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Analysis of ColorADD project - Financing options for an internationalization
strategy

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Abstract

This Field Lab aims to do an analysis to the ColorADD project, a business whose mission is the social inclusion of 350 million color blind people and that is currently seeking for investment that enables to increase its presence abroad and the code's scope and impact, intensifying the upcoming internationalization process. Based on the organization's characteristics and in what is considered as typical forms of investment for social driven companies, a model of Quasi-Equity is proposed and implemented, allowing to understand if this is a conceivable solution for ColorADD or not.

Keywords: Color blindness, ColorADD, financing instruments, Quasi-Equity

Introduction

The concept of Social Entrepreneurship is, accordingly to Martin (2015), “becoming an important driver of global change and of the transformation of capital markets. (...) The generation of the social entrepreneur is similar to its predecessors in one important way: every generation seeks to define its place in history”, and since its inception, successful increasing number of social enterprises have emerged worldwide. These enterprises are fundamentally driven by the objective to contribute with innovative solutions to address social and/or environmental problems, focusing its efforts in creating positive social returns rather than just economic, even though financial sustainability remains as one important feature to the social core mission's accomplishment and in case of profit generation, reinvestment of the funds in the business itself is usually the purpose, in spite of feasible dividends may be paid to shareholders (Ernst&Young, 2014).

Aligned with this concept is ColorADD, a social enterprise¹ founded in 2010 by Miguel Neiva, which is currently in the expansion phase, aiming to reach new markets in different countries and whose main focus is the social integration of colorblind people, a handicap that affects around the 350² million people in the entire world.

After having been recently introduced to the ColorADD project, it became undeniable the interest in discovering more about the concept, the proposed solution, the specific characteristics of a social enterprise, what it takes to succeed and also the problem it addresses since Medical Science is also a subject of interest for me, besides Management. Furthermore, Social Entrepreneurship is a totally new field in my academic background, which means that this Field Lab will allow me to explore and learn more about the subject while having the opportunity to become part of this project by helping to design a solution to ColorADD from the Management point of view.

Thus, this Field Lab will start with ColorADD's presentation, highlighting its main features, the focus will be then in the major problem ColorADD experiences nowadays, followed by Literature Review and Methodology. Consecutively, the proposed resolution and implementation will be specified and finally the conclusion and recommendations to the organization, which hopefully can help ColorADD addressing the organizational challenge.

ColorADD – Case

Based on M.EOS Model (Santos, 2013) which states that managers are able to modify the overall performance of a company by reshaping some or all of the correlated elements that represent it, namely Environment, Organization and Strategy, this section will do a brief overview³ of the most relevant factors, focusing on the pointed elements.

¹Despite not being an accepted definition in Portugal, throughout the work, ColorADD will be referred as social enterprise

²<http://www.coloradd.net/why.asp> (accessed February 20, 2016)

³Based on the Interviews to Miguel Neiva, available in the Appendix

Context

The term dyschromatopsia, commonly known as color blindness refers to any type of color vision deficiency that leads to an incapability in recognize or distinguish certain colors such as red or green and in extreme cases “consists of rod vision with the ability to see only shades of dark and light with no perception of the colors of the spectrum” (Paterson, 2003: 104). Color blindness may be inborn due to heritable genetic defect, affecting around 6 to 10 per cent of men and 0,4 to 0,7 per cent of women (Melo et al, 2014) or acquired “as the result of ocular, neurologic or systemic disease” (Simunovic, 2016), for which there is no known cure or solution, since until now the only promising hope are glasses that allow to see some colors, even though these are not available or affordable by everybody. Worldwide, there are approximately 350 million color blind people, whose life is significantly affected by this condition, whether by the reduction of employment opportunities (for e.g. airplanes and boats pilotage are not an option and in some countries not even get a driving license is possible), the frustration of being dependent on others to perform daily tasks like shopping or even the social exclusion since early ages in schools⁴.

Aware of the lack of information and solutions to color blind people and determined to help reducing embarrassment and constraints, Miguel Neiva created in academic context and after 8 years of research, a tool promising to be a legacy for the humanity – the ColorADD.

Concept

ColorADD – Color Identification System is a code based on three graphic symbols, each one representing a primary color (Figure 2 in the Appendix), that established on the “Color Addition Theory” allows to identify graphically the complete color pallet, having Black and White as a reference for light or dark colors (Figure 3 and 4 in the Appendix). By being

⁴See Figure 1 in the Appendix for more information

universal, innovative and inclusive, the code enables colorblind people to identify color whenever it is a decisive element of orientation, selection or identification (ColorADD).

The implementation of the ColorADD allows to increase not only the economic value for companies and other institutions by accessing to a new market niche and giving a differential value, but also the social value by improving people's quality of life, especially for those who cannot interpret the colors (Escorial, 2016), this way have products more accessible and inclusive to all customers. It is also noticeable the association of companies to innovation and social responsibility, which according to the Commission of the European Communities (2001) "an increasing number of European companies recognize their social responsibility more and more clearly and consider it as part of their identity. This responsibility is expressed towards employees and more generally towards all the stakeholders affected by business and which in turn can influence its success". In this cases, companies search for differentiation aspects, strategic capacities, new and innovative products that can represent a competitive advantage, while contributing to the solution of several social problems (Escorial, 2016), in this case, color blindness. On the customer side, the implementation aims to improve quality of life by facilitating the access to products adapted to their needs, integrating colorblind in society while keeping their privacy at the same time, not having to pay for it and like this, minimizing the constraints in day-to-day situations. Moreover, raises public awareness for color blindness, a condition that it is not easily noticeable and a lot of times concealed by colorblind people (CGD).

Organization and Structure

There are two distinct businesses, namely ColorADD and ColorADD Social. The first one, ColorADD – Miguel Neiva & Associados – Design Gráfico, Lda., is a private limited company with a share capital of 10 thousand Euros⁵, founded in 2010 by Miguel Neiva together

⁵<https://www.racius.com/miguel-neiva-e-associados-design-grafico-lda/> (accessed May 10, 2016)

with other partners and that has as its core business the commercial licensing of the code for areas other than Education. It has a total of four full-time employees, each one allocated to a different area, namely Design (whose Miguel Neiva is in charge of), Management (establishment of partnerships and protocols and related assignments), Architecture (material delivery to companies, technical validation and implementation monitoring) and Communication Sciences (Social Media management, newsletters and after sales monitoring). The second one, ColorADD Social is a NGO founded in 2012 by Miguel Neiva and two other partners, having Education as a strategic area. It is based on a Pro-Bono Licensing System, so that the code could be implemented for free in schools and school libraries. The NGO has nowadays two people working in full-time and another one as a volunteer, all of them having backgrounds in areas related to the project like Design and Psychology. Both businesses are narrowly related being possible to allocate resources between them.

Strategy

The ColorADD focus is to spread the code through companies and other partners for whom color is an important element, which means that in order to do it, partners must pay a license fee for the right to implement the code in their products and services. All of this is possible through the co-creation process of ColorADD with the corresponding company, helped by the digital distribution channel and management.

Concerning the ColorADD Social, the objectives are to obtain updated statistic data regarding colorblind people in Portugal, to integrate children since early years without discriminating, prevent the social exclusion and also guarantee that children accept the right to be different and finally to create awareness in the society for a problem that has been neglected. Moreover, in this stages the code has more potential to be learnt and it can help children's cognitive development. This has been possible by the disclosure of the "*Ver e Sentir as Cores*" campaign in visits to schools, distributing kits to children with school supplies where the code

is implemented. In this context, it was provided professional training focused on the needs to help colorblind children with the ColorADD code in educational situations and partnerships have also been established concerning the early diagnosis of colorblindness cases in children, teachers and other employees so this way they could be afterwards followed up by professionals (CGD). In addition, it has been developed a free app, available for IOS. Resultant of a partnership of ColorADD's team know-how and web designers, it is an efficient solution and great communication tool to disclose the code worldwide.

Aiming to extend the code national and internationally, ColorADD developed a strategy to turn Portugal in to a cluster, centralizing all the know-how and this way creating references and solutions to facilitate implementations abroad.

Business Model

With the objective of reaching financial sustainability while creating social value by integrating color blind people in the society, all the financial growth that ColorADD experienced so far has been completely independent and organic, which means no external financial support.

The primary source of income generation is the license acquisition by social responsible businesses, afterwards invested in the ColorADD Social Program of early diagnosis and reinforcement of the company which means that also this business model is totally independent and its sustainability is ensured by the licenses of ColorADD. To implement and use the code, companies or other institutions must acquire a 4 year license, whose licenses fees are adjusted according to each company dimension, ensuring a fair and affordable price for everyone and also no exclusivity to any company or institution. After that period, for the same amount, the license becomes permanent. The fee is paid annually but if a company decides to pay the total amount in the beginning of the contract, there is a 25 per cent reduction in the total cost. Since these license fees represent the major source of revenue for ColorADD, having the money

available right away allows to increase the working capital. There is also some flexibility regarding the license since sometimes the code is only applicable during a certain event or period of time.

Regarding the code's implementation in products, ColorADD provides to companies the essential digital working tools so that the code can be adapted to their products, as effortless as possible. After that, ColorADD team does the technical validation, covered in the licensing, ensuring the right equivalence between symbols and colors. The aesthetic aspects are entirely a concern of each company. Along with this model, companies may also choose the consultancy model. In these cases, companies buy not only the right to implement the code but also the development of all the adaptation process of the code to their products, specifically analysis of requirements, development of the solution, technical validation and implementation.

Impact⁶

According to the most recent ColorADD disclosed data⁷, there are partnerships with around 250 companies, covering different sectors such as Health (e.g. *Hospital dos Capuchos*), Transportation Systems (*Metro do Porto*, reaching around 150 thousand passengers per day⁸), Didactic Games, Food Retailers (Continente through the “Nutritional Traffic Light” initiative), Book Publishers (e.g. Altmira in Brazil⁹), School Utilities (Viarco with 200 thousand boxes of color pencils in the market¹⁰), Textile and Shoes (e.g. Zippy, Dkode, MO, etc. counting with around 23 million labels), among so many others. The ColorADD Social has already reached more than 100 schools with around 12 thousand ophthalmologic examinations and kits handed out to children¹¹.

⁶For this section no more data was provided. Still, for some information see Table 1 in the Appendix

⁷See Interview to Miguel Neiva – Part 2 in the Appendix

⁸http://www.metrodoporto.pt/uploads/document/file/60/Relat_rio_e_Contas_Metro_do_Porto_2013.pdf (accessed April 09, 2016)

⁹<https://portaldodaltonico.wordpress.com/2015/07/19/coloradd-no-brasil-a-incluir-pela-cor/>

¹⁰http://www.coloradd.net/imgs/ColorADD%20About%20Us%20_2015%20V1.pdf (accessed February 20, 2016)

¹¹See Figure 5 in the Appendix for more information

All the partnerships established so far with companies and other partners are the major step to achieve greater visibility and social impact. Therefore, it is mainly by partners' campaigns promoting the partnership, press media, social media and prime-time in national television that people and other companies get to know the project.

The Portuguese government's recognition has similarly helped to spread the code, not only by the recognition of the project with awards but also through protocols with the Portuguese Ministries leading to the code's implementation on national exams and events promoted by the Government.

So far, ColorADD has been benefiting from its uniqueness. Being a patented project, with all the elements covered, like intellectual property rights and trademark registration, it is the pioneer in creating an innovative solution, a universal and democratic language that does not depend on accessories or technology.

The next step

Having experienced successful implementations in Portugal, ColorADD is now focused on replicating this achievement worldwide. To help this process and design an internationalization strategy, a partnership was established with McKinsey. So, considering the needs of color blind people in color accessibility and based on critical factors' analysis, on a first level, four key segments to approach were selected, namely, School Utilities, Textiles, Didactic Games and Transportation Systems. On a second level are Health, Environment, Software, Tourism, Schools Books and Parking Areas, and finally, Food and Construction Industries, Signposting and Painting Materials.

As a way to carry the outlined strategy, two complementary approaches were considered, specifically the Bottom – Up, focused on showing that color blindness exists, that a solution is needed and thereby encourage the implementation of the code and by now, driven by a signed contract with the communication agency, McCann Erickson Madrid and the Top –

Down, being crucial to find and get in touch with companies that are references worldwide to implement the code and therefore attract other companies to do the same by effectively communicating the partnership.

The partnerships established for the internationalization strategy were enhanced by ColorADD being an Ashoka Fellow¹², the only one in Portugal, so far. This organization “is the largest network of social entrepreneurs worldwide, (...) putting their system changing ideas into practice on a global scale. (...) Has provided start-up financing, professional support services, and connections to a global network across the business and social sectors (...)”¹³ (Ashoka).

Facing now the internationalization phase, ColorADD is seeking for investment, working as a bridge financing, which according to Harris (2015) “is typically structured as a short-term loan that provides working capital until more permanent equity financing is obtained”, generated from a wide range of sources. In this case, as Miguel states, the amount invested would be recoverable through the license fees paid by new partners.

According to the entrepreneur, the required investment is, approximately of 500 thousand Euros with an estimated 4 year payback period and rate of return higher than 10 per cent that will be assigned to Fixed Assets, Marketing, Advertising and Public Relations, New app, Customer Relationship Management (CRM), E-commerce platform and Intellectual Property. Questioned about the requirements of this investment, Miguel Neiva expressed his willingness in sell 25/30 per cent stake in exchange for a capital injection of around 1 million Euros. The evaluation of the organization’s fair value was based on the Discounted Cash Flow analysis, for positive and negative scenarios and fluctuation on the different assumptions such as perpetuity growth rate and beta, estimating a fair value of around 3 to 4 million Euros.

¹²See Ashoka Fellows in <https://www.ashoka.org/fellows> (accessed February 20, 2016)

¹³<https://www.ashoka.org/about> (accessed February 20, 2016)

In the following section, an analysis of the overall organization's performance will be performed, focusing afterwards on the major problem to ColorADD, which will be the focal point to be addressed in this Field Lab.

Problem Definition

As previously evidenced by the highlighted features, ColorADD has a unique and strong concept, easily understood in any part of the globe, with the forceful goal to include 350 million people in the society, in a non-discriminatory manner, relying on the help of a focused and skilled team who shared the same values. Besides, its adaptability and flexibility of implementation to different industries and situations are definitely pluses regarding the internationalization since adjusts to any language and context, being compatible with the objective of spreading the code. In order to do it, ColorADD has had the full support of global and trusty companies who have outlined a clear and well-designed strategy that will be able to, in the long-term, spread the code and hopefully reach its target.

Focusing now on challenges, specifically to the internationalization intention, there is the communication, depending almost completely on the announcement of partnerships by companies, media coverage and ColorADD's website and Facebook, and that should be reinforced since from my personal experience, there is a lot of people who do not know ColorADD, even people who buy products where the code is implemented. The current team is also a concern, despite being qualified and experienced in strategic areas critical to the project's success, in case of fast growth following from the internationalization with a high number of new partnerships, the team may not have the capacity to assist it successfully. Besides, getting the contacts of targeted companies could be a problem since in the majority of cases companies reach ColorADD and not the other way around and the resources to do it are not available. The lack of financial resources holds back some of the intended goals ColorADD has like for example the development of an app for Android since until now is only available for IOS, which

goes against ColorADD's vision. Finally, involving a new business model concept requires constant adjustments as new and different partnerships are established.

Therefore, the need for investment, approached several times by the entrepreneur in the interviews, is indeed a difficulty whose resolution may have a positive side effect to other stated problems since it will be a boost to the upcoming process, being crucial to get effectively to new markets and ensure a solid approach and further support.

As it is noticeable by the items in which investment will be spent on, according to Miguel Neiva, it will be possible to, first of all, help in the Top - Down approach with the reference companies, either through investors or other possible contacts and then, recruit new employees that can increase the technical and professional qualification, thus guarantee that there is a specialized and dedicated team capable of designing an effective approach to big companies by researching and developing in advance all the process's adaptation of the code for that specific business, such as analysis of requirements, development of the solution, etc. and then provide immediate support to any company anywhere in the world. By doing it, the code can be perceived as easily implemented, reach high rates of successful implementations and like this, minimize displacement costs. Besides, in order to simplify this process, Miguel Neiva intends to develop technological solutions creating online platforms that help to support companies abroad. Logically and depending on the number of hired workers, it would also imply moving to new facilities. Even though it is not a priority to Miguel Neiva, this investment also contributes to the establishment of a budget for the reinforcement of communication like a new website, stakeholders' testimonies, updates of new partnerships and monitoring of previous ones, web content management, etc. Finally, this investment also makes possible the development of an app for Android, turning ColorADD much more accessible and extensive, concerning electronic devices.

In spite of agreeing that the organization can benefit from having someone investing, with the areas for which investment is intended for and that ColorADD is a company whose concept and code are easily adjustable to any company around the world, the internationalization process must be a phased and lengthy process, which means that in a near future, some of the mentioned items may not be a priority to invest in. For example, the acquisition of fixed assets (in case of new facilities) or the development of an E-commerce platform will be justifiable only after a certain number of partnerships have been established, that can be either abroad or not. By concentrating efforts and resources, the claimed amount can decrease and this way start a primary stage of investment with a more feasible sum.

Besides, from my perspective this investor must bring more to ColorADD than just money. It is important to find an investor, aligned with social mission and impact, that through its technical expertise and networking helps ColorADD not only for management reasons but also to reach international markets.

The fact that, as Miguel Neiva indicated¹⁴, over the years investment propositions were made and refused since Miguel did not know how to apply the money neither wanted to be conditioned by economic interests, may be a good indicator that if throughout the preliminary stages investors saw the potential in ColorADD, now that the organization is prospering and making significant achievements, there may be more and different investors willing to provide funds to promote the organization, therefore, ColorADD should explore possible investment options. Concerning the amounts, the applied method to evaluate the organization's fair value is suitable and it is based on a 5 year projection, however, in my opinion, since the required amount is estimated to be 500 thousand Euros, there is no need for the organization to sell 1 million Euros besides that, for a first round of investment, the amount might be too high, putting too much pressure and maybe compromise further developments. This means that ColorADD

¹⁴See Interview to Miguel Neiva – Part 1 in the Appendix

could create an intermediate step supported by a lower initial investment that somehow would make possible to cover and improve strategic areas like Marketing, Advertising and Public Relations and approach some prospective clients internationally and then escalate its activities as projected.

Even though it could slow down the process, it allows ColorADD to grow sustainably as it has been doing so far and focused on its mission along with ColorADD Social. Furthermore, looking for investor(s) willing to provide such high amount could be time and resources consuming and in case of more than one investor, may be a struggle the alignment of the several shareholders' mindsets.

Thereby, throughout the developed work we will examine if the proposed financing method is the most suitable considering the given information and ColorADD's specifications.

Literature Review and Methodology

Social enterprises focus their efforts in tackle demanding and neglected problems of our daily lives, aiming to generate essentially high social impact instead of profits. Today, there are around 55 thousand established organizations in Portugal and constantly new entrepreneurs and social innovation initiatives, like ColorADD join this number. Despite the high social value creation, social enterprises face financing as one of the biggest threats, which can jeopardize not only their progress but also the achievement of the proposed social impact goals (*Grupo de Trabalho Português para o Investimento Social*, 2015).

As stated by Bugg-Levine et al. (2012), while some social enterprises have the capacity to earn enough profits appealing to the investors, others are unable to guarantee economic returns and therefore, struggle to attract investment which turns financing of social enterprises in one of the most time consuming activities.

Before proceeding with the literature regarding financing social enterprises, there is a recent and relevant concept rising in this field, namely the Impact Investment that, according

to Kickul and S. Lyons (2015) “combines financial investment and social and/or environmental impact. Social impact investors seek both financial and social return on investment”, which means that while few value Return on Investment (ROI), others value Social Return on Investment (SROI), pursuing “double and triple bottom line activities”. This concept becomes even more important because, regardless of whoever the investor is, and considering the strong social dimension of the project, the entrepreneur expressed interest in ColorADD seeking for someone who is completely aligning with this concept, therefore, providing financial resources aiming not only to have financial return but also generate social impact, combining humanitarian objectives with standard financial decision making (Höchstädter and Scheck, 2015), that besides, fully understands the specific features that social projects like ColorADD undertakes, including possible longer lead times until profitability is reached.

Considering financing, social enterprises must contemplate four key elements to ensure the proper information is gathered, therefore anticipating potential investors’ requests and showing business viability and sustainability based on recent and rigorous data (GreaterCapital, 2011). The first element is to clearly understand the legal structure of the organization according to the country’s legislation and what it implies regarding financing possibilities (Handford et al., 2005), the second element is a business plan pointing out defined objectives including financial ones, how to address future risks and challenges, etc., the third element is the preparation of key financial statements such as Income statement, Cash-Flow Statement, Break-Even Analysis and Balance Sheet, and finally, a skillful management team as the last element.

While developing these elements, important features must be mentioned that could help to determine the “most appropriate sources and make the best use of the funds” (GreaterCapital, 2011), which authors consider to be, first of all, the purpose of the financing, listed as most common “Purchasing, renovating or fitting out a building, Purchasing or leasing equipment, Managing ongoing cash needs, Funding a growth in operations through increasing staff,

increasing production, adding new products or locations, or upgrading systems, Converting an established business into a social enterprise, Starting income-generating activities from a previously traditional non-profit, R&D or Non-income generating activity, expand product access for disadvantage groups”, next the amount required and lastly the stage the company is in its lifecycle.

According with Nicholls and Pharoach (2008) “many social enterprises’ needs move dynamically along the investment spectrum, changing over time and with their organizational lifecycle”, which Larson (2012) classifies in four main stages: Start-Up/Seed Stage, Survival, Growth and Mature.

If over the years, social enterprises have been constrained to the most standard forms of financing such as philanthropy donations or family/individual’s grants, and bank loans, one of the most usual financing methods, do not represent an option since “traditional financial institutions generally refuse to lend to social enterprises because they do not meet their established client criteria and are not seen as offering sufficient guarantees.” (European Commission/OECD,2013) Due to the risk and unpredictability of its returns, nowadays social enterprises experience significant changes in the financing opportunities just as Justis (2013) states “capital is moving in new ways and organizations are responding with remarkable innovation”. Financing sources are increasing as social enterprises emerge with noticeable recognition, being able to generate financial returns besides the expected social impact, which broadens the financing options to riskier forms of capital.

Currently, four key types of investment can be identified namely, *Grants* that GreaterCapital (2011) defines as “donations to organizations, usually from charitable foundations or the government. (...) Grants have one obvious advantage: they do not need to be repaid. However, grants have several limitations which mean that relying entirely on them is not always a wise move (...)”, *Debt* “the term used to describe money that is loaned to you

by a financial institution on condition of repayment, usually with interest”, *Equity* which refers to “selling a portion of the ownership of the enterprise to outside investors, which, depending on the valuation of the company, can generate substantial cash” and lastly Mixed Instruments that includes *Mezzanine Finance* constituted as subordinated debt, a “debt with a lower ranking claim on assets of an organization if it becomes insolvent” that due to the high risk also implies higher interests. If the company is not able to pay back the debt, there is the possibility to convert it into ownership or equity. Another form of Mixed Instruments is *Quasi-Equity*, “usually structured as an investment, whereby repayment is linked to the investee’s financial performance”, usually revenues (European Commission, 2016). For further understanding on these investment types, please see Table 2 in the Appendix.

Also worth considering is a concept, transversal to several instruments, the Patient Capital. According to GreaterCapital (2011) this is “used to describe finance that aims for long term results, whether financial, social or environmental.” Possible to obtain from different sources, “repayment requirements on it are subordinate to the desire to see the enterprise succeed and generate strong social and/or environmental returns.” It is especially important because is completely aligned with the previously mentioned Impact Investment and a relevant instrument to stages like Start-Up/Seed, Survival and Growth and to specific purposes of investment needs such as “Purchasing, renovating or fitting out a building, Funding a growth in operations through increasing staff, increasing production, adding new products or locations, or upgrading systems, Converting an established business into a social enterprise and Starting income-generating activities from a previously traditional non-profit” (GreaterCapital, 2011).

Despite the social focus of the project, literature regarding the most traditional instruments to finance SME and Entrepreneurs it is also interesting to contemplate. So, based on the OECD Report (2015) there are alternative financing instruments to the most commonly

debt financing. Ranging from low to high risk-return, four different types of instruments are outlined, as highlighted in the Table 3 in the Appendix.

As depicted, there are several shared instruments between social and non-social entrepreneurs, however, due to the specific characteristics of social enterprises and also founders' mindset, some of the instruments must undertake significant changes while others are not suitable at all.

To ensure financing for scale and further stages of the enterprise, Martin (2015) defends the use of hybrid models by "providing financing via a variety of financial instruments". Prior to defining the suitable instruments, the author considers that financing needs are classified primarily by the type of good providers, whether it is public, usually non-profit organizations with social or economic impact whose benefits cannot be financially converted in goods and services markets, or private, commonly for-profit or non-profit organizations with social and economic impacts and financially sustainable or even with profitable business models, being this the most likely to obtain hybrid financing.

Keeping in mind market prospects and the different characteristics like risk, cost and ease of deployment that the range of instruments hold, for the author the four main structures than can be combined are *Grants*, *Debt*, *Equity* and *Mezzanine*. Furthermore, the author also mentions the proper combination of instruments depend on legal form, business model and life stage of each enterprise. Time is also a variable to consider since this model can be synchronic with grants and non-grants combined at the same time or diachronic, starting with grants and then moving to equity and debt, which usually occurs with private good provider that "typically prosper from a combination of debt and equity capital, paired with technical assistance and capacity building grant funds".

After contemplating what the literature remarks regarding the demand side of financing, the supply side also needs to be approached since there is quite a breadth of options.

Briefly explained, funds may have public or private origins. On the public sector, the primary sources are “Government ministries, Local authorities and EU funds” (European Commission, 2016) whilst on the private sector of fund providers, the sources are much diversified such as Financial Institutions, Venture Philanthropy, Social Investment Funds, Private Sector, Individual Investors like Business Angels and Crowdfunding. The ones covered in this section refer to the most outlined in consulted literature.

Still about investors, while providing their funds, according to PWC (2014) there are four guiding principles about what investors seek which are “Alignment between financial and social objectives, Build and present a well-balanced management team, Measure your impact and Avoid mission drift at all times”.

Regarding to measurement of mission’s impact, when approaching an issue as financing companies, it is crucial to mention accuracy, transparency and disclosure of the enterprise’s results. Aware of that, Bugg-Levine et al. (2012) explain that “without standards and ratings, investors can’t distinguish between good investments and bad ones, and lawmakers can’t provide frameworks to regulate and protect investors and companies alike. When it comes to evaluating a social enterprise, the challenge is doubled.”

By not effectively developing tools that allow to evaluate social risks and returns, two problems arise, namely investors having financial returns as their only focus and the lack of financing opportunities by trustworthy enterprises due to information shortage. In order to address this problem, the non-profit Global Impact Investing Network¹⁵ (GIIN) created in 2009 an initiative known as Impact Reporting and Investment Standards (IRIS), whose purpose is to offer “a free public good to support transparency, credibility, and accountability in impact measurement practices across the impact investing industry¹⁶” (IRIS). This tool of fundamental

¹⁵See GIIN in <https://thegiin.org/giin/history> (accessed April 3, 2016)

¹⁶<https://iris.thegiin.org/> (accessed April 28, 2016)

performance metrics that measures social, environmental and economic achievements, provides added value in different levels by collecting useful metrics within the industry, standardizing relevant results and this way supporting the gathering of information in a portfolio and the comparison of investments.

Using this tool will bring benefits to investors as it increases the array of investment options, to social enterprises by accessing the needed capital compatible with their social commitment and to donors since it shows how effectively money is being employed (Bugg-Levine et al., 2012). Even though other metric's tools exist, this was one of the most mentioned in the analyzed literature and considered as relevant, in my personal point of view. This is a significant tool to concepts such as Impact Investment and Patient Capital.

After briefly presenting what the literature remarks, there must be chosen the most appropriate investment type. Thus, we will assume first of all that ColorADD's legal structure enables to sell equity and accommodate shareholders (even by what the organization is considering now as financing instrument), secondly and as previously described, there are clear objectives contemplated in a Business Plan, thirdly all the Financial Statements, or at least the most relevant ones have been rigorously prepared and lastly, a qualified management team based on academic background and past or present professional experience.¹⁷

In order to help the decision, the purpose and the stage will be classified according to the listed elements. So, ColorADD as easily noticed by the items mentioned is seeking investment for "Funding a growth in operations through increasing staff, increasing production, adding new products or locations, or upgrading systems" (GreaterCapital, 2011), for which authors suggest as source "Working capital loan, equity, patient capital, term loan" and is currently in the Growth Stage, that in accordance with Table 2 in the Appendix is favorable to

¹⁷See Team in <https://www.changemakers.com/fabricofchange/entries/coloradd-universal-color-identification-system> (accessed May 10, 2016)

the use of Equity, Mixed and Debt. According to GreaterCapital (2011) “once you have a track record with a clear market and sustained cash flow” debt is a high likely source of financing and “Once your enterprise is truly established, it will be able to access diverse sources of capital, and should look to obtain financing through multiple channels (...)”, which means that Debt is usually the last investment to use even because it is more suitable for later stages and requires risk capital, leaving us with Equity and Mixed Investment.

Despite of who the investor will be, it is really important to select an instrument that not only is suitable to ColorADD as an enterprise and what entails but that also meets and respects the entrepreneur objectives and social mission, therefore, at this stage Quasi-Equity seems to be a good option as a primary source of financing. This concept may also be known as Revenue Participation Agreement (RPA), which as the name itself indicates, allows “the investor to take a share of future revenue streams”, sharing the risk and reward with the social enterprise (Venturesome/CAF, 2008). As stated by the authors, investors participate in revenues instead of profits because profit generation is not the priority for the entrepreneur and besides, to avoid fulfill the agreement’s terms, there may be the temptation to influence profits. The repaid amounts are volatile since these are linked to the enterprise’s performance and based on a pre-agreement of payments’ periodicity (annual, monthly, etc.), percentage of royalty payment, IRR, among other features.

This agreement is usually constrained in time and/or value i.e. the RPA ceases immediately after the due date is reached, regardless of the amount recovered, and/or after the agreed amount have been reimbursed, for example, 2 or 3 times the initial investment.

In this case, as stated above, with the internationalization process it is expected that revenues increase significantly, which means that by having an investment whose repayment is linked to revenue streams its recoverability may be possible in a shorter period of time. In addition, this gives investors an incremental concern over how the organization is doing and

encourages them to be more active in helping to achieve the proposed results, along with the entrepreneur. The founder and investor can establish different kinds of agreements, limiting the time of the pay back or the amount paid and add some clauses regarding the social impact. Still, this also implies that in case of profit generation this can be reinvested in ColorADD and/or ColorADD Social, or even distributed to shareholders, who maintain their ownership and control, guaranteeing that all partners remain focused on their mission.

The *Grupo de Trabalho Português para o Investimento Social* (2015), states the investment offers many advantages not only for social enterprises by aligning capital costs with financial performance or no dilution of control and ownership but also to investors by having the opportunity to get higher IRR and a flexible direct investment for activities' expansion, besides that it is a method able to apply when legal structure does not allow equity.

In the long-term, and based on what Martin (2015) defends, ColorADD could apply the hybrid model, looking next for Equity and Debt as new sources of financing.

Implementation and Analysis

Previous to implementing Quasi-Equity to ColorADD, the following factors must be taken in consideration: 1) Due to the shortage of information, the revenue and number of licenses considered as reference for year 1 of implementation will be the ones determined in the projections disbursed by the ColorADD team for 2016, without any information regarding past performance, 2) The forecasted period for revenues will be 5 years, which is not only the same time ColorADD considered in its projections but also the time frame considered more reasonable given the market characteristics¹⁸, nonetheless this does not mean that additional periods could not be acknowledged if necessary, 3) For the Internal Rate of Return (IRR), the reference will be risk free rate for which 10-Year Government Bond is a good approximation

¹⁸<http://www.investopedia.com/university/dcf/dcf1.asp> (accessed May 16, 2016)

and is estimated to be 3.11¹⁹ per cent. In this case, the applied IRR will be 10²⁰ per cent and 4) The percentage of shared revenues for the investor is 15 per cent.

Undertaken the forecasted revenues released by the ColorADD (see Figure 6 in the Appendix) which are assumed to be achievable due to the predicted investment of 500 thousand Euros, we will have a positive scenario (A) since we assume that the same amount of revenues are reachable with smaller amounts of investment and a negative scenario (B), or perhaps more realistic given the value invested, that will assume lower growth rates, in this case, half the rates of scenario A, which are the following:

	Year 2	Year 3	Year 4	Year 5
Annual Growth Rate	77%	73%	60%	51%
Annual Average Growth Rate	65%			

Table 4 - Revenues growth rates based on ColorADD data

So, according to scenario A, for an investment of 250 thousand Euros, and focusing on the needed time to recover just the amount invested, it would require between 5 to 6 years to recover it. If the investment is reduced to 150 thousand Euros, than the amount would be recoverable in 4 to 5 years (Tables 5 and 6 in the Appendix). For Scenario B, starting with an investment of 250 thousand Euros, it would be necessary more than 8 years to reimburse this amount. For an investment of 150 thousand Euros, this time is reduced to 6 to 7 years which means that in this case, the time difference is considerable (Tables 7 and 8 in the Appendix).

Of course that, for every scenario, if the organization performs better than what is expected, the amount can be recoverable in a shorter period of time and the other way around if the company underperforms. In case the agreement establishes to recover, for example, twice the amount invested, then it would take many more years for that to be possible. For a

¹⁹<http://www.bloomberg.com/markets/rates-bonds> (accessed May 16, 2016)

²⁰Based on Venturesome/CAF Case Study <https://www.cafonline.org/docs/default-source/about-us-publications/venturesomequasiequitymarch2008.pdf> (accessed May 02, 2016)

constrained agreement in time, as can be seen, it would be desirable to consider longer periods, otherwise the investor may not be able to recover, at least, the initial investment.

As previously mentioned, almost every variable results from a pre-agreement between the investor and the company, which means that for these projected revenues, whether for positive or negative scenarios, better repayment periods can be achieved. For this to be possible, one or several of the following elements can be redefined, other than reducing the invested amount, namely 1) Reduce the demanded IRR by the investor that would have to be willing to provide risky capital at lower return rates 2) Increase the percentage of shared revenues paid to the investor, which can be critical due to the possibility of result in loss for the company if costs are not accurately foreseen, endangering the future of the business.

Conclusion and Recommendations

As the projections allows to observe and based on the information provided, unless under certain agreed conditions that may be unlike to occur, Quasi-Equity is only advisable for small amounts of investment. It takes several years to recover just the initial amount which compromises future investment needs and the capability to attract new investors and new types of investment. Therefore, to use this investment, ColorADD should consider a smaller amount than the initial proposed that would allow in the near future to develop strategic areas and reinforce the organization's position and financial performance. Assuming a form of patient capital we consider relevant to have an investor that focuses on the social return, besides the potential financial return and that consequently does not require excessive return values. Moreover, the initial investor could bring new investors for next rounds of investment, this time as Equity which is an option to contemplate since no reimbursement is needed, only dividends in case of profit generation.

Concerning recommendations, it would be suitable, due to the strong social impact the organization has and hopes to intensify, to define well established not only financial but also

social KPIs based on specific metrics that would allow to evaluate the overall performance and then disburse some of that information, not only to spread its achievements for general public, but also to attract possible investors. Improve the presence in social media networks like Facebook or Instagram it could also benefit ColorADD since these are low cost methods to increase brand visibility, interact with possible consumers, announce new partnerships, and raise awareness for color blindness, among many others benefits. Furthermore, we would recommend a website upgrade where, at least, a list of partnerships and countries where the code is already implemented are available (information that was difficult to get and we believe should be public). Finally, ColorADD could take advantage of governmental initiatives that provide funding like Portugal 2020²¹ which aim to encourage innovation, harness an inclusive growth, create job opportunities and increase the presence of Portuguese products abroad.

Limitations

For the development of this Field Lab, in order to understand and know more about the ColorADD, 2 interviews with the entrepreneur were conducted (available in the Appendix). Over the work's progress, however, as additional information was required, we did not have full disclosure of information, inclusively of data that would allow to get detailed knowledge regarding the current financial position and business flows between ColorADD and ColorADD Social. Therefore, it is important to acknowledge how the lack of relevant data restricts the conducted study and compromises the feasibility of results and possible decisions. From the academic perspective it would also have been a valuable opportunity to analyze real data such as financial statements and this way acquire and strengthen the knowledge for future academic and job opportunities. Even so, given the available information and assumptions, we have tried to develop the best work possible and create good foundations for further studies.

²¹To know more about this initiative see <https://www.portugal2020.pt/Portal2020> (accessed April 29, 2016)

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