Brazil 2020
Opportunity Tree
There is an old saying that in Brazil even the past is unpredictable. And that is why the objective of this report is not to predict the future.

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.
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
Disclaimer

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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

1. The endless possibilities enabled by cheaper and cleaner energy, Kevin Nobels, Sergio Canova Marcelo Aude

2. Brazil’s key role to feed the world, Nelson Ferreira, Mikael Djanian

3. Consumer centricity at its peak, Bruno Furtado, Luiz Lima

4. The multi-billion market for innovation and start-ups, Yran Dias, Roberto Marchi, Paula Castilho, Jordan Lombardi

5. The financial market is reinventing itself, Alexandre Sawaya, Elias Goraieb

6. The reshaping of Brazil’s infrastructure is likely to become a reality, Roberto Fantoni, João Guilraum, João Pedro Branco

7. Insurance: Brazil’s financial-services gem, Bruno Batista, João Bueno

8. The power of the engineering and tech talent pool, Heloisa Callegaro, Henrique Ceotto, Erick Colares

9. The potential of increasing productivity to improve quality of social and public services, Vijay Gosula, Pepe Cafferata, Rafael Siqueira, Aluizio Goncalves

10. 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

12. The new media landscape: opportunities for advertisers, Marina Cigarini, Cristiano Fontes, Marco Dyodi

13. Tech-enabled productivity should not wait, Marina Cigarini, Paulo Fernandes, Wagner Gramigna, Lucas Pinz

14. Informal and distance learning are transforming the Education landscape in Brazil, Nicola Calicchio, Marcus Frank

15. The next wave of disruptions in the healthcare industry, Tracy Francis, Monica Szwarcwald, Mauricio Cepeda

16. Brazilian workers want to innovate and feel ownership of the business, João Pedro Branco, Anita Baggio

17. São Paulo as a global hub, Nicola Calicchio, Henrique Teixeira

18. Consumers call for action in sustainability, Fernanda Hoefel, Carla Vorlander

19. The multiple (and not so obvious) opportunities in consumer growth, Jose Carlucco, Beatriz Federico

20. Boosting the growth of small and mid-sized cities in Brazil, harnessing fragmented trade, Fernanda Hoefel, Carla Vorlander

21. The values of Brazil’s new generation are a source of inspiration, Tracy Francis, Fernanda Hoefel, Kevin Nobels, Fernanda Mayol

22. The underrated power of Brazilian soccer, Bruno Furtado, Pedro Mendorça, Luís Cerqueira

23. 20 (not so known) inspiring Brazilians in their 20’s, Massimo Mazza, Marina Mansur, Paulo Cunha, Luisa Pereira
At a time when disruption is impacting the world and historic trading relationships are being impacted by geopolitics and technology, Brazil stands out as a country where opportunities for growth appear compelling and there to be seized.

Kevin Sneader
Global Managing Partner
McKinsey & Company
The endless possibilities enabled by cheaper and cleaner energy

Kevin Nobels
Partner
kevin_nobels@mckinsey.com

Sergio Canova
Partner
sergio_canova@mckinsey.com

Marcelo Aude
Associate Partner
marcelo_aude@mckinsey.com

Contributors: Pedro Peixoto, Bruno Silva, Gabriel Moreira
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 Power System Regulator (ANEEL) has proposed an 11% tariff reduction over the next 4 years.

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

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.

<table>
<thead>
<tr>
<th>Source in auctions(^1)</th>
<th>Average price negotiated by source in auctions BRL/MWh, Base prices Aug/2019</th>
<th>CAGR(^2)</th>
<th>Installed capacity GW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solar</td>
<td>282 80</td>
<td>-22%</td>
<td>134</td>
</tr>
<tr>
<td>Wind</td>
<td>178 97</td>
<td>-11%</td>
<td>13</td>
</tr>
<tr>
<td>Natural gas</td>
<td>288 189</td>
<td>-8%</td>
<td>12</td>
</tr>
<tr>
<td>Biomass</td>
<td>261 187</td>
<td>-6%</td>
<td>5</td>
</tr>
<tr>
<td>Small hydroelectric (PCH)</td>
<td>209 224</td>
<td>1%</td>
<td>15</td>
</tr>
<tr>
<td>Hydroelectric</td>
<td>160 157</td>
<td>0%</td>
<td>15</td>
</tr>
</tbody>
</table>

| Growth 2019-2029 %       | | | |
|--------------------------|-------------------|-------------------|
| Solar                    | 18%               | 11%               |
| Wind                     | 11%               | 11%               |
| Natural gas              | 2%                | 4%                |
| Biomass                  | 2%                | 0%                |
| Small hydroelectric (PCH)| 0%                | -6%               |
| Hydroelectric            |                   |                   |

- 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

Source: CCEE (Consolidated auction results - base August/2019), ANEEL (Power Generation database), EPE (10-year plan 2029)
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

Source: ANP, CNPE Resolution 16/2019
National Power System Regulator (ANEEL) has proposed an 11% tariff reduction over the next 4 years

<table>
<thead>
<tr>
<th>Tariff reduction estimates by component</th>
<th>Overview - Tariff reduction agenda</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td></td>
</tr>
<tr>
<td>Generation</td>
<td>• Reduction in expensive thermal power generation costs</td>
</tr>
<tr>
<td></td>
<td>— Costs increase in 2012-2018 due to major draught in Brazil</td>
</tr>
<tr>
<td></td>
<td>— New, cheaper capacity is gradually being connected to the grid</td>
</tr>
<tr>
<td></td>
<td>— Remote areas, historically dependent on expensive fossil fuels, are gradually being connected to grid, thus benefiting from cheaper renewable energy</td>
</tr>
<tr>
<td></td>
<td>— Litigation between expensive thermal power plants and government shall be resolved</td>
</tr>
<tr>
<td>Transmission &amp; Distribution</td>
<td>• End of the financial support given to power distribution companies during the 2014 draught shall reduce tariffs</td>
</tr>
<tr>
<td>Subsidies</td>
<td>• Tariff adjustment in new transmission installations</td>
</tr>
<tr>
<td>Total</td>
<td>• Streamlining of tariff subsidies related to rural producers, water &amp; sewage companies and social tariffs depend on Federal Government support and may generate additional savings in electricity tariffs</td>
</tr>
</tbody>
</table>

Source: ANEEL (Presentation to Congress’ Infrastructure Services Committee in May 2019)
Brazil plans to invest ~USD 120 Bn in transmission and distribution capacity until 2029

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

Source: EPE (2029 10-year plan), ANEEL (BIG – Power Generation database)
Proposed measures will improve Brazil's position in the tariff ranking... Industrial energy tariffs after the 11% reduction
USD cents/kWh

... 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
All indications point to 2020 being a year of gradual economic recovery. The adjustments and reforms required for economic growth are moving, such as the pension reform and Congress' efforts for a tax reform. As a result, some planned investments should start flowing in, and increased employment should drive economic growth.

Luiza Helena Trajano
Chairwoman of the Board of Directors
Magazine Luiza
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.

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.

André Clark
President and CEO
Siemens Brazil

Mario Lindenhayn
Head of Country
BP Brazil
Brazil’s key role to feed the world

Nelson Ferreira
Senior Partner
nelson_ferreira@mckinsey.com

Mikael Djanian
Associate Partner
mikael_djanian@mckinsey.com

Contributors: Pedro Peixoto, Andre Coutinho
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

Source: FAO-OECD, McKinsey analysis
Brazil is likely to export almost half of seaborne soybean by 2027, while China is expected to import ~2/3 of seaborne soybean that same year.

Source: FAO-OECD, McKinsey analysis
In general, countries stabilize sugar consumption at lower level of income than meat consumption

Sugar and protein consumption per capita
Kg per person per year

- 90% of sugar stabilization level
- 90% of protein stabilization level

Source: FAO-OECD Agricultural outlook (2017-2026); World Bank – IDP per capita 2018; McKinsey analysis
Brazil has experienced unparalleled consistent growth in grain productivity

Evolution of soybean productivity in Brazil

Source: CONAB; McKinsey analysis

Kg/HA


2.1% p.y.

This Report is proprietary of McKinsey & Company
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

Source: Radar AgTech 2019
Low interest rates and credit availability will foster long-term investment

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

1. Consumer Goods Forum

Source: WWF, Ag News, Mongabay
New certification Schemes are expected to emerge along the value chain

Grain and oilseed companies
- Improved brand positioning, go-to-market strategy and revenue model

Food and consumer goods
- Increased relevance for sustainability agenda

Farmers
- Access to restricted markets

End consumers
- Traceability of origin of consumption products

Source: WWF, Ag News, Mongabay
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
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
São Martinho SA

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
BRF
Consumer centricity at its peak

Bruno Furtado
Senior Partner
bruno_furtado@mckinsey.com

Luiz Lima
Associate Partner
luiz_lima@mckinsey.com

Contributors: Renato Andrade, Carlos Fucci, Priscilla Licht
Consumer centricity is a huge opportunity for Brazilian companies

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 customer-centric 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.

To find out more use the QR code to access McKinsey – The future of personalization.
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 class\(^1\) in 2018, up from 56% in 2015
- **24-hour** instant QR code payment pilot will be launched by the Central Bank in 2020

\(^1\) Social class C

Source: We Are Social – Digital in 2019, press clippings, Cetic.br TIC DOMICÍLIOS 2018
Tech startups are disrupting several industry verticals through a consumer-centric approach

**Transportation**
- Uber

**Delivery**
- Uber Eats
- ifood
- Loggi
- Rappi
  - One-stop-shop **allowing consumers to order almost anything**, even cash, seamlessly

**Health and Education**
- arco
- dr.c
- Gympass
  - Allows companies to provide **nationwide access to gyms for its employees**

**FinTech**
- neon
- inter
- pagseguro
- magnetis
- Nubank
  - Nubank’s customers saved **more than USD 1.1 billion in fees** over 6 years

**Others**
- hotmart
- CargoX
- QuitoCماذا
- SAIN
- Reduced time spent to rent a property to **less than half the time** of traditional channels

Source: Press clippings
Companies with very high customer satisfaction scores outperform their peers

Revenue per customer by satisfaction score

Source: USA Banking Industry data; McKinsey CX Squad

S. Jobs, former CEO of Apple

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

Mission statement

…to be Earth’s most customer-centric company…”

L. Page and S. Brin, Founders

Focus on the user and all else will follow.“

L. Page and S. Brin, Founders

This Report is proprietary of McKinsey & Company
Incumbents are reacting to sustain and engage their customers

<table>
<thead>
<tr>
<th>From…</th>
<th>…To</th>
</tr>
</thead>
</table>
| ![Itaú](image)  
**Traditional Banking value proposition** | **Digital native banking offer and experience**
Free online payments for clients, unbanked people and non-Itaú account holders |
| ![Nike](image)  
**Consumer connection primarily at moment of purchase (offline and online)** | “Membership” mindset and connection to engage consumers continuously, based on their preferences and passions (e.g., SNKRS for collectors; NRC for runners) |
| ![PortoSeguro](image)  
**Very low frequency – car insurance purchased 1x per year** | Leveraging telematics to understand customer behavior and offer discounts
Offer additional products and services to increase frequency such as electrician service and credit card |
| ![GPA](image)  
**High frequency grocery segment, looking to increase engagement and loyalty** | Offers personalized discounts through the app.
Partnered with Raia Drogasil to build the coalition program ‘Stix’ to increase loyalty and cross-sell |

Source: Press clippings
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**

- **2014:** 0%
- **2016:** +47%
- **2017:** +75%
- **2018:**

\[\text{Customer Acquisition Cost (CAC) relative to year}\]

\[\text{+75\%}\]

\[\text{Source: 2018 CAC Study Profitwell, Hubspot Customer Acquisition Study}\]

... 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)

**Source:** 2018 CAC Study Profitwell, Hubspot Customer Acquisition Study
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

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

**Partner loyalty programs**
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 accordingly

**Dietary preferences & wellness**
Company knows “Ana” is a vegan so it adds almond milk to her smoothie

**Smooth ordering experience**
Improves order interface and flow, automatically based on time of day and “Ana’s” habits
“Segment of one”: businesses leverage data across touchpoints to gain unprecedented insights

Whether “Ana” is…

- sitting on her couch browsing social media
- walking her dog in the park
- or in a cab on her way to the airport

Businesses are collecting data to deliver a better and personalized user experience

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

Other examples

- **Amazon**: Personalizes every user’s homepage - generates 10-30% added revenues
- **Netflix**: 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

Source: Press clippings, McKinsey analysis
The customer-centric opportunity is massive – but there are imperatives to capture the value at stake

1. **Offer higher frequency services** that fulfill customer needs across multiple aspects of their daily life

2. **Monetize the user base**, driving customers from low to high value services by working as an innovation powerhouse

3. **Structure internally** to enable end-to-end management of customer journey and KPIs – even if it means self-disrupting

4. Build the required user-centric and tech capabilities to truly deliver an **unparalleled user experience**

Source: McKinsey analysis
I’m optimistic about life and optimistic about Brazil, always. The unprecedented liberal shock in progress has already achieved two very difficult things: approve social security reform and lower benchmark interest rates and real interest rates to the lowest levels in history, which will bring positive effects yet to be seen. There are a lot of difficulties, but a lot of progress in the economy, which in 2020 is expected to grow twice as much than in 2019.

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 long-term vision for the nation.

Cesar Carvalho
Co-Founder and Global CEO
Gympass

We are living in a positive era in Brazil with historically low benchmark 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

Yran Dias  
Senior Partner  
yran_dias@mckinsey.com

Paula Castilho  
Partner  
paula_castilho@mckinsey.com

Roberto Marchi  
Senior Partner  
roberto_marchi@mckinsey.com

Jordan Lombardi  
Partner  
jordan_lombardi@mckinsey.com

Contributors: Priscilla Licht, Marina Xandó
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
70% of Brazil’s population is connected to the internet

<table>
<thead>
<tr>
<th>Country</th>
<th>Internet Penetration % Jan 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>98</td>
</tr>
<tr>
<td>United States</td>
<td>95</td>
</tr>
<tr>
<td>South Korea</td>
<td>95</td>
</tr>
<tr>
<td>Japan</td>
<td>94</td>
</tr>
<tr>
<td>Malaysia</td>
<td>80</td>
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<tr>
<td>Turkey</td>
<td>72</td>
</tr>
<tr>
<td>Brazil</td>
<td>70</td>
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<tr>
<td>Mexico</td>
<td>67</td>
</tr>
<tr>
<td>Morocco</td>
<td>62</td>
</tr>
<tr>
<td>Global Average</td>
<td>57</td>
</tr>
<tr>
<td>China</td>
<td>57</td>
</tr>
<tr>
<td>Indonesia</td>
<td>56</td>
</tr>
<tr>
<td>South Africa</td>
<td>54</td>
</tr>
<tr>
<td>India</td>
<td>41</td>
</tr>
</tbody>
</table>

Source: We Are Social – Digital in 2019

Internet access has grown significantly this decade

Brazil Internet penetration growth

% of total population

Source: Cetic.br TIC DOMICÍLIOS 2018 – Main results
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

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

Source: We Are Social – Digital in 2019
The connectivity of the lower income class is increasing.

Internet access growth by social class
% households in 2018

- Class A: 99
- Class B: 94
- Class C: 76
- Class D/E: 40

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

Source: Cetic.br TIC DOMICÍLIOS 2018 – Main results
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.

- **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.

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

- **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.

- **40.8 M** internet users used taxi or transportation apps in 2018.

- **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.

Source: Cetic.br TIC DOMICÍLIOS 2018; Detran.sp.gov.br; Globalwebindex Online TV Report and Social Report; Folha de SP – Boom de delivery por app; Statista – Key figures on food delivery app iFood 2019; G1 - Microempreendedores formais; Prior Data, Nielsen Global New Product Innovation Survey 2015.
The Coffee – Enhanced in-store 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

Source: https://cubo.network, the coffee website

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
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.

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

**Entrepreneur**

en·tre·pre·neur/ˌäntrəprəˈnər 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.

### % of workforce aged 18-64 who are entrepreneurs

<table>
<thead>
<tr>
<th>Year</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>21%</td>
</tr>
<tr>
<td>2010</td>
<td>32%</td>
</tr>
<tr>
<td>2015</td>
<td>39%</td>
</tr>
</tbody>
</table>

### Most common activities

- **Restaurants**: 14%
- **Apparel**: 9%
- **Catering**: 7%
- **Auto Mechanics**: 7%
- **Beauty Saloon**: 5%
- **Snacks**: 5%
- **Cosmetics**: 3%

Source: McKinsey Digital Report

This Report is proprietary of McKinsey & Company
Venture funding in Brazil exploded in 2018 to US$1.3 Billion – CAGR\(^1\) +40% p.y.

VC Investment into Brazilian Startups

\(\text{USD Billions}\)

\[\begin{array}{cccccc}
\text{Year} & 2013 & 2014 & 2015 & 2016 & 2017 & 2018 \\
\text{Investment} & 0.2 & 0.4 & 0.5 & 0.3 & 0.9 & 1.3 \\
\end{array}\]

+40% p.y.

\(~70\%\) of all venture money raised in Latin America

Source: LAVCA, We Are Social – Digital in 2019

The Brazilian start-up scenario

\(>10,000\) startups

\(>30k+\) jobs created
With its first unicorns, Brazil joined the rank of leading countries

Source: CBinsights Unicorn Ranking, Crunchbase, LAVCA (2018)

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
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

Source: Fintech Deep Dive 2018 survey; FEBRABAN
Low interest and a stable economy are major levers to foster entrepreneurship, 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.

2020 will be a year of great 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
The financial market is reinventing itself

Alexandre Sawaya
Senior Partner
alexandre_sawaya@mckinsey.com

Elias Goraieb
Partner
elias_goraieb@mckinsey.com

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

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average multiples</td>
<td>0.9x</td>
<td>1.4x</td>
</tr>
</tbody>
</table>

Banks are increasing their liquidity

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>LTD Ratio, %</td>
<td>155%</td>
<td>127%</td>
</tr>
</tbody>
</table>

Productivity continues to improve

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost/Asset Ratio, %</td>
<td>3.2%</td>
<td>3.0%</td>
</tr>
</tbody>
</table>

1. Loans to deposits

Source: Central Bank; Austin Asis; Capital IQ; bank reports; McKinsey analysis
Benchmark interest rates are at their lowest level ever and should continue for a prolonged period, driving credit demand.

Low interest rates become the new Brazilian reality...

SELIC interest rate, % p.y.

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Retail</th>
<th>Corporate</th>
<th>CAGR, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>2.315</td>
<td>1.152</td>
<td>-6.2%</td>
</tr>
<tr>
<td>2014</td>
<td>2.448</td>
<td>1.277</td>
<td>4.7%</td>
</tr>
<tr>
<td>2015</td>
<td>2.414</td>
<td>1.295</td>
<td>8.8%</td>
</tr>
<tr>
<td>2016</td>
<td>2.094</td>
<td>1.134</td>
<td>13.0%</td>
</tr>
<tr>
<td>2017</td>
<td>2.138</td>
<td>1.221</td>
<td>13.0%</td>
</tr>
<tr>
<td>2018</td>
<td>2.396</td>
<td>1.343</td>
<td>9.2%</td>
</tr>
<tr>
<td>2019</td>
<td>2.668</td>
<td>1.518</td>
<td>13.0%</td>
</tr>
</tbody>
</table>

CAGR\(^1\), %

<table>
<thead>
<tr>
<th>Period</th>
<th>2013-16</th>
<th>2016-18</th>
<th>2018-19</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013-16</td>
<td>-0.5%</td>
<td>8.8%</td>
<td>13.0%</td>
</tr>
<tr>
<td>2016-18</td>
<td>-6.2%</td>
<td>4.7%</td>
<td>9.2%</td>
</tr>
</tbody>
</table>

1. Compound annual growth rate

Source: Central Bank; Tendências; McKinsey analysis
Brazilian banks have been performing better than global peers

Banking ROE
%
2018

<table>
<thead>
<tr>
<th>Region</th>
<th>2018 ROE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>16.5</td>
</tr>
<tr>
<td>LatAm</td>
<td>15.5</td>
</tr>
<tr>
<td>Middle East</td>
<td>14.9</td>
</tr>
<tr>
<td>North America</td>
<td>13.5</td>
</tr>
<tr>
<td>Emerging Asia</td>
<td>10.4</td>
</tr>
<tr>
<td>Western Europe</td>
<td>5.7</td>
</tr>
</tbody>
</table>

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

Number of individual microentrepreneurs (MEIs) million

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of MEIs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>4.7</td>
</tr>
<tr>
<td>2015</td>
<td>5.7</td>
</tr>
<tr>
<td>2016</td>
<td>6.6</td>
</tr>
<tr>
<td>2017</td>
<td>7.7</td>
</tr>
<tr>
<td>2018</td>
<td>7.7</td>
</tr>
<tr>
<td>Jun/2019</td>
<td>8.6</td>
</tr>
<tr>
<td>2022E</td>
<td>11.0</td>
</tr>
</tbody>
</table>

Source: Sebrae

Relevance of Micro and Small Enterprises

- 61% of total wage paid in Brazil
- 27% of Brazil’s GDP
- 99% 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

<table>
<thead>
<tr>
<th>Year</th>
<th>Equities</th>
<th>Alternatives</th>
<th>Multimarket</th>
<th>Fixed income</th>
<th>% of assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>5</td>
<td>12</td>
<td>64</td>
<td>20</td>
<td>100%</td>
</tr>
<tr>
<td>2016</td>
<td>11</td>
<td>4</td>
<td>66</td>
<td>19</td>
<td>100%</td>
</tr>
<tr>
<td>2017</td>
<td>10</td>
<td>5</td>
<td>64</td>
<td>21</td>
<td>100%</td>
</tr>
<tr>
<td>2018</td>
<td>7</td>
<td>11</td>
<td>62</td>
<td>21</td>
<td>100%</td>
</tr>
</tbody>
</table>

### Average money market interest rates

<table>
<thead>
<tr>
<th>Year</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>13.4%</td>
</tr>
<tr>
<td>2016</td>
<td>14.2%</td>
</tr>
<tr>
<td>2017</td>
<td>10.1%</td>
</tr>
<tr>
<td>2018</td>
<td>6.6%</td>
</tr>
</tbody>
</table>

1. Including ETF (Brazilian market also includes FX funds, FIDC, Real Estate Funds, Equity Funds)
2. Assuming North American asset management allocation

Source: McKinsey Asset Management Growth Cube; ANBIMA; Viewswire; Central Bank; press clippings; McKinsey analysis
FinTechs showing increasing growth in Brazil

Number of FinTechs in Brazil
Units

+96% p.a

54
130
244
332
404

Aug 2015  
Apr 2016  
Feb 2017  
Nov 2017  
Aug 2018  

Source: Press clippings

This Report is proprietary of McKinsey & Company
Brazil enters 2020 accelerating its growth while the rest of the world is slowing down. We will probably have the highest growth among Western economies, coupled with the fact that we will have the lowest cost of capital in our history. In other words, the combination of these factors will place Brazil in the center of attention of global investors as the best investment opportunity in 2020.

Roberto Setubal
Co-Chairman of the Board of Directors
Itaú Unibanco
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

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

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

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

Only 66% of homes are covered by the sewage system.
Brazil still lags in infrastructure quality, and there is huge potential to increase investments to eliminate current gaps

**Historical infrastructure investment**

<table>
<thead>
<tr>
<th>Year</th>
<th>Water &amp; sewage</th>
<th>Electricity</th>
<th>Telecommunications</th>
<th>Transportation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>0.5</td>
<td>1.0</td>
<td>1.0</td>
<td>0.5</td>
</tr>
<tr>
<td>2002</td>
<td>0.5</td>
<td>1.0</td>
<td>1.0</td>
<td>0.5</td>
</tr>
<tr>
<td>2004</td>
<td>0.5</td>
<td>1.0</td>
<td>1.0</td>
<td>0.5</td>
</tr>
<tr>
<td>2006</td>
<td>0.5</td>
<td>1.0</td>
<td>1.0</td>
<td>0.5</td>
</tr>
<tr>
<td>2008</td>
<td>0.5</td>
<td>1.0</td>
<td>1.0</td>
<td>0.5</td>
</tr>
<tr>
<td>2010</td>
<td>0.5</td>
<td>1.0</td>
<td>1.0</td>
<td>0.5</td>
</tr>
<tr>
<td>2012</td>
<td>0.5</td>
<td>1.0</td>
<td>1.0</td>
<td>0.5</td>
</tr>
<tr>
<td>2014</td>
<td>0.5</td>
<td>1.0</td>
<td>1.0</td>
<td>0.5</td>
</tr>
<tr>
<td>2016</td>
<td>0.5</td>
<td>1.0</td>
<td>1.0</td>
<td>0.5</td>
</tr>
</tbody>
</table>

To reach world average, Brazil needs to invest ~4.7% of GDP/year for the next 20 years

Source: ISSA; Tendências; WEF; McKinsey analysis

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

<table>
<thead>
<tr>
<th></th>
<th>US capital markets</th>
<th>Brazil capital markets Scenario A</th>
<th>Brazil capital markets Scenario B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expected inflation (CPI)</td>
<td>1.6</td>
<td>4.0</td>
<td>4.0</td>
</tr>
<tr>
<td>Real interest rate(^1)</td>
<td>-0.5</td>
<td>3.5</td>
<td>3.5</td>
</tr>
<tr>
<td>Sovereign 10-year bond</td>
<td>2.1</td>
<td>7.5</td>
<td>7.5</td>
</tr>
<tr>
<td>Equity risk premium</td>
<td>6.0</td>
<td>3.0</td>
<td>3.6</td>
</tr>
<tr>
<td>Cost of equity implied in current P/E multiple</td>
<td>8.1 (PE: 17.6x Earnings growth: 2.5%)</td>
<td>10.5 (PE: 13.0x Earnings growth: 2.5%)</td>
<td>11.1 (PE: 13.0x Earnings growth: 3.5%)</td>
</tr>
</tbody>
</table>

1. Average 20 years sovereign bond

- 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.

Source: Capital IQ; MCM Consultores; National Treasury; McKinsey analysis.
The need for investment is observed in all segments

**Infrastructure by sector - 2018**

- **Highways**: 93
  - 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**: 27
  - 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**: 71
  - 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**: 83
  - 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**: 112
  - 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, respectively

---

**Comparative index**

**Historical comparison**

- General infrastructure (transportation: 140 countries; sanitation: 200 countries)

**Comparison with peer countries 2017-18**

- Energy
- Roads
- Airports
- Railways
- Ports

---

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

Source: The World Economic Forum; World Bank; ABCR Instituto trata Brasil; press clippings; CNT

This Report is proprietary of McKinsey & Company
Investments could unlock ~BRL152 Bn in value and new routes

Portfolio of federal-concession projects in infrastructure\(^1\) – November/2019

<table>
<thead>
<tr>
<th>Sector</th>
<th>Projects in the pipeline</th>
<th>Expected CAPEX(^2) BRL billion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highways</td>
<td>12</td>
<td>60.7</td>
</tr>
<tr>
<td>Railways</td>
<td>9</td>
<td>59.7</td>
</tr>
<tr>
<td>Energy(^3)</td>
<td>5</td>
<td>19.2</td>
</tr>
<tr>
<td>Ports</td>
<td>19</td>
<td>5.6</td>
</tr>
<tr>
<td>Airports</td>
<td>3</td>
<td>5.0</td>
</tr>
<tr>
<td>Others(^4)</td>
<td>21</td>
<td>1.9</td>
</tr>
</tbody>
</table>

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)
The huge untapped potential of Brazil’s waterways

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

- 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

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

- 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

The timing is appropriate as the economy recovers

Source: CNT - General aspects of inland navigation in Brazil
Brazil has achieved significant progress in sanitation over the last 10 years, and there’s a huge opportunity for sewage systems. 

% of homes with access to treated water  
- 2008: 79%  
- 2018: 86%

% of homes covered by the sewage system  
- 2008: 44%  
- 2018: 66%

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

Source: 2008 and 2018 editions of the PNAD (National Household Sample Survey);
“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

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

Source: www.Brazilian.Report
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**.
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

Source: Regulators; Swiss Re; press clippings; McKinsey analysis
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 Insuretechs, 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

Source: Regulators; press clippings; McKinsey analysis
The insurance industry is expected to continue its consistent growth in the coming years in all business lines.

**Insurance premiums**

<table>
<thead>
<tr>
<th>Business Line</th>
<th>2012</th>
<th>2014</th>
<th>2016</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other P&amp;C</td>
<td>228</td>
<td>288</td>
<td>364</td>
<td>408</td>
</tr>
<tr>
<td>Life</td>
<td>22</td>
<td>28</td>
<td>32</td>
<td>39</td>
</tr>
<tr>
<td>Auto</td>
<td>32</td>
<td>71</td>
<td>105</td>
<td>118</td>
</tr>
<tr>
<td>Pension (VGBL)</td>
<td>60</td>
<td>124</td>
<td>158</td>
<td>197</td>
</tr>
<tr>
<td>Health</td>
<td>95</td>
<td>25</td>
<td>28</td>
<td>33</td>
</tr>
</tbody>
</table>

**CAGR**

- **2012-2018**
  - Other P&C: 9%
  - Life: 10%
  - Auto: 4%
  - Pension (VGBL): 9%
  - Health: 13%

- **2019-2025E**
  - Other P&C: 8-12%
  - Life: 7-10%
  - Auto: 5-8%
  - Pension (VGBL): 8-11%
  - Health: 8-12%

Source: Regulators; McKinsey Global Insurance Pool; McKinsey analysis

1. Compound annual growth rate
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 protect
~20% of GDP

Insurance industry will return
~BRL 320 Bn in paid claims back to society

1. Assuming industry total reserves over the GDP
2. Insurance premiums per capita

Source: Company reports; Regulators; McKinsey analysis
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
The power of the engineering and tech talent pool

Heloisa Callegaro
Partner
heloisa_callegaro@mckinsey.com

Henrique Ceotto
Partner
henrique_ceotto@mckinsey.com

Erick Colares
Expert Associate Partner
erick_colares@mckinsey.com

Contributors: Edson Guimarães, Felippe Ramires, Camila Alves
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 ...

1. Science, Technology, Engineering and Mathematics

Source: INEP 2018
... 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

Source: ABIPT and The Global Competitiveness Report
Brazil’s engineering and tech pool is also accessible, having one of the most competitive costs globally

Average annual compensation for Data Scientists (USD)

- United States: 120,000 USD
- Australia: 110,719 USD
- Israel: 87,500 USD
- Canada: 81,339 USD
- Germany: 80,120 USD
- Netherlands: 75,337 USD
- Japan: 70,132 USD
- United Kingdom: 66,209 USD
- Italy: 59,791 USD
- France: 55,008 USD
- South Africa: 50,051 USD
- Spain: 47,833 USD
- People’s Republic of China: 41,310 USD
- Brazil: 35,349 USD
- Poland: 29,003 USD
- Ukraine: 25,115 USD
- India: 14,058 USD
- Russia: 13,052 USD

Source: www.kaggle.com/surveys/2017
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.

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

More than 120 startups incubated

Top 20 university incubator programs in the world

Source: Ministry of Foreign Affairs; UBI Global; EMBRAPPI
... and companies are taking advantage of this unique opportunity...

Companies are investing in R&D and innovation in Brazil

1. Akwan was Google's first acquisition outside the United States in 2005

Source: Forbes / Investe São Paulo / Você SA / G1 Portal
... which creates a very rich environment for innovation

- **350+** businesses incubators
- **9000+** businesses incubated and **+USD 5 Billion** in accumulated income since 2013
- **11+** unicorns

1. A privately-held startup company valued at over $1 billion

Source: Ministry of Science, Technology, Innovation and Communications, press clippings
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. 

Sofía Esteves  
Chairwoman of the Board of Directors  
Grupo Cia de Talentos

Maybe in the future we will remember these years 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
The potential of increasing productivity to improve quality of social and public services

Vijay Gosula
Senior Partner
vijay_gosula@mckinsey.com

Rafael Siqueira
Partner
rafael_siqueira@mckinsey.com

Pepe Cafferata
Partner
jose_cafferata@mckinsey.com

Aluizio Goncalves
Associate Partner
aluizio_goncalves@mckinsey.com

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

1. Market estimate for 2019

Source: Central Bank, press clippings
Reforms seek to diminish public deficit, increase flexibility and attract investments

<table>
<thead>
<tr>
<th>Reform</th>
<th>Status</th>
<th>Potential impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Security</td>
<td>Approved and enacted on November 12, 2019</td>
<td><strong>BRL800</strong> billions in 10 years Reduce spend on social security and increase investments in other areas</td>
</tr>
<tr>
<td>Administrative</td>
<td>Proposal already formulated, to be presented to Congress before the end of 2019 / beginning of 2020</td>
<td>Decrease public spending and increase flexibility on resources management for public bodies</td>
</tr>
<tr>
<td>Federal pact</td>
<td>Proposal already formulated, to be presented to Congress before the end of 2019 / beginning of 2020</td>
<td>More flexibility for public spending and an increase in resources for local governments</td>
</tr>
<tr>
<td>Tax system</td>
<td>Proposal structured in 4 approval waves. First one already sent to Congress</td>
<td>Simplification of tax structure and reduction of tax load for employers</td>
</tr>
</tbody>
</table>

Source: Press clippings
Governments at different levels are promoting measures to decrease bureaucracy

<table>
<thead>
<tr>
<th>Measure</th>
<th>Key points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Law of economic freedom</td>
<td>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)</td>
</tr>
<tr>
<td>Green-yellow program</td>
<td>Elimination of compulsory professional registration for 8 professions and flexibilization of work shifts</td>
</tr>
<tr>
<td>Environmental licensing</td>
<td>Minas Gerais launched an online platform for environmental licensing that streamlines the process by up to ~30%</td>
</tr>
<tr>
<td>Digitalization of services</td>
<td>Digitalization of ~1,000 public services by the end of 2020, covering ~80% of federal public services</td>
</tr>
<tr>
<td>Driver’s license process</td>
<td>Suspension of mandatory use of driving simulators and less practice lessons</td>
</tr>
<tr>
<td>Rules for sugarcane planting</td>
<td>Simplification of regulations and elimination of planting zoning restrictions for sugarcane</td>
</tr>
</tbody>
</table>

Source: Press clippings
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)

- UK: 92
- Uruguay: 72
- Argentina: 70
- Chile: 69
- Brazil: 64
- Costa Rica: 63
- Colombia: 62
- Ecuador: 56
- Peru: 54
- Venezuela: 51
- Paraguay: 50
- Bolivia: 48
- Suriname: 45
- Guyana: 37

Leader in digital government

400 services digitized by 2019

56 – Latin America and Caribbean average

Source: “Governments that serve” Interamerican Development Bank, 2016
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?
(Government digital strategy)

**Mission**
Transform government, leveraging digital, promoting effectiveness of policies, quality of services and gaining the trust of Brazilians

**Goals**

<table>
<thead>
<tr>
<th>Number</th>
<th>Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Publish 1,000 new digital services</td>
</tr>
<tr>
<td>2</td>
<td>Consolidate 1,500 @gov.br websites</td>
</tr>
<tr>
<td>3</td>
<td>Launch a new digital identity</td>
</tr>
<tr>
<td>4</td>
<td>Simplify business registration and allow online registration</td>
</tr>
</tbody>
</table>

**How**

<table>
<thead>
<tr>
<th>How</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Platform and shared services</strong></td>
<td>Launch of a unified portal of government services (<a href="http://www.gov.br">www.gov.br</a>)</td>
</tr>
<tr>
<td><strong>Centralized purchasing</strong></td>
<td>400 services digitized in 2019 (BRL 350 million in savings; 24 entities)</td>
</tr>
<tr>
<td><strong>Investment</strong></td>
<td>Brazil is already best practice in processes such as tax filing, voting and transparency regulations</td>
</tr>
<tr>
<td><strong>Team</strong></td>
<td>Work with government in discussions surrounding regulations for startups</td>
</tr>
<tr>
<td><strong>Leadership</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Regulation</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: Federal Government Digitalization Plan; Press clippings
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

<table>
<thead>
<tr>
<th>TRANSPARENCY</th>
<th>COMMUNICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>TADEPE?</td>
<td>FALA CIDADÃO!</td>
</tr>
<tr>
<td>PORTAL DA CIDADE</td>
<td>MGOV</td>
</tr>
<tr>
<td>monitorgov</td>
<td>Safety</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STATISTICS AND DATA ANALYTICS</th>
<th>TRANSPORTATION</th>
<th>EFFICIENCY / OPERATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>DATAPEDIA</td>
<td>OttoMobil</td>
<td></td>
</tr>
<tr>
<td>MAPA PÚBLICO</td>
<td>PRIS</td>
<td></td>
</tr>
<tr>
<td>MAPA PÚBLICO</td>
<td>linte</td>
<td></td>
</tr>
<tr>
<td>MAPA PÚBLICO</td>
<td>BOOSTR</td>
<td></td>
</tr>
</tbody>
</table>

Source: GovTech Brasil; Brasillab (2019)
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
A new wave of Brazilian multinationals is bringing innovation to the world
The current wave of Brazilian global champions leverages distinct approaches to business model, technology and innovation to compete on the global stage.

- **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.

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 a new generation of military transport aircraft and by developing the eVTOL aircraft to tackle the urban mobility ecosystem.

The C-390 MILLENIUM is a new generation transport aircraft with multi-mission capabilities which combines highly flexible platform with the lowest life cycle cost in the medium airlift market. The C-390 is capable of transporting and launching cargo and troops and performing a wide array of missions: medical evacuation, search and rescue, humanitarian search and rescue, humanitarian aerial refueling, aerial fire fighting and assistance.

"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, EmbraerX.

Source: Embraer Portal
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

<table>
<thead>
<tr>
<th>Net revenues 2018, USD Billion</th>
<th>~9 billion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natura</td>
<td>2.3</td>
</tr>
<tr>
<td>AESOP</td>
<td>0.3</td>
</tr>
<tr>
<td>The Body Shop</td>
<td>1.1</td>
</tr>
<tr>
<td>Avon</td>
<td>5.2</td>
</tr>
</tbody>
</table>

Revenue of the new companies (USD)

- Natura: Acquired in 2016
- AESOP: Acquired in 2016
- The Body Shop: Expected closing in the 1st quarter 2020
- Avon: Acquired in 2017


1. The Body Shop joins B Corp in pledging further sustainability efforts in Retail Gazette
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

- Transportation: 51%
- Industrial: 18%
- Energy grid: 11%
- Others: 20%

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

Source: WEG has a card up its sleeve for the future: Volkswagen's electric truck - Seu Dinheiro Oct/2019
Wildlife Games is the largest mobile-gaming company in Latin America

Wildlife is among the 10 largest mobile-gaming 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.

Source: Wildlife website
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!

Bob Sternfels
Senior Partner
McKinsey & Company

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
I’m a liberal. I believe in private initiative and meritocracy. That’s why I’m optimistic about this moment of the country. Everything seems to be pointing to a new economic moment and a new mission as catalyst and potential destination for global investments. A huge internal market, a gradual reduction in state power and a firm and gradual shift from a country of the smart to a country of the fair, motivates me to invest even more in this country of multiple opportunities.

Alexandre Costa
CEO
Cacau Show
The recovery of the real estate market

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

Roberto Fantoni
Senior Partner
roberto_fantoni@mckinsey.com

Gustavo Tayar
Partner
gustavo_tayar@mckinsey.com
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 low-income 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 Brazil

**Number of new properties launched**

<table>
<thead>
<tr>
<th>Year</th>
<th>Properties Launched '000</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>80</td>
</tr>
<tr>
<td>2011</td>
<td>84</td>
</tr>
<tr>
<td>2012</td>
<td>68</td>
</tr>
<tr>
<td>2013</td>
<td>75</td>
</tr>
<tr>
<td>2014</td>
<td>65</td>
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<td>2015</td>
<td>40</td>
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<tr>
<td>2016</td>
<td>35</td>
</tr>
<tr>
<td>2017</td>
<td>46</td>
</tr>
<tr>
<td>2018</td>
<td>54</td>
</tr>
<tr>
<td>2019</td>
<td>70</td>
</tr>
</tbody>
</table>

**Number of new properties sold**

<table>
<thead>
<tr>
<th>Year</th>
<th>Properties Sold '000</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>76</td>
</tr>
<tr>
<td>2011</td>
<td>70</td>
</tr>
<tr>
<td>2012</td>
<td>61</td>
</tr>
<tr>
<td>2013</td>
<td>71</td>
</tr>
<tr>
<td>2014</td>
<td>49</td>
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<tr>
<td>2015</td>
<td>42</td>
</tr>
<tr>
<td>2016</td>
<td>38</td>
</tr>
<tr>
<td>2017</td>
<td>46</td>
</tr>
<tr>
<td>2018</td>
<td>50</td>
</tr>
<tr>
<td>2019</td>
<td>61</td>
</tr>
</tbody>
</table>

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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...

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

Confidence of construction professionals Index

Stock value of top construction players

Source: CNI, Bovespa, McKinsey analysis
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 10.5, lower than last decade average.

---

1. SELIC adjusted by inflation
2. 2018

Source: BACEN, IBGE, SECOVI, ADEMI, Sinduscon, press clippings, McKinsey

This Report is proprietary of McKinsey & Company
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 ...

... can support demand for low-income housing, which increased after the crisis in 2015

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

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.

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.

EBC, November 2019

Reuters, October 2019

Estadão, January 2019
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.

Source: BACEN, IBGE, CAGED, Equity Research reports, press clippings, McKinsey
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

This 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 real-estate. 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
The new media landscape: opportunities for advertisers

Marina Cigarini
Senior Partner
marina_cigarini@mckinsey.com

Cristiano Fontes
Associate Partner
cristiano_fontes@mckinsey.com

Contributor: Carlos Dare

Marco Dyodi
Associate Partner
marco_dyodi@mckinsey.com
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

![Graph showing linear vs. non-linear viewership by age group with data from 2014 to 2018.]

... with younger age\(^1\) ranges already consuming primarily non-linear\(^2\)

**NETFLIX**
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

**YouTube** 44%
of Brazilians already mention Youtube as their preferred video viewing platform, vs. 8% only for broadcast TV

---

1. 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 Kingdom, Russia, Sweden and Taiwan
2. Linear - Broadcast / Non-linear - on demand

Source: IHS, eMarketer, VideoProvokers; Nielsen; Ericsson; Anatel; Press clippings

This Report is proprietary of McKinsey & Company
New independent content producers leveraging open platforms gain disproportionate relevance

### Largest Brazilian Youtube Channels

<table>
<thead>
<tr>
<th>Subscribers MM</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>KondZilla</td>
<td>Music</td>
</tr>
<tr>
<td>Whindersson Nunes</td>
<td>Comedy/Variety</td>
</tr>
<tr>
<td>Felipe Neto</td>
<td>Comedy/Variety</td>
</tr>
<tr>
<td>Você sabia</td>
<td>Variety</td>
</tr>
<tr>
<td>Luccas Neto</td>
<td>Comedy/Variety</td>
</tr>
<tr>
<td>GR6 Explode</td>
<td>Music</td>
</tr>
<tr>
<td>RezendeEvil</td>
<td>Games</td>
</tr>
<tr>
<td>Galinha Pintadinha</td>
<td>Kids</td>
</tr>
<tr>
<td>Canal Canalha</td>
<td>Comedy/Variety</td>
</tr>
<tr>
<td>Authentic Games</td>
<td>Games</td>
</tr>
</tbody>
</table>

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

---

1 Audience measured between Jan-Oct/2019, in the 15 largest markets | Source: Youtube subscribers as of Nov2019; Kantar, EPE, Anatel
Local content production increasing and receiving large investments...

Yearly Brazilian movie releases
# of movies

<table>
<thead>
<tr>
<th>Year</th>
<th># of movies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>14</td>
</tr>
<tr>
<td>1997</td>
<td>21</td>
</tr>
<tr>
<td>1999</td>
<td>28</td>
</tr>
<tr>
<td>2001</td>
<td>30</td>
</tr>
<tr>
<td>2003</td>
<td>30</td>
</tr>
<tr>
<td>2005</td>
<td>46</td>
</tr>
<tr>
<td>2007</td>
<td>78</td>
</tr>
<tr>
<td>2009</td>
<td>84</td>
</tr>
<tr>
<td>2011</td>
<td>100</td>
</tr>
<tr>
<td>2013</td>
<td>129</td>
</tr>
<tr>
<td>2015</td>
<td>133</td>
</tr>
<tr>
<td>2017</td>
<td>160</td>
</tr>
</tbody>
</table>

14 x

US$ 350 MM

Netflix² claims Brazil has extraordinary talent and a long tradition of great storytelling, announcing investments in local content production

Netflix² - $350 million

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

BRL 4,2 Bn

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

². exame.abril.com.br/tecnologia/netflix-vai-investir-350-milhoes-de-reais-em-conteudo-brasileiro/
Source: Ancine, Press clippings
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

<table>
<thead>
<tr>
<th>People willing to pay more for...</th>
<th>Social Classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of respondents agreeing with the statement</td>
<td>A</td>
</tr>
<tr>
<td>... customized products for me</td>
<td>58%</td>
</tr>
<tr>
<td>... products/brands that defend what I believe in</td>
<td>70%</td>
</tr>
</tbody>
</table>

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

Source: Gen Z Brazil Survey, conducted by Box1824 and McKinsey | McKinsey article ‘True Gen’: Generation Z and its implications for companies, 2018

This Report is proprietary of McKinsey & Company
Digital marketing is the new norm, with investments growing at 5x traditional media

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

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

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

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Advertising revenue Bn BRL</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>27</td>
</tr>
<tr>
<td>2012</td>
<td>33</td>
</tr>
<tr>
<td>2014</td>
<td>40</td>
</tr>
<tr>
<td>2016</td>
<td>42</td>
</tr>
<tr>
<td>2018</td>
<td>50</td>
</tr>
<tr>
<td>2020</td>
<td>59</td>
</tr>
<tr>
<td>2022</td>
<td>74</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>From:</th>
<th>To:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main channel for marketing activities still <strong>offline</strong> channels (i.e., TV)</td>
<td><strong>Shift to digital</strong> Offline channels starting to convert to online (digital radio, TV etc.)</td>
</tr>
<tr>
<td><strong>Long-term</strong> planning before launch, and performance measurement <strong>after campaign</strong></td>
<td><strong>Real-time view</strong> 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&amp;L</td>
</tr>
<tr>
<td><strong>Silo</strong> thinking: Brand versus digital performance marketing</td>
<td><strong>Integrated analytics</strong> Integrated journey view with offline and online performance marketing</td>
</tr>
<tr>
<td>Managing <strong>few</strong> channels at a time with mainly creative agency support</td>
<td><strong>360° journey view</strong> Working with multiple external partners for excellence in various channels</td>
</tr>
<tr>
<td>Decisions based on <strong>gut feeling</strong>, experience and on market research</td>
<td><strong>Automation</strong> Automated decision-making based on big customer data</td>
</tr>
</tbody>
</table>

Source: McKinsey analysis
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 low-quality 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
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
Telefónica Brazil
Tech-enabled productivity should not wait

Marina Cigarini
Senior Partner
marina_cigarini@mckinsey.com

Paulo Fernandes
Senior Partner
paulo_fernandes@mckinsey.com

Wagner Gramigna
Partner
wagner_gramigna@mckinsey.com

Lucas Pinz
Expert Associate Partner
lucas_pinz@mckinsey.com

Contributors: Priscilla Licht, Fernando Schneider
There is no excuse for delaying productivity gain

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

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

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

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

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 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

Data, especially unstructured data, is growing exponentially globally

- Unstructured text
- Structured data

Exabytes 40,000

2006 2020

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

Source: McKinsey analysis
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**

- **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

- **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

- **Cognitive Agents**
  Combining image processing techniques, the accuracy of pit-stop time measurements in Formula 1 racing dropped to **<0.001 seconds**

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

What is Industry 4.0's top priority on your company's management agenda?

Percent

- High priority
- Medium priority
- Low priority

Brazil is putting Industry 4.0 as high priority

Percent

<table>
<thead>
<tr>
<th>Country</th>
<th>High priority</th>
<th>Medium or low priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>73%</td>
<td>27%</td>
</tr>
<tr>
<td>China</td>
<td>87%</td>
<td>13%</td>
</tr>
<tr>
<td>France</td>
<td>55%</td>
<td>45%</td>
</tr>
<tr>
<td>Germany</td>
<td>69%</td>
<td>31%</td>
</tr>
<tr>
<td>India</td>
<td>94%</td>
<td>6%</td>
</tr>
<tr>
<td>Japan</td>
<td>31%</td>
<td>69%</td>
</tr>
<tr>
<td>USA</td>
<td>63%</td>
<td>37%</td>
</tr>
</tbody>
</table>

Average top priority: 68%

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

<table>
<thead>
<tr>
<th>AI Capabilities</th>
<th>Brazilian examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine Learning</td>
<td>Dasa uses ML algorithms to analyze thousands of medical records to diagnose diseases in a faster way</td>
</tr>
<tr>
<td>Computer Vision</td>
<td>N2B has an app that evaluates pictures of food dishes from customers to check for their dietary requirements</td>
</tr>
<tr>
<td>Virtual Agents</td>
<td>Bradesco launched BIA, its AI-based assistant to solve day-to-day customer questions</td>
</tr>
<tr>
<td>Robotics</td>
<td>Gerdau implemented an RPA solution to automate several back office processes, reducing costs and increasing speed and reliability</td>
</tr>
</tbody>
</table>

Source: McKinsey analysis, Press clippings
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.

### Environments

<table>
<thead>
<tr>
<th>Environments</th>
<th>Size in 2025 USD trillion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factories</td>
<td>1.2-3.7</td>
</tr>
<tr>
<td>Cities</td>
<td>0.9-1.7</td>
</tr>
<tr>
<td>Wearable devices</td>
<td>0.2-1.6</td>
</tr>
<tr>
<td>Retail environments</td>
<td>0.4-1.2</td>
</tr>
<tr>
<td>Workplaces</td>
<td>0.2-0.9</td>
</tr>
<tr>
<td>External environments</td>
<td>0.6-0.9</td>
</tr>
<tr>
<td>Vehicles</td>
<td>0.2-0.7</td>
</tr>
<tr>
<td>Homes</td>
<td>0.2-0.3</td>
</tr>
<tr>
<td>Offices</td>
<td>0.1-0.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3.9-11.1</strong></td>
</tr>
</tbody>
</table>

Source: MGI, consortium analysis

### Three IoT impact levers in emerging markets:

1. **Manufacturing and rural**

2. **Large populations in cities**

3. **Social welfare – healthcare, safety, etc.**

38% of the value generated by IoT will be captured in emerging markets such as Brazil.

This Report is proprietary of McKinsey & Company
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’).

- **Cities**: USD 13-27 billion (Preliminary impact in 2025)
- **Healthcare**: USD 5-21 billion (Preliminary impact in 2025)
- **Rural**: USD 5-39 billion (Preliminary impact in 2025)
- **Industrial**: USD 11-45 billion (Preliminary impact in 2025)

Source: Supporting a national-wide development plan for IoT in Brazil - BNDES
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

Source: McKinsey analysis
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.

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
Informal and Distance Learning are transforming the Education landscape in Brazil

Nicola Calicchio Neto  
Senior Partner  
nicola_calicchio@mckinsey.com

Marcus Frank  
Senior Practice Expert  
marcus_frank@mckinsey.com

Contributors: Priscilla Licht, Eliziario Barbosa, Omar Seguel
Private Education plays a crucial role in Higher Education in Brazil, representing ~83% of enrolled students.

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

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.

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

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

The private K12 education segment also offers opportunities.

To find out more use the QR code to access “McKinsey’s report on Future of Work”.

This Report is proprietary of McKinsey & Company.
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**

<table>
<thead>
<tr>
<th>Rank</th>
<th>University</th>
<th>Enrollment (Thousand)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cogna Higher Education¹</td>
<td>866</td>
</tr>
<tr>
<td>2</td>
<td>Laureate Education</td>
<td>865</td>
</tr>
<tr>
<td>3</td>
<td>YDUQS (Estácio)</td>
<td>575</td>
</tr>
<tr>
<td>4</td>
<td>American Public Education</td>
<td>181</td>
</tr>
<tr>
<td>5</td>
<td>Grand Canyon Education</td>
<td>167</td>
</tr>
<tr>
<td>6</td>
<td>Ser Educacional</td>
<td>152</td>
</tr>
</tbody>
</table>

~50% of students are enrolled in Distance Learning Programs

---

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

Source: COGNA Corporate Presentation Nov/2019; Laureate Education Reports First Quarter 2019 Financial Results; YDUQS Results 3T2019; R&I McKinsey
The gap between students admitted and ENEM test takers indicates a potential demand for Higher Education in Brazil

ENEM\(^1\) test takers vs. students admitted to higher education in Brazil

\textit{Million Students}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{enem_vs_admissions.png}
\caption{Gap: 3.4 Million Students who intend to pursue higher education, but have not yet joined the system}
\end{figure}

\textbf{Gap: 3.4 Million}

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

Source: Estácio Institutional Presentation 2018
Distance Learning is a growth driver of higher education in Brazil, representing 40% of students in 2018, with a CAGR\(^1\) ~20% p.y.

1. Compound annual growth rate

Source: Census of Higher Education 2017-2018 (INEP); Hoper Education, McKinsey analysis
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

<table>
<thead>
<tr>
<th>Brazilian Market for Informal Education</th>
<th></th>
<th>CAGR(^4) 2018-21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Market</td>
<td>BRL 14Bn</td>
<td>4.8-8.8%</td>
</tr>
<tr>
<td>Online Market</td>
<td>BRL 5Bn</td>
<td>8.6-12.6%</td>
</tr>
</tbody>
</table>

748 EdTechs emerged in Brazil\(^1\)  USD 67 M
Invested in the last 18 months\(^2\)

| 75% of teachers believe that digital learning content will totally replace printed textbooks within the next 10 years |
| +2.6 million\(^3\) 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

---


Source: Euromonitor 2018; 2 INEP - Institute from the Brazilian Ministry of Education; 2016 Digital Education Survey; Lemann Foundation site; ABStartups

McKinsey & Company
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

1. **Noslen Borges’ Channel** teaches Portuguese and Literature to young students from São Paulo, Rio and the Northeast
   +2.5 Millions subscribers

2. **Débora Aladim’s Channel** has preparatory History classes for ENEM, sponsored by Santander
   +2.4 Millions subscribers

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

Source: YouTube Insights, 2018; Estadão; Hotmart site; Press clippings
The focus of 21st century skills for students is shifting from the application of core skills to character traits and creativity.

**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
2. Critical thinking
3. Creativity
4. People management
5. Coordinating with others
6. Emotional intelligence
7. Judgement and decision making
8. Service orientation
9. Negotiation
10. Cognitive flexibility

**Key Fact:**
Strong education in next-generation (life) skills is one of the top 3 elements that parents prioritize when searching for a school.


Source: Future of jobs report, World Economic Forum
The private K12 education segment also offers opportunities

- Highly fragmented market
  Market share of top 5 players, # of students

- Potentially attractive margins – Market average <10% but optimized institutions achieve >25% EBITDA

- Compelling drivers for investing in K12 (first grade through secondary school) in Brazil
  - Growing appreciation for education and a reduced birth rate increased household ability to invest in next generation education
  - Winning will require new business models and skills

- BRICS are converging towards low fertility rates
  Estimated fertility rate from 1950-2030, Children per women
  - 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

Source: Census of Higher Education 2018 (INEP); Census of primary education 2018; IBGE; UNESCO; Expert Interviews
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.

Source: McKinsey Global Education Trends
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
The next wave of disruptions in the healthcare industry

Tracy Francis
Senior Partner
tracy_francis@mckinsey.com

Monica Szwarcwald Tyszler
Partner
monica_szwarcwald@mckinsey.com

Mauricio Cepeda
Senior Expert
mauricio_cepeda@mckinsey.com

Contributor: Carolina Malcher
There is great opportunity for change in Brazil’s healthcare system through digital transformation.

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

<table>
<thead>
<tr>
<th>Payers</th>
<th>Providers</th>
<th>Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>~3Mn People lost private coverage during the crisis (2014-2019)</td>
<td>-270 Reduction in the number of private hospitals (2014-2018)</td>
<td>3.8% Claims management from payers to major hospitals. Besides, new payment models are being imposed (though immature)</td>
</tr>
<tr>
<td>25%+ Estimated healthcare spend in 2035 (as % of GDP)</td>
<td>3x Triple burden of disease: chronic, infectious and violent</td>
<td>43% Patients do not trust the healthcare system, in spite of being a top priority for them</td>
</tr>
</tbody>
</table>

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

1. Operational margin = Revenues – Claims – SG&A – Taxes; Payers only
Source: ANS, IESS, CNSSaúde, Anhap, WHO, McKinsey analysis, Health Coalition
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
- Support diabetic patients through meal tracking, data analysis and reports

**… while streamlining healthcare system processes**

- AI 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

Source: Press clippings, McKinsey analysis
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

Source: McKinsey analysis
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
Brazilian workers want to innovate and feel ownership of the business
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

Organizational Health Survey – Brazil vs. global benchmark

<table>
<thead>
<tr>
<th>Category</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovation &amp; Learning*</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Direction</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Work Environment</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Coordination &amp; Control</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Leadership</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>External Orientation</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Capabilities</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Accountability</td>
<td>1</td>
<td>-4</td>
</tr>
<tr>
<td>Motivation</td>
<td>-10</td>
<td>-6</td>
</tr>
</tbody>
</table>

* How effective and in what ways does the organization encourage and harness new ideas, including everything from radical innovation to incremental improvement, so the organization can effectively evolve and grow over time.

Source: Brazil Mega OHI (Organizational Health Index) benchmark 2018 and 2019

This Report is proprietary of McKinsey & Company
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

<table>
<thead>
<tr>
<th>Company</th>
<th>Area</th>
<th>Why are they innovative</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>NuBank</td>
<td>For giving thousands of Brazilians access to banking</td>
</tr>
<tr>
<td>2</td>
<td>Grow</td>
<td>For creating last-mile transport alternatives</td>
</tr>
<tr>
<td>3</td>
<td>Appli</td>
<td>For leveraging AI to give income-generating opportunities</td>
</tr>
<tr>
<td>4</td>
<td>MagazineLuiza</td>
<td>For experimenting with using AI to track inventory and serving customers</td>
</tr>
<tr>
<td>5</td>
<td>Rappi</td>
<td>For one-stop shop offering: multitude of products or services, all under one roof</td>
</tr>
<tr>
<td>6</td>
<td>Cliengo</td>
<td>For providing a cost-effective chatbot for small businesses</td>
</tr>
<tr>
<td>7</td>
<td>Movile</td>
<td>For making one app for everything you need</td>
</tr>
<tr>
<td>8</td>
<td>PagSeguro</td>
<td>For helping Brazilian businesses manage their finances</td>
</tr>
<tr>
<td>9</td>
<td>Selina</td>
<td>For turning spaces no longer used like factories and asylums into funky hotels</td>
</tr>
<tr>
<td>10</td>
<td>EcoAndino</td>
<td>For processing and marketing Andean superfoods while conserving biodiversity</td>
</tr>
</tbody>
</table>

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.

Source: Brazil Mega OHI (Organizational Health Index) benchmark 2018 and 2019; powered by advanced analytics
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
Brazil’s stock market capitalization

Source: B3
São Paulo as a global hub
São Paulo is distinctive in many different ways

Source: McKinsey analysis
70% of the top 20 companies in Brazil are based in São Paulo

Top Companies in Brazil
Ranked 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
SP has a fierce startup ecosystem

Highlights – non exhaustive

**Incubators / Accelerators**

- ACE
- baía
- PULSE Perfect Consulting
- SEBRAE SP
- TAPESP
- ENDEAVOR Brasil
- AGVENTURES

**Investment / Support institutions**

- monashees
- FIESP
- CDPQ

**Startups**

1. São Paulo
   - neon
   - stone
   - CX CargoX
   - Nu Bank
   - dr. consulta
   - creditas
   - Guiabolso
   - VINDI
   - Loggi
   - bionexo

2. Campinas
   - movile
   - ifood
   - Gaia
   - carro
   - agrosmart
   - SMART BREEDER
   - BONSAI
   - bug

3. Ribeirão Preto
   - iClinic
   - liberdade Capital
   - e-Agro
   - AgroGestor
   - corefi
   - BE BLÜE
   - magico
   - MONETO

4. São Jose dos Campos
   - mama
dos Campos
   - peapge
   - BE BLÜE
   - TERRAMAGNA

5. Piracicaba
   - quiet Rádial

6. Sorocaba

**Highlights**

- São Paulo
- Campinas
- Piracicaba
- Ribeirão Preto
- São José dos Campos
- Sorocaba

**Source:** Crunchbase, ABStartup, Anprotec, Valleys' websites, Anpei; INEP (2017), SPConecta, Press clippings

3,300+ startups

25+ incubators

15+ accelerators

BRL 21 Bn startup ecosystem value
São Paulo’s economy is comparable to that of the largest countries in the world

GDP per capita
Thousands BRL/inhabitant

Source: IBGE; Press clippings; McKinsey analysis
São Paulo fosters an environment for attracting and developing talent

Home of the #1 University of Latin America: USP

160+ colleges, 35 universities and 7 technological innovation 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

Source: Secretary of the City of São Paulo; Press clippings; McKinsey analysis; Inep; Observatório do turismo; ABS Startup
“The city of opportunities” with an increasingly diverse, talented and inclusive atmosphere

Growing opportunities…

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 country

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
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

Source: Secretary of the City of São Paulo; Press clippings; McKinsey analysis; Observatório do turismo; Rais; Statista
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, Lolapalooza and Virada Cultural that generated together BRL ~650 Million

Source: Secretary of the city of São Paulo; Press clippings; McKinsey analysis; Observatório do turismo; Mastercard
Consumers call for action in sustainability
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.

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.

Companies embracing the social and environmental sustainability trend are displaying encouraging results.
With environmental issues becoming more evident in daily life, Brazilians are also paying more attention to sustainability issues

95%¹ of Brazilian consumers believe that environmental issues should gain even more relevance in the coming years

66% of Brazilians in 2018 agreed that citizens are also responsible for protecting nature (vs. 46% in 2014)

89%² of Brazilians are aware about the use of disposable, non-recyclable products (vs. 81% in the world)

~60% of consumers believe their health and well-being are strongly affected by environmental problems¹

---

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

Source: Tetra Pak environmental research, WWF, IPSOS
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

65%

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

67%

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

84%

...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

<table>
<thead>
<tr>
<th></th>
<th>India</th>
<th>Brazil</th>
<th>Turkey</th>
<th>USA</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>88</td>
<td>85</td>
<td>85</td>
<td>78</td>
<td>53</td>
<td></td>
</tr>
</tbody>
</table>

...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

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Sometimes</th>
<th>Usually</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>45</td>
<td>47</td>
<td>45</td>
<td>41</td>
</tr>
<tr>
<td>Turkey</td>
<td>27</td>
<td>28</td>
<td>26</td>
<td>25</td>
</tr>
<tr>
<td>USA</td>
<td>9</td>
<td>9</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>UK</td>
<td>9</td>
<td>9</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>19</td>
<td>16</td>
<td>22</td>
<td>25</td>
</tr>
<tr>
<td>Millennials</td>
<td>9</td>
<td>9</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Gen-X</td>
<td>9</td>
<td>9</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Boomers</td>
<td>9</td>
<td>9</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>

~80% somehow included sustainable packaging

1. Unilever & Europanel survey released in 2017

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

<table>
<thead>
<tr>
<th></th>
<th>% of sales</th>
<th>% of category growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retailer private label</td>
<td>17</td>
<td>20</td>
</tr>
<tr>
<td>Small</td>
<td>19</td>
<td>53</td>
</tr>
<tr>
<td>Medium</td>
<td>33</td>
<td>25</td>
</tr>
<tr>
<td>Large</td>
<td>31</td>
<td>2</td>
</tr>
</tbody>
</table>

“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)

**Unilever**

“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

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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

Source: Nielsen Retail Measurement, Pew Research; ITU; Gen Z study – McKinsey & Company; companies’ website; Press clippings
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
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 socio-environmental 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
The multiple (and not so obvious) opportunities in consumer growth

Jose Carluccio
Partner
jose_carluccio@mckinsey.com

Beatriz Federico
Engagement Manager
beatriz_federico@mckinsey.com

Contributors: Bruno Massaro, Isabela Liberato, Victoria Meduna, Julio Galache, Silvana Lee, Carlos Dare
There are multiple, not so obvious opportunities in consumer growth

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.
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%), 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 low-income audiences, are beginning to offer financial services to these segments (e.g. retailers, telecommunications).

1. % of population that has bank accounts

Source: Press clippings, McKinsey analysis, 1H19 Brazilian Banking Review, McKinsey & Company
Among Brazilians, main opportunities focuses on low-income millennials and the middle aged

Credit Fintech customer profile

% of customers

By age

+60 years: 5
48 - 59 years: 14
37 - 47 years: 30
26 - 36 years: 32
<25 years: 19

By income class

A: 13
B: 8
C: 39
D: 29
E: 11

Demand has been high...

# of credit requests received

Thousand

2017: 3,236
2018: 6,401

+98%

Credit granted amount

BRL Million, PF and PJ

2016: 161
2017: 804
2018: 1,195

+172%

...pushed by faster responses

Credit analysis time

% of Credit Fintechs

<15 sec: 23
15 sec - 1 hr: 33
1 - 24 hrs: 30
>24 hrs: 15

Credit approval time

% of Credit Fintechs

<12 hrs: 23
12 - 24 hrs: 33
24 - 72 hrs: 30
>72 hrs: 15

Source: Press clippings, McKinsey analysis, 1H19 Brazilian Banking Review
The Brazilian population is aging and by 2031, the older population will exceed the young population

**6th largest elderly population in the world, behind China, India, USA, Japan and Russia**

**13%**

Elderly represent 13% of the total population (2018)

**26%**

Elderly will be 26% of the total population by 2045

**81 years**

Will be life expectancy in 2060

**2031**

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

**21%**

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

Source: IBGE, Press clippings
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
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
Boosting the growth of small and mid-sized cities in Brazil, harnessing fragmented trade
There’s a great opportunity to boost the growth of small and mid-sized 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.
Fragmented trade in Brazil is highly relevant

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

These stores are typically run 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
## Majority of future consumption growth will come from smaller cities

<table>
<thead>
<tr>
<th>Size of city Inhabitants</th>
<th>Cities per segment # cities</th>
<th>% of consumption growth 2015-25</th>
<th>Distribution of fragmented trade(^1) footprint</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 500 thousand</td>
<td>5,514</td>
<td>64%</td>
<td>70%</td>
</tr>
<tr>
<td>500 – 1 million</td>
<td>25</td>
<td>9%</td>
<td>-8%</td>
</tr>
<tr>
<td>1 – 2 million</td>
<td>12</td>
<td>8%</td>
<td>-7%</td>
</tr>
<tr>
<td>&gt; 2 million</td>
<td>7</td>
<td>19%</td>
<td>15%</td>
</tr>
<tr>
<td>Total Brazil</td>
<td>5,558</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

1. Stores with up to 9 employees

Source: McKinsey CityNav Brazil database, Rais, IBGE
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

Shoppers

- Better shopping experience and assortment
- Early access to innovation / launch of new products

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)

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

Source: McKinsey analysis
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
The values of Brazil’s new generation are a source of inspiration.
The values of Brazil’s new generation are a source of inspiration

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: 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.

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, Brazil’s Gen Zers are hypercognitive

**Hyperinformed**
- Baby Gen Z
- Era of Information
- 1995-2002

**Hyperconnected**
- Teen Gen Z
- Era of Social Networks
- 2004-2012

**Hypercognitive**
- Young Gen Z
- Era of Hyper Reality
- 2013-Today

- 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

Source: Gen Z Brazil Survey, conducted by Box1824 and McKinsey | McKinsey article ‘True Gen’: Generation Z and its implications for companies, 2018
The search for the truth is at the root of all Generation Z’s behavior

Gen Z key characteristics

<table>
<thead>
<tr>
<th>Undefined ID</th>
<th>Communaholic</th>
<th>Dialoguer</th>
<th>Realistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Don’t define yourself in only one way”</td>
<td>“Be radically inclusive”</td>
<td>“Have fewer confrontations and more dialogue”</td>
<td>“Live life pragmatically”</td>
</tr>
</tbody>
</table>

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.

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

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.

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

Expressing individual truth

Connecting through different truths

Understanding different truths

Unveiling the truth behind all things

Source: Gen Z Brazil Survey, conducted by Box1824 and McKinsey | McKinsey article ‘True Gen’: Generation Z and its implications for companies, 2018
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

For companies

• 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

Source: Gen Z Brazil Survey, conducted by Box1824 and McKinsey | McKinsey article ‘True Gen’: Generation Z and its implications for companies, 2018
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
The underrated power of Brazilian soccer

Pedro Mendonça
Senior Partner
pedro_mendonca@mckinsey.com

Bruno Furtado
Senior Partner
bruno_furtado@mckinsey.com

Luis Cerqueira
Partner
luis_cerqueira@mckinsey.com

Contributors: Bernardo Mergár, Paulo Cunha
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
Talking about professional sports is talking about “Soccer” and the US leagues (NFL, NBA, MLB, NHL)

Revenue, selected sports (US $ Billions, 2017)

<table>
<thead>
<tr>
<th></th>
<th>NORTH AMERICA</th>
<th>EMEA</th>
<th>LATAM</th>
<th>ASIA-PACIFIC</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soccer</td>
<td>2% 1.1</td>
<td>75% 27.4</td>
<td>71% 4.9</td>
<td>51% 8.0</td>
<td>41.4</td>
</tr>
<tr>
<td>American football</td>
<td>42% 22.6</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>22.6</td>
</tr>
<tr>
<td>Basketball</td>
<td>23% 12.7</td>
<td>4% 1.5</td>
<td>NA</td>
<td>NA</td>
<td>15.0</td>
</tr>
<tr>
<td>Baseball</td>
<td>18% 9.9</td>
<td>NA</td>
<td>2% 0.2</td>
<td>20% 3.2</td>
<td>13.3</td>
</tr>
<tr>
<td>Ice Hockey</td>
<td>8% 4.5</td>
<td>4% 1.3</td>
<td>NA</td>
<td>NA</td>
<td>5.9</td>
</tr>
<tr>
<td>Tennis</td>
<td>2% 0.9</td>
<td>3% 1.2</td>
<td>4% 0.3</td>
<td>4% 0.6</td>
<td>3.0</td>
</tr>
<tr>
<td>Cricket</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>15% 2.4</td>
<td>2.6</td>
</tr>
<tr>
<td>Others</td>
<td>4% 2.6</td>
<td>13% 4.9</td>
<td>22% 1.5</td>
<td>6% 1.0</td>
<td>10.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>54.4</strong></td>
<td><strong>36.6</strong></td>
<td><strong>6.9</strong></td>
<td><strong>15.8</strong></td>
<td><strong>~115bn$</strong></td>
</tr>
</tbody>
</table>

% of region’s total

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

Europe

Top 5 European Leagues revenues¹, $ Bn

<table>
<thead>
<tr>
<th>Year</th>
<th>Bundesliga</th>
<th>Premier League</th>
<th>Serie A</th>
<th>Ligue 1</th>
<th>La Liga</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014/15</td>
<td>16,1</td>
<td>2,2</td>
<td>2,7</td>
<td>3,4</td>
<td>3,6</td>
</tr>
<tr>
<td>2016/17</td>
<td>18,0</td>
<td>2,2</td>
<td>2,7</td>
<td>3,4</td>
<td>3,6</td>
</tr>
<tr>
<td>2018/19</td>
<td>19,1</td>
<td>2,2</td>
<td>2,9</td>
<td>3,6</td>
<td>3,7</td>
</tr>
</tbody>
</table>

+7.1% p.y.

Source: McKinsey Global Media Report, Turkish Press
The core of the soccer business is growing double digits annually (2/2)

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

<table>
<thead>
<tr>
<th>Rest of the world</th>
<th>2018-2019 Revenues in soccer per country and league, M$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>1.486 (+5%)</td>
</tr>
<tr>
<td>Chinese</td>
<td>1.341 (+8%)</td>
</tr>
<tr>
<td>League</td>
<td></td>
</tr>
<tr>
<td>MLS</td>
<td>1.128 (+9%)</td>
</tr>
<tr>
<td>J1 League</td>
<td>1.071 (+4%)</td>
</tr>
<tr>
<td>Russian Premier</td>
<td>806 (+12%)</td>
</tr>
<tr>
<td>League</td>
<td></td>
</tr>
<tr>
<td>Süper Lig</td>
<td>727 (+31%)</td>
</tr>
<tr>
<td>K League</td>
<td>585 (+6%)</td>
</tr>
</tbody>
</table>

1. Compound annual growth rate

Source: McKinsey Global Media Report, Turkish Press
Women Soccer Audience is rocketing up in Brazil...

**FIFA Women’s World Cup France 2019**

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

- **20 M** Brazilians
  - Watched the Women’s World Cup 2019 decision (match US vs The Netherlands)

---

**... with Brazilian women players popularity on the rise**

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

1 Interactions and video views

Source: Nielsen Sports Women’s Sports Research 2018

---

1. Fifa.com
2. veja.abril.com.br/placar/brasil-registra-a-maior-audiencia-do-mundo-para-a-final-da-copa-feminina; only in Rede Globo
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 loss-makers – 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

Source: McKinsey analysis
Globalization of premium source towards big export markets (China, USA, etc.)

Example: Top 5 European leagues
Total revenue € bn

- 2014-15: 14, 22% domestic, 5% export, 73% domestic markets, 5% international markets, +5% CAGR
- 2017-18: 18, 6% domestic, 30% export, 64% domestic markets, 30% international markets, +11% per year
- 2024-25: 38, 9% domestic, 50% export, 41% domestic markets, 59% international markets, +20% per year

1. Compound annual growth rate

Source: McKinsey analysis
### Example: paradigm shift for premium soccer broadcasting rights

**Conceptual**

<table>
<thead>
<tr>
<th>From the “eye balls”...</th>
<th>... to the “adjacencies”</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Guiding principle</strong></td>
<td>“Platform neutrality” – selling exclusive rights to one selected partner by geography</td>
</tr>
<tr>
<td></td>
<td>“Universal distribution” – selling the right to broadcast to all distribution platforms at a fixed price (proportional to size of client base)</td>
</tr>
<tr>
<td><strong>Packaging</strong></td>
<td>Limited, given that leading FTA or pay-TV providers are positioned as the “natural owner” for all packages</td>
</tr>
<tr>
<td></td>
<td>Opportunity to segregate / overlap specific packages (e.g., 1 match per week) to specific platforms (e.g., internet player)</td>
</tr>
<tr>
<td><strong>Monetization</strong></td>
<td>Typically limited to the value of the “eye balls” (audiences) under an advertising (FTA) or subscription (pay-TV) business model</td>
</tr>
<tr>
<td></td>
<td>Incorporates the value of adjacent businesses (beyond the eye balls): churn reduction, ARPU protection and market share gains</td>
</tr>
<tr>
<td><strong>Reach</strong></td>
<td>Often limited to drive the “exclusivity” value in adjacent businesses – e.g., foster premium services</td>
</tr>
<tr>
<td></td>
<td>Maximized by combining – and even overlapping – all distribution platforms (all types and all players)</td>
</tr>
</tbody>
</table>

**Source:** McKinsey analysis
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

- Lack of traction vs. Traction
- Self-reinforcement vs. Counter-cycle (?)

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 than what they earn; €30 Mn if covered by the club owner or related party).

Source: McKinsey analysis, Wilkofsky Gruen Associates
...with high concentration of revenues in top 5 leagues

Leagues total revenue (Mn €) in 2017

- UK: 5,340
- Spain: 2,899
- Germany: 2,799
- Italy: 2,163
- France: 1,639
- Brazil: 1,493
- Russia: 813
- Turkey: 731
- Portugal: 431
- Belgium: 383
- Ukraine: 89

75% of top 30 leagues total revenue

Source: McKinsey analysis, Wilkofsky Gruen Associates
Brazilian soccer is uniquely positioned to increase its relevance in the global arena

**SUPPLY...**

- Soccer
  - =
  - UEFA
  - +
  - Brazil
  - +
  - Argentina

**DEMAND...**

- Soccer
  - =
  - Supply markets
  - +
  - US
  - +
  - China/Asia

Source: McKinsey analysis
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

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

“FIFA believes the proposed 24-team 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 format of Club World Cup creates space for non-European top clubs to compete on a global level

Source: Press clippings; McKinsey analysis
New structure of competition is likely to unlock value and drive major changes in the soccer business

From...

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

To...

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

Source: McKinsey analysis
Participation in international (global) competitions is a fundamental economic lever

International revenues as % of total revenues\(^1\) (split into UEFA and other international revenues)

<table>
<thead>
<tr>
<th>League</th>
<th>Prize money from UEFA competition</th>
<th>Impact of international exposure</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top 5 Leagues</td>
<td>12%</td>
<td>24%</td>
<td>36%</td>
</tr>
<tr>
<td>Top 6-10 Leagues</td>
<td>29%</td>
<td>6%</td>
<td>35%</td>
</tr>
<tr>
<td>Top 11-30 Leagues</td>
<td>39%</td>
<td>2%</td>
<td>41%</td>
</tr>
</tbody>
</table>

\(^1\) 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.

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

- 2017/2018:
  - 100% (Driven by domestic markets)
  - 37% (Driven by international markets\(^1\))

- 2024/2025 E:
  - 100% (Driven by domestic markets)
  - 53% (Driven by international markets\(^1\))

Source: McKinsey analysis
Key questions to be addressed

<table>
<thead>
<tr>
<th>Pillar</th>
<th>Key questions to be addressed</th>
</tr>
</thead>
</table>
| **01. Competitions structure** | Articulation between domestic games and international games competition structures  
- 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)? |

Source: McKinsey analysis
20 (not so known) inspiring Brazilians in their 20’s

Massimo Mazza
Senior Partner
massimo_mazza@mckinsey.com

Marina Mansur
Associate Partner
marna_mansur@mckinsey.com

Paulo Cunha
Engagement Manager
paulo_cunha@mckinsey.com

Luisa Pereira
Recruiting Manager
luisa_pereira@mckinsey.com

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!
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
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.
20 inspiring people in their twenties

César Filho
Founder and CEO of Wecancer

Wecancer is an app that helps 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.
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
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
20 inspiring people in their twenties

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
20 inspiring people in their twenties

**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 low-income 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

Patricia gathers funds for her projects through crowdfunding on the internet

Patricia studied Design Graphic at SENAI
20 inspiring people in their twenties

**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
20 inspiring people in their twenties

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.
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
Participants
Core Team Authors

Nicola Calicchio
Reinaldo Fiorini
Vicente Assis
Anita Baggio
Paulo Cunha
Priscilla Licht
Amanda Zambianco
Rogerio Campos
Tiago Sanfelice
Julia Broide
Conrado Sertorio
Aina Calia
Eduardo Leite
McKinsey in Brazil

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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