



Leapfrog Into an Innovative Future

How Brazil's development bank aims to coordinate the nation's digital transformation.

Unlike the banks that support China's "**One Belt, One Road**" initiative by investing in traditional frameworks such as bridges, rail, ports and energy across Asia and Europe, other world-class development banks are concerned with the importance of funding a new kind of infrastructure.

The Brazilian Development Bank (BNDES) has historically been responsible for 50 percent of the country's infrastructure financing and is now looking towards the future of work.

The third largest development bank in the world, BNDES has more than US\$250 billion in assets and more than 2,000 employees. It has more money invested in Brazilian development projects than the **World Bank** has invested globally. Carlos Da Costa, Director of the Credit, Planning and Information Technology divisions at BNDES recently visited the INSEAD Europe campus to speak to MBA students about how a development bank can spur digital transformation.

Moving towards intangible assets

Da Costa described how fixed assets are losing importance. "Right now, intangible assets are 90 percent of the value of the S&P 500. These are human capital, technology, brands, distribution networks, organisational capital and so on." With this in mind, development banks like BNDES need to

adapt so that they can provide business and society with the means to finance these intangible assets.

In response to the move towards intangible assets, development banks need to coordinate transformation. Instead of a backbone of roads and bridges, the essential structures for economies are now fibre-optic or 5G networks. Development banks have to aid completely new types of infrastructure, without the same assurances of the past. But what is needed to create the kinds of networks required for digital work?

A new paradigm

A 5G network, for example, requires the **deployment** of small-cell technology instead of tall towers, and the hope is that 6G won't follow. Although Brazil doesn't currently have the most high-tech network, building this type of digital infrastructure doesn't involve layers upon layers of existing material. In the 19th century, the United Kingdom started with a small **rail network** which grew over time. That kind of expansion is no longer necessary with today's (and tomorrow's) technology.

Rethinking urban **energy storage** and the roads needed for autonomous cars are other types of infrastructure changes that will need to be considered by development banks.

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According to Da Costa, digital transformation – **integration** of smart cities, smart grids, and healthcare fuelled by the internet of things – needs three components: physical infrastructure (like 5G), people (creatives who live and work in the digitised space) and organisations. Organisations are especially important to Da Costa. These new organisations must be less risk-averse, look forward instead of back and be keen to exchange ideas.

Development banks need to consider three aspects to create the conditions for this transformation:

- Continue to provide the financial instruments necessary to stimulate growth
- Provide financing for the education and training of professionals
- Coordinate the change that companies will need in order to transform

In Africa, where phone companies used to keep potential customers waiting for access, mobile phones have opened up communication for hundreds of millions. Companies have used this opportunity to **leapfrog** into new business models, like Kenya-based M-Pesa, which allows people to send money via their mobiles.

Latin America has a similar potential for exponential growth. Companies that previously didn't have money to invest in expensive IT systems can leapfrog into digital. Broadband fixed lines were not available, due to lack of investment, but the high penetration of mobile phones and mobile broadband in particular shows great potential. **Brazilians** spend more time online via a mobile device than any other nationality.

For the first time, Brazil will be one of the leading countries to adopt the newest telecommunications technology: 5G. More than anything, Da Costa said, digital transformation requires coordination in terms of standards and new devices, as well as coordination in the innovative ecosystem.

BNDES has made an important investment to coordinate specialists, companies, government regulators, customers, NGOs and academic institutions to set priorities for the country. The bank released a study on the **internet of things** detailing the steps needed to make Brazil one of the world leaders in IoT. "We can leapfrog, adopt the IoT, and make all these challenges much easier and cheaper to overcome," said Da Costa, adding that this presents a coordination problem. "The complexity of organising so many diverse people – customers, entrepreneurs, academic specialists, futurologists, engineers – is overwhelming."

Brazil has a **long way** to go in the IoT realm, and BNDES has invested US\$1 billion in venture capital

in Brazil. Da Costa announced, "We are launching **an angel investor fund** – \$30 million – we're going to launch ten of those. At \$300 million, it will be the largest angel investor in the world."

In addition, Da Costa is creating a special board with ten high-powered entrepreneurs, including Tallis Gomes of **Easy Taxi**, an international taxi booking app which has expanded to 12 countries. BNDES trusts the board to get on with its work and doesn't micromanage it.

An important outgrowth of digitisation has been transparency. It can speed up processes when creating a new venture: "All the bureaucracy involved in managing a firm and all the tax complexities will become much simpler once you go digital," said Da Costa. That transparency also helps "Brazil overcome the corruption problems **we used to face**," he added.

Transparency and governance

"The more society knows what you're doing, the more society monitors and digitisation helps that a lot," he explained. With transparency and established rules, it's easier to decline any requests for patronage.

"You always need to have people whom you trust...sometimes we're going to make mistakes. We expect to make small mistakes and big successes. We need to make mistakes sooner, so that they're still small," he said.

At the bank, they talk about "Error type 1 and Error type 2. Error type 1 is doing the wrong thing; Error type 2 is not doing the right thing." For Da Costa and BNDES, Error type 2 is the real problem and they keep an eye out for those not doing the right thing.

Since Da Costa became director of Planning, Credit and Technology areas, he has focused the purpose and the vision of the bank and ensured that employees are aware of both. Their purpose is to take care of generations in Brazil, including the future generation.

Vision is important to enable teams to do their best possible work. Da Costa said, "There's overwhelming evidence that maximising profits for shareholders is not what makes people more productive, brilliant, creative or engaged. If you say, 'Our purpose is to maximise profit for the shareholders', people are not going to be engaged or creative. And they are not going to **maximise profits** for the shareholders."

The purpose of a development bank is to do what the market cannot easily achieve. It is a "leadership challenge to make sure that the people working

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there really believe that it's not their role to do what private companies should do," Da Costa said.

BNDES, using its expertise, would like to help Brazil transform itself into a digital power. This is a real possibility and perhaps it can provide a new role for development banks.

Felipe Monteiro is an Affiliate Professor of Strategy at INSEAD.

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