UNIVERSIDADE DE BRASÍLIA

FACULDADE DE TECNOLOGIA

ENGENHARIA DE PRODUÇÃO

PROJETO DE SISTEMAS DE PRODUÇÃO 1

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BUSINESS MODEL FOR WASTE PICKERS EDUCATION VIA MOBILE APPLICATION

Final Report

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SUMMARY

1. PROJECT IDENTIFICATION

The project *Business Model for Waste Pickers Education project via Mobile Application* is part of the group of projects called *Mobile Education for Low Income People: focus on Waste Pickers*, which aims to develop a mobile application that intends to provide educational content for individuals from low social classes, with an initial focus on waste pickers impacted by the closure of the Estrutural Dumping Ground and considering the future perspective of dumps closures throughout the Brazilian territory due to the enactment of Law nº 14,026.

The objective of the project, developed over the semester by this PSP1 team, was to define a business model and a marketing structure for the application that would make it viable. It lasted 95 consecutive days and reprioritized the initial definition objective for the study of business models devised by the members. Five interviews were conducted with potential partners to collect inputs and identify patterns of behavior/acceptance of the application and forms of partnership.

2. RESEARCH METHODOLOGY

To achieve the project's objectives, we conducted a Desk Research — compilation of existing information to acquire knowledge — to give the necessary initial direction, containing a list of possible partners and the behaviors of companies when relating and investing in social projects.

Based on the members' understanding of the topic, 4 possible business models were devised. Aiming to understand the market positioning, in a deeper way, we performed qualitative research, where the results requested by the students of Aalborg University were obtained.

Idealized business models:
- **Creation of a course:** the partners would act in the creation and preparation of the contents made available by the platform, within the execution;
- **Sponsorship of a course:** provision of financial resources for the production of content, with the disclosure of the partner brand only in the course;
- **Sponsorship of the application:** provision of financial resources for the sustainability of the application, with the disclosure of the partner brand;
- **Employability partnership:** provision of financial resources for the sustainability of the application, with the disclosure of the partner brand, in return for the possibility of hiring labor with greater training and monitoring of the users' progress.

<u>Qualitative research roadmap:</u>

(Presentation of the project and context of the interviewed organization)

1. What do you expect when establishing a partnership? (what do you wish to gain / promote for society?)

2. Considering the presentation of our project and purpose, do you see a possible partnership being established? Why?
   - *If the answer is yes:* How do you imagine this partnership? (what would be the win-win relationship? / what do you have to offer and what do you expect to receive?)
   - *If the answer is no:* What would have to change / what is the ideal business model, so that the partnership can be established?

3. What improvements do you believe we have to make in our project so that it can reach a better potential in the market?

(Present idealized business models)

4. What did you think of the idealized business models? Do you believe they are viable?

5. Which partnership format do you think best suits your corporation?

6. What changes / improvements would you make to the partnership models presented so that there would be a greater fit with your business?

7. Do you sponsor other social projects? (if the answer is yes: do any of them require exclusivity with your corporation?)

8. What kind of impact and improvements does *[name of the corporation]* hope to bring to society?

9. Do you currently have a budget for promoting social projects? (what do you think about that for the future?)

10. How is the decision process for a project to gain your support and investment?

3. PROSPECTING CHANNELS

The main prospecting channels used, in order of effectiveness, were:

- WhatsApp;
- Calls;
- LinkedIn;
- E-mail.

Adaptations of the prepared pitch, presented below, were used to prospect possible partners contacted after the elaboration and listing of the secondary research.

Communication model (Pitch):

"Hello [person's name], how are you?

My name is [person's name] and I'm a student of Production Engineering at the University of Brasília. I participate in the project '*Mobile Education for Low Income People: focus on Waste Pickers*', a collaboration with students from Aalborg University in Denmark, which aims to bring knowledge and education to low-income people in Brasília, specially the waste pickers who have undergone the change of their jobs with the closure of the Estrutural Dump in early 2018.

With the enactment of Law n° 14,026, on July 15, 2020, which alters the legal framework for basic sanitation and has the closure of 3000 dumps in Brazil by 2024, there was a need to do something about it and collaborate with the society. We are currently in the stages of research, validation and development of the business model that would enable the continuity of our project, promoting the impact on the lives of those most in need through education so that they can seek new opportunities to bring sustenance to their lives.

We believe that [name of corporation] can add a lot to our project. I would like to make a call with you to better explain the project and validate partnership models."

4. ANSWERS PATTERNS

At the end of the interviews, it was possible to perceive some standardization of opinions that are essential for understanding the next steps to be taken by the project. Fundraising is difficult to acquire: in all of the interviews, the possibility and availability of investment by the organizations was not obtained. In addition to occurring, with considerable recurrence, concern on the part of the interviewees about how we would be able to raise these funds, since the sponsorship of the application is a delicate point due to the conditions of the users.

However, it was pointed out that there is a very strong market trend to increase the relationship between companies and social projects, as consumers are increasingly demanding in choosing brands, associating themselves with conscious consumption and organizations that hold the same values and purposes that the client. Such factors need to be validated in the next quantitative research so that the application can obtain the necessary investment for its sustainability and development, overcoming the obstacles and bureaucracies — initially punctuated — of this achievement.

Most respondents indicated that the project is necessary to promote changes in the reality of people with lower income conditions, and that the idealized business models were feasible over time with

the meeting of the right partners. It also stipulated the importance of engaging the population of the Federal District so that the project gains more visibility, and can count on individual donations, in addition to facilitating the meeting of investors and sponsors to promote an improvement in their reputation.

In 60% of the meetings, an opening for the consolidation of the partnership was perceived, and one of the corporations that did not indicate the fit in the partnership formats has a business structure that allows the entry of the project as a possible client (if accepted in the criteria of evaluation of the company, within a selection process). The greatest interest was in the elaboration of courses. Even though the main objective of obtaining financial resources has not been achieved, there was a significant acceptance of the project and the opening of organizations to continue its development, in addition to promoting the project's dissemination to other entities so that more research can be carried out.

5. PROJECT PERFORMANCE

Overall performance:

From the reformulation of the initial scope of the project, through the combined of both parties involved — the students of the University of Aalborg and the participants of the PSP1 team —, the final deliverables described in the Business Case were successfully completed. It is understood that, for a better performance of the project, the scope could have been realized with more diligence through a better organization and prioritization of tasks and demands, external to the project, of the team members.

Performance in relation to deliveries and expected goals:

Deliveries and goals	Verified acceptance discretion
At least interview 3 possibles partners	5 interviews were conducted with possible partners from external organizations
A spreadsheet containing: people contacted, respective positions and corporations, and insights generated in each conversation	Finalized spreadsheet containing all the requirements broken down in columns and the filling of the lines through the inputs acquired in the interviews
Defining a framework for long-term application sustainability	Reprioritized at the beginning of the project due to the understanding that analysis prior to the definition of the business model would add more value
A document containing: methodology used for research, prospecting channels, patterns identified in conversations with possible partners, lessons learned and next steps	The necessary topics for making the delivery were linked to the construction of this document

<u>Performance in relation to the stipulated period:</u>

There was a delay of 4 consecutive days from the planned final date (May 14, 2021) due to the extension of the interview scheduling stage necessary for the preparation of the project's final deliveries.

6. DIFFICULTIES

It was difficult to schedule the validation interviews: positive results were not obtained in most of the contacts with the companies listed as possible partners, as they are large, with biases in the public service and with a high level of bureaucracy, which led to the restriction of interviews with organizations in which the team had contact with a collaborator or from referrals from third parties (teachers and interviewees) — a factor that represented 80% of the interviews (only 1 out of 5 was marked with a company that had no relationship with members of the group or was not referred). Therefore, it demonstrates the importance of having relevant connections and the need for contact bridges for the project to reach the desired scope and relevance, in addition to trying to take advantage of the availability of teachers to achieve these contacts.

In the interviews, it was repeatedly noted the claim that the proposed idea was good and that the market was full of companies that would be willing to contribute financially, since, currently, social

projects are on the rise to promote the good reputation of the brand, because of customer demand and new consumer trends. However, the organizations interviewed did not have funds, due to the current business model, to invest in the project, and indicated a greater interest in the elaboration of courses.

7. NEXT STEPS

Based on the analyzes generated through the qualitative research carried out, it is understood that the next step is to define a quantitative research script to validate the inputs collected in the interviews, since, in this way, the business model can be consolidated with the necessary basis, understanding the feasibility of the application.

For this, due to the acquired perception of the openness and receptivity of Brazilian companies and organizations, there is a need to approach Junior Achievement Distrito Federal's network of contacts to ensure adequate dissemination to implement the quantitative research of the project and seek the potential investors of financial resources for the application.

It is believed that the support of professors for the continuity of the research through the indication of contacts and the communication medium will be crucial for the success of the second stage, taking as an example the deepening of the understanding of the participation of the Central Bank when acquiring contact with the department of financial education that is directly related to the objectives of the project.

8. CONCLUSION

The execution of the present project was concluded with satisfaction in the results and analyzes obtained, the objectives and agreed stipulations were delivered and the delay was considered as a necessity for the quality of the deliveries to be high.

The contributions to the future of the Mobile Education for Low Income People: focus on Waste Pickers project are significant for the application to be developed according to the needs punctuated by possible partners, in order to achieve viability and sustainability, so that the development of the educational support solution can bring an effective impact to low-income people. In addition, greater clarity and direction of the next steps to be taken were promoted.