 ADM
- 14 Telefônica
- 15 Bunge
- 16 Claro
- 17 Arcelormittal
- 18 BRF
- 19 Marfrig
- 20 Copersucar



Key Fact:

When it comes to the top 20 banks, the number is approximately the same: 65% are also based in São Paulo

Companies based in São Paulo

Report is proprietary of McKinsey & Com

SP has a fierce startup ecosystem

Highlights – non exhaustive



Incubators / Accelerators









Investment / Support institutions



spventures













Ribeirão Preto



Startups



















bionexo

Loggi











5 Piracicaba



G Gênica













dos Campos

GUICHÊ

4 São Jose













LIBER

AgroGestor

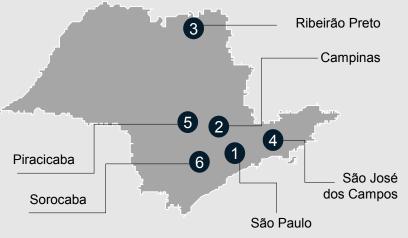


3,300+ 25+ startups

incubators

15+ accelerators **BRL 21 Bn**

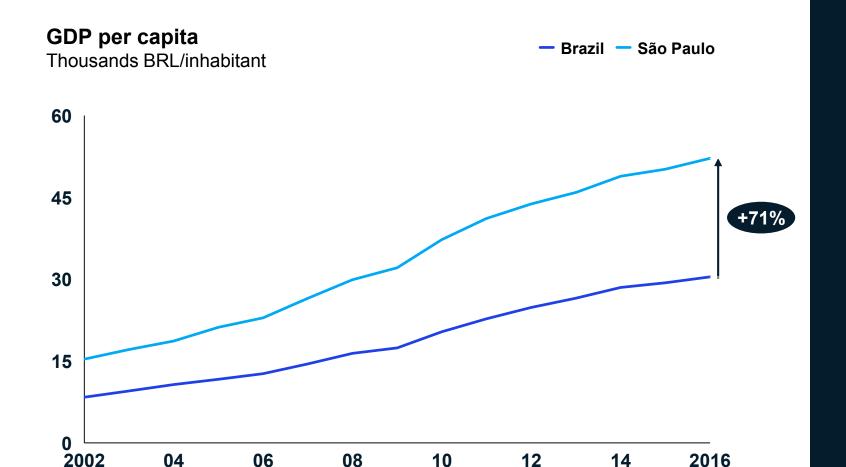
startup ecosystem value



SMARTBREEDER

⇔ bug

São Paulo's economy is comparable to that of the largest countries in the world



Most populated metropolitan region in the Americas with over 21 million people

It is among the 10 largest city economies in the world, with a GDP of BRL 1.1 Bn (18% of Brazil's GDP)

It would be the **32**nd largest economy in the world if it were a country

São Paulo's GDP is bigger than countries like Colombia, Chile and Portugal





São Paulo fosters an environment for attracting and developing talent



Home of the #1 University of Latin America: USP



160+ colleges,35 universitiesand 7technologicalinnovation centers



770+K
undergraduate
students,
25% of
Brazil's higher
education
institutions are
located in SP



86% of R&D investments received in Brazil

25% of Brazil's scientific production

"The city of opportunities" with an increasingly diverse, talented and inclusive atmosphere





The state of São Paulo has more than 10K foreign students, which represent

~35%
of the foreign students in Brazil



...Diversity & Inclusion are booming

196 countries

Recognized by the UN that have at least one inhabitant **in SP**

+164% students

increase in the number of **basic education students** from another country¹

3+ Mn participants

São Paulo has one of the **biggest LGBT+ Pride Parades in the world**,
with over 3 million participants

1. From 2007 to 2017

Source: Folha de São Paulo. Estadão: FBI

Report is proprietary of McKinsey & Company

São Paulo city is becoming a center for high value-added services





Healthcare

- 9,000+ medical clinics
- Albert Einstein and Sírio-Libanês
 Hospitals are considered international references in health, even when compared to New York and London medical services
- SP is the Latin American leader in organ transplants



Professional services

- 28% of Brazil's employed lawyers
- ~30% of Brazil's auditors
- ~25% of Brazil's accountant



Robust Infrastructure

- 3 airports serve the city of São Paulo: Congonhas, Guarulhos and Viracopos
- Connects 45 international destinations and all major cities in Brazil
- 470km+ of cycle/cycling lanes
- 100+ parks and 300+ sport centers
- 173 subway and train stations connect the city
- Considered one of the 11 best subway systems in the world

São Paulo is a reference in culture and leisure



Culture

- 150+ museums and 100+ cultural centers
- MASP, one of São Paulo's most iconic museums, broke its visitation record in 2019 with +560 thousand visitors in a year
- MIS experience, a 2.5 thousand m² space dedicated to cultural immersive experiences is the first of its kind in Latin America

Leisure and events

- Gastronomy is the main activity sought by tourists who visit the city, with 12 Michelin starred restaurants
- #2 city in the world in number of restaurants
- Attracts a total of ~15 Million tourists per year (68% more than Rio de Janeiro)
- 53+ shopping malls, 180+ nightclubs and **50+** spas
- **1,300+** different events per year generating BRL ~16.3 billion
- Hosts major events such as Formula 1, Lolapalloza and Virada Cultural that generated together BRL ~650 Million

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Consumers call for action in sustainability

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Contributors: Felipe Boaretto, Victoria Meduna



Brazilians are increasingly more aware about health and sustainability, an opportunity that should be fully embraced by companies



Sustainability is increasingly becoming part of the concept of well-being for consumers: ~60% of consumers believe their health and well-being are strongly affected by environmental problems



Companies embracing the social and environmental sustainability trend are displaying encouraging results



Consumers' orientation towards sustainability is already being reflected in their actions: 85% of Brazilians say they feel better when buying sustainable products and, for ~80%, sustainable packaging is somehow part of their purchasing decision



With environmental issues becoming more evident in daily life, Brazilians are also paying more attention to sustainability issues

of Brazilian consumers believe that environmental issues should gain even more relevance in the coming years

of Brazilians in 2018 agreed that citizens are also responsible for protecting nature (vs. 46% in 2014)

of Brazilians are aware about the use of disposable, non-recyclable products (vs. 81% in the world)



^{1.} Tetra Pak environmental research. Total of 6,500 respondents from 13 countries, including Brazil

^{2.} IPSOS survey based on 19,519 online adults aged 16-74 across 27 countries – Feb-March/2019

The increased awareness for sustainability is already reflected in Brazilian consumer expectations towards companies and brands

Brazilians are looking for products from ethical companies,...



Want to know where the product came from before buying



Of consumers seek to buy from companies that are ethical / with social purpose

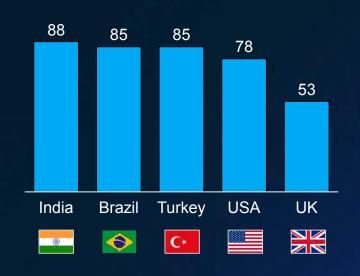


Of Gen Z consumers stopped buying products from companies involved in controversial scandals

...claim to feel better when buying products they know are sustainable...

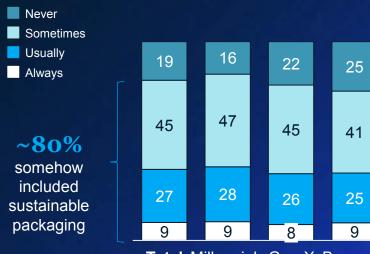
I feel better when I buy sustainable or better for the environment products¹

Percentage of respondents, 100% = 20.000



...and, in fact, consider sustainability an important factor in their purchasing decision

How often do you include sustainable packaging in your purchase decision?
Percent 2019



Total Millennials Gen-X Boomers

^{1.} Unilever & Europanel survey released in 2017

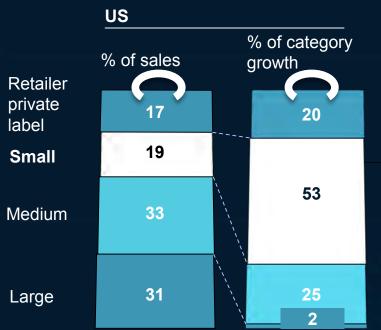
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Companies embracing the social and environmental sustainability trend are displaying encouraging results

New & smaller brands that use their social purpose as a competitive advantage, are generating 2.5x share of growth¹

FMCG industry share of sales and of growth – US example, 2016–17





"Millennials
and Gen Z are
2.8x more
likely to believe
newer brands

are better / have more credibility or are more innovative"

Global companies adapting to the sustainability trend are also capturing positive impact

Selected global examples of sustainability initiative impacts

Natura & co

"Natura is recognized as the 15th most sustainable company in the world in the Corporate Knights Global 100 ranking; Natura expects revenue growth of 75% until 2022"

- Forbes (Jan/2019) and Reuters (Apr/2018)



"In 2018, Unilever's
Sustainable Living
Brands² grew 69%
faster than the rest of
the business,
compared to 46% in
2017, and delivered 75%
of the company's growth"

- Unilever Press Release, Jun/2019

^{1.} Large = top 16 companies; Medium = next 400; Small = the rest

^{2.} Unilever's Sustainable Living Brands are those that communicate a strong environmental or social purpose

Difficult times can be the start of major transformations and creative solutions. Observing the various groups in our city and country we see practical and creative solutions emerging that will impact and transform our lives. It is an opportunity for the government to scale up what has been built, listening to the more vulnerable families and reducing social inequality, and at the same time care for the environment.

Vera Cordeiro

Founder and Chairwoman of the Board of Directors Associação Saúde Criança

Economic growth in 2019 is already visible in several sectors and, albeit timid, allows us to say that a virtuous cycle of sustained development has already begun and will be strong in 2020.

João Carlos Costa Brega

Latin America President Whirlpool

Report is proprietary of McKinsey & Company

The room for growth and productivity increase is huge. The structural hurdles have been or are being eliminated. **Everything indicates that 2020** will mark the start of a new cycle of economic prosperity for Brazil. I am confident that the forces of democracy and the nation's institutions will simultaneously promote social progress and environmental protection.

João Paulo Ferreira CEO Natura I truly believe in Brazil and the nation's potential! In the midst of socioenvironmental discussions, Brazil, and mainly the agribusiness sector, can take the lead in the debate through "Innovability", by proposing solutions that combine innovation and sustainability to deal with the great challenges and dilemmas of the 21st Century.

David Feffer

President Suzano Holding

19

The multiple (and not so obvious) opportunities in consumer growth

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McKinsey & Company

Contributors: Bruno Massaro, Isabela Liberato, Victoria Meduna, Julio Galache, Silvana Lee, Carlos Dare

There are multiple, not so obvious opportunities in consumer growth

To find out more use the QR code to access McKinsey Study América Latina e seus "Missing Middles"





Democratization of the financial sector is directly contributing to low-income people

New offers are emerging as alternatives with simpler products, lower costs and online options

Among Brazilians, the main opportunity focuses on low-income millennials and the middle aged



There is a call to action for companies to better understand and address the needs of Brazil's older population

The Brazilian population is aging and by 2031, older population will exceed the young population

s proprietary of McKinsey & Company

Democratization of the financial sector is directly contributing to low-income people, and new offers are emerging as alternatives

Although financial inclusion in Brazil is still low (~75%1), the population with bank accounts has grown in recent years

The emergence of FinTechs and Digital Banks has facilitated the low income population's access to the banking market

These models come as an alternative with simpler products, lower costs and online banking services, regardless of the existence of bank branches

Non-financial players, but with strong interaction with lowincome audiences, are beginning to offer financial services to these segments (e.g. retailers, telecommunications)

Timeline of digital accounts offered to the low income segment





Niche banks

Started offering zero-fee digital accounts

"Co-branded" accounts with soccer clubs

Client monetization still in the early stage, players are adding more products

Retailers

Leverage their **customer base** to offer financial services

Chain stores work as physical branches

Basic financial product offering and synergies with core retailer products

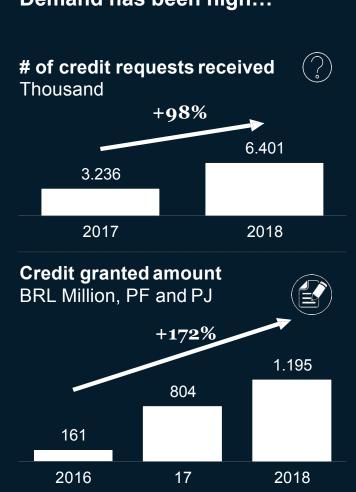
Traditional Banks

Offer digital accounts with cheaper fees

Simplified product offering, starting with transactional banking services and then adding inhouse banking products

Among Brazilians, main opportunities focuses on low-income millennials and the middle aged Credit Fintech customer profile Demand has been high... ...pushed by faster recommendation...







The Brazilian population is aging and by 2031, the older population will exceed the young population

26%

largest elderly population in the world, behind China, India, USA, Japan and Russia

Elderly represent 13% of the total population (2018)

Elderly will be 26%¹ of the total population by 2045

81 years 2031

21%

will be life expectancy in 2060

Will be the year when we will have more old people than young people

Growth in the number of elderly from 2013 to 2018

Opportunities for companies

- Develop a better understanding of this important segment of consumers
- Revise their product portfolio to meet the demands of senior citizens
- Adjust product design to adapt to the elderly (e.g. readable information on packaging, etc.)
- Tailor marketing and communication campaigns to this audience
- Ensure the shopping experience is also adjusted (e.g. consider using augmented reality to enhance experience for less mobile people, re-direct sales force for personalized servicing, etc.)

^{1.} População acima de 60 anos

^{2.} População até 14 anos

Brazilian companies could follow what's being done in Japan and the United States, making adjustments to serve the elderly population



Japan

The estimate is that in 2060 the elderly represent 40% of the population. With the highest proportion of elderly in the population (32%), the minimum retirement age increased to 70 years

The Government is also putting technology (AI) in place to play an important role in caring for the elderly

What are companies doing? examples



7-Eleven stores deliver meals - the service is widely used by the elderly, who take advantage of and buy other basic items to be delivered with meals. The company also created itinerant stores that go to neighborhoods with high concentration of elderly people



Japan Post, IBM and Apple in partnership offer elderly care services - Japan Post will distribute iPads equipped with IBM software to shop at local stores and monitor health, and Japan Post employees will make monthly visits to check the situation of the elderly



Several companies have developed robots for nursing homes and the elderly in their homes; some cities are offering robots at no cost to the elderly who sign up for their programs



United States

In the US, 40% of housing, healthcare, transportation, entertainment, food and alcohol between 2015 and 2030 will be driven by 60-plus consumers

What are companies doing? examples



Condominiums for the elderly, where people younger than 55 cannot access (e.g. Elite International Realty, which has built a residential complex with adapted apartments, hotel, offices and a wellness and living center)



IncludeHealth is a manufacturer of exercise equipment for the elderly and wheelchair users

All the equipment has been developed to meet the specific needs of this public



ElliQ is a robot that offers services so that the elderly can live more independently

The device helps to make calls, has reminders for medications and helps to schedule doctors

Source: Press clippings McKinsey & Company

port is proprietary of McKinsey & Company

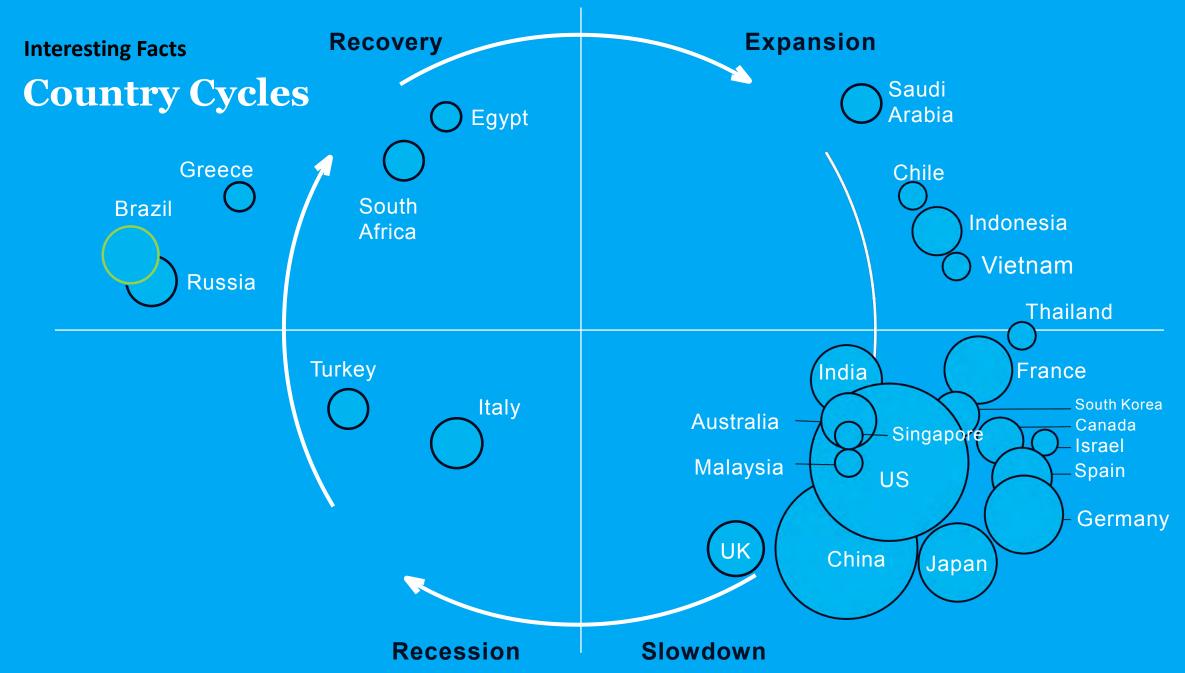
For 2020, I believe the return of consumer credit with greater financial inclusion will consequently benefit the population with less access to the opportunities that the financial system has to offer.

Ana Karina Dias

President Banco BMG 2020 will be the year of consolidating the democratization of access to financial services in Brazil. Open banking implementation - expected by the end of 2020 - will reinforce such trend of financial inclusion. It should level the playing field, and help competition increase fiercely; traditional banks will see their incumbent advantages even more challenged and whoever offers the best service and products will stand out. And ultimately, more financial inclusion leads to more economic growth, so we have a lot of reasons to be optimistic about 2020.

Cristina Junqueira

Co-Founder Nubank



Source: Moody's Analytics

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Boosting the growth of small and midsized cities in Brazil, harnessing fragmented trade

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There's a great opportunity to boost the growth of small and midsized cities in Brazil, harnessing fragmented trade



Retail in Brazil is still highly fragmented: 41% of total retail is fragmented, with >1Mn mom-and-pop stores serving millions of consumers in low-tier and distant areas of Brazil



Looking at future consumption in Brazil, small and mid-sized cities are expected to capture ~2/3 of total growth over the next 5 years — cities where fragmented trade is even more relevant (70% of fragmented trade is concentrated in those cities)

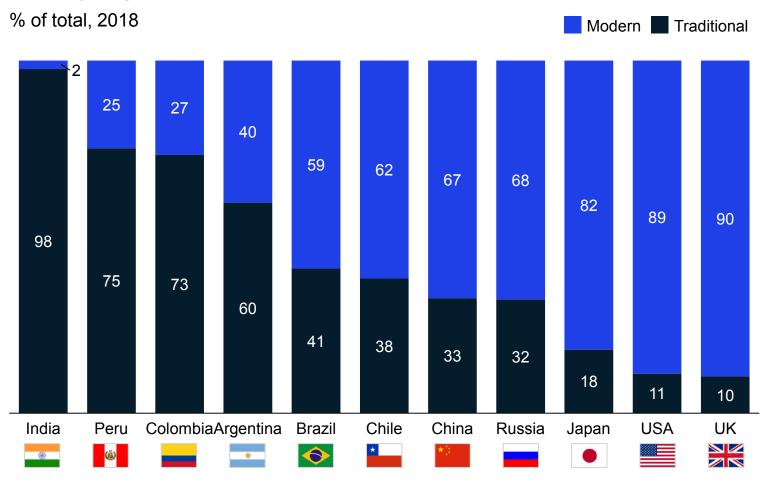


There is a huge opportunity to reinvent the Route to Market and boost the potential of small and mid-sized cities, engaging the fragmented trade with digital technology, which can provide enormous advantages of increased transparency and efficiency for all stakeholders in the value chain: CPGs/manufacturers, fragmented trade (store owners) and shoppers

Benort is proprietary of McKinsey & Company

Fragmented trade in Brazil is highly relevant

Grocery segments



There are 1.14 million momand-pop stores serving millions of consumers in low-tier and distant areas of Brazil

These stores are typically ran by lower skills owners with limited sourcing options

Brands/ manufacturers distribute products mainly through a network of suppliers and wholesalers, with narrow range of understanding of the local moms and pops, and high mark-up costs

Source: Euromonitor

This Report is proprietary of McKinsey & Company

Majority of future consumption growth will come from smaller cities

Size of city Inhabitants	Cities per segment # cities	% of consumption growth 2015-25	on	Distribution of fragme trade ¹ footprint	ented
Up to 500 thousand	5,514	64%		70%	
500 – 1 million	25		-9%		-8%
1 – 2 million	12		-8%		7%
> 2 million	7		19%		15%
Total Brazil	5,558	100%		100%	

^{1.} Stores with up to 9 employees

There is a huge opportunity to reinvent the Route to Market and connect the fragmented trade leveraging digital technology

Digital RTM has the potential to create win-win situation with advantages for all stakeholders

CPGs

Increase retail transaction and performance transparency with direct reachability to trade

Gain granular insights about performance at POS level

Increase logistic efficiency and portfolio of products to help lower total cost



Store owners

Intelligence on sales and operations results and optimized shelf and store management

Better stock management with automated reorders

Deep understanding of customer preferences based on neighborhood data/shopping pattern analysis (guiding assortment, pricing, etc)

Shoppers

Better shopping experience and assortment

Early access to innovation / launch of new products

Advanced
Analytics can be
a enabler to
capture granular
growth potential
in small towns

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Over the 20 years that we at MGI have studied the Brazilian economy, we have observed the great entrepreneurial dynamism among the SMEs ranging from small, informal operations to the latest wave of FinTech startups. Yet most of the small businesses fail to grow to become thriving mid-size or larger companies. Efforts targeted to unlocking that entrepreneurial energy and expand the pool of larger, globally competitive businesses are a great growth opportunity for Brazil.

Jaana Remes

Economist & Partner
McKinsey Global Institute (MGI) / McKinsey & Company

I have the advantage of seeing the 2020 air tickets reservations, and we are very excited with the inversion of the demand curve that is starting to pick up speed. We believe that conditions are right for renewed growth and job creation. Low interest rates, a reformed pension system and increasing confidence. Next year, after almost a decade, we will launch a new route between Europe and Brazil. This demonstrates our confidence in the future.

Antonoaldo Neves

CEO TAP Air Portugal

21

The values of Brazil's new generation are a source of inspiration

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Contributors: Carla Vorlander, Priscilla Licht, Luis Chagas, Adriane Hauer

The values of Brazil's new generation are a source of inspiration

To find out more use the QR code to access McKinsey Study "True Gen: Generation Z and its implications for companies"





The first generation of **true digital natives**: from earliest youth, they have been exposed to internet, social networks, and mobile systems. As a result, Gen Zers are hypercognitive; very comfortable with collecting and cross-referencing many sources of information



Search for the truth is at the root of all Generation Z's behavior. Gen Zers value individual expression, avoid labels. They mobilize themselves for a variety of causes. They strongly believe in the efficacy of dialogue to solve conflicts. Finally, they are realistic and make decisions and relate to institutions in a highly pragmatic way.



Companies should be attuned to three implications for this generation: consumption as access rather than possession, consumption as an expression of individual identity, and consumption as a matter of ethical concern

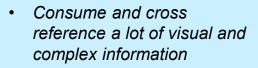
The first generation of true digital natives, Brazil's Gen Zers are hypercognitive







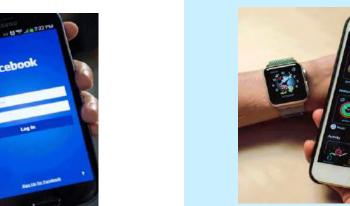
Experience multiple real and digital realities at the same time



Possess infinite resources to control each step of their lives











2004-2012

ERA OF SOCIAL NETWORKS 2013-Today

ERA OF HYPER REALITY





ERA OF

INFORMATION



The search for the truth is at the root of all Generation Z's behavior

Gen Z key characteristics



Undefined ID

"Don't define yourself in only one way"



76% of Gen Zers belong to a religion. At the same time, they are the most open to themes not aligned with the beliefs of their religions



Expressing individual truth

Communaholic

"Be radically inclusive"



66% join communities they believe are created by common causes and interests, not by educational levels or economic backgrounds



Connecting through different truths

Dialoguer

"Have fewer confrontations and more dialogue"



Less than 50% of Gen
Zers believe they need to
break with the system to
change the world; they
rather believe in the
importance of dialogue



Understanding different truths

Realistic

"Live life pragmatically"



71% of Gen Zers value a formal registered job – raised at a time of economic distress, they are more realistic than previous generations



Unveiling the **truth** behind all things

For companies

Gen Z's forms of behavior influence attitudes toward consumption; companies should rethink how they deliver value to consumers



Consumption re-signified: From possession to access

Consumption means having access to products or services, not necessarily owning them. With that, unlimited access to goods and services creates value. Products become services, and services connect consumers.



Singularity: consumption as an expression of individual identity

Consumption becomes a means of self-expression, with consumers eager for more personalized products and experiences, and also willing to pay a premium for that (58% of class A and 43% of class C are willing to pay more for customized offerings)



Consumption anchored on ethics

In a transparent world, young consumers don't distinguish between the ethics of a brand, the company that owns it, and its network of partners and suppliers. ~65% try to know the origins of anything they buy and ~80% refuse to buy from companies involved in scandals

- Think beyond the product itself to offer full platforms of products, services, and experiences that connect customers around brands
- Rethink value-creation models, leveraging more direct relationships with consumers
- Advanced analytics becomes crucial to develop customer and business insights
- Traditional scale and mass production model can be rebalanced against personalization
- Marketing, supply chain and manufacturing processes should be more agile/flexible
- Coherence is key: companies should practice what they preach when they address marketing issues and work ethics
- Identify clearly the topics on which to take positions, and also ensure alignment throughout the value chain

If my generation did not leave a better Brazil for our children, it left better children for our country. Today's youth has greater environmental, ethics and social consciousness.

Fabio Barbosa

Advising Partner of Gávea Investimentos and Board Member of the Fundação das Nações Unidas

22

The underrated power of Brazilian soccer

Pedro Mendonça

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Brazilian football is uniquely positioned to increase its relevance in the global arena



The global soccer sector is growing almost double digits and with an extraordinary outlook considering the globalization of premium soccer towards big export markets (China, USA)



Open discussion around the evolution of the sports calendar (FIFA vs. UEFA vs. leagues) likely to open the stage for top non-European brands to compete in a "play of global brands with local essence"



Despite double-digit growth, the soccer ecosystem is not homogeneous across leagues around the world



Homework must be done to ensure appropriate level and sustainability of domestic competition and foster Brazil's top soccer brands in a new global economy for football clubs

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Talking about professional sports is talking about "Soccer" and the US leagues (NFL, NBA, MLB, NHL)

Detailed next

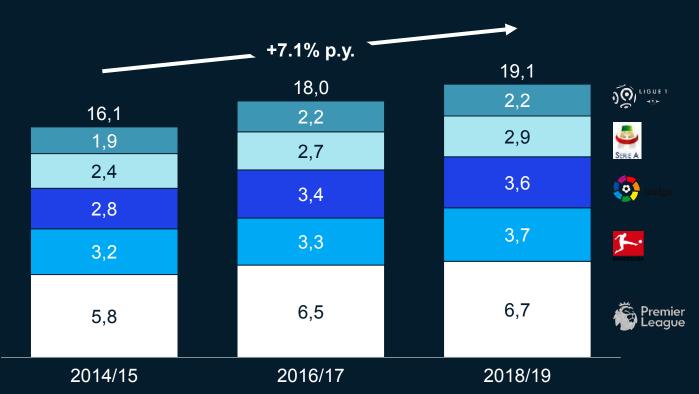
Revenue, selected sports (US \$ Billions, 2017)

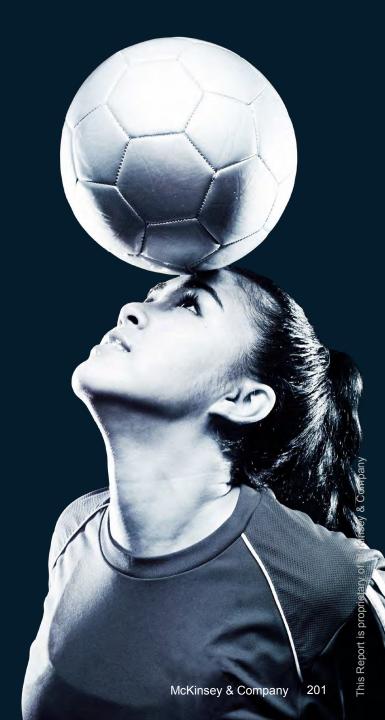
	NORTH AMERICA	EMEA	LATAM	ASIA-PACIFIC	Total
Soccer	2% 1.1 3%	75% 27.4	66% 71% 4.9	51% 8.0	41.4
American football	42% 22.6 100%	6 NA -	NA NA -	NA NA -	NA 22.6
Basketball	23% 12.7	1.5	10% NA -	NA 4% 0.7	15.0
Baseball	18% 9.9 75%	NA -	NA 2% 0.2	1% 3.2	13.3
Ice Hockey	8% 4.5	1.3	23% NA -	NA NA -	5.9
Tennis	2% 0.9 30%	3% 1.2	40% 0.3	10% 0.6	3.0
Cricket	NA - NA	1% 0.2	8% NA -	NA 15% 2.4	92%
Others	2.6 NA	13% 4,9	NA 22% 1.5	NA 6% 1.0	10.0
Total	54.4	36.6	6.9	15.8	~115bn\$

The core of the soccer business is growing double digits annually (1/2)

Europe







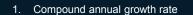
The core of the soccer business is growing double digits annually (2/2)

Rest of the world

(%) Forecasted CAGR¹ for total soccer revenue in 2017-22 period

2018-2019 Revenues in soccer per country and league, M\$

<u></u>	Brazilian League	BRITANIA BAGO	1.486	(+5%)
<u></u>	Chinese Super League	W.	1.341	(+8%)
⊕	MLS		1.128	(+9%)
•	J1 League	**************************************	1.071	(+4%)
<u>-</u>	Russian Premier League	2 274	806	(+12%)
<u>@</u>	Süper Lig	SuperLig	727	(+31%)
	K League		585	(+6%)



Source: McKinsey Global Media Report, Turkish Press



Women Soccer Audience is rocketing up in Brazil...

FIFA Women's World Cup France 2019

60 M people¹

Watched the Brazil vs France, in quarter finals match of Women's World Cup 2019 - 35mi people only in Brazil

20 M Brazilians²

Watched the Women's World Cup 2019 decision (match US vs The Netherlands)

... with Brazilian women players popularity on the rise

2019 Women's World Cup Social Media Engagement

Name	Country	Number of Posts	Total engagement ¹ (Millions)	Total Followers (Millions)	Follower Growth Rate %
Marta	Brazil	24	6.4	2.8	74%
Megan Rapinoe	⊕ US	82	9.0	2.0	53%
Lieke Martens	Holland	33	2.5	1.2	20%
Julie Ertz	⊕ US	7	0.8	1.2	18%
Alex Morgan	⊕ US	83	19.1	14.7	15%
Christen Press	⊕ US	43	1.4	1.2	13%
Kelley O'Hara	⊕ US	25	0.9	1.2	12%
Tobin Heath	⊕ US	5	0.2	1.1	11%
Carli Lloyd	⊕ US	47	2.0	2.6	7%
Ali Krieger	≝ US	55	1.4	1.8	7%

¹ Interactions and video views

Source: Nielsen Sports Women's Sports Research 2018

Positive outlook, with more opportunities than challenges ahead

Non-exhaustive

Opportunities

- Structure of competition to unlock entertainment value (+ international, + top matches), while reinforcing competition and development
- Paradigm shifts with soccer leveraging adjacencies
 (and not the opposite) e.g., TV rights, membership models, etc.
- Digital allowing for further enhancement of fan base engagement and monetization
- Protection mechanisms will reduce uncertainty and attract more private investment
- First development of more professional / sophisticated standards in business and sports management

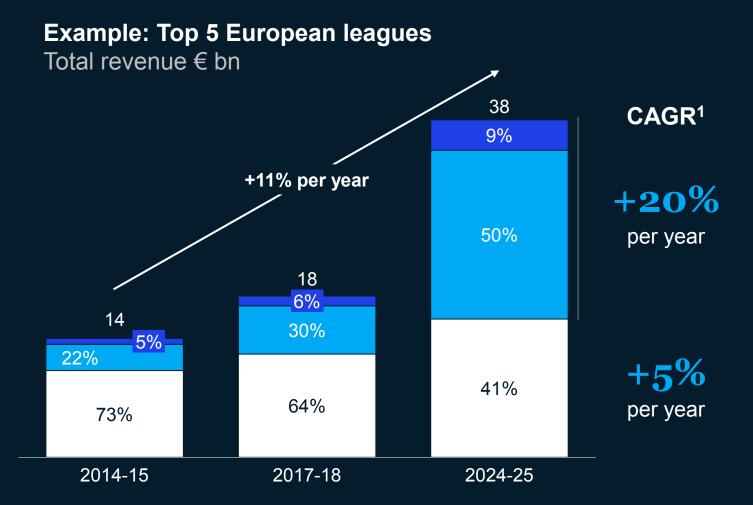
Challenges

- Changing consumer behaviors puts pressure on the game's evolution (audience fragmentation, alternative entertainment offers, ...)
- "Winner-takes-all" dynamics hard to fight back among confederations, leagues / nations and clubs
 - Soccer ecosystem requires a balanced funding of lossmakers – smaller leagues, secondary leagues, women, youth / development, etc.

Double-digit growth can be sustained for a long period of time Leading institutions have the responsibility to fix the basics and build on such positive momentum

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Globalization of premium source towards big export markets (China, USA, etc.)



- Domestic markets
- Domestic International markets (export)
- International competitions

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Example: paradigm shift for premium soccer broadcasting rights

Conceptual

From the "eye balls"...

Guiding principle

"Platform neutrality" – selling exclusive rights to one selected partner by geography

Packaging

Limited, given that leading FTA or pay-TV providers are positioned as the "natural owner" for all packages

Monetization

Typically limited to the value of the "eye balls" (audiences) under an advertising (FTA) or subscription (pay-TV) business model

Reach

Often limited to drive the "exclusivity" value in adjacent businesses – e.g., foster premium services



"Universal distribution" – selling the right to broadcast to all distribution platforms at a fixed price (proportional to size of client base)

Opportunity to segregate / overlap specific packages (e.g., 1 match per week) to specific platforms (e.g., internet player)

Incorporates the value of adjacent businesses (beyond the eye balls): churn reduction, ARPU protection and market share gains

Maximized by combining – and even overlapping – all distribution platforms (all types and all players)

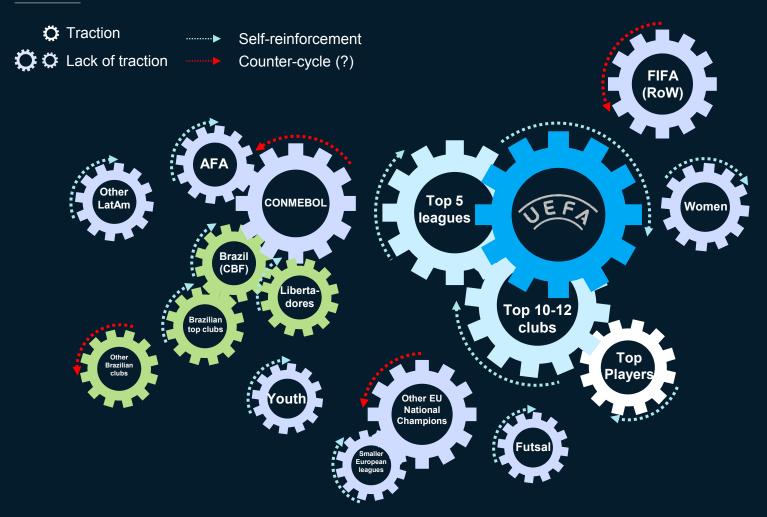


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Despite double-digit growth, the soccer ecosystem is not a fairy tale beyond UEFA and the top 3-5 European leagues

"Forces at work" in soccer eco-system

Outside in



Open conflict over sports calendar: FIFA vs. UEFA vs. Leagues?

Growing concentration in top leagues threatens soccer footprint?

Top clubs claiming their fair share of value?

Top players become global brands competing against club brands?

Other European and RoW national champions lagging behind?

Smaller leagues in a vicious "winner-takes-all" cycle?

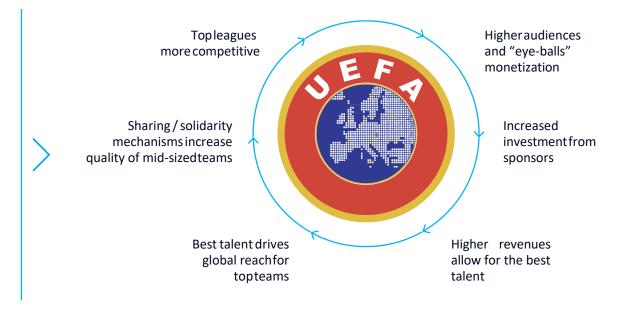
Other confederations without a strategy to react?

Financial fair-play regulations reinforced revenue concentration in top leagues

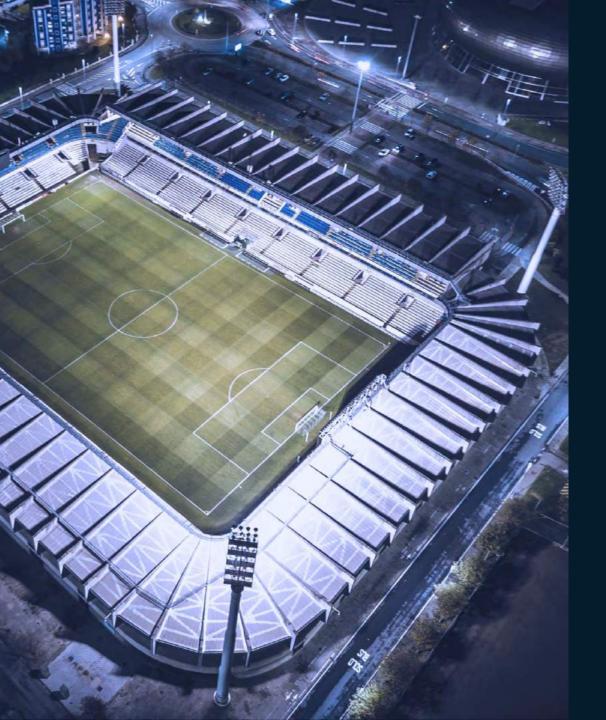
Financial fair-play regulations empowered a "winner takes all" dynamic...

Financial fair-play regulations introduced more discipline in the management of clubs, promoting their long-term sustainability

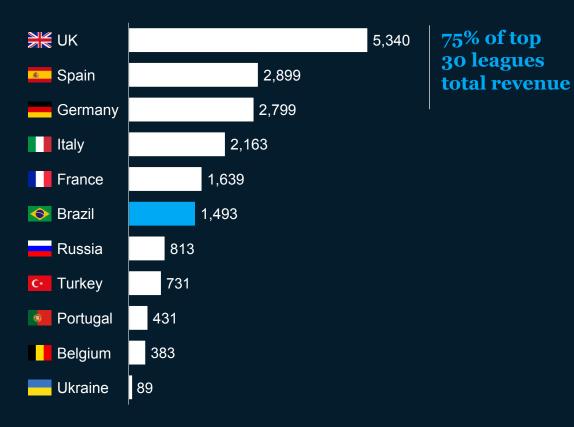
On the other hand, it limited squad investment in proportion to the revenue generated by the club/ league (per season, clubs can only spend €5 Mn more that what they earn; €30 Mn if covered by the club owner or related party)







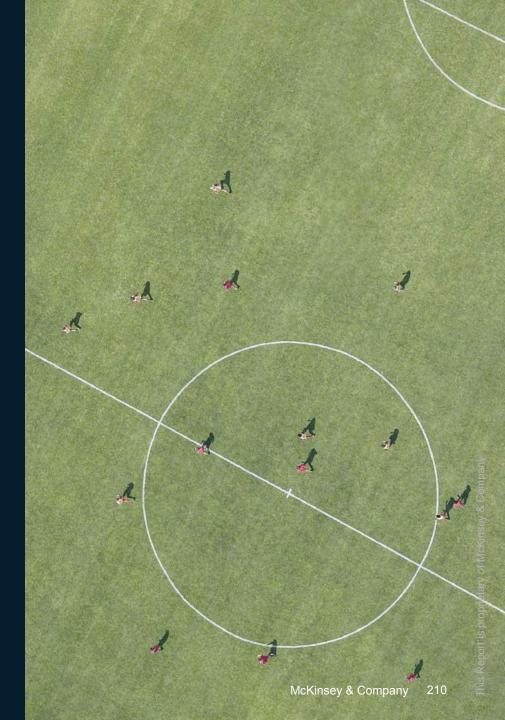
... with high concentration of revenues in top 5 leagues Leagues total revenue (Mn €) in 2017



Brazilian soccer is uniquely positioned to increase its relevance in the global arena

SUPPLY... Soccer **UEFA Brazil** Argentina





Open conflict over sports calendar as the key lever to unlock and allocate value

Adjusted timing of the tournament would not conflict with European regular calendar...

"The main reason why the 2021 Club World Cup is likely to be a success (...) is the timing of the tournament. The current Club World Cup has to compete with the European soccer season." Forbes, October 2019

... record breaking prize money is likely to drive engagement from top clubs... "After the plans were presented to top Premier League and European clubs in April and May, promising more than £100Mn to each participating club (...) other clubs were positively interested."

The Guardian, October 2018

New format of Club World Cup creates space for non-European top clubs to compete on a global level

... creating a favorable environment for non-European teams to compete on a global level

"FIFA believes the proposed 24team Club World Cup would promote and grow football for the benefit of all confederations, member associations, leagues, clubs and fans."

Associated Press, March 2019



New structure of competition is likely to unlock value and drive major changes in the soccer business

From...



To...



UEFA's financial fair play led to a concentration of money in the top 3-5 leagues

Top brands of top leagues fight for UCL and become global brands

Broadcasting rights of local leagues with global brands with international reach further feeding this vicious / virtuous cycle

Rebalance towards international competitions likely to dilute structural advantage of top leagues (particularly EPL, La Liga)

Soccer will become a play of 35-40 global brands with a local essence (those playing UCL and World Champions League)

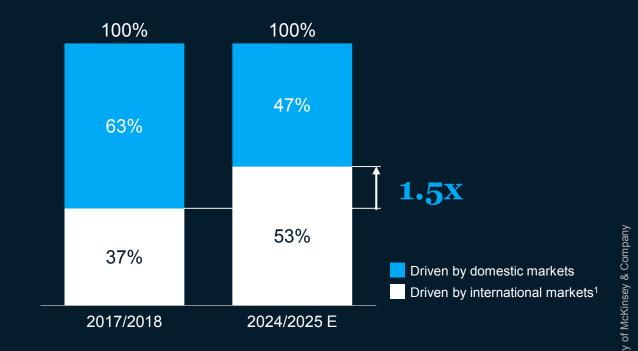
Promotion / relegation from within mechanisms (WCL vs. UCL vs. Europe league) will progressively "take-over" domestic leagues

Libertadores

Participation in international (global) competitions is a fundamental economic lever



Top 30 leagues total revenue, by market (domestic vs. international), Top 30 leagues



¹ UEFA, Domestic TV rights sold internationally and Ticketing of international competitions considered International Revenue. Remaining Ticketing and Domestic TV considered Domestic. Sponsors, Merchandising and other revenue split according to the previously mentioned allocated revenues

addressed be Key questions

Key questions to be addressed

Non-exhaustive

01.

Articulation between domestic games and international games

competition structures

Competitions

structure

- Total number of games
- Scheduling to optimize trade-off between matchday vs. TV rights vs. betting
- Relegation / promotion mechanisms (playoffs?)

02.

Talent development

Do countries have the required knowledge and infrastructure to develop talent (e.g., players, coaches, referees?)

Are the correct incentives in place?

- Players developed locally
- Players **developed** in the club

03.

Regulatory and tax framework

How should the tax framework evolve (in each country) to further promote soccer

How can the regulatory **environment** further evolve to develop football and attract private investment? 04.

Football monetization

How can CBF/clubs increase engagement?

How can CBF/clubs further monetize fans? (e.g., TV rights, memberships, matchday) 05.

Solidarity mechanisms

What is the right sharing level to ensure soccer ecosystem's

> sustainability (e.g., between countries, between teams, etc.)

Which revenues should be shared (e.g., TV? International competitors? Players?)

06.

Competition

What is the competition stage for non-European global brands?

How to revise intercontinental sharing / solidarity mechanisms (e.g., player transfers)?

07.

Private investment

Which investors to target?

What equity story to communicate? Who should organize the roadshow to attract private/external investment (across all countries)?

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20 (not so known) inspiring Brazilians in their 20's

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Contributors: Lucas Poglia, Fellipe Mendes, Yuri Alves, Felipe Santos, Marcela Boffelli



A group of young Brazilians stand out based on their inspiring initiatives

Youth have a key role in the development of the country. Guided by their courage to change and pursuing their dreams, they have changed our society in many ways. Here, we would like to prestige some of them who have been inspiring us all.

A group of McKinsey consultants engaged with technology and social impact activities have put together several young leaders whose projects lead Brazil towards a brighter future. This is not an exhaustive list and we know that there are lots of initiatives and people committed to make Brazil a better place!

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20 inspiring people in their twenties



Amanda Oliveira

Founder and CEO of Instituto As Valquírias

Instituto As Valquírias is devoted to creating opportunities to children, young people and the elderly who are at risk of social and emotional vulnerability. It is based on Musical Band, the Social Institute and the Social Impact Business.

Amanda studied Marketing at ESPM



André Ferraz

CEO and Founder of InLoco

In Loco has created a solution for mobile apps that allows direct push notifications based on target location. Its geo localization technology is 30 times more precise than GPS, which improves consumer engagement by sending contextual and relevant push notifications anonymously authenticated at the right time and the right place.

André holds a B.Sc. in Computer Science from UFPE

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20 inspiring people in their twenties



Andre Georges

Founder and CEO of Soccer for a Cause

Football for a cause sell items used in official matches and convert the funds into social actions focused on education. They get the items by partnering with professional players and soccer teams

André studied Naval Engineering at UFRJ and took part in a double degree program in France



Anna Luisa Beserra

Creator of the Aqualuz Project

Aqualuz offers a filtering system to purify rainwater exclusively with solar energy, with a gauge device that changes color when the water is safe to consume

The project is focused in the semi-arid region, where a larger portion of the population does not have access to clean water

Anna studied Biotechnology at the Federal University of Bahia

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20 inspiring people in their twenties



César Filho

Founder and CEO of Wecancer

Wecancer is an app that helpscancer cancer patients monitor their treatment when they are out of the doctor's sight. The patient records their symptoms on the app on a daily basis, that are transmitted real time to the doctors

Wecancer is free to the patients – their revenues come from hospitals who pay to use the software

He studied Biological Science at UFES



Felipe Neves

Founder and President of Projeto Constituição na Escola

Projeto Constituição na Escola is a civic education NGO that provides lectures about law, civics and politics to public school students clarifying rights and rules that they have as Brazilian citizens

Felipe studied law at Pontifícia Universidade Católica de São Paulo (PUC-SP) and received the Master of Laws degree from Stanford University

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20 inspiring people in their twenties



Fernando Rangel

Co-founder and Director of the NGO Refúgio

Refúgio343 is an NGO that supports refugee families that try to move to Brazil. The NGO uses crowdsourced funds to pay for the families integration costs, as well as the living costs until the families get settled

Fernando studied at Uni BH, PUC and IBMEC



João Henrique Vogel

Co-founder and CFO of Cuidas (with Deborah Alves and Matheus Silva)

Cuidas is a healthcare startup that brings health to the workplace: it connects companies with primary care doctors

The company can request for assistance through an app, and the doctors go to the company, to attend the workers at their workplace

João studied at Harvard College

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20 inspiring people in their twenties



Johnatan Highlander

URA Leader, One Robot for Student initiative

One Robot for Student initiative has increased the access to robots for educational utilization: the method with 3D print has reduced the cost of robots per student from BRL 3.000 to BRL 120

Johnathan studies Mechanical Engineering at UFRN



Laís Higashi

President of Litro de Luz Brazil

Litro de Luz promotes solar lighting solutions using simple materials as plastic bottle and PVC pipes to communities with no access to electricity or street illumination

Laís studied business management at FEA-USP and master in Management at KEDGE Business School

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Louise Ferreira

Founder and CEO of Prep Change

Prep Change is a platform that helps young people access top schools abroad, by providing structured mentoring through a 4-month mentorship program

Louise studied Edification at ITB



Marco Aurélio Gomes

CEO of Kea Funds

Blockchain-focused Venture Capital fund founded in 2017, first of its kind in Brazil. Kea is currently developing a digital bank to provide financial services to customers and suppliers of large companies. Among the Bank's applications, there is a tool that allows tokenization of receivables through Blockchain

Marco studied Business Administration at FGV

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Matheus Cardoso

Founder and CEO of Moradigna

Moradigna is a company focused on ensuring better housing for all. It provides favorable conditions for people from lowincome areas to make house reforms at low cost

He studied Civil Engineering at Mackenzie



Patrícia Honorato

Scientist – works on projects to save wildlife

She supports projects to combat eutrophication – eutrophication causes oxygen reduction in rivers and lakes, leading to the death of animals

Patrícia gathers funds for her projects through crowdfunding on the internet

Patrícia studied Design Graphic at SENAI

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Pedro Nascimento

CEO at Qura

Qura Publisher of MIT Sloan Management Review Brazil and HSM Management, and Partner at Grupo Anga

Grupo Anga is a holding company that undertakes conscious businesses that generate positive impact, transforming companies in a conscious way

Pedro studied Business Administration at UFRJ



Rafaella de Bona Gonçalves

Idealizer of Maria project

Maria project aims to provide access to sanitary products for all women, by creating a low-cost product that can be adapted to the street reality and be distributed by the government

Maria is an absorbent adapting to the conditions of homeless people, made of banana fiber and other biodegradable material

Rafaella studies Product Design at UFPR

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Ricardo Guimarães

Founder and CEO of BitCapital

BitCapital is an Open Banking platform based on Stellar's blockchain and Google Cloud. It is a infrastructure provider, enabling other companies to develop their own financial products through their APIs in a simple, secure and fast way

BitCapital's main services are: Core Banking software for SCD, Banking as a Service for Digital Accounts and Sub Acquires

Ricardo studied Business Administration at Insper



Taciana Pereira

VP of Life Science Solutions at Allevi

Taciana is responsible for researches on development of 3D bio printed organs

Cheaper and accessible is the purpose of Taciana's researches on 3D bio printed organ. Pursuing this goal, she also has the objective of encouraging research in Brazil and reduce transplants lines

Taciana studied Bioengineering at Harvard University and received the RAD Awards nomination as Scientist of the Year

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20 inspiring people in their twenties



Taynara Alves

Creator of "Pure and Good" product

Pure and Good is a product that removes food pesticides. It is a liquid solution for washing vegetables and fruits that removes chemical substances, contrary to vinegar and sodium bicarbonate (commonly used to wash these foods in Brazil)

Taynara studied Business Management and innovation at Fatec



Victor Haruo

Partner of Inspirando Jovens de Sucesso

Inspirando Jovens de Sucesso is a network focused in developing an entrepreneurial mindset in young people from low-income families

The initiative offers a network of knowledge, opportunities and connections from and to young people, with lessons usually not taught in school

Victor studied Business Administration at Ufscar, and did a course of Innovation and Strategy at HBS

Brazil is stepping into 2020 with an outlook for growth that, while it may not be very daring, is based on far better economic pillars, delivering excellent expectations for business development, improved consumer spending and better quality of life for the population. The best of Brazil is its people, Brazilians are fighters and are about to turn this very challenging page.

Artur Grynbaum

President and CEO Grupo Boticario

Access to the Internet and new technologies in Brazil grows year by year. About 70% of all homes in Brazil are connected, a number that reaches 85% among the younger population. In 2020, technology and education will once again accelerate the nation's social and economic development in Brazil. The qualified and ethical use of exponential technologies could put Brazil as a leader of a global movement for digital empowerment, contributing to the humanization of the 4th Industrial Revolution.

Rodrigo Baggio

Co-Founder and President Recode (former CDI) and Tendrel

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McKinsey in Brazil

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Partners

Years in Brazil

A global management consulting firm, deeply committed to helping institutions in the private, public, and social sectors achieve lasting success. For more than 90 years, our primary objective has been to serve as our clients' most trusted external advisor. With consultants in 133 cities in 66 countries, across industries and functions, we bring unparalleled expertise to clients anywhere in the world.

We work closely with teams at all levels of an organization to shape winning strategies, mobilize for change, build capabilities, and drive successful execution



A pessimist sees the difficulty in every opportunity; an optimist sees the opportunity in every difficulty

Unknown author

Be the change you want to see in the world

Mahatma Gandhi

