IoT pilots and SDGs

How the Brazilian Development Bank fosters IoT adoption for inequality reduction

Eduardo Kaplan

Aarhus, June 18th 2019
BRAZIL’s IoT ASPIRATION
Accelerate the implementation of the Internet of Things as a tool for the sustainable development of Brazil, capable of...

...increasing the economy’s competitiveness...

...strengthening Brazil’s manufacturing chains...

...and fostering better quality of life
The study prioritized the environments with highest potential for Brazil, defining specific objectives for each one.
BNDES has several options to support foreign investment in Brazil

**Financial Instruments for IoT Solutions**
- Credit for IoT solutions
- **ICT Companies:** €3.25Bi (last 3 yrs)
- **Users:** financial support for farmers, cities, hospital, industries, etc.

**Investment Funds**
- **€125M+ available** for investment in IoT companies (next 3 yrs)
- **Co-investment with Corporate Venture and Institutional Funds** (e.g. aerospace with Embraer)

**IoT Pilots**
- **1st initiative** for coordinating IoT pilots in Brazil
- **Demand driven** applications

- ✓ BNDES to finance investment in local currency
- ✓ Co-invest in Funds for IoT companies
- ✓ Joint investment in IoT pilots
In order to accelerate the adoption of IoT in these select environments, we decided to start working on a key initiative: BNDES IoT Pilots.

**BNDES IoT Pilots Goals**

- Use IoT to **solve Brazilian problems**
- **Foster local innovation** and IoT ecosystem
- Identify sustainable **IoT business models** and scale up
- Faster the **addressment/mitigate the risks of IoT thresholds** (privacy, safety, interoperability, HR etc.)

SOURCE: Consortium analysis
The Pilots will target the goals and applications set aligned to the SDGs

**BNDES' Pilots**

- **Cities**
  - Mobility
  - Public safety
  - Water and Energy

- **Health**
  - Management efficiency
  - Chronic diseases
  - Prevention

- **Rural**
  - Machine efficiency
  - Sanitary safety
  - Resources efficiency

- **Industry**
  - Resource and stock efficiency
  - Capital optimization

**External Partnership**
Non-reimbursable funding is structured through an R&D Institution that should be part of the consortium.

**Criteria for projects selection**

- Relation to strategic objectives
- Interoperability
- Financial contribution
- Social Impact
- Promotion of innovation
- Replicability
- Expected Economic Impact

---

**Consortium profile**

- R&D
- Users
- Vendors
- Start-Ups
- $$$
  - Up to 50%
- $$$
  - $$$

---

**External Evaluator**

---
BNDES IoT Pilots - submitted projects

- 54 submitted projects
- US$ 90 million in total investments
- 22 projects
  - US$ 40 million
- 17 projects
  - US$ 25 million
- 14 projects
  - US$ 25 million
BNDES IoT Pilots – selected projects for smart cities
BNDES IoT Pilots – selected projects for health sector
BNDES IoT Pilots – selected projects for agriculture
Government initiatives could accelerate IoT adoption

On Health...
Foster the adoption of IoT based solutions on Public Health System (“SUS”)

On Rural...
“Plano Safra” (Inova Agro)
100 M EUR (‘17)

On Cities...
“Educate” public agents for using technology
BNDES financing to municipalities
It will be a pleasure to answer your questions

eduardo.barbosa@bndes.gov.br

Thank you!