

FACULDADE DE ENGENHARIA DA UNIVERSIDADE DO PORTO



Community development through entrepreneurship

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Dissertation made for the Master in Innovation and Technological Entrepreneurship

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Abstract

Models for entrepreneurship and business have been developed and used by several academics and leaders, always trying to minimize project failure. Those tools are vital, especially when it comes to helping a leader identify crucial aspects of business success.

Although the importance of this guidance is evident, it was not possible to find one framework capable of assisting entrepreneurs in fostering community development. Many cases were analysed, and it was possible to understand the complexity of this kind of project. In the end, it became clear the non-existence of a unique framework able to deal with all these complexities. Therefore, it was evident the necessity of trying to create one model considering all elements involved, which would represent a great value to the leaders of such project.

Based on case studies from the literature reviewed, this research grouped common existing elements and success factors among entrepreneurship community projects. A graphic representation was created using all components and relations found, emerging the so-called *Entrepreneurial Forces Diagram*. The well-known case “*Gran Vikas*” was used as a scenario to validate the diagram, and proved that the relationships of the elements were correct.

Despite the study’s limitations, this research has successfully achieved the relationship representation between the main elements of an entrepreneurial journey in a developing community.

The *Entrepreneurial Forces Diagram* can be used as a base to better understand the environment behind a business project that fosters a community through entrepreneurship. It may also be used to build new tools, such as canvas, to guide fresh starters on their path.

Keywords: Social Entrepreneurship; Social Business; Community Development; Entrepreneurial Forces; Entrepreneurial Model.

Content

Acknowledgment	5
Abstract	7
Content	9
List of Figures	11
List of Tables.....	13
1 Introduction	15
1.2 Motivation and Objective of the Research	16
1.3 Overview of the Methodology.....	17
1.4 Structure of this Dissertation	17
2 Literature Review	19
2.1 Introduction	19
2.2 Research Analysis	20
2.3 Discussion	32
2.4 Conclusion.....	33
3 Methodology	35
3.1 Introduction	35
3.2 Research Question	35
3.3 Research Design	35
3.4 Scenario Selection	37
3.5 Conclusion.....	37
4 Model Development	39
4.1 Introduction	39
4.2 Entrepreneurship as a solution.....	39
4.3 Proposing a model, Literature Review elements and their relationship	40
4.4 Applying the Entrepreneurial Forces Diagram to a Scenario	44

4.5	Discussion	47
4.6	Research Limitations	48
5	Conclusion.....	49
6	Bibliography:.....	51

List of Figures

Figure 1 - Framework for Understanding Design Science Approach Note. Adapted from Design Science in Information Systems Research (p. 80), by A.R. Hevner, S.T. March, P. Jinsoo, and R. Sudha, 2004	36
Figure 2- Entrepreneurial Forces Diagram.....	41
Figure 3 - Entrepreneurial Forces Diagram - Gran Vikas Case	46

List of Tables

Table 1. Literature Review analysing a model of social entrepreneurship as a way to develop a community.....	22
Table 2. Literature review with common characteristics identified. “Community Problem”, “Endogenous Resources”, “Community Involvement”.	27
Table 3. Literature review with common characteristics identified. “Governance”, “Project Leader”, “Key Partners”.....	28
Table 4. Literature review with common characteristics identified. “Empowerment”, “Social Value”, “Economic Value”.	29
Table 5. Literature review with common characteristics identified. “Funding”, “Financial Independence”, “Obstacle”.	31

1 Introduction

The advancement of technology brought even more tools to entrepreneurs. The solutions led to a positive gain in the benefit of society. In addition, the social goal has gained space in entrepreneurs' minds around the world and has been helping many people and communities.

“Societies around the world are facing significant social problems for which they often do not have cost-effective solutions. They also face uncertainty and rapid changes (in everything from technology to migrating populations) that lead to new, complex, and shifting problems, and open the door to new approaches to solutions” (Zeyen et al., 2013, p.4).

Despite the trend of entrepreneurship, many communities do not have this empowerment in the local's mind, and stand still, waiting for government initiatives to grow and develop.

A passive position by society may have made sense in the past, but nowadays with the new technologies and information access, seems to be more likely to get this reality changed. Locals have new incentives to grow nowadays, such as entrepreneurship, even though the government cannot do much for some communities, the residents have tools to help their community development.

Throughout the Internet, people are able to acquire knowledge autonomously and become competent to create new solutions or improve themselves. Collectively, people can embrace their community's problems and try to solve it through entrepreneurship, and help the local growth.

Trying to understand that subject, we found the concept of *Community Development*. Although there is no consensus in science about it, in this dissertation, we will use the term *Community Development* in ABCD version, Asset-Based Community Development, which refers to creating a change at a community or any local level such as a neighbourhood. Every community has its own assets, including spaces, skills, knowledge, financial resources, and associations (Kretzman & McKnight, 2005).

A variety of efforts can be made in order to help a community to grow. An entrepreneur, for example, can start a business that brings economic value to the local society, even though it

was not the primary goal. When it comes to the community, every activity has an impact. This effect will bring positives or negatives changes to the locals, such as economic growth, or damage to the local environment, for example. Therefore, it is crucial to acknowledge and analyse all of the impact behind any action. This dissertation will focus on entrepreneurial endeavours launched with the specific intent of producing community impact.

In order to have a deeper understanding of social impact initiatives, we focus on the most important concept, the *Social Innovation*, which is the concept behind the idea that conceives a solution, method, or service that brings value to society. “Social innovation refers to new ideas that work in meeting social goals.” (Mulgan, Tucker, Ali & Sanders, 2007, p.8)

The success of a social enterprise is directly related to the complexity of each region and its particular problems, local culture and inhabitant, entities, resources, and governmental support which can make a business structuration difficult.

This study will try to better understand all those elements behind a local development and pursue a general model that helps micro-regions (cities, neighborhoods, villages) to advance using entrepreneurship as a mean.

1.2 Motivation and Objective of the Research

Entrepreneurship has been gaining awareness during the past decades. It is an effective way to obtain extra income and also to change lives and places. For example, in ten years, between 2007 and 2017, Brazil went from 14.6 million entrepreneurs to 49.3 million, according to the Global Entrepreneurship Monitor (GEM) survey in PEGN Magazine (2018), which means that entrepreneurship is growing.

Around the world, there are entities and tools available to help businesses and entrepreneurs to avoid, or at least mitigate, failure. In Brazil, for example, there is SEBRAE, an entity able to provide support for small businesses. However, the same organization reports that one in four companies close in the first two years, Exame Magazine (2018), this means that the growth of entrepreneurship, might be happening in an unstructured way despite the tools available for developing these new businesses.

It is common to have models on business and entrepreneurship subjects. A business plan, for instance, is a detailed structured document that helps setting directions to the business. For the Business Model, a modern and uncomplicated tool was created by Alex Osterwalder and Yves Pigneur, the Business Model Canvas (BMC), that allows stakeholders to evaluate and have a clear understanding of the business model. Those are examples of supports that help an entrepreneur or any business person to make the project happen.

Some authors tried to customize those models to achieve different objectives, for example, creating a Business Model Canvas focus on Social Enterprise or even focusing on a core department, such as Marketing.

The customization is vital to analyse all particularities of a project regarding its type or complexity. Therefore, as community development has different elements inside, it is our understanding that it might be positive to have a structured model to guide entrepreneurs through their path, building a sustainable business able to transform their communities.

1.3 Overview of the Methodology

Following the literature review, the research questions was defined as:

How can entrepreneurship contribute to local communities?

- a) Is there a model to be used as a reference?
- b) If not, can we build one model to describe how to use entrepreneurship to foster community development?

The literature revealed no model but brought valuable insights. A new model could be proposed, and applied for validation, in the case scenario of Gran Vikas which was a significant case that helped develop a small village in India.

1.4 Structure of this Dissertation

This dissertation is structured as follows:

- Chapter 1 Introduce the reader to the subject presenting the motivation, objectives, and overview of the methodology.
- Chapter 2 reviews of the literature and identification of the research gap.
- Chapter 3 outlines the methodology.
- Chapter 4 proposes the so-called *Entrepreneurial Forces Diagram*, and applies it to a case study for validation.
- Chapter 5 presents the conclusion of this research and suggest future development.

2 Literature Review

2.1 Introduction

According to Levy & Ellis (2006), the study research question will be legitimized and validated through the literature. Therefore, this chapter seeks to analyse what has been written about developing a community through entrepreneurship.

First, we will try to understand the definitions behind our topic, *Entrepreneurship*, *Community*, and *Community Development*.

Several authors brought their own perspectives about the definition of the term *Entrepreneurship*. According to Van Aardt (2008), entrepreneurship is the act of initiating, creating, building, and expanding an enterprise or organization, and also mentions building a team and obtaining resources.

In literature, there are two primary uses of the term *Community*. The first is the territorial and geographical notion of community (neighborhood, town, city). The second is “relational,” concerned with “quality of character of human relationship, without reference to location” (Gusfield, 1975, p. 16).

Completing the topic concepts, *Community Development* is defined as “a planned effort to build assets that increase resident’s capacity to improve their quality of life. These assets may include several forms of community capital: physical, human, social, financial, environmental, political, and cultural.” (Green, G. P., & Haines, A., 2015, p.11).

Using the concepts above, we can conclude that entrepreneurship is an act related to create or expand any business, and it can or cannot have a social approach or goal. As we are trying to understand the act involving a community, it is important to understand that a community is a mixture of geographic and human aspects, which lead us to the capacity of those human beings inside a community to develop their region through entrepreneurship using the local resources available.

The concepts above will guide our research and support the analysis of a broad understanding of the subject.

2.2 Research Analysis

To better understand how entrepreneurship affects a community, and the main characteristics of those projects that bring transformation and help the development of a community, a search was done in Scopus to find the underlying knowledge to support this dissertation. We recognize as relevant to analyse papers that mention “entrepreneurship”, “community”, “social”. As we are trying to go deeper into actions that involve the society, we consider the word “engagement” as also consistent with the subject as well as “under-represented” since it would filter papers focus on solutions with less government interference.

The search query used was:

Title-abs-key (entrepreneurship) AND key (community) AND key (engagement) and title-abs-key (social or "under-represented")

This search produced 20 articles, and it was possible to obtain relevant information from ten. The others were considered not relevant to this research.

Most of the papers mention cases of projects in which the entrepreneurship was used to help community development so we could filter crucial information from those. By analysing the cases found in each paper, it was possible to identify the primary blocks that compose the basis of the projects. Those blocks were used to describe the model used in each paper.

The blocks identified as elementary were the following:

- **Location:** The geographic area where the project takes place.
- **Project Leader:** The identification of an entity or individual who leads the project.
- **Direct Beneficiaries:** The identification of direct beneficiaries’ identification.
- **Direct Value:** The identification of the value that the project brings to the direct beneficiary.
- **Indirect Beneficiaries:** The indirect beneficiaries’ identification.
- **Indirect Value:** The identification of the value that the project brings to the indirect beneficiary.

- **Key factors:** Which factor it was critical to making the project possible.
- **Funding:** How the project was paid.
- **Stand Funding:** How the project manages to obtain funding to stand financially.

In Table 1, these blocks appear under the column label as “**Model**”.

Even though some essential elements in common emerged in all cases, those were not necessarily the reason for the project's success, each of them has its own crucial factor in succeeding or failing. Moreover, as the cases are related to each particular community and all of the complexity behind the local needs and context, it is understandable and expected to have unique factors that make the case individually relevant. Therefore, it is essential to better understand those successful factors, which are presented as the “**Critical Success Factor**” in Table1, second column.

Table 1. Literature Review analysing a model of social entrepreneurship as a way to develop a community.

Authors and Year	Model	Critical Success Factor
Fortunato, B., & Manapat, J. Z. (2018).	The project foresees the acquisition of recycling machines, which are built by UP FABLAB students and training of residents so that they can manufacture their own recycled products. Location: There are two sites for the project: Barangay Tonsuya in Malabon City (the pilot site) and Barangay Payatas in Quezon City. Project Leader: University. Direct Beneficiaries: Women from the community, who are the focus of the project. Direct Value: With the possibility of decent work and learning. Indirect Beneficiaries: Environment and the community. Indirect Value: Through the recycling proposed by the program. Key factors: Training. Infrastructure (space, material, logistics). Funding: University investment fund. Stand funding: Sale of products made with recycled plastic.	In this case study, we understand that regarding the impact, not only a social appeal appears as relevant, bringing empowerment to women, but also an positive environmental impact when collaborating with a destination for solid waste, in this case, the plastic. Therefore, the union between social and ecological problems, made this project possible and attractive.
Hsu, K. W., & Chao, C. Y. (2018).	The aim of the project launched by the government is to rebuild the urban space in Wufeng, Guangfu Village. Location: Wufeng, Guangfu Village. Project Leader: The government. Direct Beneficiaries: The residents of the village. Direct Value: Through a sustainable revitalization. Indirect Beneficiaries: The government and residents outside the village. Indirect Value: They can start enjoying their infrastructure. Key factors: The government initiative, and the participation of residents and non-residents, which brought greater diversification to the project. Funding: Through government and NGOs. Stand funding: The article does not make it clear, but once the village has been revitalized, the government and residents could maintain it.	This case study shows that collaboration is an excellent way to solve problems, involving both resident and non-resident, in an attempt to improve a situation caused by a natural cause, the earthquake.
Solórzano-García, M., & Navío-Marco, J. (2019).	The article proposes a distance learning model of social entrepreneurship. Project Leader MOOCs (Massive Open Online Courses). Direct Beneficiaries: Students interested in social entrepreneurship at a distance. Direct Value: Through a platform, it promotes interaction between participants and encouraging interactions. Indirect Beneficiaries: Those involved in the project developed by the student. Indirect Value: The social entrepreneur, having access to not only knowledge, but also to a network with other social entrepreneurs, has a higher chance of avoiding common mistakes,	The study makes an analysis of online learning communities that seems to be an attractive solution to promote social entrepreneurship in an interactive way and with participants being able to exchange learning and experiences.

Authors and Year	Model	Critical Success Factor
	and making the project possible. Key factors: Interactions proposed by the platform that promotes social capital increase for the social entrepreneur. Funding: The article does not go into the financial aspect. Stand funding: The article does not mention, but it is known that on these platforms, most of the time, the courses are free, but the certificate is paid, which generates revenue.	
Morakinyo, A., & Akinsola, O. (2019).	The study elaborates a research with Jumpstart project participants and aims to bring entrepreneurship education at the government schools. Location: Nigeria. Project Leader NGO. Direct Beneficiaries: Teenagers and young people involved in leadership and entrepreneurship programs. Direct Value: With entrepreneurial training promoted by the Adopt a School program. Indirect Beneficiaries: Government and society. Indirect Value: Students are willing to put their teachings into practice and develop their own social projects. Key factors: Training. Funding: The article does not make it clear, but makes it clear that there are resources on the part of the NGO and the government. Stand funding: The project is not self-sufficient.	The article brings an example of a learning program as a way to promote social transformation. It is interesting to be aware that, even though it is an important program for the individual, the program found conflicts with some family's beneficiaries.
Sun, Y., Liguori, K., Moussavi, P., & Mehta, K. (2015).	The article analyses a social enterprise project that aims to bring healthy food to the population. Location: The Zima Pizza project was piloted in the city of Nyeri, Kenya. Project Leader Pilot venture Zima Pizza. Direct Beneficiaries: Workers who eat on the streets daily. Direct Value: Street food, with local ingredients, and higher nutritional values. Indirect Beneficiaries: The government. Indirect Value: When you eat healthier, the local health system is used less. Key factors: Location, nutritious food, legal license, street food price. Funding: through the sale of food. Stand funding: Through the sale of food. OBS: This pilot did not bring the expected impact. The pizza is considered a luxury food, and although the price was half of an ordinary pizza, it is still more expensive than everyday street food.	This study shows that it is necessary to have empathy and knowledge, not only of the problem we are trying to solve but also the entire context in which it is inserted. In this case, the pizza was not adequate to solve the problem because of the social appeal about eating pizza that was not previously identified. Also, the price, which seemed to be adequate to the entrepreneur's point of view, was not suitable through the customer's perspective. Showing the lack of prior research to understand the market before launching the project.

Authors and Year	Model	Critical Success Factor
Southcott, J., & Joseph, D. (2017).	The article focuses on a philanthropic project from the perspective of social innovation and entrepreneurship. Location: Australia Project Leader: Creativity Australia charity. Purpose: Social inclusion. Direct Beneficiaries: people who feel the need to have a social activity. Direct Value: Art promotes therapy, social justice, health promotion, community well-being and boosts local economies. Funding: Donations, activities promoted by the organization, sale of products, fees.	This study brings the promotion of art as a way of transforming individuals, and consequently, the community in which they are inserted.
Ravel, M. K., Linder, B., Oakes, W. C., & Zoltowski, C. B. (2015).	The article does not discuss a model for community development.	The model used was based on a specific space that promotes learning and entrepreneurship. In the model, the university is the provider of the place, and they are responsible for creating partnerships.
Kimmel, C. E., Hull, R. B., Stephenson, M. O., Robertson, D. P., & Cowgill, K. H. (2012).	The article does not discuss a model for community development.	This study understands as important to apply qualitative analysis on how and why social media managers relate ideas and knowledge in online platforms. And also analyse moderating variables between social media, knowledge creation, and innovation in small, medium, and large enterprises.
Tremblay, C., & Hall, B. L. (2014).	The article does not discuss a model for community development.	The study does not analyse a model for community development but reinforces the importance of local partnerships when universities start projects to integrate students with social problems.
Maclean, M., Harvey, C., & Gordon, J. (2013).	The article does not discuss a model for community development.	The model used is to promote philanthropic projects sponsored by corporations or individuals with high incomes.

It is crucial to understand the importance of better knowing your community. The insight into social and cultural aspects is essential to have a broad understanding of the local pricing perception (higher or lower), for example (Sun, Liguori, Moussavi, & Mehta, 2015).

To improve the training of the entrepreneur who can act as a community agent, one of the articles proposes the existence of a platform that motivates, connects, and brings more knowledge to the entrepreneur (Solórzano-García, & Navío-Marco, 2019). Also, regarding education, the involvement of the university can be essential to unite theory and practice and thus help to transform a community (Ravel, Linder, Oakes, & Zoltowski, 2015).

Describing the Critical Success Factor in each article, it became clear that the common elements are not enough to compose this kind of project. Unique factors can bring a broad understanding of the project's success or failure, and it brought insights that can be used for entrepreneurs, serving community development.

It is crucial to deeply understand all of the elements detected. Therefore, we focused on articles with a study case, and from that, it is possible to see the main components. Eight articles have presented an explicit model for community entrepreneurship. From those, it was possible to identify main characteristics regarding our subject, which were the following: "Community involvement", "Community problem", "Use of endogenous resources", "Governance", "Empowerment", "Project leader", "Key Partners", "Funding", "Social Value", "Economic value", "Financial Independence", "Obstacle".

To better visualize those characteristics, Table 2 was divided into four groups, as follows:

Group 1: What can the community provide?

The community has its own characteristics and elements that can be used to fuel its development. This group in Table 2 will highlights:

- Community problem
- Use of endogenous resources
- Community involvement

Group 2: Who is willing to make the project possible?

The stakeholders are fundamental to community success. A thriving project is dependable on people or entities to support, lead, and manage it, as shown in Table 3. Those elements were grouped as follows:

- Key Partners - Key partnerships may bring essential tools and knowledge, which the leader does not have;

- Project leader - The Project Leader is the person or entity responsible for delivering the project, but not necessarily the one who will manage and keep the process afterword;
- Governance – The structure of making strategic decisions and managing the ongoing social enterprise.

Group 3: Positive consequences.

Observing community entrepreneurship shows that the solution usually has a social and economic impact. According to Dancin, Dancin and Tracey (2011), the social entrepreneur's primary mission is to create social value when he provides answers to social problems. One of the benefits brought by the project is the empowerment of individuals in the community. According to Felipe Santos (2009), empowerment in this context is “the process of increasing the assets and capabilities of individuals or groups to make purposive choices and to transform those choices into desired actions and outcomes” (p. 36). These concepts lead us to the elements in Table 4:

- Empowerment
- Social Value
- Economic Value

Group 4: Funding and obstacles.

Solutions may or may not require financial resources; however, according to the review, all cases needed some funding. It is necessary to distinguish the initial investment required to start the project (Funding) and later, the capital needed to maintain the activities. Some projects are able to achieve financial independence, with its own resources, but others still depend on donations or partnerships. Also, in some articles, obstacles were highlighted regarding the solution found. The elements presented in Table 5 are:

- Funding
- Financial Independence
- Obstacle

Table 2. Literature review with common characteristics identified. “Community Problem”, “Endogenous Resources”, “Community Involvement”.

Authors and Year	CP: Community problem ER: Endogenous Resources CI: Community Involvement
Fortunato, B., & Manapat, J. Z. (2018).	CP: The project "aims to address the increasing amount of plastic waste produced in the country while providing income opportunities for women in a partner community by establishing a plastics recycling facility based on an open-source design". (p.1) ER: The project is planned by the local University, workers will also be local, and the raw material used (plastic) comes from local disposal. CI: The local university provides the machines for recycling and training both to operate machines and to develop products. Women in the community are trained to recycle, create new products from recycling and sell. "Through this project, the women in the community will be manufacturing upcycled products themselves". (p.1)
Hsu, K. W., & Chao, C. Y. (2018).	CP: The village was completely rebuilt after the earthquake and the second world war. It is a village with an exclusive design that aims to integrate work and residential spaces in green areas with the first underground sewer system that separates rainwater and wastewater. However, after the residents moved the village left empty spaces. To boost revitalization, the main difficulty is in importing sustainable design and human resources. ER: Sustainable infrastructure and remaining residents are the project's endogenous resources. "Guangfu Village provided 39 buildings for 70 units as the main base of youth start-ups community." (p.1) CI: The project involves residents of the village, as well as non-residents, who are young people interested in entrepreneurship and sustainable design. "Youth entrepreneurship program imported 70 non- residential participants for the purpose of promoting Guangfu Village as an ecological urbanism demonstration base on garden city planning in Taiwan." (p.1)
Solórzano-García, M., & Navío-Marco, J. (2019).	CP: The article focuses on the challenge of distance learning with a focus on social entrepreneurship. "This study deals with the challenge of the distance teaching of social entrepreneurship. By nature, this requires to channel and promote the concerns of those who want to meet a social need through a business project, helping them to identify themselves as social entrepreneurs and to be part of a social entrepreneurship learning community, as well as giving them the fundamental tools, skills, and resources to develop their projects" (p.2) ER: The platform promotes interaction between entrepreneurs, which makes the information brought by them enrich learning. CI: The platform promotes involvement and networking among social entrepreneurs in a training context (MOOC).
Morakinyo, A., & Akinsola, O. (2019).	CP: Educational problems in Nigeria. "The organisation provides an alternative and sustainable solution to educational problems prevalent in Nigeria and the continent of Africa. Jumpstart seeks to complement the effort of government in the area of education. The foundation takes specific interests in every student enrolled with it and the foundation does a follow-up on them. It is believed that youths are not the problems to be solved, but the problem solvers." (p.2) ER: The article does not make it clear, but apparently, public school infrastructure is used. The facilitators also seem to be local. The report does not make it clear, but presumably, the infrastructure of public schools is used. The facilitators also appear to be local. CI: High school students belonging to the government receive training on leadership and social entrepreneurship, the project sees these students as potential agents of change to offer solutions to social and economic issues in the community.
Sun, Y., Liguori, K., Moussavi, P., & Mehta, K. (2015).	CP: High rates of malnutrition. Low or no supply of healthy food on the streets at a low cost. " High malnourishment rates in these low-resource settings create a need for healthy street food. The successful introduction of healthy street food could ultimately improve communities' overall health and wellness without constraining people's budgets and eating habits. " (p.1) ER: Staff and food are local. CI: The employees, being local, promote the food and its benefits, as well as help with research regarding flavours and ingredients.
Southcott, J., & Joseph, D. (2017).	CP: The program focuses on social inclusion through a cultural program. ER: The article does not mention where the project teachers or the infrastructure comes from, whether it is from the community itself or if the NGO provides it. CI: The article does not make it clear whether the community actively collaborates, but the beneficiaries are individuals in the community, and donations are also.

Authors and Year	CP: Community problem ER: Endogenous Resources CI: Community Involvement
Ravel, M. K., Linder, B., Oakes, W. C., & Zoltowski, C. B. (2015).	CP: In the article, the focus is not defined; any problem in the community can be addressed. ER: The article does not determine a standard of resources that should be used, but mentions that the resources vary according to the needs of each community. " <i>Each institutional combination of students, faculty members, community, and infrastructure is unique, and each approach must be adapted to its local context.</i> " (p.4) CI: The article mentions that the project has partnerships within each community, but does not go into details about the involvement of the community members.
Kimmel, C. E., Hull, R. B., Stephenson, M. O., Robertson, D. P., & Cowgill, K. H. (2012).	CP: There is no specific focus; the goal is to address the community in general, without focusing on an individual or business. " <i>Builds social infrastructure and targets communities rather than individuals, households, or businesses.</i> " (p.10) ER: The study does not make clear what the specific endogenous resource would be, but mentions the importance of community participation. CI: The article does not make specific involvement clear, but it stresses the importance of community involvement.

Table 3. Literature review with common characteristics identified. “Governance”, “Project Leader”, “Key Partners”.

Authors and Year	G: Governance C: Project Leader KP: Key Partners
Fortunato, B., & Manapat, J. Z. (2018).	G: The article does not make it clear, but it is likely that the faculties connected to the project are responsible for the management of the project. " <i>For the Payatas site, Fairplay will be providing the required resources (e.g., space, materials, logistics of permits, and others).</i> " (p.2). " <i>Fairplay is the finance and community engagement partner for the Payatas site, while UP FABLAB is the fabrication partner.</i> " (p.2) C: The initiative for the project came from the HEED, a group from the University of the Philippines Diliman. " <i>To address this problem, the Humanitarian Engineering, Entrepreneurship, and Design (HEED) group of the University of the Philippines Diliman (UPD) started Project Plastikan.</i> " (p.1) KP: Some colleges University of the Philippines Diliman have become key partners for project: " <i>CWGS focuses on community engagement</i> " (p.2), " <i>UP FABLAB is the fabrication partner</i> " (p.2)
Hsu, K. W., & Chao, C. Y. (2018).	G: The research proposes that in addition to government support, there is also the figure of an NGO and the youth entrepreneurship. " <i>It is suggested that the youth entrepreneurship program could establish a rolling mechanism to combine with a nonprofit organization to develop an interactive mechanism in local redevelopment activities.</i> " (p.4) C: The project was developed at the initiative of the government. " <i>Taichung City Government launched the "Taichung Youth Entrepreneurship" program and turned it into a cultural and creative village where artists and entrepreneurs came to establish their new community within the mottled historic red brick walls.</i> " (p.1) KP: Governments, NGOs, and young non-residents interested in entrepreneurial activities and sustainable design.
Solórzano-García, M., & Navío-Marco, J. (2019).	G: The article does not explain who is behind MOOC, but we know that there must be some organization behind, for example, EDX. We can also say that because it is a platform powered by third-party courses, those responsible for these courses are also part of governance. From another perspective, entrepreneurial students themselves, when they interact and bring information and relevant exchange with other students, also become necessary in governance. C: Online teaching platforms interested in MOOCs. KP: Educational institutions, motivated to promote courses related to social entrepreneurship and that manage to provide the interaction of students during the session.
Morakinyo, A., & Akinsola, O. (2019).	G: The article does not make it clear, but schools seem to be involved. C: The project is an initiative of the non-profit foundation, Jumpstart Dream. " <i>Jumpstart Dream Foundation is a non-profit educational organisation in Nigeria.</i> " (p.2) KP: Schools are the main partners, as well as the teachers involved in the project and the government.
Sun, Y., Liguori, K., Moussavi, P., & Mehta, K. (2015).	G: The Zima Pizza venture. C: The Zima Pizza venture. " <i>The Zima Pizza venture was piloted in the town of Nyeri, Kenya, to pilot this implementation process.</i> " (p.1). KP: Small hotel and restaurant in the center of Nyeri. CooksWell. Rural producers of local food. " <i>A partnership was established with a small hotel and restaurant in the center of Nyeri town. This facility was used for recipe testing, preparing pizzas, storing ingredients, and selling finished products.</i> " (p.4). " <i>The pizzas were cooked fresh with a charcoal oven purchased from a Nairobi-based company called CooksWell.</i> " (p.5).

Authors and Year	G: Governance C: Project Leader KP: Key Partners
	<i>"In this case study, the restaurant that Zima Pizza partnered with benefited from public perception, and Zima Pizza benefited from the connections, resources, and customer base of this popular restaurant."</i> (p.8)
Southcott, J., & Joseph, D. (2017).	G: Creativity Australia. <i>"The Melbourne-based not-for-profit organization Creativity Australia oversees With One Voice choirs that offer 20 programs with about 3000 participants."</i> (p.2) C: Creativity Australia. <i>"The charity Creativity Australia and its With One Voice social inclusion programmes was founded in 2008 by Tania de Jong AM who is a soprano, 'social entrepreneur, creative innovation catalyst, spiritual journey woman and global speaker'"</i> (p.5). KP: The article does not make it clear, which are the main partnerships for the project.
Ravel, M. K., Linder, B., Oakes, W. C., & Zoltowski, C. B. (2015).	G: The project involves students and teachers. <i>"EPICS teams, or course sections, consist of eight to twenty-four students and are student led with a faculty or industry mentor (called an advisor), and a graduate teaching assistant (TA)."</i> (p.2). C: EPICS: Purdue University Faculty of Engineering. ADE: Olin College of Engineering and Babson College. <i>"The EPICS and ADE educational models were developed at institutions of different size, student diversity, communities, geographies, and relationships."</i> (p.3). KP: The article mentions that it is essential to have partnerships within communities, but does not specify which ones.
Kimmel, C. E., Hull, R. B., Stephenson, M. O., Robertson, D. P., & Cowgill, K. H. (2012).	G: The study is not very clear, but mentions that the community itself can be governance. <i>"It empowers each community to design its own strategy, request its own mix of resources and expertise from the state, and provide specific directions for maximizing the impacts of engagement specialists scarce time."</i> (p.11) C: The university provides the social environment. KP: <i>"It engages landowners, businesses, nongovernmental organizations (NGOs), local government officials, resource professionals, scientists, consumers, and concerned citizens in the work of caring for their environment and community."</i> (p.5).

Table 4. Literature review with common characteristics identified. "Empowerment", "Social Value", "Economic Value".

Authors and Year	EP: Empowerment SV: Social Value EV: Economic Value
Fortunato, B., & Manapat, J. Z. (2018).	EP: The project is significant to empower women in the local community, who start to generate their own income through a dignified and environmentally sustainable activity. <i>"A plastics recycling project that aims to provide income opportunities for women in marginalized communities by building a plastics recycling facility based on the design of David Hakkens, founder of Precious Plastics."</i> (p.1) <i>"The project will inculcate gender equality and empowerment among its beneficiaries while providing a more holistic educational experience to the students and faculty members involved in the project."</i> (p.1) SV: In addition to socio-economic empowerment, since it brings income to residents of the region, the project will also bring benefits to the region's environment, reducing pollution, delivering higher quality of life to residents. EV: The project empowers women not only with knowledge but also with the possibility of additional gains for their income, bringing socio-economic benefits to society.
Hsu, K. W., & Chao, C. Y. (2018).	EP: The project brings revitalization to the community, in addition to encouraging residents to appreciate their place more and non-residents to get to know it, and thus the Vila is transformed. <i>"Guangfu Village has turned into a cultural and creative village where young artists and entrepreneurs came to establish their creative base within the mottled historic red brick walls"</i> (p.2) SV: The project involved residents and non-residents, attracting people from outside the community, which brings more cultural diversity. EV: The revitalization project offers residents and non-residents new opportunities to exercise their activities.
Solórzano-García, M., & Navío-Marco, J. (2019).	EP: Motivated by a collaborative platform, the student empowers himself with both knowledge and social capital, since he actively interacts with many students interested in the same topic. <i>"Insist on the need to promote 'student empowerment', placing more emphasis on the environment or ecosystem, peer learning, collaborative learning and activities on social networks"</i> (p.3) SV: This type of project not only motivates new entrepreneurs to bring out social projects, but it also makes them qualified. <i>"Given the nature of social entrepreneurship, the creation of networks for collaboration between social entrepreneurs is an essential factor for its success. Therefore, teaching students how to behave in collaborative contexts, and how to actively construct knowledge, concepts, and competences by interacting"</i>

Authors and Year	EP: Empowerment SV: Social Value EV: Economic Value
	<i>with their environment is crucial for their training as social entrepreneurs."</i> (p.3). <i>"identified that having a support community was essential to generate a sense of belonging, affiliation and commitment. A strong sense of community can increase commitment to group objectives, cooperation between group members, satisfaction with group efforts, and motivation to learn"</i> (p.5). EV: Although there is no direct profitable purpose, we can say that there may be an indirect financial benefit for the participants since acquiring such knowledge and social capital have a positive impact on the success of the project.
Morakinyo, A., & Akinsola, O. (2019).	EP: The program empowers students with privileged knowledge. <i>"The views expressed by the participants have shown that the programme had a great impact on them and brought out some hidden potentials. This had enabled some of them to come up with sustainable solutions to societal problems."</i> (p.11). <i>"They (participants) see themselves as part of the big change they are looking forward to create in our world."</i> (p.11) SV: The project brings empowerment to students, who in turn, have a desire to give back to society. Indirectly, the school itself is also recognized for having students participate in the program. <i>"Administrator and principals should encourage programmes like this to be introducing to their school because the students will eventually make the school proud when they partake in this kind of programme."</i> (p.13). EV: <i>"The vision of the foundation is to cultivate a new generation of leaders and entrepreneurs who will lead ethically and work for the greater good of the society. The programme core values are: personal leadership, ethical actions, powerful relationship, innovation and exponential empowerment."</i> (p.2) The program can bring indirect economic benefits, as it opens up new opportunities for its students.
Sun, Y., Liguori, K., Moussavi, P., & Mehta, K. (2015).	EP: The article does not make the issue of empowerment clear, but we can say that the project empowers people to choose healthier food. SV: Providing healthy food, people eat better, and stay healthy. EV: Providing quality food with healthy foods made with local ingredients brings health benefits to consumers, and promotes the local economy by using local producers.
Southcott, J., & Joseph, D. (2017).	EP: The project brings social empowerment to the extent that it includes individuals in society, promoting social capital. <i>"Provide opportunities for collaboration and social cohesion, the development of a sense of autonomy and empowerment, and the feeling of being valued by their immediate and wider community"</i> (p.3). SV: The project brings social inclusion and promotes health benefits as it fights depression; it also develops social capital. <i>" In Australia at least, there is a wave of interest in art as a tool for therapy, social justice, health promotion, enhancing community wellbeing and boosting local economies ' "</i> (p.3). EV: In addition to promoting improvement in mental aspects of well-being, the program promotes opportunities for connections such as friendships and opening new paths for employment opportunities. <i>"It is asserted on the website that sponsorship helps improve mental and physical well-being, increases participants' sense of belonging to their local community, and provides opportunities for friendships and possible pathways to employment."</i> (p.6)
Ravel, M. K., Linder, B., Oakes, W. C., & Zoltowski, C. B. (2015).	EP: The article does not mention. SV: In addition to bringing students a social perspective, the program is beneficial to each community, impacting according to the purpose of each project. EV: There is no mention of economic impact.
Kimmel, C. E., Hull, R. B., Stephenson, M. O., Robertson, D. P., & Cowgill, K. H. (2012).	EP: The article deals with empowerment when it mentions a learning program that can be linked to the social space. <i>"communities empowered to define their own problems and solutions produce more sustainable results"</i> (p.11). SV: The article mentions know-how and targeting the community as a way of empowerment and benefit. <i>"Targeting communities builds social capacity which, we argue, secures more lasting change by enabling and encouraging leaders and entrepreneurs to search for solutions, perpetuates know-how in the community, and directs it where it is needed."</i> (p.10) EV: There is no mention of economic impact.

Table 5. Literature review with common characteristics identified. “Funding”, “Financial Independence”, “Obstacle”.

Authors and Year	F: Funding FI: Financial Independence O: Obstacle
Fortunato, B., & Manapat, J. Z. (2018).	F: The study mentions, Fairplay, as financial support, although it does not provide details on what kind of entity this is, apparently there is a relationship with the university. <i>"Initial funding for FGD*s in the Tonsuya site also came from the UP CWGS**.</i> Fairplay is the finance and community engagement partner for the Payatas site, while UP FABLAB is the fabrication partner." (p.2) FI: The project must be maintained through support from partners and sale of products. The article leaves no details. O: For instance, the recent barangay elections posed problems in securing land for the facility, as trust must be built again with the newly elected officials. * Focus group discussion. ** UP Center for Women’s and Gender Studies
Hsu, K. W., & Chao, C. Y. (2018).	F: Governments, NGOs. The study does not make it clear, but it is understood that some residents also collaborate to keep the design sustainable. FI: The article does not make it clear whether the project is self-supporting or whether it always depends on an institution. O: Residents seem to be more reluctant to change. <i>"Resident participation has been proven to be an effective factor for local redevelopment. On the contrary, new communities declare supporting ecological community development when they joined the program."</i> (p.1). <i>"The major issue is how to establish a platform for the interactions and dialogue between social community and residents to share the same goal for achieving local sustainable development."</i> (p.4)
Solórzano-García, M., & Navío-Marco, J. (2019).	F: The article does not mention, but we know that the EDX platform, for example, offers free courses, charging only for certificates. Platforms may also have important institutions interested in providing resources at EDX is Harvard and MIT. FI: The article does not mention financial aspects. O: Collaboration is the solution, but a lack of collaboration can be an obstacle. <i>"If the members of the community do not create relevant content, the rest of the activities of the community will have little influence."</i> (p.7). <i>"Active participation by providing and consuming content plays a crucial role in sustaining an online group."</i> (p.7)
Morakinyo, A., & Akinsola, O. (2019).	F: Through the NGO itself. <i>"Through the Adopt-A- School Programme, the foundation educates government owned secondary school students to see themselves as instruments of positive change through a fusion of both academic and entrepreneurial curricular."</i> (p.2). FI: The project is not self-sustaining with the information cited in the article. O: The article brings some obstacles such as: Find educators; Duration of the program; Family conflict; Limited scholarships.
Sun, Y., Liguori, K., Moussavi, P., & Mehta, K. (2015).	F: The article does not make it clear, but it makes it clear that the responsibility for financial resources lies entirely with The Zima Pizza venture. FI: The project should be self-sustainable with the sale of products. O: Difficulty with business regulation. Consumers do not see much value for healthy food. <i>"Specifically, Kenyan law requires that all food sold by mobile food vendors be fully processed and prohibits cooking procedures on the street."</i> (p.5) <i>"One major observation from the interviews was that locals did not place much value on nutrition when deciding what to eat."</i> (p.7)
Southcott, J., & Joseph, D. (2017).	F: The project receives donations. <i>"Sponsorship can take the form of in-kind support, investment in future projects, or donations that directly support the choirs."</i> (p.6). FI: In addition to donations, students who can afford to do so. <i>"The 50+ people are more capable of paying for participation themselves; they might sponsor some disadvantaged people too". According to the CPM the annual full fee for choir membership is '\$500 ... \$350 is concession for students, part-timers, then the \$80 for full concession'"</i> (p.6) O: Not identified.
Ravel, M. K., Linder, B., Oakes, W. C., & Zoltowski, C. B. (2015).	F: Government programs, companies, foundations, individual sources, donations. <i>"External funding can provide advantage when negotiating teaching and administrative staff support. Program funding can be sought from government, corporate, foundation, and individual sources."</i> (p.4). FI: The project is not economically self-sustainable. O: Not identified.

Authors and Year	F: Funding FI: Financial Independence O: Obstacle
Kimmel, C. E., Hull, R. B., Stephenson, M. O., Robertson, D. P., & Cowgill, K. H. (2012).	F: The article mentions that there may be some kind of appeal from the government. <i>"resources by state funded programs inevitably cease and get redirected."</i> (p.11). FI: The article mentions partners as an investment possibility. <i>"Landcare-type programs do not generate revenue per-se, but they do create partnerships that can access and leverage funds."</i> (p.11). O: Not identified.

The referenced articles mentioned above showed specific relationships between factors. Those details will be addressed in a later chapter.

2.3 Discussion

This chapter began with a search for the subject “community entrepreneurship” and using as keywords “*entrepreneurship*”, “*community*”, “*social*”, “*engagement*,” “*under-represented*”. The selected articles’ analysis intended to find a model and better understand the relationship between entrepreneurship and the local community.

The examination allowed us to identify: First, that each project has a uniqueness to its success or failure. Second, it was possible to identify essential elements, shown in Table 1, such as Location, Project Leader, Direct Beneficiaries, Direct Value, Indirect Beneficiaries, Indirect Value, Key factors, Funding, Stand Funding. And third, it was possible to go deeper into those essential elements which brought main characteristics regarding our subject presented in Tables 2 through 5: “Community involvement”, “Community problem”, “Use of endogenous resources”, “Governance”, “Empowerment”, “Project leader”, “Key Partners”, “Funding”, “Social Value”, “Economic value”, “Financial Independence”, “Obstacle”.

It became evident that each project has a different vital factor. Therefore, it was possible to identify some crucial elements such as research, cultural aspects, the importance of partnerships and local engagement. Those elements were not the same in every article; in fact, each of them brought their own vital factor.

Tables 2 to 5 above shows how each article presents its own elements, previously highlighted from the readings. All cases have all of the elements, and each of them shows a different description regarding its particularities. The previous analysis showed the high complexity of the projects that aims to help communities through entrepreneurship. Although it was possible to identify essential elements, it is evident that there is no unique model.

It was not possible to identify a particular model that thoroughly answers to the understanding of the relationship between entrepreneurship as a solution for community development.

Overall, all identified research papers have different perspectives and are based on different models of entrepreneurship within their community. This is expected due to the particular

context and unique factors in each project, such as problem causes and cultural aspects. Therefore, it is only natural we do not find a unique model fitting all diversity of needs.

2.4 Conclusion

The literature revealed essential elements that will be used in future chapters but did not show a structured analysis of what is involved in entrepreneurship as an approach for community development. That means that we have a gap to explore.

3 Methodology

3.1 Introduction

This chapter presents the research question that follows from the identified gap and describes the research methodology followed in this project.

Following the analysis in the previous chapter, this dissertation will try to contribute to create a model, using the previous studies and their conclusions, in order to support entrepreneurs during their path to community development.

3.2 Research Question

In his book on German language, Winter mention that “The research question is also the question why you should delight the world with another pile of printed paper” (as cited in Gabler, 2020, para. 6). After performing the literature review to understand what is being written under the subject *entrepreneurship with a focus on community transformation*, we realized these themes are approached from different perspectives and with different objectives.

In this context, this research aims to answer the following questions:

How can entrepreneurship contribute to local communities?

- a) Is there a model to be used as a reference?
- b) If not, can we build one model to describe how to use entrepreneurship to foster community development?

3.3 Research Design

To consider a research valid, it is necessary to use scientific methodology and research format.

We will use the Design Science Approach (pictured in Figure 5) (Hevener et al., 2004). “Design science addresses research through the building and evaluation of artifacts designed to meet the identified business need” (p. 79-80). The design science approach to research consists of 2 design processes (build and evaluate) and four design artifacts (constructs, models, methods, and instantiations) (Hevner et al., 2004). Figure 1, below, shows how the design plan of this research will be approached.

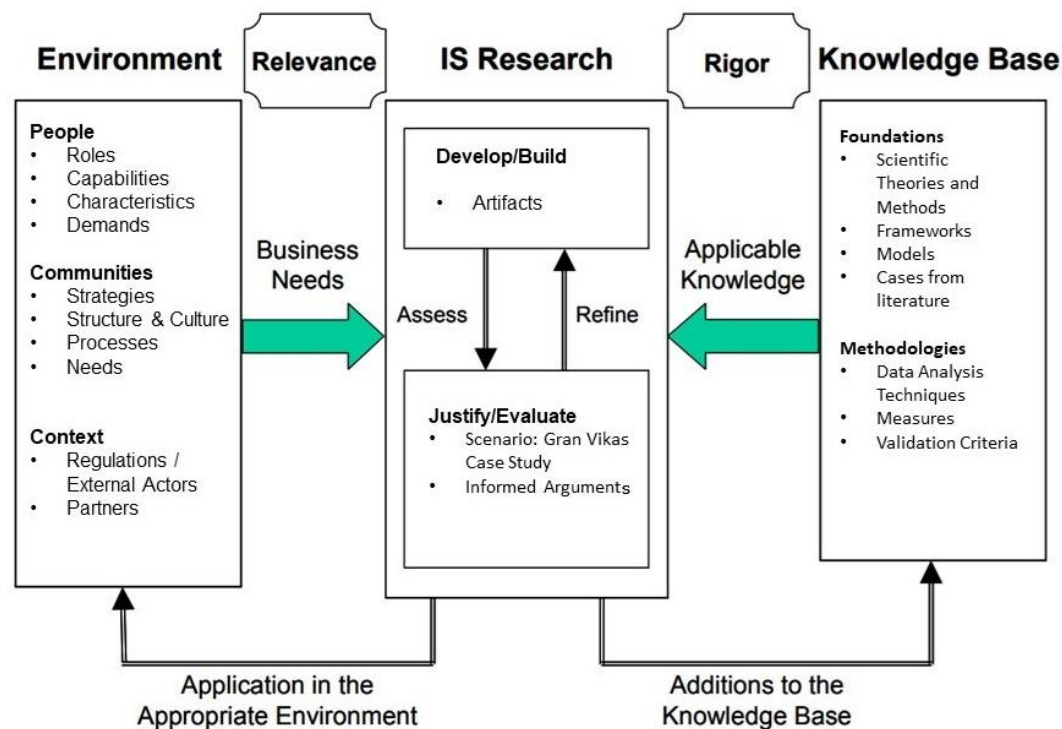


Figure 1 - Framework for Understanding Design Science Approach Note. Adapted from *Design Science in Information Systems Research* (p. 80), by A.R. Hevner, S.T. March, P. Jinsoo, and R. Sudha, 2004

The framework was adapted to fit this research specificities. The research was separated in two stages, the building and the validation part:

Building the model: The model was built based on the material from the Literature Review. All of the elements that were found will be discussed and supported by literature arguments.

Validation: We will validate our model through the scenario of Gran Vikas project using a case study. The use of this case aims at validating how the proposed model behaves with a real and complex situation, so it would be possible to understand if the model would be enough to answer the research question “*How can entrepreneurship contribute to local communities?*”. The informed arguments from the literature were used to support the logic for the proposed model.

3.4 Scenario Selection

The Gran Vikas project had a significant impact, and it is a well-known case study where entrepreneurship helped to develop a community. (Chowdhury & Santos, 2010). The Gran Vikas was founded in 1979, in India, and was involved in many development areas, including: "education, health care and sanitation, income generation and small-scale energy production"(p.12).

3.5 Conclusion

This chapter described the methodology used in this study, explaining the approach chosen to pursue the answers to the research questions. In the next chapter, we present the artifact created, discuss it, and validate using the scenario of Gran Vikas case study.

4 Model Development

4.1 Introduction

In this phase, we start from the elements found in the literature review to discuss their relation and their importance to the entrepreneurship project's focus on community development. Follows the model proposal, discussion and the application to a scenario of the Gran Vikas Case Study.

4.2 Entrepreneurship as a solution

A community (in regional, geographical terms) has particular aspects coming from that same culture and region. However, it is natural that, in general, there is the desire or the need for socio-economic development. There are examples of entrepreneurial efforts as a means of making local development possible, even though often this is not the main objective of the project. Still, the community could indirectly gain from many entrepreneurial initiatives.

In the literature, we find cases where entrepreneurship was used as a solution to develop a community. All the cases were analysed, considering their particularities, we could highlight important aspects exposed by them.

In Fortunato and Manapat (2018)'s project, entrepreneurship is used to mitigate a substantial waste problem in the Philippines. Through a plastic recycling project where women residents of Barangay Tonsuya in Malabon City and Barangay Payatas in Quezon City, have been encouraged to make products from recycled plastic and sell them. The material is made using recycling machines with open-source designs created by students from UP FABLAB. The women were trained to upcycled products themselves, which empowering them to provide their own income.

The youth entrepreneurship program used in Guangfu Village and Adopt a School program in Nigeria gave young people access to resources and opportunities not only to develop themselves but also to meet local development needs. (Hsu & Chao, 2018), (Morakinyo & Akinsola, 2019).

Zima Pizza was formed as a social entrepreneurial venture. In this project, the intention was to bring to Street Food a healthy eating option (Sun, Liguori, Moussavi, & Mehta, 2015).

The article about philanthropic project "With One Voice" defends having aspects of social innovation and entrepreneurship as it empowers participants to become active in the community. "Philanthropic organization, local and national government authorities, donors, supporters, and participants should be aware that community choirs and all the arts can be used to engage and empower socially isolated and marginalized people in society." (Southcott & Joseph, 2017, p.12).

All those cases have different perspectives and also occur in a diverse process considering its singularities. Despite the differences, we understand that some aspects are common to all of them, and we also comprehend that those unique factors, highlighted in each of them, could be helpful to other projects. Therefore, from those several cases in which entrepreneurship has helped the development of a community, either directly or indirectly, we brought those main elements and related them visually in the following section.

4.3 Proposing a model, Literature Review elements and their relationship

Based on the essential elements within the universe of the entrepreneurship as a way to help transform communities, we create the *Entrepreneurial Forces Diagram*, in which, we were able to establish the relationships between elements found in the literature (Figure 2):

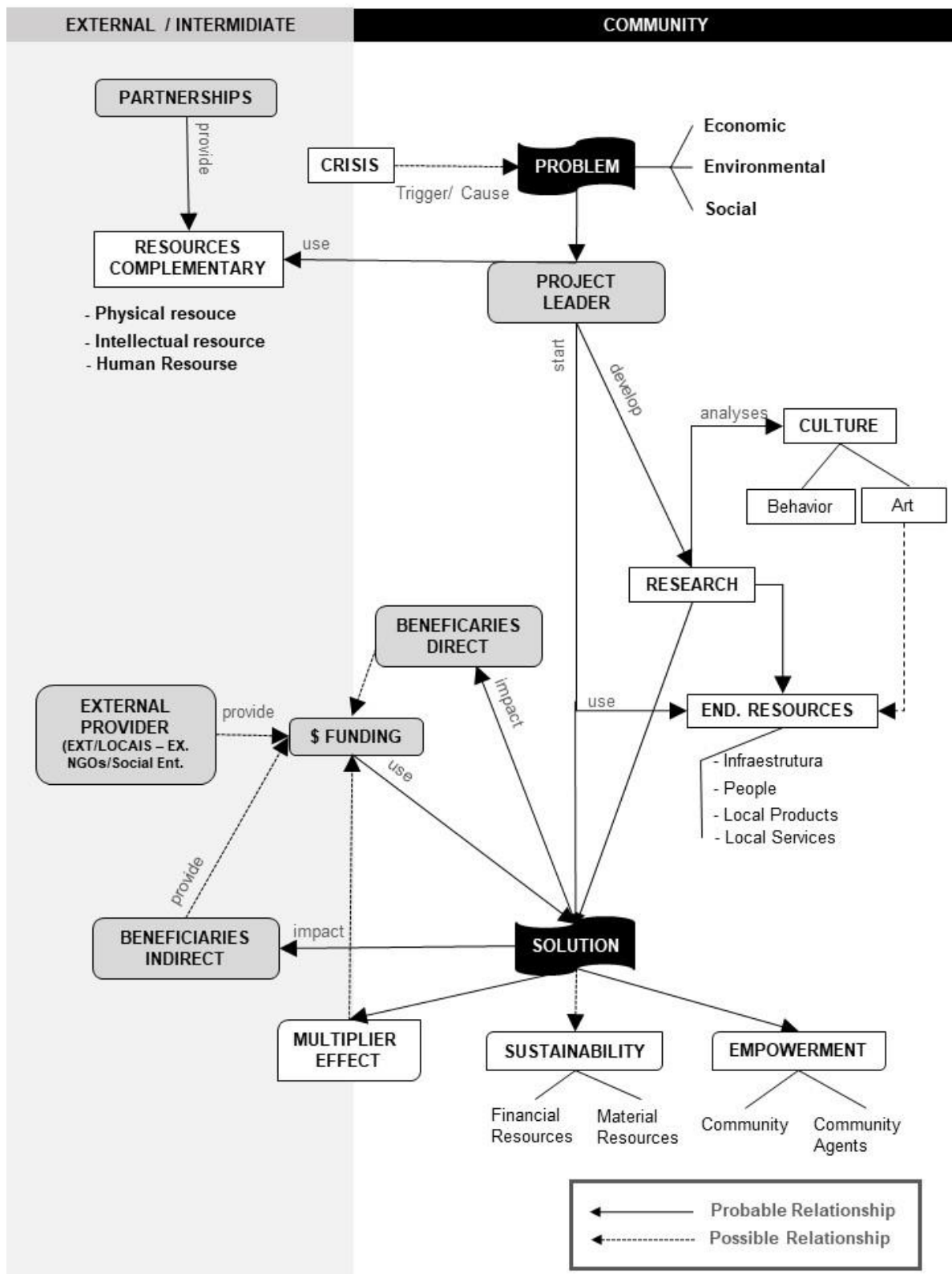


Figure 2- Entrepreneurial Forces Diagram

All cases analysed began with a "**Problem**" affecting directly or indirectly a local community. The problem may result from many causes: *Social issues*: such as the Jumpstart

project, which focuses on a predominant educational problem in Nigeria (Morakinyo & Akinsola, 2019); *Social, Economic and Environmental problem*: such as the plastic recycling project that generates income and empowers marginalized women, while helping to mitigate the solid waste matter faced regionally (Fortunato & Manapat, 2018); *Environmental issue*: caused by natural disasters, as in the Guangfu Village earthquake, where the problem was driven by an external "**crisis**". These events unbalance the scenario and may *cause or increase* an existing problem (Hsu & Chao, 2018).

The problem is directly linked to the "**Project Leader**", which may be represented by a social enterprise such as venture Zima Pizza, NGOs, such as Creativity Australia charity, Universities, such as the University of the Philippines Diliman. In this study, no initiative led by an individual was found.

The project leader, usually impacted by the problem, may even see a "**Solution**," but it is not able to accomplish its implementation alone. The literature reinforces the importance of the "**Partnership**" because the solution always requires some resources from outside the community. This resource can be material, intellectual, or even labor that will help to develop the project. One of the articles had a University as a leader, so it was essential to use local partnerships to make the project possible (Ravel, Linder, Oakes, & Zoltowski, 2015).

Some resources may come from the community itself, in the Zima Pizza project, local ingredients were used in the food production (Sun, Liguori, Moussavi, & Mehta, 2015), these are called "**Endogenous Resources**". The endogenous resources are essential not only for support, but it is also understood that community involvement is vital to engage locals in the project (Hsu & Chao, 2018).

A few articles posited "**Culture**" as an important element, in opposite ways though, and with different consequences. In the case of Southcott and Joseph, the local inclination for arts helped create the philanthropic choir project to happen (Southcott & Joseph, 2017). On the other hand, the cultural aspect of community behaviors can negatively impact the project outcomes. Sun et al. (2015) reports that some clients felt the product was too fancy for the local's perspectives. The price was not right for that particular situation (pizza as street food option) (Sun, Liguori, Moussavi & Mehta, 2015), another cultural aspect that might have an impact to the project involves the acceptance by the locals, in an education project, for example, it is crucial that the family understands the project importance and gives the support to the student when needed, as shown in Morakinyo and Akinsola (2019) case: "The personal challenge I had was first a family challenge. My family didn't see the reason I had to leave home weekends, while I could be useful in the house" (p.12).

Developing an analysis, or exploratory research on the community, is an advantage that might mitigate cultural obstacles, and even help the entrepreneur to create a coherent solution, as it was used in phase one of the Fortunato and Manapat (2018) project, as described: "Phase 1 involves needs assessment and market research. The needs assessment aims to identify the quantity and types of plastic trash found in the community as well as get feedback from the stakeholders after explaining the project and showing the products that may be created using the recycling machines". (p.1).

The **solution** is the element with more links attached, as you can see in the diagram, which means it is the most interdependent element.

The solution broadly **empowers** the community through their agents, as in Guangfu Village case (Hsu & Chao, 2018), and also, the solution may empower only some community agents, as is the case of women in Malabon City (Fortunato & Manapat, 2018), and the case of students from Nigeria (Morakinyo & Akinsola, 2019).

In addition to empowerment, the solution can be **sustainable**, which means producing its own resources to sustain the ongoing endeavor, such as the example of plastic waste that is transformed into products and sold by the residents (Fortunato & Manapat, 2018). A project that achieves financial independence is the ideal for viability, although it is often not reached. None of the articles used in this study were capable of achieving its financial independence.

The **multiplier effect** is an essential element because every solution has a "**direct beneficiary**", but many other beneficiaries may arise due to its impacts. Those are the "**indirect beneficiaries**".

These elements are fundamental for the feasibility of the project, the understanding and the identification of all direct and indirect beneficiaries, and their ability to pay, will be vital factors to choose the ideal business model that will maintain the project. "Hence, Ability to Pay of the Beneficiary affects the Social Business Value Proposition since the incapability of any beneficiary to financially contribute to the organization will completely affect the business strategy of a social venture." (Todaria, 2017, p.37).

In her paper, Todaria (2017) identifies the following as beneficiaries: Impact Investor, Government, Community, Impact Payer, Venture Philanthropist, Client, Cooperative member, Customer, Employee, Recipient, and Supplier.

Sometimes the direct beneficiaries can also be the customer who will provide income, as in the Zima Pizza project, where the pizzas are charged and that income aim to maintain the project (Sun, Liguori, Moussavi, & Mehta, 2015), but is unlikely to obtain financial resources of its own. Therefore, it is necessary to understand who are the stakeholders of the project, to seek potential funding sources. For example, in the Adopt a School program the indirect beneficiary is the government, which benefits through the complementary education delivered by the program. The government has understood that the program improves the knowledge of its population and therefore has an interest in funding it (Morakinyo & Akinsola, 2019). When this is not possible, it is necessary to seek the financial support of an "**external provider**", in the philanthropic project of Creativity Australia charity, the paying participants, were not enough to maintain the project, so the project also has donors as an external provider (Southcott & Joseph, 2017).

Understanding these elements and its relationships open discussions about how entrepreneurship works in community development. As illustrated in the diagram, we recognized it as important to highlight that some elements are **Probable**, and others are **Possible** to exist. The *Probable Relationship* line, represented in the diagram, shows the items that, according to our study are likely to appear in a project, therefore, is extremely important

for a Project Leader to identify all of them, and only after that it will be possible to have a clear overview about the whole context of the project. After considering and understanding all those elements, it might be possible to make reliable decisions. The *Possible Relationship* line, reflects the likelihood of a relation which may not exist. Those elements represented in the end of this line might appear in a project, but it is not mandatory.

In the next paragraph, we will discuss how this diagram may be used by applying it to a case study.

4.4 Applying the Entrepreneurial Forces Diagram to a Scenario

The *Entrepreneurial Forces Diagram* was build based on the case studies presented in the literature review. In order to validate and check its appropriateness, we have chosen to apply it to the Gran Vikas case study as a scenario.

The Gran Vikas project has a significant impact, and it is a well-known case study where entrepreneurship helped develop a community. (Chowdhury & Santos, 2010). The Gran Vikas was founded in 1979, in India and was involved in many development areas, including: "education, health care, and sanitation, income generation and small-scale energy production"(p.12).

During a devastating cyclone (**“Crisis”**), Joe Madiath (**“Project Leader”**), Executive director of Gran Vikas, with some volunteers decided they would continue in the village after the devastation, in order to help the locals. Joe Madiath realized that the poor quality of drinking water was the cause of 80% of the mortality, directly related to the local **unsanitary** conditions.

As the **sanitary “Problem”** was identified, Gran Vikas started a pilot project with 337 village families (**“Direct Beneficiary”**). The villagers are also the source of **labor, material, and funding** (**“Endogenous Resource” / “Funding”**).

The **“Solution”** found was to build a sanitary system on the Village, able to deliver clean water for the villagers. The program was known as **MANTRA** (Movement and Transformation Network for Transformation of Rural Areas).

"Gram Vikas ensures that all the families in a MANTRA village will have access to the same minimum level of products and services, including: (1) toilets and bathing rooms in every house; (2) 24-hour piped water supply to the toilet, bathing room, and kitchen of every family; and (3) the construction of a water tank as a community asset " (p.14).

The MANTRA program understands everyone has the right to have sanitation service, and this should not be a privilege reserved only for society's highest rank. In other words, the program overcomes the social barriers of that society (**“Cultural”**). This project was "a way of transforming hierarchical chaste and gender-based exclusion into equitable inclusion" (p.13).

In order to bring inclusion as a core value, the Gran Vikas program requires that 100% of the village's families join the program and equal participation of males and females in decision-making level and control; otherwise, the social equity or the gender equity would not happen properly. (“**Empowerment**”).

The sanitary quality is just one of the benefits of the program. Latterly, comes many “**multipliers effects**,” such as decreases to in infant **mortality** and **disease** rates. As the villagers do not have to get water every day, the spare time can be used to work, and children are able to have more quality time to study and play. Therefore, the sanitary solution impacted on the **education** and **economy**. Also, the project is “**patent-free**”, which means the project can be freely applied to other communities.

Some specialized resources for construction are funded by the villagers and occasionally by the **government** and **House Development Bank** (“**External Provider**”), which can also be considered an “**Indirect Beneficiary**” as they benefit from the project.

The government will have to assume the project sustainability:

“if the government could not do it and there was no mechanism to do something then we would do it, and that also not forever. Only till it became mainstream, till it got assigned within the government programs, and so it was in my philosophy to never do an activity forever” (p.15).

The villagers themselves fund the project, and all families must contribute, on average 1.000 rupees (**corpus fund**). Those who cannot contribute with money donate materials and provide labor force. The money goes to maintenance costs and expansion of water supply and sanitation (“**Sustainability**”).

In order to expand the project, Gran Vikas has granted a partnership with the CRHP (Comprehensive Rural Health Project) in Jamkhed - Maharashtra, to transfer technology and implement the project in other Villages (“**partner**”).

The case recognizes the importance of previous research to understand the local context in order to transfer technology and know-how (“**Research**”) successfully.

The Gran Vikas case scenario is represented in the *Entrepreneurial Forces Diagram* illustrated in Figure 3:

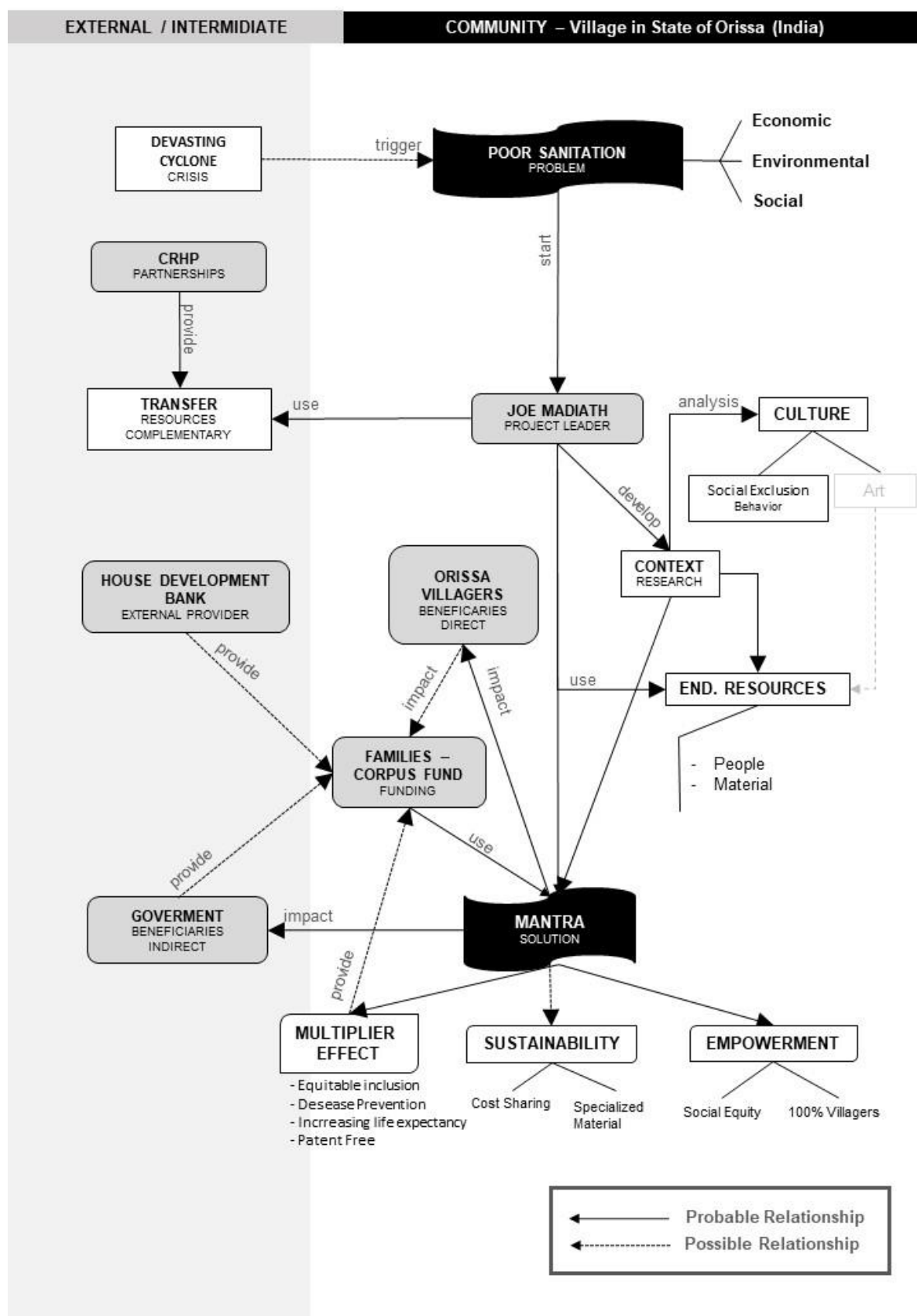


Figure 3 - Entrepreneurial Forces Diagram - Gran Vikas Case

4.5 Discussion

The application of the *Entrepreneurial Forces Diagram* to the Gran Vikas scenario enabled the identification of important facts to be considered:

a – Every element connected by a “*Probable Relationship*” line were identified correctly and fit properly in the diagram.

b – The “**art**” element does not appear in the Gran Vikas case study because the program did not use art as a solution. This fact further validates the use of a “*Possible Relationship*” line for this element, as shown in the *Entrepreneurial Forces Diagram*;

c – The “**crisis**” element in the Gran Vikas scenario was not “**causing**” the problem, but instead “**increasing**” it, and worked as a catalyser motivating the project leader to develop a solution.

The questions that guided this research were:

How can entrepreneurship contribute to local communities?

c) Is there a model to be used as a reference?

d) If not, can we build one model to describe how to use entrepreneurship to foster community development?

From the beginning, the pursuit of a model highlighted the high complexity level of social projects. Despite each project’s singularity, along with the research, we can identify some common characteristics, which we named as Elements, present in all studies.

Although we did not find a unique model to be used as reference, we were able to group the essential Elements on a graphical representation, the *Entrepreneurial Forces Diagram*, was built on multiple cases from the literature and validated with the Gran Vikas Social project. Therefore, this research was able to answer the two subsequentially research questions *a* and *b*. For the first (*a*) “*Is there a model to be used as a reference?*”, the answered is “No”. And, for the second (*b*) “*If not, can we build one model to describe how to use entrepreneurship to foster community development?*”, the answer is “Yes”, despite the limitations of the study, we were able to build the *Entrepreneurial Forces Diagram*.

The case study validation revealed that the diagram covered all elements of the Gran Vikas project implementation, which was easily observed due to its graphical presentation, and that turns the *Entrepreneurial Forces Diagram* a simple and useful tool for entrepreneurs to evaluate projects in the area of community development.

The *Entrepreneurial Forces Diagram* illustrates the relationships among stakeholders, forces, and resources. This graphic representation might give the Project Leader a broad

overview to analyse all aspects of the project before making important decisions to achieve their goal.

In addition to the holistic view of the forces, it is crucial to reinforce the importance of a clear identification of the underlying characteristics, shown at the beginning of this study namely as: Community involvement; Collective problem; Endogenous resources; Governance; Empowerment; Project leadership; Key partnership; Funding; Social value; Economic value; Financial independence; Obstacles to overcome.

Those were the minimum components to a project that helps a community development through entrepreneurship to accomplish its goal. Therefore, the projects will have to address and direct attention, at least to these topics. However, the diagram brought further elements that are not mandatory to identify but still, were highlighted as crucial to the success, such as: “Research”, “Indirect Beneficiaries”, “Multiplier Effect”, “External Provider”, “Sustainability”. This study understands important to consider those elements due to their relevance to enable the project to succeed, as shown in the cases analysed by this research.

To achieve a sustainable level on a project is required to pay close attention to all of the aspects described above. The main goal is to make the path of the social entrepreneur less challenging and increase the odds of the project success.

4.6 Research Limitations

This study was based on a restricted number of articles, and the diagram was validated using one case scenario. A dissertation for a Master’s degree has a strict time frame available. Therefore, it is not possible to further develop this project. It is our understanding that an on-site study of an ongoing project would be of great value for the validation process, but it was not possible to conduct such a project within the timeline of this dissertation.

5 Conclusion

The purpose of this dissertation was to acquire a better understanding of how entrepreneurship can help a community to develop.

As there are multiple models focusing on entrepreneurship and business construction, we expected to find a model able to help entrepreneurs or entities to develop their communities.

The literature review revealed a gap. No unique model was focused on developing a community through entrepreneurship. In order to create such a model, the cases found in the literature were used.

Throughout the case analysis, we identified several factors (Elements) influencing entrepreneurial projects with positive effects on their surroundings. All of the elements identified as common or critical for success were highlighted and related. The structuring of their inter-relationship resulted in the *Entrepreneurial Forces Diagram*.

The *Entrepreneurial Forces Diagram* was applied to a well-known case, the Gran Vikas, where the local people were motivated to rebuild their villages. The case study complexity and extensiveness allowed for a first validation of the *Entrepreneurial Forces Diagram*.

Despite its limitations, this study made an important contribution to the existing knowledge by providing a graphical and unified representation model to guide future entrepreneurs and start-ups in community development.

Future work

This study provided a foundation upon the *Entrepreneurial Forces Diagram*, and it can be used in many different perspectives. For future studies, it is possible to go further and develop new tools based on the knowledge here presented, such as a canvas, to guide fresh entrepreneurs, for example.

We believe that the work developed in this study may contribute to structure future entrepreneurship ventures acting upon community development.

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