Does your solution have an impact on market logic?

1st CALL

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PHASE I

Study results - Leapfrogging practices in Brazilian Startups focused on social impact

November 2019
Executive Summary

The Study
FDC’s study on Leapfrogging practices in Brazilian startups with social and environmental impact brought together 157 organizations throughout Brazil, which met the specifications described in the Call Notice. The attendees are part of the 2nd Business Impact Map of 2019, released by the startup - Pipe Social based in São Paulo - Capital.

The sample was analyzed by the team of researchers that conducted the treatment and analysis of the data obtained. The following is the results obtained and the interpretations from the sample of 157 Brazilian startups.

Summary of Results
The significant number of founders over 30 years of age suggests that startups are businesses developed by mature professionals, with previous experiences in the market. Another fact that reinforces this interpretation is the high percentage of businesses fostered by own investment resources (75% of the sample).

Although the startup ecosystem of the Southern region is recognized nationally by having several cities fostering entrepreneurship and innovation in nascent companies, the business participation of this region was only 8% in the sample evaluated. The fact may have a causal relationship with the more technological and process optimization characteristics in the businesses of the center. It is worth mentioning that our study focus prioritized businesses with social or environmental impact and we did not focus on optimization processes.
Executive Summary

There are significant differences between businesses in Brazil, from a regional perspective. Although the Southeast and Northeast regions have similar business rates in final stages of development, startups in the Southeast last longer when compared to those in the Brazilian Northeast.

Regarding business acceleration mechanisms, the sample presented a significant number of startups that have not undergone incubation yet, even after several attempts (36% of our sample). Another relevant fact is that among the 157 businesses evaluated, almost half (47%) were never accelerated, demonstrating an opportunity for investment funds such as Venture Capital and Angels.

The representativeness of B2G (*Business to Government*) modality was also significant, cited by 31% of the startups analyzed. Business in the area of Health, Sanitation and Education also stand out in this modality, a fact that justifies the representativeness of social impact on the sample in CivicTechs and SDG - Citizenship.

Emerging technologies are present in most of the startups evaluated, and the study focused on their diversification. On average, each startup uses more than three technologies simultaneously in their products and services. This fact proved interesting, considering the low acceleration through financial resources from third parties for research investments in startups in Brazil.

We wish you a good read and new discoveries.
Call statistics - Notice
From 18 February to 31 March 2019

MOBILIZING SOCIAL NETWORKS:

• **Facebook Campaign** at the startup Pipe Social, with investment to boost the network *(1 round per week, 2758 likes of the page)*

• Ad engagement *(5,063 people achieved and 1,846 engagements)*

• **17 organic posts on Pipe's Facebook** *(8,923 people reached)*

• **17 posts** on Pipe's Linkedin

• **15 posts** on Instagram and Stories

• **3 newsletters** for business registered in the Pipe's base *(4,480 entrepreneurs registers)*

• **3 newsletters** for the base interested in the setor *(1,298 Impact Map downloads 2017)*

• **3 newsletters** for businesses registered in Pipe's base *(361 ecosystem actors)*

• Partners who shared the campaign on their respective bases: Civi-co, Wylinka, Movimento Choice, Sitawi, Quintessa, ponteAponte, Kaleydos, Prosas, ICE, Impact Hub, Mov Investimentos, Noticias de Impacto e Vox Capital

• **73 posts** on Facebook groups engaged on the impact, innovation, technology and business sector.

• **20 posts** in WhatsApp groups, engaged on the impact ecosystem, logistics group, renewable energies, impact business, environment and sustainability, Brazilian startups, innovative business in SP *(2,642 people reached)*

• Activation on Pipe's entrepreneurial base *(107 call initiatives according to the call relevance criteria determined by the workshop)*
Call statistics - Notice

From 18 February to 31 March 2019

MOBILIZATION VIA EMAIL MKT:
PIPE BUSINESS BASE: average of 16,9% emails opened
BASE OF ACTORS INTERESTED IN THE SECTOR: average of 22,2% emails opened
ECOSYSTEM BASE: Average 23,06% emails opened
PIPE SOCIAL REGISTER: 909 ACCESSSES TO THE LINK

REGISTERED BUSINESSES AND PARTICIPANTS IN THE NOTICE: 157 BUSINESSES
Why study and invest time in Leapfrogging?

01 Technological and innovation practices are economic development engines.

02 Technological redesign makes technology accessible for a big portion of the population.

03 World Bank study field for developing countries.

04 Adoption of new technological practices leverage the country's productivity and competitiveness gains.

05 Overcoming steps and charting new technology paths is imperative for developing countries.

Source: authors of this research.
What we are trying to answer…

**Title:**
Study on the leapfrogging practice in the Brazilian start-ups with social and environment impact

**Research Question:**
What Brazilian start-ups’ initiatives can be characterized as leapfrogging and what kind of impact evidence/metrics their solutions have on social and environmental context?

*Source: authors of this research.*
# Profile of evaluated startups

Among the 157 startups analyzed, the study focuses on businesses located mainly in the Southeast and Northeast regions of Brazil, which have on average less than 15 employees. Most of them were founded less than 5 years ago, and only 12% (19 companies) had a woman as a startup founder.

### Time of existence
4.6 years on average.  
*29% founded less than 2 years ago, and 33% between 2 and 5 years.*

### Founders
48% of mixed startups (men and women).  
12% founded by women only.  
71% of the founders are over 30 years old.

### Team Structure
14.4 employees on average.  
In addition to the hired team, there is on average 6.7 freelancers

### Region
Southeast (67%) and Northeast (11%), totaling 78% of the sample.

### Related SDGs
Reduction of inequalities, and sustainable cities and communities, with 38% association

### Impact Areas
Citizenship and Green Technologies (marked respectively by 46% and 41% of the sample).

### Leapfrogging Categorization
Education (22%) and Civic Techs (13%) together represented 35% of the sample.  
The most cited new technologies are **Big Data (10%)** and **Artificial Intelligence (9%)**

### Business Formalization
16% haven't formalized their business yet  
33% of Limited Companies (Ltda, Eireli *, etc).

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*Eireli: Individual Limited Liability Company.*
Profile by Region

The South region's businesses last longer, on average, and had the second lowest percentage of businesses without revenues. In addition, it is the only region where Education is a relevant area of impact among its startups.

<table>
<thead>
<tr>
<th>Region</th>
<th>% sampled startups</th>
<th>Average time of existence</th>
<th>Average employee number</th>
<th>% without revenue</th>
<th>Most common impact area</th>
<th>% final business stages</th>
</tr>
</thead>
<tbody>
<tr>
<td>North</td>
<td>6% (9)</td>
<td>3.3 years</td>
<td>7.0</td>
<td>56% (5)</td>
<td>Green tech and Citizenship</td>
<td>33%</td>
</tr>
<tr>
<td>Northeast</td>
<td>11% (17)</td>
<td>3.3 years</td>
<td>10.8</td>
<td>47% (8)</td>
<td>Health and Citizenship</td>
<td>53%</td>
</tr>
<tr>
<td>Midwest</td>
<td>3% (4)</td>
<td>5.9 years</td>
<td>10.3</td>
<td>25% (1)</td>
<td>Citizenship</td>
<td>25%</td>
</tr>
<tr>
<td>Southeast</td>
<td>67% (105)</td>
<td>4.6 years</td>
<td>23.9</td>
<td>37% (39)</td>
<td>Green tech and Citizenship</td>
<td>51%</td>
</tr>
<tr>
<td>South</td>
<td>8% (14)</td>
<td>6.5 years</td>
<td>13.1</td>
<td>29% (4)</td>
<td>Citizenship and Education</td>
<td>64%</td>
</tr>
<tr>
<td>Not informed</td>
<td>5% (8)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Final business stages: Business organization, Traction, Pre-scale and Scale.  
Source: 2nd Impact Business Map 2019, provided by Pipe Social.  
157 complete answers.
Business Phases

39% of businesses are in the early stages of development. From this group, **63% do not have any revenue yet.**

48% of businesses are already in more mature stages of development. From this group, **59% already have revenues between R$1 and R$500 thousand.**

2% of startups said they don't know what stage their business is in. Another 10% did not answer at what stage the business is in.

Source: 2nd Impact Business Map 2019, provided by Pipe Social.
157 complete answers.
Time of existence x Business phase

Among the 157 startups in the sample, more than half (59%) were founded over 2 years ago. However, among the oldest ones (over 5 years old), almost a third still remain in the early stages of the business.

Early stages: Idea, Idea Validation, Prototype, Pilot, and MVP.

Source: 2nd Impact Business Map 2019, provided by Pipe Social.

157 complete answers.
Sustainable Development Goals (SDGs)

Startups showed stronger connection of their business to SDGs related to inequality reduction and sustainable cities, and lesser connection to biodiversity-related SDGs.

SDGs with greater business connection:
- 10 Reduced Inequalities: 38%
- 11 Sustainable Cities and Communities: 38%
- 4 Quality Education: 34%
- 3 Good Health and Well-being: 34%
- 8 Decent Work and Economic Growth: 33%

SDGs with lesser business connection:
- 2 Zero Hunger: 11%
- 5 Gender Equality: 8%
- 7 Affordable and Clean Energy: 6%
- 15 Life on Land: 6%
- 14 Life Below Water: 2%

Source: authors of this research. 157 complete answers.
More than a third of startups have no revenue yet. Among those earning more than 1 million, **39%** have been incubated **more than once**. Most startups continue to raise investments.

![Revenue Distribution](image)

**Revenue**

Among startups without revenue, **82%** are capturing investments. Among startups that earn more than 1 million, **more than half** are not yet in scale phase.

*Source: authors of this research. 157 complete answers.*
Emerging Technologies

Overall, startups use an average of 3.3 emerging technologies in their businesses. It is possible to observe great diversification in the use of these technologies, since there is no significant concentration of any of them among startups.

10% of the signaled technologies represent less than 2%, such as mixed reality, drones, genetic engineering and other uninformed ones.

3.3 is the average number of different emerging technologies mentioned by startups as technologies used in their business.

31 startups simultaneously use at least 5 emerging technologies to operate their businesses.

Source: authors of this research.
157 complete answers.
Acceleration and Fundraising

There is a significant percentage of startups that, even after attempts, have not yet gone through incubation/acceleration processes. In contrast, 14% of startups have gone through acceleration more than once.

76% of the sample startups are raising funds in their businesses.

62% of these companies seek to raise funds below R$500 thousand, to leverage more mature stages of development of their business. Half of these companies are in the Business Organization, Pilot, and Traction phases.

Source: authors of this research.
157 complete answers.
Source of Funds

Own investments are the major drivers of the startups analyzed. Support from friends and family and loans represented a smaller participation. National development banks had low representativeness as a source of funds.

**Startup Sources of Funds**

- **Investimento próprio**: 75% (118)
- **FFF (amigos/familiares/fãs) - Empréstimo**: 20% (32)
- **Empréstimo Instituição Financeira**: 14% (22)
- **Sócioinvestidor**: 13% (21)
- **Institutos/Fundações - Doação**: 13% (21)
- **Crowdfunding**: 11% (17)
- **FFF (amigos/familiares/fãs) - Doação**: 11% (17)
- **Instituições públicas/governo - Doação**: 9% (14)

Other sources of funds were mentioned by startups, but with lower representativeness. Among these modalities are the donation of accelerators / incubators, loans from national development banks (BNDES) and equity investor partners.

Among startups that started their business with their own investment (even if they received another source of funds in parallel), **39% still do not have revenues**. In this group, 87% of businesses are still raising funds.

Source: authors of this research.

157 complete answers.
Business Model

B2B and B2C were the most frequent modalities observed among startups. It is worth mentioning the representativeness of businesses involving solutions for B2G government spheres, mainly in the health and education areas.

Among the startups of B2B, there are businesses whose monetization is through recurring direct sales (55%) and single direct sales (53%).

11% of startups did not report the nature of their business models.

Another 5% of the sample do not know their companies’ business model.

Source: Prepared by the authors of this research.

157 complete answers.
## Support needed for startups

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Description</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>55% (87)</td>
<td><strong>Financial resources</strong>&lt;br&gt;Investments, partners, working capital for the most diverse purposes.</td>
<td>Source: Prepared by the authors of this research. 276 classifications</td>
</tr>
<tr>
<td>40% (63)</td>
<td><strong>Dissemination, networking and partnerships</strong>&lt;br&gt;Support for dissemination and expansion of network in the business areas of expertise</td>
<td></td>
</tr>
<tr>
<td>20% (32)</td>
<td><strong>Team and business plan development</strong>&lt;br&gt;Hiring staff, elaboration of dissemination and communication strategies.</td>
<td></td>
</tr>
<tr>
<td>19% (30)</td>
<td><strong>Mentoring and Consulting</strong>&lt;br&gt;Consulting on strategic areas of the business and mentoring over the startup development</td>
<td></td>
</tr>
<tr>
<td>17% (27)</td>
<td><strong>Technical, academic and legal support</strong>&lt;br&gt;Business regulation, Information, techniques and scientific studies, work together with universities.</td>
<td></td>
</tr>
</tbody>
</table>

### Other types of help demanded by startups:

- Physical structure (6%)
- Patents and Trademarks (3%)
- Internationalization support (2%)

Still, **13% of startups did not say what kind of help they need.**
Overview

Entrepreneurship is one of the major drivers of a country’s economic growth because it creates wealth and jobs. In this context, social impact businesses, in addition to playing a role in economic growth, also seek to solve social and environmental problems in areas as diverse as education, health, clean energy or financial services.

Especially in this type of business, it is important to constantly seek disruptive innovations that are capable of generating significant and transformative economic, social and environmental gains.

Gradual changes and business-as-usual are not enough to solve the serious social and environmental problems the world is facing, especially in developing countries such as Brazil. In the search for disruptive innovation that generates positive impact, it is important to understand and know more about Leapfrogging practices in Brazil.

Also known as Technology Leapfrogging, this phenomenon is characterized by the application of the latest technological practices without necessarily going through incremental stages of technological advancement.

Therefore, it constitutes a leap in technological stages, and for this reason, fostering the creation of companies and their respective adoption in the production chain of different sectors has been a highly effective strategy for developing countries in recent decades.

The FDC team of professors and researchers responsible for this study share the Phase I research report in the following QR-code. Our analysis is aimed at understanding trends affecting Brazil’s economy and development policy, according to data collected from managers and founders of 157 Brazilian startups.

Whatever the next paths are, there is no doubt that we will have new opportunities to develop and materialize Leapfrogging practices, thereby directly interfering with the competitiveness and performance of organizations and, on the other hand, overcoming or resolving gaps and deficiencies presented by developing nations, such as Brazil.

1 Ipea forecasts GDP growth of 2.7% in 2019 in the country | Exame (2018)
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Last but not least, we thank the Fundação Dom Cabral for the institutional support offered to this research dedicated to the generation of new knowledge.

Please accept our thanks.
Questions?

Please send us by e-mail
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Disclaimer

This study is based on data obtained spontaneously from managers / founders of Brazilian startups who accepted to participate in the FDC Leapfrogging Practice Notice. Data were obtained from primary sources, i.e., directly from each research participant and through public information analysis, especially websites of each startup. The research team, author and responsible person on behalf of FDC, makes it clear that they have not independently verified or audited the accuracy of all and / or any information provided by the 157 startups through the electronic questionnaires used in data collection. Therefore, it does not guarantee, expressly or implicitly, that such data is absolutely correct or complete. The analyzes and conclusions contained in this document are based on the type of information obtained / collected and mentioned in the previous paragraph. Therefore, the judgment of the FDC Strategy Reference Center’s team of professors and researchers is based on the data obtained and considered as answers. Therefore, they should not be understood as definitive forecasts, nor generalized, nor as guarantees of future performance or results. In addition, the data and interpretations contained herein do not constitute advice of any kind, are not intended for use for investment purposes, nor are FDC’s teaching staff as none of its associate researchers assume any responsibility or liability with respect to their use, or the reliability of any information or analysis included on these pages. All rights in this document belong to Fundação Dom Cabral represented herein by prof. Fabian Salum, and it may not be published, transmitted, distributed, copied, reproduced, or republished, in whole or in part, without the express written permission of Fundação Dom Cabral.
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