



UNIVERSIDADE CATÓLICA PORTUGUESA

From social entrepreneurship concept validation to business model's lessons learned:

The case of a social tech start-up

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Católica Porto Business School

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From social entrepreneurship concept validation to business model's lessons learned:

The case of a social tech start-up

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Resumo

Este trabalho foi realizado com o propósito de identificar como uma *start-up* tecnológica social desenvolve e sustém a sua atividade.

Para este fim, foi necessário identificar uma metodologia de empreendedorismo apropriada para o setor social, com foco nas iniciativas verificação da mesma de modo a compreender a sua aplicabilidade. Esta temática deriva de uma realidade estudada na literatura em que na sociedade atual, há uma variedade de iniciativas sociais a serem executadas. Contudo, o cenário comum mostra uma falta de uma abordagem eficiente e eficaz para uma *start-up* alcançar a sua missão. Após a revisão literária sobre o estado atual da inovação social, os seus conceitos e identificação de diferentes metodologias de desenvolvimento aplicáveis, foi então selecionada uma *start-up* tecnológica social para a realização de um estudo caso (Yin, 2018) de análise do seu percurso de desenvolvimento, confrontando-o com o modelo dos “Seis Estágios de Inovação Social” em cada um dos seus estágios.

O estudo culminou com a compreensão de que a empresa em causa, independentemente da sua natureza tecnológica, não suportou o seu desenvolvimento em nenhuma metodologia, havendo falhas relativamente à validação do seu conceito e desenvolvimento de um modelo de negócio adequado à sua natureza social, culminando com a sua extinção por falta de sustentabilidade financeira. O estudo, entre outras conclusões, chama a atenção para a necessidade de introdução de uma cultura de valorização do erro e de metodologias de validação ágeis que guiem o empreendimento pelos vários estágios.

Palavras-chave: inovação social; empreendedorismo social; prova de conceito; modelo de negócio; lições aprendidas; *start-up* tecnológica; estudo de caso.

Abstract

This work was carried out with the purpose of identifying how a social technological start-up develops and sustains its activity.

To this end, it was necessary to identify an appropriate entrepreneurship methodology for the social sector, focusing on its verification initiatives to understand its applicability. This theme stems from a reality studied in the literature in which in today society, there is a variety of social initiatives being executed. However, the common scenario shows a lack of an efficient and effective approach for a social start-up to achieve its mission. After the literature review on the current state of social innovation, its concepts and identification of different applicable development methodologies, a social technology start-up was then selected to carry out a case study (Yin, 2018) to analyse its development path, confronting it with the "Six Stages of Social Innovation" model in each of its stages.

The study culminated with the understanding that the company in question, regardless of its technological nature, did not support its development in any methodology, failing the validation of its concept and the development of a business model appropriate to its social nature, culminating with its extinction due to lack of financial sustainability. The study, among other conclusions, draws attention to the need to introduce a culture of error valuation and agile validation methodologies that guide the venture through the various stages.

Keywords: social innovation; social entrepreneurship; proof of concept; business model; lessons learned; tech start-up; case study.

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Introduction

In the current society, there are a variety of social initiatives being executed through different examples of entrepreneurship. However, it is common to identify a lack of efficient and effective design to achieve their mission. Due to this being an unfortunate reality, and since the amount of funding for the field is, usually, limited to a fraction of what truly is necessary, the entrepreneurs responsible for driving social change should have at their disposal an easy-to-understand concept validation framework. Identifying and using such frameworks and innovation methodologies would allow initiatives to be designed for greater impact with their scarce resources and take advantage of the potential of new technologies to increase the potential effect of social change derived from the social entrepreneurship. To accomplish this objective there was a need to analyse a social initiative using technology to support its social purpose closely and understand its development life cycle, so the research question arose “how does a social tech start-up develop their concept and sustain its development?”.

In order to carry out this study it was necessary to execute a study of specific bibliography in the area of social innovation, its concepts and what motivates it. It was also crucial to analyse different actors in the field of the development of social entrepreneurship methodologies, coming across the work of Murray *et al.* of 2010 on the current state of Open Social Innovation. Different development methodologies were then discovered, focusing the study particularly on the Six Stages of Social Innovation methodology due to its adaptability, which made it possible to follow a social initiative from the problem identification stage to the systemic change driving stage, regardless of form and dimension. Subsequently,

a case study was conducted according to the indications of Yin, (2018) where a social technology start-up that emerged in 2020 during the Covid-19 pandemic was selected, however during the development of this study the start-up ceased its operations. It was the opportunity to study and present a less successful endeavour, and try to fill the gap of a rich literature that usually presents success stories. Considering this, it was opportune to approach the case study from an investigative perspective in understanding of what was practiced in its life cycle and what the literature mentions, complementing at the end with a perspective of lessons learned about its main mistakes, ending with the final conclusions of the study, limitations and recommendations for future study.

Chapter 1

Literature review

Considering the objective presented in the previous section, this chapter presents key aspects of what is social innovation and helps familiarize the concept, some elementary factors that have been driving social innovation and how present they still are, it presents a six stages concept validation framework and it presents how technology can be at the service of social innovation through different applications.

1.1. Defining Social Innovation

To introduce the concept of Social Innovation, it is necessary to give some simple examples that accompany us today in our everyday life. Although we do not realize it, according to “The Young Foundation report” on the topic, social innovation embraces us through multiple forms:

Self-help health groups and self-build housing; telephone helplines and telethon fundraising; neighbourhood nurseries and neighbourhood wardens; Wikipedia and the Open University; complementary medicine, holistic health and hospices; microcredit and consumer cooperatives; charity shops and the fair-trade movement; zero-carbon housing schemes and community wind farms; restorative justice and community courts. (Mulgan, *et al.*, 2007)

These examples were all ideas and methods of addressing different societal¹ needs, and their development and implementation through impactful social measures and actions are what drives societal systemic change over time. Some of these can be more conventional, and others dismissed when displayed, but all of them have the same ultimate purpose: somehow to improve people's lives.

The notion of innovation has long been regarded as critical to economic progress, so much that in the past 10 years, innovation in new formats has been more prominent. Social innovation to address social needs or modify social practices and open up innovation to attain efficiency and efficacy (Martins & Bermejo, 2014). Social innovation studies are significant in the context of current ideas in which public administrations have developed social management, localism, citizen participation, and social movements (Schaffers, *et al.*, 2011 *cit in.* Martins & Bermejo, 2014). The ability to innovate is an inherent feature of humans (Simms, 2006 *cit in.* Martins & Bermejo, 2014). In 1996, the European Commission *cit in.* Martins & Bermejo (2014) demonstrated that innovation is more than a technological or economic mechanism; it is also a social phenomenon.

According to the TEPsIE (2014) report on “Social Innovation Theory And Research”, to define social innovation means to describe a broad range of activities which include:

- a) development of new products, services, and programs;
- b) social entrepreneurship and the activity of social enterprises;
- c) reconfiguration of social relations and power structures;
- d) workplace innovation;
- e) new models of local economic development;
- f) societal transformation and system change (Westley F. 2008);

¹ While “social” refers to human relationships and groups of people within the human society, “societal” represents the society as a working system with the different parts involved, also involving different concerns/issues/problems/values – according to the Cambridge dictionary.

g) non-profit management (Phills Jr, *et al.*, 2008), and

h) enterprise-led sustainable development (Caulier-Grice, *et al.*, 2012).

Another remark as noted by Nicholls *et al.* (2015) is that, in fact, social innovations can have the shape of ideas, actions, frames, models, systems, processes, services, rules, and regulations as well as new organizational structures.

This variety of activities and forms, which may be included in other fields besides SI, leads to the conclusion that there is no commonly agreed definition fit for a concise description of what social innovation stands for (Caulier-Grice, *et al.*, 2012). Instead, it is understood that this field is led by practices that surface from patrons/entities executing their take on what should be done to meet the different social needs (Mulgan, 2006).

With closer regard to the points listed in the first paragraph, these have been a constant in the communication of multiple institutions and initiatives, *ibid.* cited by Phillips, *et al.* (2015), portrays social innovation as “innovative activities and services that are motivated by the goal of meeting a social need” (Mulgan, 2006, *cit in.* Phillips, *et al.*, 2015). This action demonstrates that social innovation occurs across several forms of organizations, from profit-driven companies, which often generate social value through CSR (Corporate Social Responsibility) programs, to dual mission organizations, thus shaping new models, hybrids (Phillips, *et al.* 2015). Over the last decades, there has been a significant increase in interest in social entrepreneurship, and consequently social innovation, one origin, especially at the corporate level. Since there are weaknesses and flaws in the profit model derived from entrepreneurship, companies and organizations have been led to create support activities more related to the first two concepts mentioned before (Phillips, *et al.*, 2015).

Although a vast and considerable amount of research and investigation in the area of social business innovation exists and has been conducted, Phillips, *et*

al., (2015) states that technological and social innovation remains insufficiently explored by academics. This statement by Phillips, *et al.* (2015), comes from the studies and results obtained by Mulgan, *et al.*, 2006 (*cit in.* Phillips, *et al.* 2015) that underlines the lack of approach in the social field in the research carried out so far and the difficulty that the lack of knowledge imposes on those who want to properly promote social innovation.

Thus, this elucidates that it is impossible to approach social innovation without linking this concept to social entrepreneurship:

The nascency of research into social entrepreneurship and social innovation highlights the need to develop a shared understanding not only of the term "social innovation" but also its links with social entrepreneurship. Although debates rage regarding linkages between social innovation and social entrepreneurship, few connections have been made. (Defourny & Nyssens, 2010 *cit in.* Phillips, *et al.* 2015)

However, at the Stanford Center for Social Innovation (Stanford Business, 2018) a different opinion emerges. It posits that even though social entrepreneurship became a common supporting viewpoint for people wanting to improve the world, for a fact, social changes can happen elsewhere. Because historically, solutions have come from non-profit, private, and government sectors. This concept for social innovation concentrates strictly on the proposals and answers that generate social value, which can derive from processes of multiple origins. These same solutions and processes, many times involving cross-sector cooperation, compose the introduction of what are to be believed as the main social innovation drivers.

Due to the complex universe of the different social problems and the rise of cross-sector initiatives including industry and government, the definitions of what is social are rapidly becoming obsolete, as the term grows and matures through experimentation (Phills Jr., *et al.*, 2008). Another meaning from the

authors are that from the concept “social” is the connection elaborated before, concerning the relationship between needs and issues of the impacted public by the problem. This means that while there can be disagreement on what is the social character of specific innovations, society generally agrees on what a social need or problem is, and what kind of social objectives are valuable to deposit attention and resources. These objectives generally involve issues concerning justice, fairness, environmental preservation, improving health conditions, arts and culture, and better education, among others (Phills Jr., *et al.*, 2008).

To reiterate, there is one key idea that is understood and envisioned as a paving concept concerning the importance of cooperation, especially in the social field – “Ultimately, the most difficult and important problems cannot be understood, let alone solved, without involving the non-profit, public, and private sectors.” (Stanford Business, 2018). With such a defining concept at hand, social innovation entrepreneurship needs to focus on establishing good communication channels with all three parties. Such is only possible if in its creation there is special attention to the inclusion of individuals, entities and the general interested public. This way, there is room for an open and inclusive innovation format that focuses on transparency and achieving a clear and established social mission.

1.2. Driving Social Innovation

“Every truth passes through three stages. First, it is ridiculed. Second, it is violently opposed. Third, it is accepted as being self-evident.”

-Arthur Schopenhauer

Social innovations are frequently linked to specific social issues, most typically at the local level, and potentially even when current systems have failed in some

manner, or new demands have developed from government, civil society, or even other players. social innovation is a method of developing new solutions and altering people's social habits (Schröder *et al.*, 2018). Concurrently, while some social innovation efforts have on their mission to create an impact of some sort on social change, the majority do not begin with the intention of bringing about such change (the concept and perspective involving social change will be further explored in this chapter). Typically, the primary goal of social innovators is to solve a specific social issue in a certain community, such as dealing with poverty or elderly loneliness, among other things (Schröder *et al.*, 2018).

According to Moulaert, *et al.*, (2014), *cit in.* Nicholls, *et al.* (2015), social innovative actions, strategies, practices, and processes are more prone to arise when clear problems involving poverty, exclusion, segregation and deprivation of opportunities concerning standard living conditions are visible. Therefore, since there is a lack of satisfactory solutions present in the 'institutionalized field' linked to the public or private action, new alternatives begin to be raised.

It implies that social innovation intervenes when the current institutions fail at satisfying the different societal needs of the population. This fact leads to the growth of the sector, whilst interacting with different domains of society, such as technology, markets, policies, and governance, among others. Such cooperation is expected to result in structural well-being and economic prosperity since it aims to address certain distribution problems in terms of conventional innovation policy and elected reform (Moulaert, *et al.*, 2014).

(...) the spread of education and democracy, and new generations of technology, have made it much more feasible for people to take control of their lives and their world, and have helped turn the deeply democratic ideal of self-government into a more practical possibility (Mulgan, 2011)².

² In "The Study of Social Innovation - Theory, Practice and Progress".

In a sense, social innovation can also be understood as a partial response to how certain population groups have been marginalized. This can happen because, for the most part, the regular citizen is viewed as an economic/consuming actor and not an effective participant in collective decision-making. This perspective leads to the assumption that social innovation can be a sense-making process, aiming to frame key issues to be solved, and then seeks to propose alternative worldviews on the matters (Moulaert, *et al.*, 2014). This opinion on the drivers of social innovation stresses the necessity of tackling the current designs of social support and relations (as services and infrastructures fail to provide adequate and sustainable solutions for the maintenance of the general population well-being), via new models of empowerment, engagement, or political mobilization (Moulaert, *et al.*, 2014).

1.3. The Six Stages of Social Innovation

This section derives from the work of Murray, *et al.* (2010) in the Open Book of Social Innovation, where 6 stages were identified regarding the process of social innovation and concept validation, as depicted below in figure 1. These stages do not necessarily need to be sequential, as it depends on the specific nature, method, and form of innovation. However, it can serve as a useful logic framework to accompany decision-making and thought processes, supporting the team behind the cause and the cause itself so that it could grow logically and in a structured manner.

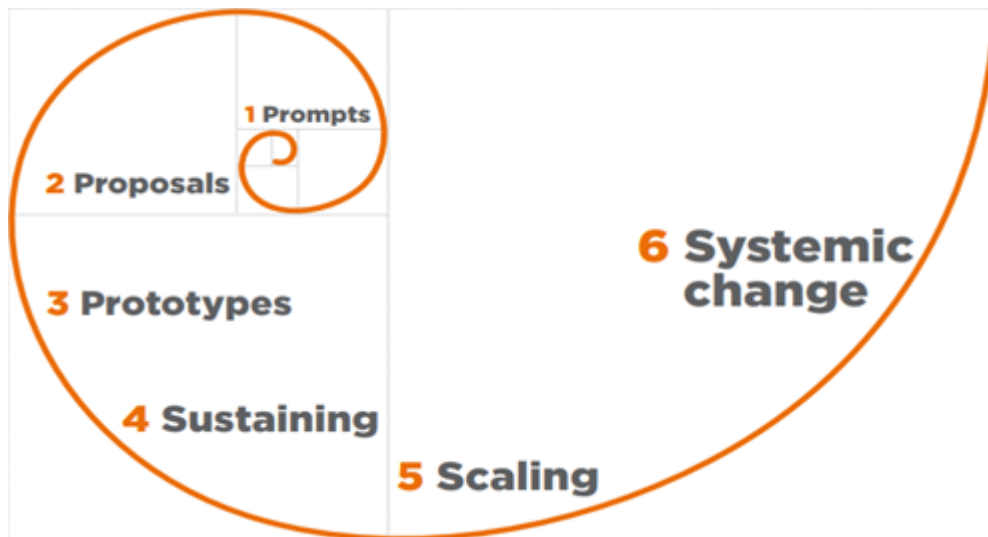


Figure 1.
The six stages of social innovation³

1.3.1. Prompts and inspirations

According to Murray, *et al.* (2010) this step focuses on diagnosing the social problem at hand and framing the question in a way that addresses the root causes of the problem, and not just its symptoms. It means analysing beyond the symptoms and identifying the causes of a particular problem.

The authors claim that all innovations begin with a central concept to frame the issues. However, the concept itself is frequently motivated by an experience, an event, or fresh information that highlights a social need or injustice. Some companies begin prompts on their own, while others are prompted by feedback systems that highlight possible concerns that need to be resolved. However, this highlights one of the important problems, as recognizing the appropriate problem is critical at this point.

When a significant problem is recognized, the answer might be found in hints as to the underlying causes. In this situation, appropriately phrasing the issue is critical for formulating a solid solution. Murray, *et al.* (2010) relate the evolution of social activities to the development of medicine, arguing that the essential

³ Source: "The Open Book of Social Innovation", by Murray et al., 2010, page 12

problem in social policy is the diagnosis, getting beyond the symptom to the cause. In such a case, seeking a solution to the wrong problem can frequently aggravate the situation. In other cases, it is a question of dividing a common problem into manageable and adaptable components.

In another approach, prompts can be triggers for action. As they can take the form of priorities because some actions are necessary to deal with the immediate situation, such as cases of a budget crisis or a natural disaster happening. In Table 1, some triggers and inspirations that prompt innovation and can act as mobilizing agents are listed.

Trigger and inspiration	Explanation
Crisis	Many countries have utilized economic and social crises to accelerate reform and innovation, and in other cases, the crisis has been used to intentionally accelerate social innovation by institutionalizing innovation as part of the response.
Efficiency savings	The desire to reduce government spending frequently demands the redesign and delivery of services, resulting in consequential systemic changes. ⁴
Poor performance	Emphasize the need for change in services, acting as a motivator to develop innovative methods to design and provide public services ⁵ . Examples of this are when a determined service has a high number of complaints or suggestions from users, or when a service cannot respond to its demand.
New technologies	These can be modified to better satisfy societal demands or to provide services more efficiently. It is then determined through experimentation how these can function best.

⁴ Chapman (2002) 'System failure: why governments must learn to think differently.' London: Demos *cit in.* (Mulgan, *et al.* 2016).

⁵ Bacon, *et al.* (2008) 'Transformers: How local areas innovate to address changing social needs.' London: NESTA *cit in.* (Mulgan, *et al.* 2016).

New evidence	Can bring to light new needs and innovative answers to those needs. One recent example is climate change and how it has influenced the path that continents, governments, and businesses have taken to battle it and reduce the number of emissions caused.
Urban acupuncture	Urban acupuncture, as an alternative to traditional development methods, proposes a malleable model for city revitalization. It refers to the improvement of social and urban concerns through precise interventions, drawing on the metaphor of the traditional Chinese medicinal practice ⁶ . An example is the Cheonggyecheon project in Seoul, South Korea, which saw a two-tiered highway dismantled to restore the original river that ran through the city centre. Representing the city's transition to a greener and more human-centred phase of growth.

Table 1
Triggers and inspirations for social innovation prompts⁷

These triggers can be used to support social innovators in the process of identifying new needs to satisfy, therefore, what comes next is the necessity of recognizing concrete problems. To recognize social problems that surge in a local or systemic environment, the need to identify them as they become a hidden or marginalised reality increases. Currently, there are developed research methods focused on discovering different problems, and the first main objective that any social initiative should have is a clear problem definition so that it could be further and correctly developed.

The authors identify five pathways for recognizing problems, each with a variety of methodologies adaptable to different contexts. The first mentioned refers to research and mapping, as new data is collected and research is

⁶ Lerner, J. (2003) 'Acupuntura Urbana.' Rio de Janeiro: Editora Record *cit in.* (Mulgan, *et al.* 2016).

⁷ **Source:** Self-elaboration, based on "The Open Book of Social Innovation", by Murray, *et al.*, 2010

developed, it becomes a more relevant method, and it can serve as a vehicle for innovations.

The second is the circuit of information, where new needs can be highlighted through the effective use of feedback systems. Where in industry and commerce, the ability to collect and analyse large amounts of data has been the foundation of remarkable changes - for example: in flexible manufacturing and the practice of retailing.

The third method is through new perspectives, where the existing problems or situations are investigated by organisations or with some exterior help through a new setting, model, or paradigm, which then can obtain new leads on how to solve them.

The fourth pathway is making problems visible and tangible, where through the use of social science and statistics, it becomes possible to understand social patterns otherwise invisible or myopic to the people experiencing or governing these same situations. Gathering such data in a more approachable manner suits best the interest of further analysing it and creatively thinking about alternative solutions for problems.

As a fifth and last method of the authors listing, it calls to problems identification with today's society media-intensive consumption, in other words, via the command of attention. Identifying attention as one of the most valuable resources for driving any sort of change, is no different for the social sector. Where if the right amount of traction supports an issue/conflict or societal problem, enough attention can deliver primary results necessary for action to be delivered. The latter is especially true if enough attention from key power figures is obtained, potentially leading to public discussions, where the stage for more attention is bigger.

According to Murray, *et al.* (2010), to diagnose a social problem means to start developing solutions. Even if it is a possibility to address these problems

symptoms, what is truly necessary is to address their actual causes. Some methods for executing this analysis are derived from the different actors' experiences and perspectives. Through the gathering of diverse data concerning the social issues to be analysed, it is consequently possible to initiate a diagnostic process that should ideally include the different people responsible for the post-implementation and those affected by it. Through the bilateral dialogue and an analytic perspective from a mediator, there is the possibility to develop and utilize its appropriate diagnosis frameworks (derived by a variety of professional disciplines) and systematic thinking models (analysing societal feedback, understanding the optimal course of action).

1.3.2 Proposals and ideas

In the social innovation field, everyone needs to be part of the ideation process and contribute with proposals and ideas, implying citizens, service users, communities, frontline employees, other sectors, or other nations. It is therefore critical to include citizens, users, and others in the design and development of solutions to maximize these resources (Murray, *et al.*, 2010). This level of involvement and engagement of the wide range of interests – consumers and beneficiaries of the innovations, as well as service providers, manufacturers, and suppliers – will often determine the success of the innovation.

Creators, policymakers and lenders need to understand how interaction and results can lead to more and better progress over time. A technique or element must meet two requirements for a call for development: novelty and improvement. The progress must be remarkable, customer-fresh, established, or relevant. and sustainable from an ecological and organizational point of view (Phills Jr., *et al.*, 2008).

New answers might emerge from a diffusion of resources, such as transferring an idea from one field to another or abruptly integrating different components. It is extremely uncommon for an idea to emerge on its very own. More frequently than not, ideas emerge from preceding ideas or through innovative reflection on contextual experience, being often stimulated across fresh or alternate approaches of thinking regarding social issues. Table 2 presents some of the strategies that can assist with the process of thinking and understanding social issues in another way.

Strategies for thinking and analysing social issues	
Starting with the user	Using user research and participant observations incorporating ethnographical techniques to understanding their environments, user/citizens' diaries or communities and individuals
Positive deviance	Community development method based on assets. In a specific community, this involves people whose unusual behaviours and tactics enable them to discover better answers than their colleagues, despite using the same resources.
Reviewing extremes	The design for extreme circumstances can give insights and ideas to serve ordinary consumers situated in neither extreme. For example, adapting buildings and items for individuals with disabilities has often led to progress that is helpful to everybody.
Visiting	Placing people in direct contact with realities is one of the most powerful tools for prompting ideas, as well as giving confidence for action. For example, it is common in the field of agribusiness to use model farms and tours to transfer knowledge and ideas.
Rethinking space	Many social materials, places and structures are underutilized, abandoned and undesirable. The challenge is to look at these areas and buildings more positively as social innovation resources, assets and possibilities. Assets may be re-used and ecosystems revitalized, social needs can be satisfied, and communities invigorated. One example is the work of Teddy Cruz, an "activist architect", who exploits garbage in San

	Diego for the construction of houses, health centres, and other facilities in Tijuana.
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Table 2
Strategies for thinking and analysing social issues⁸

Nowadays there is another approach methodology to designing solutions, which is based on the term “Open Innovation”. This term is used to describe a different model of product development based on the free flow of data and ideas through multiple organizations and departments (Chesbrough *et al.*, 2006 *cit in.* Murray *et al.*, 2010). This specific approach entails aggregating disperse the knowledge of diverse communities, requiring among the participating parts cooperation, decentralization, self-association, sharing, interaction transparency, and above all, most of the involvement from its members.

This topic has been linked to a greater interest in the use of open innovation in non-commercial contexts (as described by Dahlander & Gann, 2010 *cit in.* West, *et al.*, 2014). These include colleges (Perkmann & Walsh, 2007 *cit in.* West, *et al.*, 2014), non-profit organizations (Holmes & Smart, 2009 *cit in.* West, *et al.*, 2014) and even government entities (Chesbrough & Di Minin, 2014 *cit in.* West, *et al.* 2014). It is also important to include a balance of for-profit and non-profit stakeholders, several types of networking or community collaboration (Müller Seitz & Sydow, 2012 *cit in.* West, *et al.*, 2014). While the potential for study into open innovation is enough for further research, little research yet exists on this issue. At this stage, additional researchers are encouraged to look at open innovation in this respect and demonstrate how it is comparable and distinct from the expanding concept of open corporate innovation methods (West, *et al.*, 2014).

⁸ **Source:** Self-elaboration, based on “The Open Book of Social Innovation”, by Murray, *et al.*, 2010

The themes of social and open innovation are evident in actual examples where public and private players collaborate to address community social demands. The connection between the two ideas, however, is still understudied in the literature, with just a few papers devoted to the subject. Further research into the applicability of open innovation methodologies in various contexts is required (Huizingh, 2011 *cit in.* Martins & Bermejo, 2014). On the other hand, research into social innovation is required to determine what effectively generates innovation in social practices as well as the current mechanisms for solving social problems (Paulini, Murty, & Maher, 2013 *cit in.* Martins & Bermejo, 2014). Chalmers (2013) *cit in.* Martins & Bermejo (2014) recently linked the two ideas together, arguing that open innovation can remove barriers to social innovation; the author suggests the notion of “Open Social Innovation,” although this remains open for further debate. Exemplification is required for its consolidation, and the research question from the authors remains: - how might open innovation contribute to social innovation?

Open innovation works by allowing consumers of services and public policy to build mechanisms for themselves, to improve community welfare through innovative practices and social mobilization to solve problems. It has been argued that open innovation is more than a technique to accomplish social innovation based on a study of the features of social and open innovation. When a technique that encourages cooperation among various stakeholders in the creation of innovation agents is used, social innovation meets open innovation. Furthermore, as proven by non-profits that modify the structure of society or satisfy a social need, open innovation meets social innovation (Martins & Bermejo, 2014). Innovations must not only be categorized as open or closed but should represent a whole gamut of levels of process interaction, which may range from fully closed to open (Dahlander & Gann, 2010 *cit in.* Martins & Bermejo, 2014). One of the reasons for this development approach to have been gaining

prominence also drives from the increase of internet use, which enabled large numbers of people to be part of processes at a low cost, through collaboration and participation (Murray, *et al.*, 2010).

With the increase of the open innovation concept and the rising acceptance, it concluded that there was a need for achieving a higher engagement from the general public, be it for a more public initiative, or from a private one. Considering this, it was necessary to develop a more inclusive methodology whilst aiming to increase the culture of openness to ideas, permitting the participation of interested elements of society to generate and share ideas through official and direct channels (Murray, *et al.*, 2010).

1.3.3 Prototypes and pilots

Considering the ideas that arose from the previous process, it is then necessary to place them in practice so that they can be tested in the field. After this first step, according to Murray, *et al* (2010), these ideas can be further developed and refined. One of the procedures for such a step is through trial and error, with the development of a prototype, according to Murray, *et al.* (2010), “One of the common themes of contemporary social innovation is that it often works best by moving quickly into practice, rather than spending too long developing detailed plans and strategies.”.

Several strategies comprise this phase, particularly when it involves the process of the first contact with reality and achieving validation from the target audience of the initiative. On Figure 2 some of these strategies are presented, all of them are valid as an option to follow.

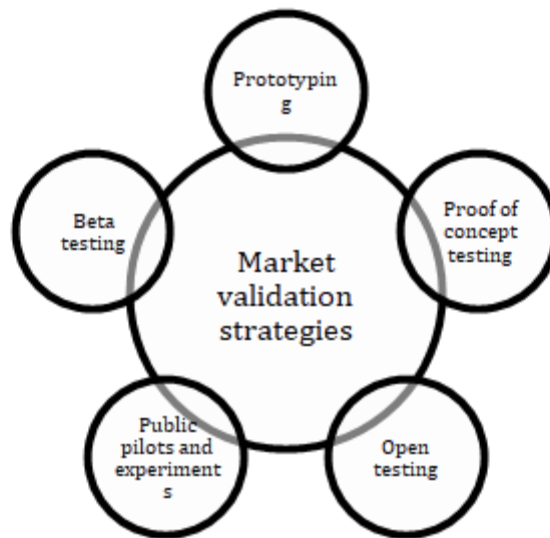


Figure 2
Market validation strategies⁹

For any of these strategies, the key concepts must be challenged directly with the target audience (Murray *et al.*, 2010). Thus, the social initiative should be designed to achieve a Minimum Viable Service (MVS). A MVS is a minimum that is delivered to prove that a problem can be solved while delivering value to the users (Millward, 2019). When the innovation is developed through a digital start-up, there is a pressing necessity to adopt the fastest, most efficient, and direct strategy to test its product or service. Many times, this strategy is through the lean start-up methodology. This methodology according to Eric Ries, (2011) is focused on agile and rapid adaptation to information, and it is set upon these five sequential steps:

1. Elaborate the user experience vision that should be delivered. Learning what the customers/beneficiaries really want/need;
2. Examine the vision and identify assumptions that accompany the product/service. There is a need to test if the target customers will indeed pay for the product/service;

⁹ **Source:** Self-elaboration, based on “The Open Book of Social Innovation”, by Murray, *et al.*, 2010

3. Build an early version to validate these assumptions and test if the product/service has a demand. The most common methods are the “Concierge MVP” (explained further ahead) and the “Smoke Screen MVP”. The latter one functions as a marketing strategy for an unfinished product, working as a crowdfunding¹⁰ tool;
4. Release the MVP and Measure the interaction/interest in it. It should be presented (most of the time through targeted advertisements) to a small segment of target customers;
5. The last step is to decide if it is necessary to Pivot or Persevere on the MVP. If the data obtained in the fourth step is positive, then the MVP should be persevered and further developed. If the data is negative or it indicates that small changes should be executed, the MVP should suffer a Pivot or small tweaking’s, accordingly.

On another note, the steps for delivering solutions should be first to prove that a problem exists, then second to prove that a viable audience is experiencing this problem. Then, on a third note that the initiative has a feasible and desirable solution, this is where the market validation strategies should be executed. Finally, there is the fourth step, the development of an MVP (Minimum Viable Product), enforcing the connection of the developed solution with the problem at hand (Millward, 2019).

However, Millward (2019) states that the third step could also be executed through the ‘Concierge’ pre-MVP prototyping method, where “manually delivering an aspect of the solution/service with smoke, mirrors, manual effort, cardboard, 3rd party tools, etc.”. This delivered service is what is defined as MVS, where the focus is to deliver value and getting a financial return and real

¹⁰ According to Smith (2021), crowdfunding is the process by which a large number of individuals contribute small sums of capital to establish a new business initiative. Crowdfunding leverages the ease with which vast networks of people can be accessed via social media and crowdfunding websites to connect investors and entrepreneurs. Accessible at <https://www.investopedia.com/terms/c/crowdfunding.asp> consulted on 16/08/2021.

feedback from a pre-MVP, validating the full service to be provided in the next phase (Millward, 2019). The author provides an example of this method, depicting it in Figure 3.

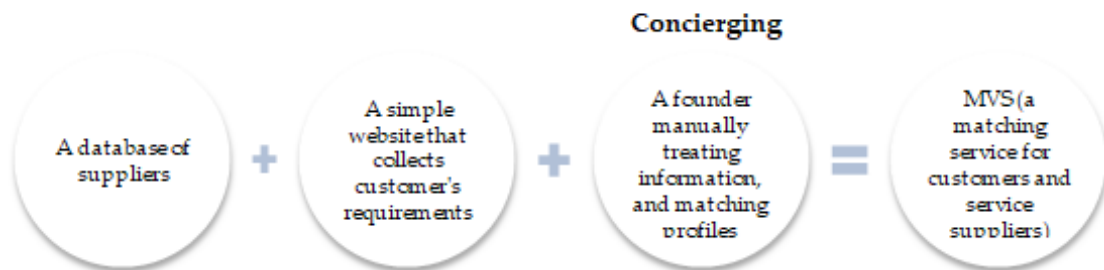


Figure 3
MVS example¹¹

The principal benefits of using such a strategy are a) quick, cheap, and safe entrance to market; b) gain insights on target audience because of direct contact; c) use feedback directly on the MVS according to real-world experience; d) a higher number of insights to further define and design the final MVP technology (Millward, 2019).

1.3.4 Sustaining

This step, according to Murray, *et al.* (2010), focuses on the process after a prototype is already successful. The objectives should be to try and simplify the processes to increase the cost-effectiveness and to identify income streams so that the innovation can be financially sustainable. Towards these objectives, sustaining an innovation involves the six key ideas:

- A business model adapted to the innovation at hand, which represents how the initiative can be sustainable;

¹¹ **Source:** Self-elaboration, content from Millward, 2019.

- A governance model with a clear map of control, accountability and safety measures to dealing with potential predators in the future;
- A plan for different sources of income, be it at the short term or over the long term;
- A model including network and communications to promote the development of potential relational capital from different parties;
- A human resources model that includes the role of potential volunteers;
- A development plan focused on operational systems, targeting information management, reporting, financial systems, IT, supply chain and risk management systems.

These key ideas are bound to lead to the elaboration of an economic or business plan, very much ending to look like one derived from the traditional business model canvas from Osterwalder and Pigneur (2010) but adapted to the social environment. On Annex 1 there can be found a preliminary adaptation from Qastharin (2015), focused on this methodology and precisely adapted for the social initiatives.

In the diagram found in figure 4, the different focus points concerning the development of a social initiative. In the social economy, control, teams and customer connections are more important and might be the essence of a new social technology on which an initiative is founded. Twelve different axis concentrating on social enterprises are described in the chart below according to Murray, *et al.*, (2010).

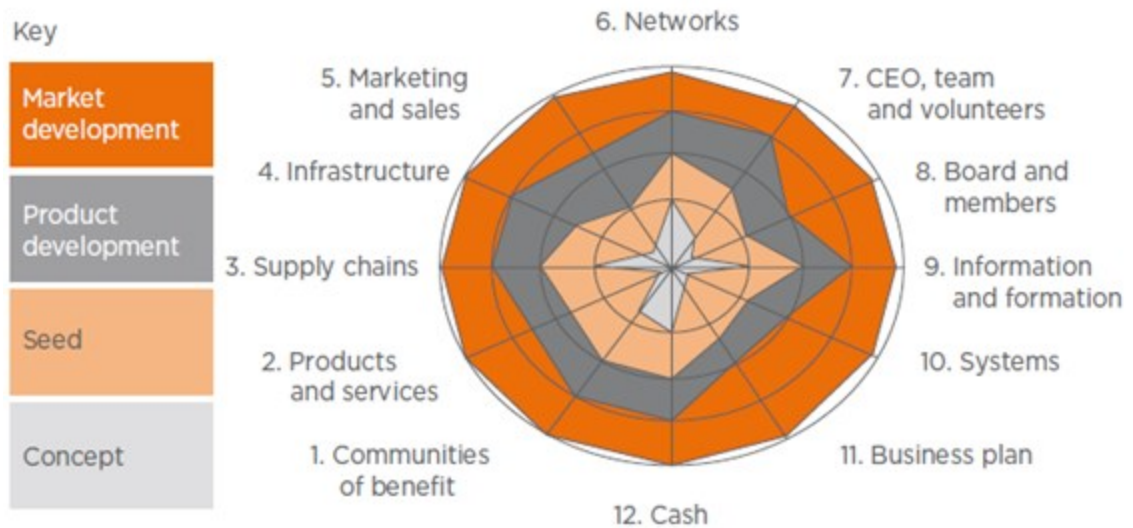


Figure 4
Twelve axis for a social venture¹²

Each phase should be evaluated in order to identify how much it stands on each of the axis, working much like a visual interpretation of a plan. For example, on Figure 5 it is possible to identify that the “Concept” key phase stands heavily on the Supply chains, Networks, Information & formation, and Cash axis. On the other hand, it barely supports itself on Products & services, and Systems axis. This representation allows for a more concise and easier understanding of planification of the different components in a social venture, and how it progresses over its development life-cycle.

Both tools are of great value for managers and investors since they allow attention to be gathered to the different elements that make a business work, while also permitting to identify the strongest and weakest links.

1.3.5 Scaling and diffusion

¹² **Source:** “The Open Book of Social Innovation”, by Murray, *et al.*, 2010

Murray, *et al.*, (2010), state that there are a variety of techniques for expanding and spreading an idea at this level, ranging from organizational development to licensing and franchising to federations and looser diffusion. Emulation and inspiration are also important in propagating an idea or practice. In propagating a successful new model, demand is equally as essential as supply and establishing an intrinsic connection to how market demand, or demand from commissioners and politicians, is mobilized. This process is also referred to as scaling, and in certain cases, it is appropriate because the innovation is generalized inside an organization/context, or the organization itself increases.

The authors also come to a compromise that since innovations stem from the social economy in a variety of ways, whether via inspiration and emulation or by the supply of assistance and know-how from one to another organization or initiative, its growth tends to be more organic and adaptable to different circumstances.

1.3.6 Systemic change

To successfully achieve this step, is the goal of social innovation. Systemic changes usually involve many elements: social movements, business models, laws and regulations, data and infrastructure, and new ways of thinking and acting (Murray, *et al.*, 2010). System changes are also usually associated with new social structures or architectures. Social innovation often encounters obstacles and hostility from entities and personalities that are not flexible or understanding of the different necessities for such a change (Murray, *et al.*, 2010). However, pioneers can sometimes bypass these barriers, due to their growth depending on creating new conditions for cost-effective innovation. These conditions include new technologies, supply chains, institutions, capabilities, and regulatory and taxation frameworks (Murray, *et al.*, 2010).

This step is also regarded as a point of view that has an objective to allow changes in the basic characteristics of social practices that can improve any service, process, or social need (Cajaiba-Santana, 2013, *cit in.*, Martins & Bermejo, 2014). This leads to the satisfaction of social needs, but this is the result of additional changes that a group of people gather in networks with similar interests to find new and better ways to collaborate within and outside the group (Cajaiba-Santana, 2013, *cit in.* Martins & Bermejo, 2014). Social innovation is therefore manifested as changes in attitudes, concepts or behaviours, and the result is the collective creation of new social practices and consciously targeting the desired social goals, leading to effective social changes (Cajaiba-Santana, 2013 & Neumeier, 2012 *cit in.*, Martins and Bermejo, 2014).

Structurally, social innovation is intangible instead, the focus is turned towards construction measures (Howaldt, Schwarz, Henning, & Hees, 2010; Neumeier, 2012 *cit in.* Martins & Bermejo, 2014). However, true social innovation occurs when changes are acceptable to society and are consequently widespread and translated into social practices or in a bigger expression in certain areas. These practices suffer a process of transformation and become institutionalized as a new social condition for society (Howaldt, *et al.*, 2010 cited by Martins & Bermejo, 2014). Thus, from a structural point of view, social needs are met through social changes, which in essence is the essential feature of social innovation.

1.4. Co-design – an alternative to design

When a service or initiative needs to be executed, it needs to be designed from the ground up with the purpose to bring order to the chaos of ideas and intentions. However, since social innovations target distinct affected social

groups, a methodology of design that integrates them as a key element for success should be considered. One of these inclusive methodologies is co-design, where social actors, beneficiaries and facilitators are placed on equal footing, towards the same goal of resolving social issues, the most effective and tangible way possible. This chapter introduces design thinking as a technique and field, the extension of design towards social service design and its concept, then the principles of co-design are enumerated in order to guide the subsequent topic, where the co-design process is presented in a narrative and simplistic approach, and as the last topic for the chapter, a brief overview of general policy regarding the subject of services design and co-design allows for an understanding of some current necessities for breaking barriers and achieving better results in solving social problems.

1.4.1. The design thinking field

A lot of research has been done on the concept of design thinking, as interest in strategic design has grown. According to Herbert Simon, the concept of "design thinking" was first used in literature in his book "The Sciences of the Artificial" in 1969. Balem, *et al.*, (2011) focused on how design affects social and environmental change and emphasized the importance of incorporating the human element in design's goals. This is also inherent to the design process, in which ideas from different departments of a company, such as those in product development, are brought together to formulate a better method of positively affecting society and contributing to society's overall integration of both productive, technological, economic, social, environmental, and cultural aspects.

Established by IDEO founder David Kelley, 'design thinking' refers to a set of principles, including attitude and method, that may be applied to solve complex problems. While considered among the most reputable and cutting-edge design firms, IDEO is also considered an influential organization for product design and

development and is widely credited for designing the creative solutions that are available in today's markets. The IDEO ethos of design thinking infuses all collaborators intending to prove the user experience in its entirety. Tschimmel, (2012) states that various definitions lead to a complex thinking process: a non-linear, unorthodox style of thinking. Now, it is widely acknowledged as a pragmatic method to problem-solving, combining creativity and innovation with a strong user focus.

Design thinking being a creative approach that focuses on people's needs, desires, and perceptions by using contextual knowledge and prototyping, enveloping an in-depth investigation of a business's opportunity, as well as its flaws and strengths, is conducted. As a result, fieldwork and rapid prototyping with ordinary materials are required to utilize this method. Most organizations employ procedures that are inflexible and may not perform well. Design thinking can explain and improve these procedures. This technique aims to generate the greatest possible outcome by employing a succession of stages, each of which emphasizes feelings, empathy, and creativity.

1.4.2. Designing social services

Rather than focusing just on material things and products, the design process as stated before has been extended to improve services. Besides the development of new services, service design also includes the improvement of existing services, processes, and business models (Ostrom, *et al.*, 2010), while accumulating knowledge and experience gained during the process of transforming the service into a working solution and how it is delivered (Moritz, 2005). Service design is increasingly being applied to social services to improve the way these services have a societal impact. The design allows you to collaborate with another framework that focuses on designing processes that

produce better results and increase happiness for social services, which can result in very purposeful and intentional thought processes (Burkett, 2012).

Users, according to Burkett (2012), are increasingly demanding direct participation in all aspects of service design and delivery. In international contexts, the values and notions of greater citizen engagement are widely embraced as mentioned in the first chapter. However, significant arguments must be made to highlight the differences between self-service and co-production or co-design. With the rise of social media and its numerous applications, it is predicted to lead to more breakthroughs in citizen-driven advocacy and service design, implying that citizens may indeed actively share their experiences throughout time. The use of the term "co-design" in social services may provide a foundation for re-involving people in its elaboration and it can also be used to highlight important differences between co-production and its concepts (Burkett, 2012). The expression "citizen-led design" typically alludes to the idea of working together on a project with others. In Table 3, co-creation, co-design, and co-production phrases are complemented with definitions from various writers to distinguish one method from another.

Co-Creation	"The systematic process of creating new solutions with people not for them, involving citizens and communities in policy and service development" - (Christian Bason, 2010)
Co-Design	"The process of designing with people that will use or deliver a product or service" - (Design Council, UK)
Co-Production	"Co-production means delivering public services in an equal and reciprocal relationship between professionals, people using services, their families and their neighbours. Where activities are co-produced in this way, both services and neighbourhoods become far more effective agents of change" - (David Boyle and Michael Harris, 2009)

Table 3

While co-creation and co-production deliver different methodologies from co-design, all three have in common the fact that they are collaborative processes that involve people in the different steps of the path. However, Co-design focuses on the people that will be the de facto users of the created service, as beneficiaries or providers.

1.4.3. Principles of Co-design

The process for successfully implementing co-designing is further developed by Kelly Ann McKercher in her book “Beyond sticky notes: co-design for real” (2020). The author focuses on the social movement regarding the inclusion of all interested parties in the decision-making of developing initiatives as well as redesigning of services. This methodology dives into the deeper problems throughout the contact with the local society, local entities and overall, every element in contact with them before the execution of a project/initiative. This concept focuses on deviating from “(...) designing for people to *designing with them.*” as well as “It involves sharing power, prioritising relationships, using participatory means and building capability.” (McKercher, 2020). The author states that initiatives designers, governments and entities understand other people's dreams, needs, experiences, and capacities, or lack thereof when making decisions on their behalf. In doing so, these peoples’ knowledge and abilities are overlooked. Therefore, the author states the need to increase community competence to enhance systems and services, and co-design is one approach to do so.

¹³ **Source:** Original concept from Burkett, (2012), self adaptation.

Based on the perspectives of McKercher (2020) and Burkett (2012) co-design is a method of designing with people rather than for them. Usually working with individuals with lived experience, communities and experts collaborate to improve something that everyone cares about. The basic function of co-design is to raise the voices of people with the help of other people, the authors present four base principles:

- i. Share power – to address this principle, authority should be shared particularly in areas such as “research, decision-making, design, delivery and evaluation.”. Because at the point when power unbalanced characteristics go unnoticed and untreated, the people with the most authority, for the most part, affect decisions, paying little mind to their ability or thoughts.
- ii. Prioritise relationships – co-design is impossible to achieve without relationships, social connections, and trust among co-designers, funders, and co-design organizers. Trust opens the door to discussions in which we address the proverbial elephant in the room (or a stampede of them, in some cases). Trust cannot be purchased; it must be earned — the stronger the social connection, the better the co-design process and outcomes.
- iii. Co-design encourages people to use a variety of means to tell their stories, like showing pictures, using movement, or simply speaking. Such approaches do not involve simply passing on information; instead, they foster people's self-discovery and help them advance from participants to active elements of the process.
- iv. Build capability - designers need to shift from 'experts' to 'coaches' to support the co-design team to adopt new ways of being and doing, learn from others, and have their voices heard. In co-design, everyone has something to teach and something to learn. You can use the principles to build a shared understanding of the process.

1.4.4. The Co-design process

Being co-design a methodologic approach to design that aspires to incorporate every human element in its design process, there is eventually a need to work on the team foundations or, as illustrated in Figure 5 (McKercher, 2020 and Burkett, 2012), the necessity to construct the conditions to work together towards the same goal. This is especially true when there is a significant gap in communication while attempting to understand the true nature of the situation.

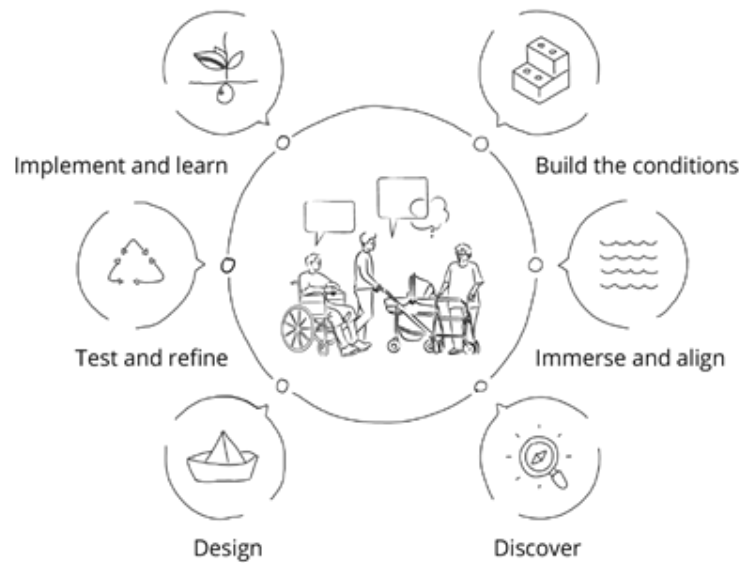


Figure 5
Foundations for co-design¹⁴

Building the conditions is the first phase of the co-design process. Being all about sharing power, prioritising relationships, and building trust. This section includes information to determine whether codesign is truly needed. Exploring the various groups of people that might be involved in the initiative (McKercher, 2020). McKercher (2020) states that these initiatives need to have a high chance of success, therefore it is essential to have in its team true influencers and sponsors. While influencers must have the capacity and resources to bring about

¹⁴ **Source:** Beyond sticky notes: co-design for real, McKercher, K. (2020)

change in organizations, institutions, or nations, sponsors must be community leaders who can give support for the team and initiative.

Getting to know the context in which you are working allows for recognizing what is already going on and what has been accomplished. This second phase, **Immerse and Align**, focuses on identifying knowledge gaps in the context of social innovation. To collaborate, the team must have the same goal. It can assist those who are resisting the process in seeing that, though there is a lot of information, there is frequently a shortage of understanding on why something is occurring. It is a starting point for ideas on how to persuade others to collaborate on a project (McKercher, 2020).

According to McKercher, (2020), the purpose is to begin by analysing, interpreting, and synthesising what is already known about the opportunity being investigated to prevent repeating effort and losing valuable resources, one of which is time. Enforcing engagement with the many aspects throughout the process fosters emotional accountability, which leads to a long-term commitment to the success of the project/innovation at hand.

In such a user-centred approach, one of the objectives is to learn with people and the different elements of the group, not for the elements (Sanders, 2002) therefore, the third phase, **Discover**, is about learning directly with the people involved in the context of the situation at hand (McKercher, 2020). Developing curiosity for the team is key for information to flow, leading to the sharing of cultural and contextual constructs (Kelly, *et al.*, 2012; Sithole, 2012; Smith, 2013; Vaioleti, 2006; Yunkaporta, 2009 *cit. in* McKercher, 2020). After the collection of this information, it is key for it to be documented and later discussed in an inclusive manner, with the participation of the different persons (McKercher, 2020). Finally, this results in different high-quality and multidimensional insights to guide the next phase, "Design". These insights

should state, what is happening, why it is happening and what could happen in the future.

The fourth phase is where the **Design** process happens, and before it begins, strong fundamental concepts must be understood and structured by the team so that this process can truly be designed towards the end-goal, the ideation of designed should aim to represent the order of importance present in Figure 6 below.

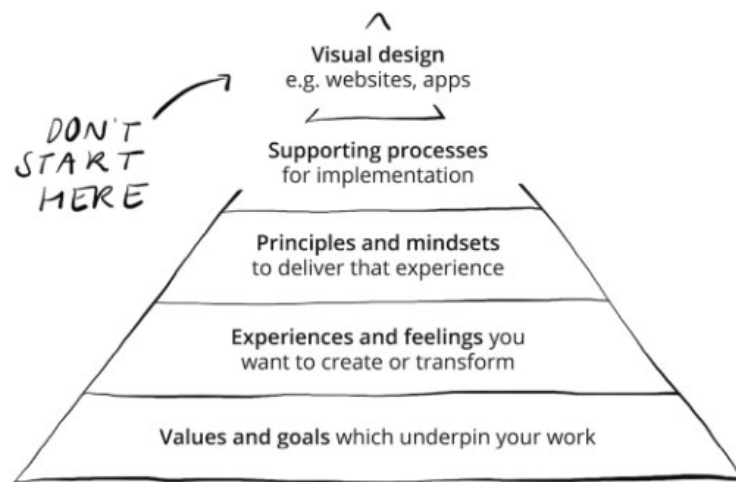


Figure 6
The structure of an idea¹⁵

Respecting this pyramid structure along the design phase allows for a smooth design process and the validation that the purpose at hand is always respected. The author presents a design process divided into 6 phases (depicted in Figure 7).

¹⁵ **Source:** Beyond sticky notes: co-design for real, McKercher, K. (2020)

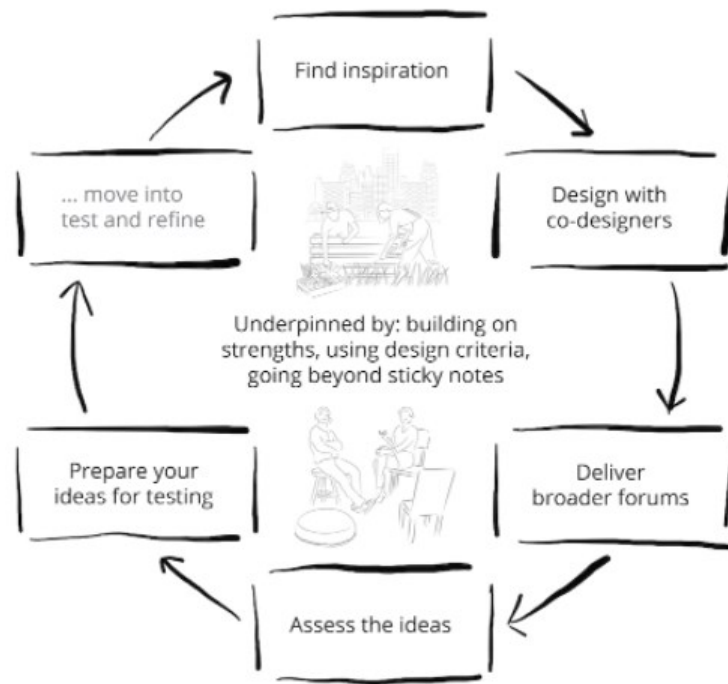


Figure 7
Activities within the Design phase¹⁶

According to the author McKercker, (2020), this process is understood with the following elements:

- i. Finding inspiration implies reviewing inspiring thoughts connected to the opportunity or task at hand. Building on existing work enables for identification of what works and what doesn't. These ideas inspire people to learn more;
- ii. Depending on the quality and depth of ideas, the design cycle may progress quickly. This process may take longer in some cases to account for different inputs and to allow co-designers to try many times to find and improve their ideas. It's best to strive to proceed beyond brainstorming because the results of this warm-up method are limited, particularly when considering the broader implications of societal complexity. Rather than focusing on volume, it is preferable to create a

¹⁶ **Source:** Beyond sticky notes: co-design for real, McKercher, K. (2020)

- safe environment for co-designers to value patience and profound thought. After studying and applying the ideas, the support staff can aid co-designers in providing and receiving useful feedback;
- iii. Outside of your co-design team, there is a constant flow of feedback. Given that many participants in larger forums will be unfamiliar with the insights and inspirations chosen, it is necessary to make them available before and during the sessions. Because co-designers are unlikely to attend larger gatherings, consider how you may introduce them to the individuals and perspectives that exist there;
 - iv. The next step is focused on evaluating the ideas generated from communications from the previous step and aligning them and see their match with what is currently being developed, the values and mission to respect, as well as the collected insights;
 - v. Before moving on to the next stage of the co-design process, co-designers must test their ideas. Ideas improve in quality over time as it becomes clear what is required to solve the insights, needs and issues. There is a big circle of feedback and information outside the team, and it can be used to test ideas, even if the co-design team isn't big enough.

The next stage is to **test and refine** the plan to see what works best for whom and in which conditions. It's important to consult with co-designers on which concepts to test or develop further. Keeping in touch with those who helped develop the prototype, showing them how their input was used, and ask for more feedback. More people involved in the prototype evaluation means a faster prototype maturation.

McKercher (2020) presents the final stage of co-design as **implementing and learning**. It's about putting the notion into practice and learning by doing. Continuing to prioritize connections and use participative methods. A long-term

commitment to co-design includes acknowledging the evidence provided by the process and respecting co-designers' contributions and care. Adopting, improving, and adapting solutions in real time is implementation.

1.4.5. Policy Impact on Services Design and Co-design

Public engagement in policymaking is even more crucial in the public sector since it is tied to concerns of trust, legitimacy, and representation. This poses several issues about the nature and method of involvement, such as how best to engage and involve individuals who might become beneficiaries. There are a variety of approaches for bringing people together to discover solutions, particularly in the realm of design. This is commonly referred to as "co-design". Some of these ideas are increasingly being employed in the public sector to redesign services.

According to Blomkamp (2018), co-design is frequently used in the public sector as a more effective, democratic, or innovative alternative to traditional approaches to community involvement, public involvement, service design, and policy creation. The letter 'co' is sometimes used as an acronym for 'cooperative' or 'collaborative' design (Burkett, 2012; Steen, *et al.*, 2011; Torjman, 2012 *cit in.* Blomkamp, 2018). Participatory design methodologies arose approximately 40 years ago because of user engagement in the workplace and software system design. Today, co-design remains an essential method in information and communications technology (Kimbell, 2015 *cit in.* Blomkamp, 2018). The widespread growth of 'design thinking' across business and governmental sectors accompanies the rising interest in co-design (Kimbell, 2015 *cit in.* Blomkamp 2018).

“Design is human-centred: it starts by understanding culture and context. While it may involve technology and the economy, it begins with what humans need or might need.

Learning by making. Instead of thinking to build, build to think. With human need as the place to start, prototyping becomes the vehicle to progress. Design is too important to be left to designers. Design should not be considered the purview of a few trained professionals. Rather, it should be a tool that elicits active participation from the community. (...) The design of “participatory systems,” where many more forms of value beyond wealth are created and measured, is a major theme for tackling the challenges of the future.” - Torjman, *et al.*, 2012 on “Tim Brown: Designers, think big!” (TEDTalk, 2008)

In this intervention, Torjman, *et al.* takes over Tim Brown statements and filters four big ideas regarding designers, design and design thinking to deliver the concept that is necessary an increase in community participation in the development of new solutions, services or products which aim to resolve societal problems. These ideas do not refer to the term co-design but touch on the ground principles for the whole social movement and the transition of design application towards the resolution of social problems and social service design.

Blomkamp (2018) gathers three key factors to understand the basis of co-design success: First, co-design is founded on the democratic conception that decision-making should include anyone impacted by design decisions (Sanoff, 1990); Second, co-design is normally consistent with growth driven by the community and deliberative democracy (Evans & Terrey, 2016); Third, it is only co-designed if individuals impacted are involved in the development of policies, which may be then defined as user-centred or human-centred design, coupled with local knowledge and practical/personal expertise (Durose & Richardson, 2016).

From this last-mentioned fact, a user-centred design method is transferable to the user-led design methodology introduced via the co-design practice (Burkett, 2012), which shares the responsibility of identifying needs and ideas with the community/public to satisfy their real necessities or achieve the best path of action to meet the best results (achieving the most impact possible). The same

applies to the redesign of existing services, through the cooperation of ex-users, new users and services providers, through the application of co-designing there is the possibility to make use of dialogue between all parties to reach a complete all-around solution, from start-to-finish. “While co-design isn’t a panacea for all of our troubles, it can and does contribute to better programs, services, policies and systems” (Burkett, 2012; Lam, *et al.*, 2018).

Many systems and organizations today fail to listen to lived experience. Thus, experts' ideas of what people want and need varies substantially from real experiences (Percy-Smith, 2006). Adding services, programs, and queries isn't enough. According to the author, resources to improve systems are often not lacking, but are just misdirected. Although not necessarily tied to these actors, a support network for newcomers can have a positive impact on the success of each effort. The goal should be to bring together different players, stakeholders, initiatives, techniques, public or private development organizations, and even private and public corporations to drive social change.

1.5. IT at Service of Social Innovation

Today, Information Technology (IT) and digital apps & tools account for a significant portion of new creative solutions for everything in the world, and it is no different for the social innovation field. According to West and Lakhani (2008, *cit in* Maiolini, *et al.*, 2016) the use of digital tools and IT can help make information explicit and allow participants to stay in touch while also helping to resolve societal issues efficiently, changing how people interact, assisting in the complex interpersonal interaction process, especially when many people are involved.

Pisano and Verganti (2008) as mentioned in Maiolini *et al.*, 2016, show how digitalization and information technology lower the cost of obtaining creative ideas by highlighting Katz and Rice's (2002) emphasis on IT's capacity to sustain collaborative dimensions in decision-making and knowledge-based activities. Many people may now actively engage in the creation and execution of new ideas thanks to the high number of digitized instruments (Hutter, *et al.* 2011). Considering the theme of connectivity and its importance, internet-based technology may help companies and organizations improve connections with stakeholders, potentially leading to a higher investment in the mission, since a higher level of communication is established, according to Vaccaro and Madsen (2009) and cited by Maiolini, *et al.*, (2016).

There are three types of drivers in this context: in terms of technology, mobile is a device; in terms of distribution channels and platforms, the web and social media; and as relevant fields, marketing, education and e-commerce. Since marketing, advertising, and e-commerce, through digital tools and IT offer a higher degree of customization and targeting, facilitating in fully understanding individuals' requirements, and as such they are essential to the social innovation field (Millard & Carpenter, 2014 *cit in* Maiolini, *et al.*, 2016). Increasingly, social marketing is being used to influence social behaviour, solely for the good of both their target audience and society, focusing again on its mission, driving social change.

Since this is such a critical step for the success of a social innovation initiative, a marketing strategy should be developed as early as possible in its development phase. And through the focus on the market's online community with the highest adoption rate and the usage of focused marketing campaigns (social media, blogs, forums, and mentions on the internet), better results can be achieved (Maiolini, *et al.*, 2016). The authors conclude that these steps towards digitalization make social innovation and entrepreneurship possible by enabling

vanguard of trends, working in conjunction with key social innovation businesses and regions to drive change. While close to SI, the underlying link between free sharing, service, gaming, healthcare, money, travel and interactive (open source) is weaker in the second tier (outside the red perimeter and within the blue circle), digitalization and IT however also have important consequences in this situation if they affect them at all. A variety of activities that have some connection to SI's core businesses makes up the third network tier (between the blue and yellow boundaries), with IT losing influence at this stage apart from e-learning and social & digital marketing.

Directly tied to this topic, presenting some social tech start-ups is relevant to better understand what some of them are doing, why they are doing what they are and how they do it.



Figure 9
SusGain logo¹⁸

SusGain¹⁹ emerged from the growing interest of the public to adopt more sustainable practices, and the difficulty of finding and distinguishing green businesses among the regular. SusGain developed a rewards application with the purpose to encourage users to engage with sustainable initiatives and businesses, and support causes or charities through a cashback reward system based on how much the users interact with green businesses.

¹⁸ **Source:** <https://www.susgain.com/our-purpose/>, consulted on 1/11/2021.

¹⁹ More information on <https://www.susgain.com/our-purpose/>, consulted on 1/11/2021.



Figure 10
Surgical Teaching logo²⁰

Surgical Teaching²¹ was created to assist medical students with their education by making it easier to understand important concepts in a more effective manner. It is possible to simplify the learning experience for students all around the world by utilising cutting-edge technology, resulting in a world of empowered medical professionals who can better respond to patients' needs, improving in the long term the access to quality health services all around the world.



Figure 11
UpEffect logo²²

UpEffect²³ empowers and equips social-good companies and creators with tools and recipes for addressing crowdfunding. Through a comprehensive campaign playbook it structures management planners, templates, workflows

²⁰ **Source:** <https://www.surgicalteaching.com/about-us>, consulted on 1/11/2021.

²¹ More information on <https://www.surgicalteaching.com/about-us>, consulted on 1/11/2021.

²² **Source:** <https://www.theupeffect.com/about/>, consulted on 1/11/2021.

²³ More information on <https://www.theupeffect.com/about/>, consulted on 1/11/2021.

and calculators in terms of tools, and it provides coaching calls, feedback on materials, accountability check-ins among other services to support social initiatives creators creating successful crowdfunding campaigns. They also help founders access customers, funds and partners who join early and become invested in the success of the brand.

These are only 3 examples of what impacts social tech start-ups have been promoting throughout the world. In the UK alone it is estimated that there are 490 tech for social good firms, 464 of them in the not-for-profit space (NFP) ²⁴and it has been growing exponentially. As more technological advances are made and new formats of applying it surge, they can also be extended towards other social innovation and entrepreneurship fields. Consequently, as learned on previous sub-sections, there are a variety of already validated development methodologies that can be executed and/or adapted towards the social field, where technology in this case can be used in order to support its development, as it can also be used as the main vehicle for providing the desired end-service or social [OBJ] effect, this latter one is further explored in the document for its relevance in the domain of the social tech initiatives and the selected tech start-up. The development methodologies present in this document are: the six stages of social innovation, the lean start-up initiative and the co-design methodology.

Applying such methodologies helps in developing clear, necessary and cost-effective social constructs with a solid execution plan, delivering to society the necessary initiatives that answer its needs.

²⁴ More information on <https://technation.io/insights/tech-for-social-good/>, consulted on 1/10/2021.

Chapter 2

Methodology

To achieve the objectives mentioned in the introduction and answer the overriding questions of this research, it is necessary to develop a methodology of approach. This chapter provides not only the framework, but also the justification for the methodology adopted in the approach to the problem under study, and consequently answer the underlying research questions.

Thus, this chapter is structured in two parts, the first presents the problem and the respective research questions, and the second presents the method used for the research, which is further divided into subthemes that complement and justify data collection.

2.1. Problem and Research Question

Social innovation and societal entrepreneurship are increasingly viewed as necessary components of addressing pressing social concerns. Both have received increased attention in recent decades, as subjects of scholarly investigation and political objective. The current extent of social innovation and social entrepreneurship appears insufficient to achieve lasting changes in how our society works and sustains itself. Nonetheless, their end goal is to achieve social change. Sometimes this is achieved with technology to execute the mission at hand and in such cases, it is also called social technological entrepreneurship. However, many social endeavours fail at reaching their mission, and one reason for it to happen, according to the literature, is that they

do not have a well-structured development methodology and plan. It is mentioned along the literature that there is a necessity for validation through research how these methodologies are necessary for social initiatives, and for the social technological initiatives should be no different. Therefore, to understand what happens in this kind of initiatives, the essential question to be answered is: **“how does a social tech start-up develop their concept and sustain its development?”**

Due to the nature of this question demanding a detailed introspective, Yin (2018), recommends that that one phenomenon identified in this situation should be researched in a qualitative manner, more specifically through a case study methodology (Yin, 2018).

2.2. Case Study Method

The research developed incorporated qualitative research characteristics consistent with the case study approach as a "research strategy" (Yin, 2018). Yin (2018) describes the case study method as an empirical inquiry that investigates a contemporary phenomenon in a real-life context, where relevant behaviours cannot be manipulated and the boundaries between phenomenon and context are not clearly defined. Yin (2018) categorizes case studies into exploratory, descriptive, and explanatory, and multi or single case, resulting in six distinct case study types. An exploratory case study develops questions and hypotheses for further research, a descriptive case study describes an event in detail and an explanatory study shows how causes produce effects. The current research, being descriptive and exploratory, aims at gathering answers for the research question thought for the case after the literature review was made, because it is suitable for answering explanatory questions such as "how", "what", and "why".

Therefore, the selected research model allowed for a logical sequence of connection between empirical data, problem/starting question, and conclusions drawn (Yin, 2018). Yin (2018) suggests using theoretical support to overcome this case-study limitation, therefore this suggestion was considered in the unit analysis.

2.2.1 Unit of analysis

According to Miles and Huberman (1994), the case itself is a Unit of Analysis (UoA), and it can be "an individual, the role played by an individual or organisation, a small group, a community, or even a nation". The choice of the method to be adopted was conditioned by the problematic under study and the type of questions to be answered, the selection of the field of analysis took into account the following prerequisites:

- i. The UoA would have to be embedded in the population of the social innovation field;
- ii. The UoA had to be a start-up;
- iii. The UoA would have to support their activity on technology to be considered of "tech" nature;

The selected UoA was a social tech start-up called Talentun²⁵. The selection of this unit resulted from the facts that:

- i. It was a social start-up initiative which emerged during the Coronavirus pandemic in 2020 in response to a collective need, and it was built around the premise of using technology to provide its mission;

²⁵ The company agreed to share its name and its case without anonymity.

2.2.1. Data Collection

The investigation through the case study method was designed to focus on the collection of valid information to answer the raised questions. The data collection was carried out as part of this process. Thus, data was collected through a semi-structured interview and the analysis of different contextual elements, such as the website information, social media presence and stakeholders' comments. The use of these multiple sources allowed for a greater understanding of the UoA.

The semi-structured interview, despite allowing less rigidity than the structured ones as they enable a greater contribution from the interviewee in answering open questions, bringing new facts relevant to the research, while at the same moment were supported by a pre-defined script (Appendix 1) as recommended by Yin, (2018). The interview was conducted with the start-up founder, following a semi-structured approach towards the different phases described in the literature regarding the idea development methodologies, while following a logical chain of thought for the interviewee to promote a fluid response while avoiding deviations from the questions. The interview was recorded with the consent of the interviewee, and it took place in Portuguese via google meets in November 2021, lasting about 1 hour and 20 minutes, its transcription can be found on Appendix 2.

2.2.2 Data Analysis

The data obtained is not relevant on its own because it must be considered when it is analysed. As a result, Yin (2018) suggests that the analysis be guided by the theoretical processes established during the literature review, with the goal of focusing on the treatment of relevant information. This process analysis was carried out by emphasizing the most important factors contained in each of

the six stages of social innovation, while remaining vigilant for the application of co-design practices throughout the process, and when possible, elements complementing the answers obtained through the interview.

The data was divided into six blocks, each corresponding to a stage of the framework identified by Murray *et al.* (2010) and presented in the literature review, and then addressed individually in a comparison format. There was an attempt to select only relevant data for each block of questions, resulting in a clear, concise, and direct analysis and, consequently, results to be discussed. After selecting relevant data, following the recommendations of Miles and Huberman (1994) and Yin (2018), it was possible to identify patterns and possible relationships between the stages under study, what was carried out in the initiative and the results obtained.

Chapter 3

Talentun case study

This chapter presents the empirical study carried out in the unit of analysis - Talentun. With the aim of studying the course of formation of the social enterprise divided into the different stages of social innovation and concept validation shared by Murray, *et al.* (2010), the comments obtained by the founder of Talentun concerning the lessons learnt from the process of creation and sustainability of the social tech start-up are analysed. The interview data was cross-checked with the framework in question, whilst it was also pertinent to be on the lookout for signs of inclusion of the co-design methodology. Evidence was also collected whenever possible on the different processes and situations mentioned.



Figure 12
Talentun logo²⁶

Talentun was created in May of 2020 with a clear mission “to create 1 million amazing careers by 2030” by allowing students, who had no means of contacting

²⁶ **Source:** The logo can be accessed through the following link: https://media-exp1.licdn.com/dms/image/C4D0BAQEKZz2wX_gDCg/companylogo_200_200/0/1599052214653?e=1645056000&v=beta&t=BWC6BsztWYV8p4L6bc9h1kbpKEXkUoS3_VUBUvrE

the business world, to have contact with it through meetings with mentors present on the labour market and clarify their doubts. This situation was aggravated because of the pandemic situation in Portugal and in the world. It ended up creating a space of interest for professionals in the labour market to do mentoring and those who wanted to receive it. The mentoring was facilitated through the platform²⁷ developed for this purpose by the founder, working as a vehicle for the relationship between the stakeholders.

3.1. Case study presentation and discussion

This section presents the analysis regarding the questions answered during the interview which can be found in Appendix 2 (in Portuguese). For the purpose of clarity and consistency for this case study the analysed contents were translated to English and compared with all the stages of the literature review.

3.1.1. Prompts and inspirations

A social problem is diagnosed by asking questions about its root causes with the objective of understanding it, not just its symptoms, according to Murray *et al.*, (2010). This means that innovations must have a central concern for which to focus on and at the same time to serve as a guiding roadmap to support execution of the concept. The discovery of this problem can appear from a variety of sources, however certain events or new information tend to function as triggers to accelerate this process. Understanding if the correct problem is identified is key to develop an adequate solution to it. Considering these aspects, in table 4,

²⁷ Talentun website is now down, however it is possible to recover a snippet dating to the 5th of June, 2021 through the use of the "Internet Wayback Machine" website crawler on the following link: <https://web.archive.org/web/20210605132010/https://talentun.co/> (consulted on 26/10/2021)

the case is analysed to understand if this initiative had triggers in its origin and how the social problem was considered.

Stage	1 - Prompts and inspirations
Stage objective	Identify the social problem;
Questions related	B1.1); B1.1.1);
Elements from the interview	B1.1) "(...) by talking to some of my colleagues who were studying, because they wanted to get summer internships, other internships or even jobs, but they couldn't because the companies weren't open (...); B1.1.1) "It arose from an individual and group need (...) at the time when I was studying, I also had that problem. (...) I wanted to have contact with companies and everything else, but (...) if I wanted to do an internship, I had a much higher cost associated with transport to big cities like Porto or Lisbon. So, if I had this at the time, it would break a barrier of having contact with professionals who could then generate networking opportunities, to then also understand what it is that I want to do when I finish the course."
Analysis	The main source of inspiration identified happened to be the distance between the students wanting to connect with the job market, felt on a personal level first and then also collectively on his surrounding public sample. However, there was a trigger that pushed the call for action, which was the increased distance felt from the job market to new students due to less opportunities being available because of the Covid-19 pandemic.

Table 4
Prompts and inspirations stage analysis²⁸

For the development of this social tech start-up, identifying a problem was crucial so that it could be broken down and a solution found. Its inspiration however departed from the Crisis trigger mentioned in the literature from Murray *et al.*, (2010) derived from individual and collective experience, and therefore the founder decided to act based on it. However, is not clear that this problem was a verified necessity for the remaining audience under the same qualifying characteristics. This verification process should had included a

²⁸ Source Self elaboration.

broader sample to validate the need, so that it could be understood if this is an identified systemic social problem or a nice-to-have remark.

3.1.2. Proposals and ideas

Proposals and ideas emerge from people in general, and they can be participants in a community experiencing the problem, as well as have no connection whatsoever. In Talentun case, the founder had already experienced to an extent the pains of the problem in hands. Not only that but the opinions of others undergoing the same situation were collected. After the necessity being established and understood, the ideas in the field of social innovation and regarding execution should begin to emerge from the included parties (Murray *et al.*, 2010). These different involved parties, if possible, should also be included in the design and development of solutions, and not just on the ideation phase. Table 5 provides the context of the ideation phase for the start-up.

Stage	2 – Proposals and ideas
Stage objective	To gather ideas from the different stakeholders on how to solve the identified problem and idealize what the path to follow is.
Related questions	B1.1); B1.1.2); B3.3)
Elements from the interview	<p>B1.1) "(...) Instead of having that experience of a summer internship where it's more about aligning expectations of the job and the roles, they talk to mentors and they explain. It's not exactly the same, but at least it would be something where they were safe, at home, doing mentoring.";</p> <p>B1.1.2) "It has always been a social initiative, that is, even very much because of that decision is that it ended up hindering its growth and probably led to its demise."</p> <p>B3.3) "The stakeholders were the students to have mentorships, mentors to provide mentorships and companies to be able to gather profiles of interest."</p>

Analysis	The objective of ideation was met, however, the only format mentioned to validate the idea, so far, was through conversation with elements close to the founder, not considering any of the remaining stakeholders.
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Table 5
Proposals and ideas stage analysis²⁹

According to Murray *et al.* (2010), the ideation phase should be an open, inclusive, and comprehensive process about the idea that aims to solve a said social problem. In this case, this primary ideation phase was limited to the founder perspective and of close stakeholders, being more inclusive in the next stages of the solution, and finally, from the founder answer, it is possible to understand that the process was not very comprehensive in its form, as it appears that it was a quick thought process. Nonetheless, an idea to be further explored in the next stages was formed.

3.1.3. Prototypes and pilots

According to the studied literature, considering the ideas generated by the previous process, the social initiative should be designed to provide a “Minimally Viable Service” and demonstrate that a problem can be solved with the bare minimum. When innovation is developed through a digital start-up, it is critical to use the quickest, most efficient, and direct strategy to test its product or service, then the market validation strategies should be implemented, presenting the MVS directly the public experiencing the problems, the analysis on this situation was done on table 6.

²⁹ **Source:** Self elaboration.

Stage	3 – Prototypes and pilots
Stage objectives	Develop a MVS solving the identified problem with minimum resources.
Questions related	B1.2); B1.2.1); B1.3.1)
Elements from the interview	<p>B1.2) "(...) At the time we were in a pandemic situation, i.e. naturally physical events would not be possible. (...) it doesn't matter if you build an application for 1, 10, 100 000 or 1 000 000 people, because it's always going to have a very small distribution cost, and naturally the goal is to scale. As the goal was to help as many people as possible, the technology made perfect sense. (...) ";</p> <p>B1.2.1) "(...)the no-code movement which was the case with Talentun, because I didn't know how to program, but I was able to make the application anyway because there are tools for that, allowing me to develop technological solutions without knowing how to program.";</p> <p>B1.3.1) "At the time I put a post on LinkedIn, had some applications and was doing everything manually at the time to validate the MVP or service. Then (...) came the idea of making an application to scale and automate the service process.".</p>
Analysis	The MVS was developed and tested with positive remarks, validating the solution.

Table 6
Prototypes and pilots stage analysis³⁰

An MVS was established, through a LinkedIn post where interested stakeholders (students and mentors) could apply for the service. After validating that, there was interest from the public, this step included the use of the Concierring supporting method for concept and service validation, while at the

³⁰ **Source:** Self elaboration.

same time gathering users by concept. With the solution tackling the problem, the next step was to make it sustainable.

3.1.4. Sustaining

According to Murray *et al.* (2010), this step focuses on the process after a prototype has already proven to be successful. The goals should be to simplify processes in order to increase cost-effectiveness and to identify revenue streams so that the innovation can be financially sustainable, it is therefore critical to create a business plan adapted to the nature of the social start-up, table 7 approaches this stage.

Stage	4 - Sustaining
Stage objectives	Simplify processes to increase cost-effectiveness and create a business plan.
Questions related	B1.1.2); B1.2.2); B1.3.2); B2.1);
Elements from the interview	<p>B1.1.2) "(...) other start-ups in the area of education and most start-ups follow the path of: let's get money from investors, to be able to sustain while we don't have enough revenue. This is a normal path, but I never took this decision because I knew that from the moment I have investors the priority will never be the students, ending up losing the social focus."</p> <p>B1.2.2) "(...) I thought about several things. One option would be grants and small support, but I don't think it would be sustainable (...) Another idea would be a crowdfunding model, where you would have the community getting a share of the company in exchange for a value. (...) it would be more decentralised shareholders, coming with the expectation of supporting the project and its sustainability (...) But no option ended up going ahead.";</p> <p>B1.3.2) ": The minimum viable service (...) would be to bring the mentors closer to the students and provide the contact moments. But this focus was eventually lost because of the potential improvements.";</p>

B2.1)" There was a first phase of 4 months where everything was manual and non-profit, then in September 2020 I converted to for-profit and started working on an application dedicated to Talentun because at the time it was not sustainable to do everything manually, and I ended up spending many hours matching profiles. So I switched to other models, made the application and then it was a matter of talking to the stakeholders and understanding what they would want from Talentun. At the beginning were the mentorships, then adding statuses about the mentors and students, making the booking of sessions easier, automated recommendations of mentors, then it was added a job board which turned out to be a bad decision because it was too complex and a forum so that the community could ask questions and comment. There were some decisions that served to further complicate the product and if it was now I would have kept everything much simpler and I would have focused on promoting the platform. I've been trying to do some marketing promotions and since the goal changed to for-profit I've spoken to several companies, but unfortunately none of them have converted into clients. I ended up not being able to find a competitive model for the sustainability of Talentun, because there were free options for companies that could present the same volume or more students."

B2.1.1) "I ended up discovering it as I was doing things (...) One week I worked on the application (...) Another week I worked on marketing (...) This is how I structured the work, it wasn't a very complex process. I tried to work by features (...)"

B2.1.2) "I ended up using a little bit the lean start-up methodology (...) I know that there is the Agile methodology which is a product methodology, as well as business plans, but I didn't research much on this subject because I don't believe much in plans (...)"

B2.2.1) "Yes, the whole business model was thought based on that, but it ended up not working. (...) monetization was crucial, to be able to sustain this service (...) The idea was to bring in revenue with companies, but put the students in 1st place and not the companies that pay us. It would have been crucial to validate this business model format earlier to try to adapt it so that the project would be sustainable."

Analysis	Using new technologies and time investment from the founder a platform was developed, however, this platform ended up taking the attention away from the MVS that was already validated. The initiative did not follow any development methodology per se, only identifying some resemblances to how events took place. The business plan was developed considering Talentun values and mission, still it failed at validating if it was financially sustainable and investing in other revenue channels.
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Table 7
Sustaining stage analysis³¹

Due to the founder's focus in developing the platform and its various features, priorities were shifted, leading to resources being misdirected considering the needs of the initiative at the time. No concrete development methodology was followed, presenting even some confusion between what a business models and a development methodology is. This presents a potential lack of structure in the approach and planning, potentially failing to prepare a business plan adapted to the reality of the social start-up.

3.1.5. Scaling and diffusion

Murray *et al.* (2010) refers to this process as scaling, as the innovation is generalized within an organization or context, there is a necessity for growth so that a bigger social impact can be delivered. The authors also reach an agreement that because innovations emerge from the social economy in a variety of ways, whether through inspiration or the transfer of assistance and know-how from one organization, initiative or community to another, their growth is more organic and adaptable to changing circumstances. This growth is also present along the beneficiaries from the service since the word-of-mouth factor and the effects of potential marketing are expected to deliver an inflow towards the

³¹ **Source:** Self elaboration.

community, and through table 8 we can verify how this was executed for the case study.

Stage	5 – Scaling and diffusion
Stage objectives	Scale and diffuse the start-up social mission and response capacity.
Questions related	B1.3); B1.3.1);B2.2); B3.2); B3.2.1); B3.2.2); B3.3.1); B3.3.2)
Elements from the interview	<p>B1.3) "As I wanted Talentun to be an open company, (...) I used to hold open meetings for the community to discuss the future of Talentun, where we talked about what was done, what would be interesting to do next and people gave feedback (...);"</p> <p>B1.3.1) "(...) Then I wanted to take Talentun to something bigger and have more relevance, help more people, so I came up with the idea of making an app to scale and automate the service process."</p> <p>B2.2) "(...) I always wanted to involve the community because it brought more ideas, more views and more marketing. When you do things in public, people talk about it and then it ends up bringing positive results because you're doing everything openly. In this case, what ended up happening was a good amount of marketing through word-of-mouth."</p> <p>B3.2) "(...) from contents, partnerships and even in a marketing aspect with the partnerships with student groups, even the personal branding of building in public also ended up becoming marketing."</p> <p>B3.2.1) "Mostly I would say yes, about 95% because it was my background. Being a platform (...) it would make perfect sense to develop the various forms in digital format. Even the partnerships were all done through digital tools, apart from a physical event at the University of Minho (...) a lot of LinkedIn and Instagram and email marketing. Ads were never part of the equation because I had no budget (...) only when they manage to have a sustainable model would it make sense to invest in ads."</p> <p>B3.2.2) "(...) on LinkedIn started from a need to get validation, after the interest was validated, it served to raise new mentors and also some students who were more actively looking for the challenge that gave birth to the project. Then the</p>

	<p>move to Instagram served as a way to try to increase the traction and flow of new students to the platform, because it ends up being where a large percentage of the target audience to serve is.</p> <p>B3.3.1) "Relationship management was carried out through regular meetings, requests for feedback either on social media through simple polls about service or app development, or even through emails sent directly to the different registrants on the platform where I asked for more structured or open feedback."</p> <p>B3.3.2) "I believe so, because by having regular meetings it was possible to explain various aspects inside the project and also included companies in this process, which in turn had mentors on the platform due to the open format of the operation. This ended up generating discussion of relevant issues for all parties (...)"</p>
Analysis	<p>The scale of operations was increased through a technological platform and with more mentors. In terms of the diffusion of its social mission, efforts were developed through digital marketing, social networks and events. There was also an open communication culture ³² allowing for participation of the stakeholders.</p>

Table 8
Scaling and diffusion stage analysis³³

The scaling component for the social initiative was considered and developed in terms of technologic infrastructure and regarding the demand for the service. Elements that facilitated communication with the different stakeholders were found and establish that efforts were made in order to have an inclusive product management perspective. There was also a structured diffusion operation happening, much of it due to word of mouth and social networks. However, as mentioned before, this field was not explored enough, failing to achieve the expected growth. The initiative also failed at incorporating potential room for volunteers in its activities, which is a possible step for social initiatives.

³² Through Annex 2 there is an example of a feedback form shared by Talentun to its users, and with Annex 3 an example of an open call for all interested stakeholders via a LinkedIn publication.

³³ **Source:** Self elaboration.

3.1.6. Systemic change

As studied, and according to Murray *et al.*, (2010) the goal of social innovation is to successfully deliver social and systemic change, this can involve social movements, business models, new ways of thinking and acting, among others. This stage is also considered a point of view with the purpose of permitting changes in the underlying qualities of social practices that can improve any service, process, or social need. As a result, social innovation manifests as shifts in attitudes, concepts, or actions, leading in the collaborative development of new social practices and the deliberate pursuit of desired social goals, resulting in effective social change. Table 9 addresses the systemic change analysis for Talentun.

Stage	6 – Systemic change
Stage objectives	To identify potential lasting social effects derived from the social initiative.
Questions related	B3.1.1); B4.2); B4.2.1)
Elements from the interview	<p>B3.1.1) "Yes, I think it could always be better, but in the end, we helped with over 300 mentoring sessions, with over 200 students enrolled and over 100 mentors. Of course, you always wanted more, but with the resources that there were I think it was a success.";</p> <p>B4.2) "I feel that those who were directly involved in or enjoyed Talentun developed a bit of sensitivity to a need, eventually bringing people who had common goals together in one place, creating a community. Mentors who shared the same mindset on the subject of mentorships and students who were aware of their future and next steps to take, and certainly new connections were made because of that."</p> <p>B4.2.1) "The platform is now closed, having ended all service. However, I am aware that mentors and students still have mentoring moments, this is because it was possible to create relationships of mutual interest."</p>

Analysis	It is unclear if the initiative resulted in a lasting social effect besides the remaining individuals.
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Table 9
Systemic change stage analysis³⁴

Since the platform is gone, the service itself is no longer available, however, if the stakeholders still remain their mentoring sessions, it validates that there was a need to satisfy and their need was met, resulting in a potential change and lasting social effect for these individuals.

3.2. Talentun lessons learned

When asked about the culture of error through question B3.1.1), the founder replies that the mentality of the person involved ends up playing an important role, because in Talentun's case several mistakes were made. Consequently there was an attempt to understand what went wrong and why allowing it not to be repeated in the future. Regarding the lessons learned, he mentions that the fact of having developed everything in an open way for the community allowed other people to be guided by the mistakes made by others, thus also culminating in an added value for society.

In this case, Talentun's key development lessons learned³⁵ according to the founder are explained through question B4.1). Starting from this point, as identified in the analysis, it would have been crucial to establish a business model suited to the social nature of the start-up. The founder however, answering to question B1.2.2), mentions that the development of a Crowdfunding model could

³⁴ Source: Self elaboration

³⁵ The founder also publicly shares his personal errors and lessons learned through the following website: <https://www.matosdfm.com/talentun-fails/> (consulted on 08/11/2021)

had been a path to follow, but at the time of execution it was not considered. Next, it is necessary to discuss that the founder did not have exclusive dedication to this initiative, having the whole process been developed during his free time. Finally, there is the cost factor involved, although as mentioned in the answer to question B1.2.1) where it's shared how open innovation technology is accessible to everyone due to its low costs, until the end of the social technological start-up's lifetime there was only investment with no financial return.

When asked what he would do differently through question B4.1.2), he mentioned that he would focus on validating the business model at the beginning of the project, making it sustainable, with this issue solved he considers that the key would be to develop the marketing network to gradually disseminate it to a larger public and work on the conversion to users. He also mentioned that he maintained the open culture of the initiative, as he feels that it worked quite well, because due to the social nature one expects understanding from the interested parties.

Conclusion

This study enabled the understanding of how a development cycle of a social initiative works, having more specifically been approached through comparative analysis in a phased manner to answer the question of “how does a social tech start-up develop their concept and sustain its development?”. It was selected as a case study, a social technological start-up whose activity closed during the development of this study, being particularly relevant to understand what went wrong and compare it to the development framework from Murray *et al.*, (2010) posits as roadmap to this process. In the course of this analysis, it became evident that the start-up did not execute or rely entirely on any methodology, as was identified as the norm in the literature review. However, its development process presented identical characteristics to the six stages of social innovation framework, regarding the scope, namely through the definition of a problem to be solved, the creation of an MVS to validate the need, the incorporation of the different stakeholders in its design and the creation of a business model. However, in the case of this last-mentioned step, the process was supported by assumptions from the founder without further verifications. It was also not validated with the market to understand its true financial sustainability, culminating in its eventual dissolution for reasons of unsustainability in the month of September 2021.

The significance of this result is that, although this social initiative has a technological nature, it suffered from the same crucial error of not following a development framework, presenting an inadequate business model and its consequent validation as well as a weak development of inorganic marketing.

In terms of practical interest, this study allowed to understand how a social tech start-up executed its development life-cycle and what its main issues and difficulties were. Whilst also identifying that although traditional social initiatives and technology-based social initiatives support their activities through different formats and costs, they suffer from common flaws. Being crucial the identification, collection and analysis of errors regardless of the format, enabling learning based on the error and not its cult.

The main limitation of this study, according to Yin (2018), is the fact that this case study only involved one social technological start-up, and there is a need to corroborate and understand what happened with other initiatives of the same nature to identify patterns to be avoided in the social technological field as well. One suggestion for future studies is the possible follow-up of the development of a social technological initiative from the moment of its formation using concrete follow-up methodologies and its comparison of results. Further studies (at national level) on the implications of the error culture and open innovation applied to social technological initiatives and start-ups can be useful to explain the difficulties of such endeavors.

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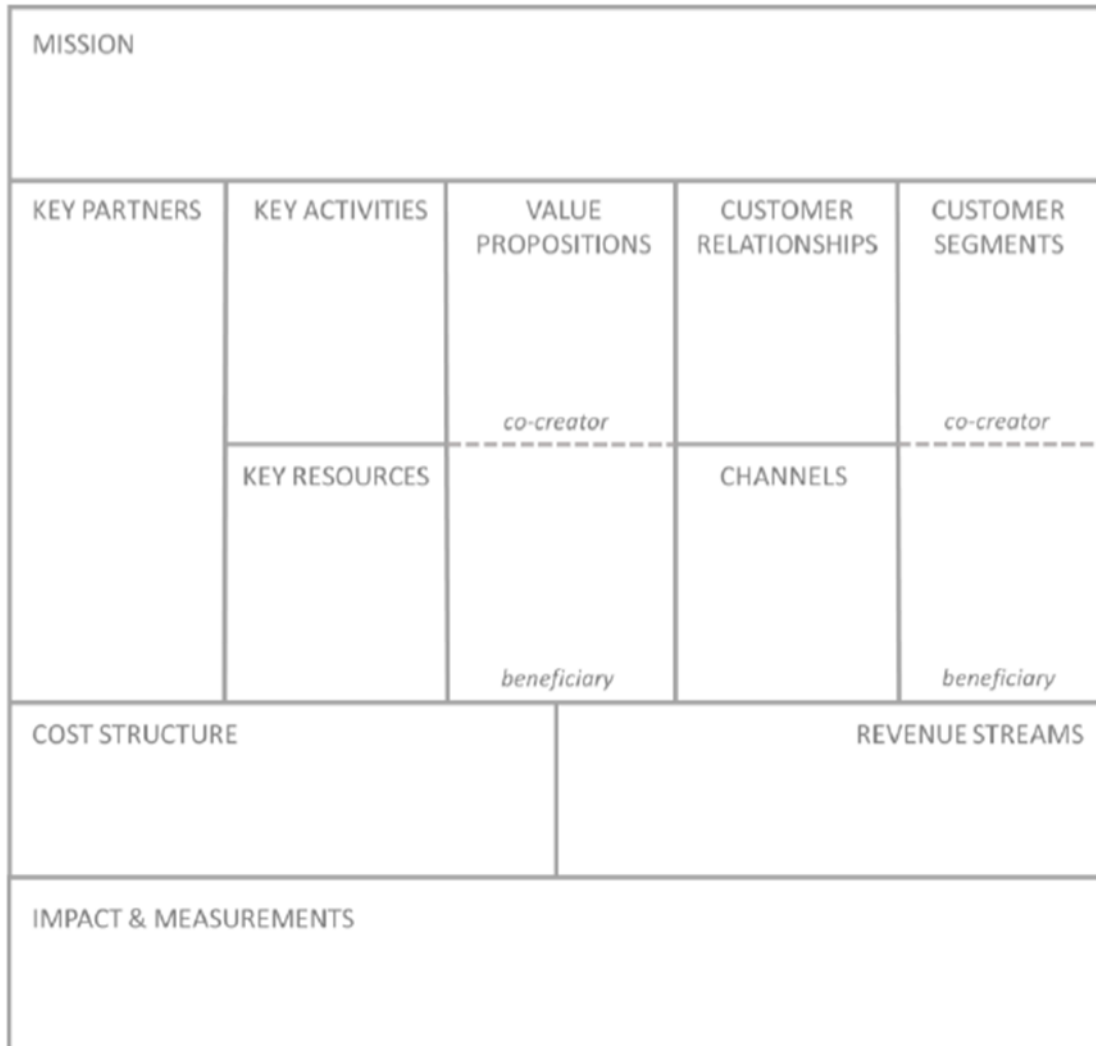
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Annexes





Annex 1
Social Business Model Canvas³⁶

³⁶ **Source:** Qastharin, A. 2015. Business Model Canvas for Social Enterprise. The 7 th Indonesia International Conference on Innovation, Entrepreneurship, and Small Business (IICIES 2015). https://www.researchgate.net/publication/323393037_Business_Model_Canvas_for_Social_Enterprise (accessed on 12/08/2021).

Como pode a Talentun melhorar a sua plataforma de mentorias?

Submete este curto formulário para nos ajudares a perceber como melhorar a nossa plataforma e assim mudar a forma como a educação é feita em Portugal!

 [Mudar de conta](#) 

***Obrigatório**

Agendaste uma sessão de mentoria? *

Sim.

Não.

Consideras que os mentores que encontraste na plataforma podem ajudar-te a entrar no mercado de trabalho? *

Sim.

Não.

As disponibilidades indicadas pelos mentores coincidem com as tuas disponibilidades? *

Sim.

Não.

Avalia a facilidade de uso da plataforma: *

Pouco intuitiva 1 2 3 4 5 Muito intuitiva

Qual é o teu grau de motivação/interesse para conheceres mentores nesta fase do ano letivo (Início das aulas)? *

Pouco Motivado 1 2 3 4 5 Muito motivado

(Opcional) Tens comentários ou sugestões adicionais a fazer?

A sua resposta _____

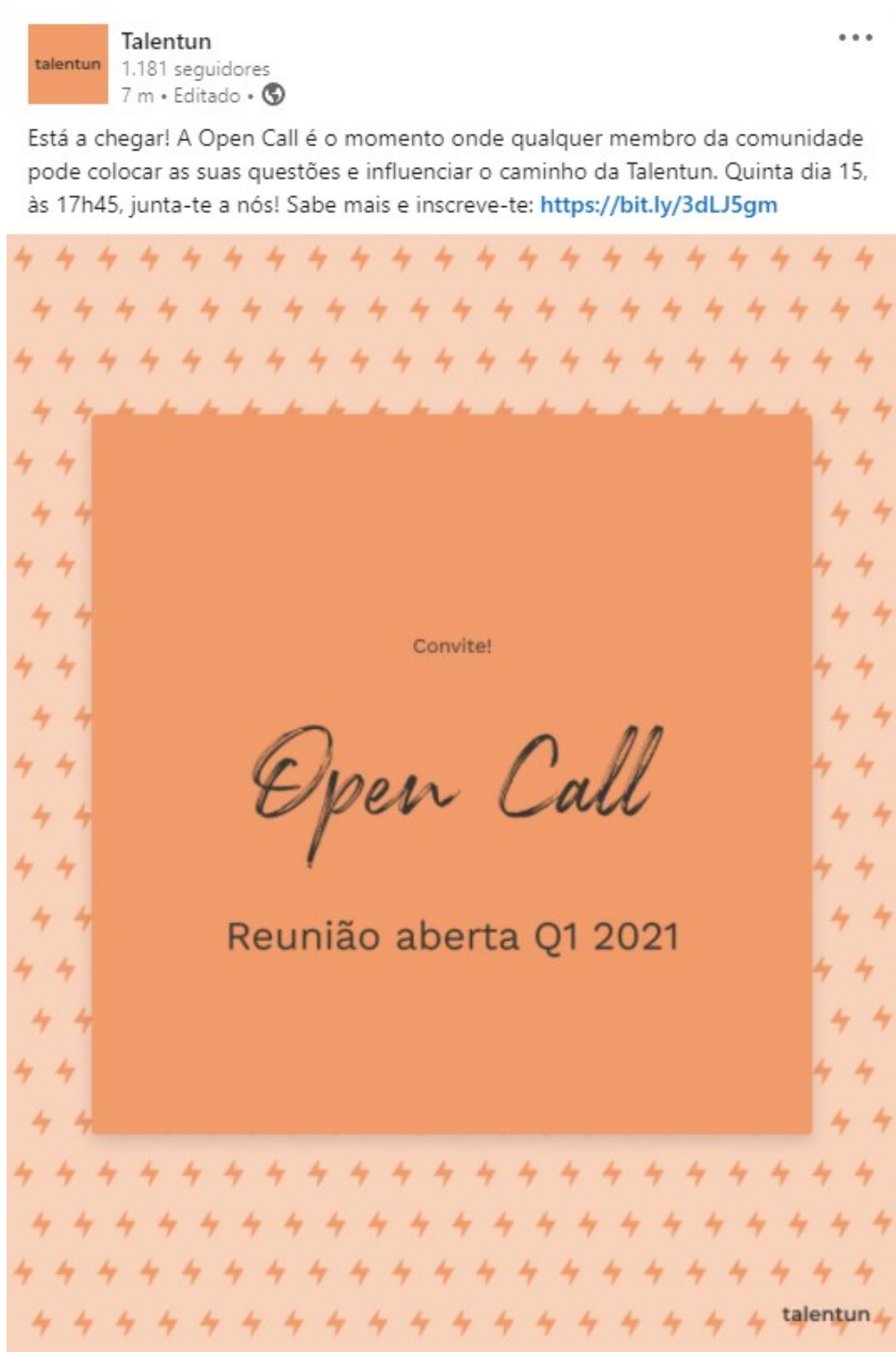
(Opcional) Deixa o teu email:
Caso tenhamos questões de followup, entraremos em contacto pelo email que indicares.

A sua resposta _____

Submeter [Limpar formulário](#)

Annex 2 Feedback form by Talentun³⁷

³⁷ Source: Example shared by Talentun founder.



Annex 3

Open call invite by Talentun³⁸

³⁸ **Source:** Gathered from : https://www.linkedin.com/posts/talentun_est%C3%A1-a-chegar-a-open-call-%C3%A9-o-momento-onde-activity-6785601493392216065-MRQ6 (consulted on 05/11/2021)

Appendixes

Block	Objective	Question	Exploratory questions	
B1) From ideation phase to proof of concept	To understand how the necessities for the social initiative surged, as well as to how its concept was validated.	B1.1) Qual foi a origem da ideia/conceito da Talentun?	B1.1.1) Surgiu de uma necessidade individual ou grupo?	B1.1.2) A Talentun era uma iniciativa social na sua essência?
		B1.2) Como surgiu a ideia de recorrer à tecnologia?	B1.2.1) Considera que há tecnologias acessíveis para fomentar a criação de empreendedorismo social tecnológico?	B1.2.2) Considerou a colaboração com investidores sociais?
		B1.3) Foram reunidas opiniões de elementos a beneficiar da iniciativa?	B1.3.1) Seguiu algum formato para validar o conceito?	B1.3.2) Foi pensado um Serviço Mínimo Viável para estruturar o serviço a ser prestado?
B2) From service design to business model creation	To understand how the service design took place and how the business model was developed.	B2.1) Qual foi o caminho a percorrer?	B2.1.1) Considera que utilizou alguma metodologia para estruturar ou suportar o processo de criação da iniciativa?	B2.1.2) Sabia que existem estas ferramentas de suporte?
		B2.2) Como considerou o formato de "Open Innovation"?	B2.2.1) Foi pensado um modelo de negócio ajustado aos valores, missão e sustentabilidade da start-up social?	
B3) From launch to Scaling	Understand how the service was launched, what the feedback from the public was, how the initiative was being disseminated	B3.1) Como foram os primeiros meses após o lançamento?	B3.1.1) Considera os resultados obtidos satisfatórios tendo em conta a missão e valores da Talentun?	
		B3.2) Foi colocada em prática uma estratégia de	B3.2.1) A comunicação foi baseada em	B3.2.2) Quando decidiu expor a talentun através das redes sociais?

	and how stakeholders were involved.	marketing digital?	ferramentas digitais?	
		B3.3) Conseguiu identificar os diferentes stakeholders?	B3.3.1) Como foi realizada a gestão das relações com os diferentes stakeholders?	B3.3.2) Foi possível realizar uma comunicação aberta entre os diferentes stakeholders?
B4) Decision to stop operations	Understand what the circumstances were when the decision to stop operations took place, and what were the key lessons learned from the social initiative.	B4.1) Quais foram os sinais que o levaram a tomar a decisão de término da Talentun?	B4.1.1) Qual a sua opinião sobre a cultura do erro e as Lessons Learned?	B4.1.2) O que faria de diferente numa próxima iniciativa de empreendedorismo social?
		B4.2) Sente que conseguiu alcançar uma mudança social?	B4.2.1) Existem stakeholders ainda a usufruir do serviço?	B4.2.2) Considera a aversão ao risco uma característica necessária para a criação de uma iniciativa social?

Appendix 1
Semistructured interview script³⁹

Transcription from the interview to the founder of Talentun
B1) From ideation phase to proof of concept
B1.1) Qual foi a origem da ideia/conceito da Talentun?
F: Basicamente a Talentun começou como uma iniciativa na altura non-profit porque tínhamos acabado o 1º confinamento em 2020 e eu queria ajudar a situação de alguma forma. Ao falar com alguns colegas meus que estavam a estudar, porque eles queriam arranjar estágio de verão, outros estágios ou até emprego, mas não conseguiam porque as empresas não estavam abertos, então a ideia surgiu. Em vez de terem essa experiência de um estágio de verão onde serve mais para alinhar as expectativas do emprego e das funções, falam com mentores e eles explicam. Não é exatamente igual, mas ao menos seria algo onde se encontravam seguros, em casa, a fazer mentorias.
B1.1.1) Surgiu de uma necessidade individual ou grupo?
F: Surgiu de uma necessidade individual e grupo, porque trabalhar em problemas que já tiveste ou tens acabas por perceber mais facilmente o que o utilizador precisa porque tu também és um utilizador, e na altura quando eu estava a estudar também tive esse problema. Ou seja, eu queria ter contacto com as empresas e tudo mais, mas eu sou de Viana de Castelo, e a minha casa é em Viana, e se eu quisesse fazer um estágio tinha um custo muito mais elevado associado a transportes para as grandes cidades como Porto ou Lisboa. Assim, se eu na altura tivesse isto, quebrava uma barreira de ter contacto com profissionais que depois poderiam gerar oportunidades de networking, para depois também perceber o que é que quero fazer quando acabar o curso.

³⁹ **Source:** Self elaboration based on Yin (2018) recommendations.

<p>B1.1.2) A Talentun era uma iniciativa social na sua essência?</p> <p>F: Sempre foi uma iniciativa social, ou seja, até muito por causa dessa decisão é que acabou por dificultar o seu crescimento e provavelmente levou ao seu desaparecimento. Por exemplo, enquanto outras start-ups da área da educação e a maior parte das start-ups segue o caminho de: vamos receber dinheiro de investidores, para conseguir sustentar enquanto não temos receita suficiente. Este é um caminho normal, mas eu nunca tomei esta decisão porque eu sabia que a partir do momento que tenho investidores a prioridade nunca vai ser os estudantes, acabando por perder o foco social. Passando a ser uma necessidade responder às expectativas dos investidores, mesmo que isso não seja o melhor para estudantes. Ou seja, acabou sempre por ter a componente social para não termos de corresponder às necessidades dos investidores, que não tínhamos e nunca quisemos ter.</p>
<p>B1.2) Como surgiu a ideia de recorrer à tecnologia?</p> <p>F: Existiram várias componentes a considerar. Na altura estávamos numa situação de pandemia, ou seja, naturalmente eventos físicos não seriam possíveis. Depois existe a questão de ter eventos físicos, mas o facto de ter limitado a Portugal acabou por não permitir a que a tecnologia alcançasse o seu potencial, ou seja, escalar infinitamente. Ou seja, não importa se se construiu uma aplicação para 1, 10, 100 000 ou 1 000 000 de pessoas, porque vai ter sempre um custo de distribuição muito pequeno, sendo naturalmente o objetivo escalar. Como o objetivo era ajudar o maior número de pessoas, a tecnologia fez todo o sentido. Mas lá está, esse é o grande potencial das tecnologias versus os eventos físicos, podendo ajudar qualquer pessoa no mundo, estando em qualquer parte do mundo por aí fora. A questão acabou por fracassar a Portugal, acabando por não ser a melhor questão e ficando o potencial da tecnologia perdido. Havia também outros que complicariam o lançamento para fora de Portugal, por exemplo, para um mentor alemão seria mais difícil ajudar um estudante português com decisões de carreira por causa de estarem ambos em ambientes diferentes, havendo aqui alguns problemas. O contrário aplica-se a um estudante português a viver na Madeira ou Açores, estes poderiam falar com os mentores de Portugal continental. O facto de recorrer à tecnologia para fornecer o serviço indica que elimina algumas barreiras demográficas, especialmente as dificuldades geográficas.</p>
<p>B1.2.1) Considera que há tecnologias acessíveis para fomentar a criação de empreendedorismo social tecnológico?</p> <p>F: Existem, até porque o custo da tecnologia está cada vez mais baixo. Por exemplo, se já souberes programar é extremamente fácil desenvolver uma operação simples, caso não saibas em 5 a 6 meses consegues desenvolver umas boas noções. Depois, os custos de manutenção seriam bastante reduzidos, havendo apenas custos de servidor, domínio, uma ferramenta de programação e alguns impostos, cerca de 50€ por mês e terias uma empresa de carácter social por esse valor, que basicamente não importa se vais estar a ajudar 1 pessoa ou 100 000, porque o custo seria sempre perto dos 50€, acabando por permitir a que se ajudasse mais pessoas. Hoje em dia existem cada vez mais tecnologias para conseguir viabilizar isto. Por exemplo, o movimento no-code que foi o caso da Talentun, porque eu não sabia programar, mas consegui fazer a aplicação na mesma porque existem ferramentas para isso, permitindo-me desenvolver soluções tecnológicas sem saber programar. Vejo que no futuro muita gente possa fazer pequenas soluções para problemas locais, para problemas que até não têm rentabilidade financeira com essas ferramentas. Isto é possível até porque pode-se construir uma aplicação por 8€ ao mês e construir um site com um baixo valor também, ou seja, isto ajudaria a resolver problemas com custos baixíssimos, sem precisar de passar 6 meses a 1 ano a aprender a programar. Depois existem outras tecnologias como open-source, crypto e NFTs, ferramentas que permitem pensar fora da caixa e também possibilitam a criação de um sentido de comunidade à volta dos projetos.</p>
<p>B1.2.2) Considerou a colaboração com investidores sociais?</p>

<p>F: Sim, ou seja, pensei em várias coisas. Uma opção seria subsídios e pequenos apoios, mas não acho que fosse sustentável porque estaria sempre dependente de valores baixos e com muitas limitações. Outra ideia seria um modelo crowdfunding, onde teria a comunidade a obter uma parte da empresa em troca de um valor. Neste caso, em vez de ter investidores, seriam acionistas mais descentralizados, vindo com a expectativa de apoiar o projeto e a sua sustentabilidade, não necessariamente querendo mandar na empresa. Se no futuro tivéssemos dividendos, faria todo o sentido reverter para estes acionistas ou teriam a opção de voltar a comprar as ações tendo algo em troca. Mas nenhuma opção acabou por ir para a frente.</p>
<p>B1.3) Foram reunidas opiniões de elementos a beneficiar da iniciativa?</p>
<p>F: Como eu queria que a Talentun fosse uma empresa aberta, em vez de ter “board meetings”, simplesmente fazia reuniões abertas para a comunidade para discutir o futuro da Talentun, onde era falado o que foi feito, o que seria interessante fazer a seguir e as pessoas davam feedback, acabando por ser muito interessante.</p>
<p>B1.3.1) Seguiu algum formato para validar o conceito?</p>
<p>F: Na altura coloquei um post no LinkedIn, tive algumas inscrições e fazia tudo manualmente na altura para validar o MVP ou serviço. Depois queria levar a Talentun para algo maior e ter mais relevância, ajudar mais pessoas, por isso surgiu a ideia de fazer uma aplicação para escalar e automatizar o processo do serviço.</p>
<p>B1.3.2) Foi pensado um Serviço Mínimo Viável para estruturar o serviço a ser prestado?</p>
<p>F: O serviço mínimo viável foi pensado desde o início, que seria o aproximar os mentores dos estudantes e proporcionar os momentos de contacto. Mas acabou por se perder este foco por causa das potenciais melhorias.</p>
<p>B2) From service design to business model creation</p>
<p>B2.1) Qual foi o caminho a percorrer?</p>
<p>F: Houve a primeira fase de 4 meses onde era tudo manual e non-profit, depois em setembro de 2020 converti para for-profit e comecei a trabalhar numa aplicação dedicada à Talentun porque na altura não era sustentável fazer tudo de forma manual, acabando por passar muitas horas a fazer o matching entre os perfis. Portanto troquei para outros modelos, fiz a aplicação e depois foi uma questão de ir falando com os stakeholders e perceber o que estas queriam ter da Talentun. No início eram as mentorias, depois adicionar status sobre os mentores e estudantes, tornar a marcação de sessões mais fácil, recomendações automatizadas de mentores, depois foi adicionada um job board que acabou por ser uma má decisão por ser demasiado complexa e um fórum para a comunidade poder colocar questões e comentar. Existiram algumas decisões que serviram para complicar mais o produto e se fosse agora tinha mantido tudo muito mais simples e tinha-me focado em promover a plataforma. Fui tentando fazer umas promoções de marketing e desde que o objetivo mudou para for-profit, falei com várias empresas, mas infelizmente nenhuma converteu em cliente. Acabando por não conseguir encontrar um modelo competitivo para a sustentabilidade da Talentun, porque havia opções gratuitas para as empresas que podiam apresentar o mesmo volume ou mais de estudantes.</p>
<p>B2.1.1) Considera que utilizou alguma metodologia para estruturar ou suportar o processo de criação da iniciativa?</p>
<p>F: Acabei por ir descobrindo à medida que ia fazendo as coisas, ia falando com os utilizadores, via o que eles queriam e tentava fazer uma divisão do meu tempo. Uma semana trabalhava na aplicação, no site, etc. Outra semana trabalhava no marketing, criava os posts para as próximas duas semanas, as landing pages e newsletters. Era desta forma que estruturava o trabalho, não era um processo muito complexo. Tentava trabalhar por features, por exemplo: agora vou trabalhar no fórum e lançava essas features de uma vez.</p>
<p>B2.1.2) Sabia que existem ferramentas de suporte?</p>

<p>F: Acabei por utilizar um pouco a metodologia da lean start-up, começando por usar um MVP do serviço e depois é que passaria para uma aplicação para escalar e automatizar o serviço. Sei que existe a metodologia Agile que é uma metodologia de produto, assim como business plans, mas não pesquisei muito sobre este assunto porque eu não acredito muito em planos, pois numa semana decidia uma coisa, mas ao falar com uns utilizadores eles dar-me-iam outra prioridade e acabavam por alterar os planos.</p>
<p>B2.2) Como considerou o formato de “open innovation”?</p>
<p>F: Eu estava sozinho no projeto e sempre quis envolver a comunidade, porque trazia mais ideias, mais pontos de vista e mais marketing. Quando fazes as coisas em público, as pessoas falam sobre isso e depois acaba por trazer resultados positivos por estar a fazer tudo de forma aberta. Neste caso, o que acabou por acontecer foi um bom volume de marketing através de word-of-mouth.</p>
<p>B2.2.1) Foi pensado um modelo de negócio ajustado aos valores, missão e sustentabilidade da start-up social?</p>
<p>F: Sim, todo o modelo de negócio foi pensado com base nisso, mas acabou por não funcionar. Passar de non-profit para for-profit através de algum modelo de monetização era crucial, para conseguir sustentar este serviço para os jovens, tentando dar um melhor serviço de mentorias. A ideia era trazer receita com empresas, mas colocar os estudantes em 1º lugar e não as empresas que nos pagam. Teria sido crucial validar mais cedo este formato de modelo de negócio para tentar adaptar de forma que o projeto fosse sustentável.</p>
<p>B3) From launch to Scaling</p>
<p>B3.1) Como foram os primeiros meses após o lançamento?</p>
<p>F: Os primeiros meses acabaram por ser de validação do serviço, queria tentar perceber se havia estudantes interessados, então comecei por falar no LinkedIn porque senti que era a rede social onde obteria maior tração, depois comecei a fazer um matching entre as diferentes manifestações de interesse e depois pensei em fazer uma aplicação para prestar este serviço de forma mais automática e escalável.</p>
<p>B3.1.1) Considera os resultados obtidos satisfatórios tendo em conta a missão e valores da Talentun?</p>
<p>F: Sim, acho que podia ser sempre melhor, mas acabamos por ajudar com mais de mais de 300 sessões de mentoria, com mais de 200 estudantes inscritos e mais de 100 mentores. Claro que queria-se sempre mais, mas com os recursos que haviam acho que foi um sucesso.</p>
<p>B3.2) Foi colocada em prática uma estratégia de marketing digital?</p>
<p>F: Sim, desde conteúdos, parcerias e até mesmo numa vertente de marketing as parcerias com núcleos de estudantes, até o personal branding de construir em publico também acabou por se tornar em marketing.</p>
<p>B3.2.1) A comunicação foi baseada em ferramentas digitais?</p>
<p>F: A maior parte diria que sim, cerca de 95% porque era o meu background. Sendo uma plataforma não estaria dependente de eventos físicos, logo faria todo o sentido em desenvolver as várias formas em formato digital. Até as parcerias foram todas realizadas através de ferramentas digitais, tirando um evento físico na Universidade do Minho, acabando por ser marketing físico em vez de digital. As ferramentas acabaram por ser as redes sociais, muito LinkedIn e Instagram e e-mail marketing. Anúncios nunca fizeram parte da equação porque não tinha orçamento e acredito que as start-ups numa fase inicial devem tentar usar canais não pagos orgânicos para conseguirem perceber melhor os utilizadores e verem a tração que conseguem ter, só quando conseguirem ter um modelo sustentável é que faria sentido investir em anúncios.</p>
<p>B3.2.2) Quando decidiu expor a Talentun através das redes sociais?</p>
<p>F: A exposição da Talentun no LinkedIn partiu de uma necessidade para conseguir validação, depois do interesse estar validado, serviu para angariar novos mentores e também</p>

alguns estudantes que procuravam de forma mais ativa o desafio que deu origem ao projeto. Depois o passo para o Instagram serviu como um caminho para tentar aumentar a tração e fluxo de novos estudantes para a plataforma, porque acaba por ser um canal onde muitos se encontram.
B3.3) Conseguiu identificar os diferentes stakeholders da Talentun?
F: Os stakeholders eram os estudantes para terem mentorias, mentores para prestarem mentorias e empresas para poderem reunir perfis de interesse.
B3.3.1) Como foi realizada a gestão das relações com os diferentes stakeholders?
F: A gestão das relações foi levada a cabo através de reuniões regulares, pedidos de opinião seja nas redes sociais através de pools simples sobre desenvolvimento do serviço ou aplicação, ou até através de emails enviados diretamente para os diferentes inscritos na plataforma, onde pedia feedback mais estruturado ou aberto.
B3.3.2) Foi possível realizar uma comunicação aberta entre os diferentes stakeholders?
F: Creio que sim, porque ao fazer as reuniões regulares era possível explicar vários aspetos por dentro do projeto e também incluía as empresas nesse processo, que por sua vez tinham mentores na plataforma devido ao formato aberto do funcionamento. Isto acabava por gerar discussão de temas relevantes para todas as partes, permitindo também desenvolver o projeto em conjunto.
B4) Decision to stop operations
B4.1) Quais foram os sinais que o levaram a tomar a decisão de termino da Talentun?
F: O facto de não ter receita era um sintoma do problema da doença de que não existe necessidade no mercado disto, ou seja, as empresas apesar de quererem talento, na maior parte das vezes querem talento já com alguma experiência sem necessidade de o desenvolver de raiz. E mesmo quando querem desenvolver o talento, existem já soluções grátis à sua disposição, por exemplo vão a uma universidade é grátis, vão aos núcleos e com pouco custo conseguem obter bastantes resultados. Ou seja, basicamente seria estar a cobrar por um serviço mas oferecer os mesmos estudantes ou até menos do que essas alternativas, porque não teríamos a presença de uma universidade. Num ponto de vista económico não fazia sentido para as empresas, porque não trazia grandes vantagens competitivas face às restantes. Se implementasse outro tipo de tecnologias até poderia ser que os resultados fossem diferentes, mas é tudo “se”, porque nada me garante que as empresas queriam isso, podendo nunca haver escala para tornar tudo funcional. Depois havia o fator de tempo e custo em termos de horas que estava a ter no projeto, porque sentia que já não tinha mais capacidade para dar resposta às necessidades.
B4.1.1) Qual a sua opinião sobre a cultura do erro e as lessons learned?
F: Acho que depende da mentalidade de cada pessoa, mas eu fiz vários erros e depois de fazer um erro era tentar perceber que aconteceu e porquê, com o objetivo de tentar não repetir 2 ou 3 vezes. A nível de lessons learned, partilhei tudo publicamente porque via pouca gente a fazer isso, mas acho que era importante porque se os meus erros podem ajudar outras pessoas a guiar as suas decisões era uma mais-valia para sociedade. Após o término da Talentun, acabo por sair do projeto com uma série de aprendizagens importantes para o sucesso de um novo projeto.
B4.1.2) O que faria de diferente numa próxima iniciativa de empreendedorismo social?
F: Modelo de negócio e Marketing. É importantíssimo validar no início formas de fazer dinheiro e tornar o projeto sustentável, conseguir provas de investimento e interesse real financeiro. Depois continuava a fazer tudo de forma aberta, porque acho importante e funcionou, fazia muito mais marketing, porque acho que é tudo, desde trazer pessoas para a comunidade e missão, esquecendo tanto o produto ou a forma como é feito. Porque depois conforme erras dentro da parte do serviço prestado, ao ter uma cultura aberta as pessoas vão

<p>percebendo que estás a errar porque estás a tentar fazer algo de novo e acompanham o crescimento da ideia, acabando por compreender as tuas falhas. O marketing em si é que é o mais difícil, ou seja, a comunicação e trazer as pessoas para dentro, pegar a atenção das pessoas que já é muito escassa e conseguir fazer alguma coisa com ela.</p>
<p>B4.2) Sente que conseguiu alcançar uma mudança social?</p>
<p>F: Sinto que quem diretamente esteve envolvido ou usufruiu da Talentun desenvolveu um pouco a sensibilidade para uma necessidade, acabando por reunir pessoas que tinham objetivos em comum num só local, criando uma comunidade. Mentores que partilhavam da mesma mentalidade no assunto das mentorias e estudantes que estavam atentos ao seu futuro e próximos passos a tomar, e certamente que novas ligações foram estabelecidas por causa disso.</p>
<p>B4.2.1) Existem stakeholders ainda a usufruir do serviço?</p>
<p>F: A plataforma encontra-se fechada, tendo terminado todo o serviço. No entanto, tenho o conhecimento de que mentores e estudantes ainda possuem momentos de mentoria, isto porque foi possível criar relações de interesse mútuo.</p>
<p>B4.2.2) Considera a aversão ao risco uma característica necessária para a criação de uma iniciativa social?</p>
<p>F: Acaba por depender de pessoa para pessoa, mas acho que é uma característica essencial sim. Acho que no Reino Unido e outros países existe uma cultura completamente diferente de Portugal. Por exemplo, Portugal na escala de Hofstede encontra-se com um índice de aversão à incerteza de 99. No entanto senti que existiu bastante apoio da comunidade, mas pode ser por estar num nicho específico, mas senti que ao fechar não houve a mesma receção. Enquanto está tudo a andar as pessoas tinham uma opinião de apoio, mas quando tomei a decisão de terminar apenas tinha um quinto do apoio. Mas acho que depende muito do segmento, porque falando num meio de start-ups as pessoas sabem que o erro é necessário. Fora desse segmento, se disseses que vais assumir este risco e despedires-te para tentar construir uma empresa, as pessoas muitas vezes olham para ti e dizem que és louco. Se fores para um país com menos aversão, as pessoas lidam com a situação com maior banalidade e compreendem. Também acho que despedires-te para trabalhar numa ideia não é algo sensato porque depois acabas por ter um deadline e gastaste muito dinheiro teu e não de investidores. Apesar de achar que este passo tem de ser eventualmente feito, essencialmente após um balanço da situação.</p>

Appendix 2

Transcription from the interview to the founder of Talentun⁴⁰

⁴⁰ Source: Self elaboration.