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The Game Changing Act of Impact
Investing –
The Case of MAZE

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Abstract

Dissertation Title: The Game Changing Act of Impact Investing – The Case of MAZE

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The research study examines the practice of the upcoming financial instrument of impact investing, with prior focus on impact measurement, by analysing the approach of a Portuguese impact investing firm, MAZE. The study will establish a theoretical foundation by reviewing existing literature, and clarifying conceptual frameworks, to be applied when analysing the case of MAZE. For the first part of the analysis the framework of PESTEL will be applied to understand the drivers of the market in the relevant industry. For the second part of the analysis, the study will examine the impact management approach of MAZE, the Impact Management Project (IMP) guidelines and its adaption of the framework. To evaluate the challenges and suggest improvements, the SWOT analysis will be applied.

The results of the study demonstrate that Portugal has a strong orientation towards positive change and the market is well-equipped for social enterprises to rise. Furthermore, the analysis shows that MAZE has done a great job in developing a significant impact management approach that allows for a detailed and actionable overview of the impact created, to develop infrastructures for social enterprises to grow and succeed. The results in combination explain the fact that MAZE has become a major player in the Portuguese impact scene and demonstrates how impact management can be accomplished to achieve higher positive change.

Keywords: Impact Investing • Impact Measurement • IMP • Social Enterprises • MAZE • SWOT • PESTEL

Sumário Executivo

Título da dissertação: O Acto de Investimento de Impacto de Mudança de Jogo - O caso da MAZE

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O estudo de investigação examina a prática do próximo instrumento financeiro de investimento de impacto, com foco prévio na medição do impacto, analisando a abordagem de uma empresa portuguesa de investimento de impacto, MAZE. O estudo estabelecerá uma base teórica através da revisão da literatura existente, e clarificando quadros conceptuais, a serem aplicados na análise do caso MAZE. Para a primeira parte da análise, o enquadramento do PESTEL será aplicado para compreender os motores do mercado na indústria relevante. Para a segunda parte da análise, o estudo examinará a abordagem de gestão do impacto do MAZE, as directrizes do Projecto de Gestão do Impacto (IMP) e a sua adaptação do enquadramento. Para avaliar os desafios e sugerir melhorias, será aplicada a análise SWOT.

Os resultados do estudo demonstram que Portugal tem uma forte orientação para uma mudança positiva e que o mercado está bem equipado para que as empresas sociais possam crescer. Além disso, a análise mostra que MAZE tem feito um grande trabalho no desenvolvimento de uma abordagem de gestão de impacto significativo que permite uma visão detalhada e accionável do impacto criado, para desenvolver infra-estruturas para que as empresas sociais cresçam e tenham sucesso. Os resultados em combinação explicam o facto de MAZE se ter tornado um actor importante no cenário de impacto português e demonstram como a gestão do impacto pode ser realizada para alcançar uma mudança positiva mais elevada.

Palavras-chave: Impact Investing • Medição de Impacto • IMP - Empresas Sociais • MAZE • SWOT • PESTEL

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List of Abbreviation

EC	European Commission
EU	European Union
GIIN	Global Impact Investing Network
IFC	International Financial Corporation
IMP	Impact Management Project
IRR	Internal Rate of Return
KPI	Key Performance Index
MD	Managing Director
MOIC	Multiple on Invested Capital
MSM	Mustard Seed MAZE
PIS	Portugal Inovação Social
SDG	Sustainable Development Goals
SIB	Social Impact Bond
SROI	Social Return On Investment
TQ	Teaching Question
UN	United Nations
VC	Venture Capital

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1. Introduction

As the Glasgow Climate Change Conference 2021 just came to an end, the conference demonstrated that countries have inconsistent views and perceptions about climate specific goals and therefore, the ambition among countries to work towards a common goal to prevent climate change differ. Main differences were represented in the security of global net zero by mid-century. Whereas, most developed countries, pledged for a more ambitious goal, others pledged for net-zero in 2070. (Lennan, M., & Morgera, E., 2022).

This mismatch of climate change awareness and sense of responsibility among countries, provoke frustration during the conference and demonstrates the deficits in the public sector to act against climate change. This emphasis the importance of the role of private sectors to engage. As a result, impact investing, the use of profit-seeking investment to generate social and environmental good, gained attraction among investors and a rapid growth was identified (Monitor Institute, 2009). According to Monitor Institute (2009) Impact Investing has the potential to grow to about 1% of total managed assets, which would result in about USD 500 billion of capital channelled toward social and environmental impact.

With the risen interest of impact investing among investors, to create value with not only risk-adjusted market-rate return, but social and environmental impact, the expectations from companies to report on non-financial issues, risk and opportunities with the same discipline and rigours as financial information has been established (Wold Economic Forum, 2020). Accordingly, the demand for a holistic impact reporting approach is required. Within the last decade economists and institutions are researching and developing different impact measurements methods and strategies, however, the challenge to find a universal approach made it difficult for regulatory and companies to set standards (Salazar et al., 2012).

As a result, the dissertation strives to understand the pressuring question how impact investing can keep its promise of social and environmental impact. To investigate this problem statement, the dissertation will focus on an impact investing venture in Portugal, MAZE. MAZE accelerates and invests in solutions that deliver impactful outcomes. Their mission is to inspire organizations to find solutions for social and environmental challenges. Thus, the overarching question of this dissertation will be:

How can MAZE ensure greater impact performance by investing into impact and what role does the Portuguese market play for MAZE to advance positive change in the industry?

In order to answer this question, MAZE's environment and strategy needs to be analysed. For that the dissertation is breaking down the analysing into three teaching questions:

-
- | | |
|-------------|--|
| TQ 1 | What was MAZE's main driver to start an impact investing firm in Portugal? |
| TQ 2 | How is MAZE measuring impact to ensure impactful investments into their portfolio? |
| TQ 3 | What are main challenges and possible improvements in MAZE impact management strategy? |
-

Table 1: Teaching Questions

1.1. Managerial Relevance

The managerial relevance of the dissertation can be implicated by the fact that focusing on environmental and social justice have never been more relevant for enterprises (Lee and Carroll, 2011). Thus, an accurate financing instruments and an affiliated approach of impact measurement is needed. As Filho et al. (2019) mentioned only what is measured can be managed and what is measured will be more likely to succeed. This highlights the importance of accurate impact measurement strategies to achieve successful impact investments.

1.2. Methodology

The research for the dissertation is based on a qualitative research with the use of primary and secondary data. For the primary data collection, semi-structured interviews were conducted with four different online interviews. Two interviews were with internal stakeholder of MAZE, the Managing Director and an Analyst and two interviews were with founders of two different impact ventures from MAZEs' portfolio. The secondary data was used to gain a broader and wider amount of information and perspective, mainly using annual reports, websites and blogposts. For the data analysis a thematic analysis was developed to extract key findings.

1.3. Dissertation Outline

The dissertation is divided into six chapters, starting with the introduction. The introduction will present the research topic and the define research objectives, including the clarification of the

relevance of the research. The introduction will be followed by the literature review, which serves as a theoretical and conceptual framework, where required concepts will be defined. Subsequently, the methodology of the dissertation will be outlined, to provide procedures and techniques used and understand the reasoning behind it. In the fourth chapter research findings will be present in the developed case study about MAZE, followed by teaching notes, an analysis and evaluation of the case based on the concepts presented in the previous chapters. To finalize the dissertation, the last chapter will conclude the findings, with implications for further researches.

2. Literature Review

The literature review provides a theoretical background with relevant concepts on the research topic to establish a strong knowledge foundation on the research objective. The following chapter, therefore, strives to provide a general definition and clarification of concepts that are most relevant to evaluate the case presented in chapter four.

2.1. Social Enterprises

Recently, there has been much talk about Social enterprises, with the increasing emergence of responsible behaviour among businesses and the high expectations arising from climate disasters and social norms. Sustainable topics, especially regarding environmental and social justice have never been more relevant and this also left an effect on enterprises across all business industries (Battilana and Lee, 2014). As a result, social enterprises gained significant relevance. However, the concept of social enterprises is still ill-defined and varies in meaning and definition among different research papers and is lacking consistency (Weerawardena and Sullivan Mort, 2006; Dart, 2014).

Among all the diverse definition of social enterprises, this dissertation will follow the most common definition of social enterprise as an organization that exists for a social purpose and engages in trading activities to fulfil its mission, using market-based techniques to achieve social impact (Talbot et al., 2002). The concept is not a new concept, but a renewed one, emerging from a non-profit background, taking business as an instrument for social development into consideration (Dart, 2004). Meaning, that the profitability is reinvested in social purpose to achieve the mission, instead of maximizing profit for shareholders and owners (Boschee and McClurg, 2003; Doherty et al., 2014).

Despite the inconsistency in definition of the concept and the fact that a precise definition of the social enterprise, shared at a EU level, does not exist yet (Defourny, 2004), there is progress in creating policy and legal structure to support the development of social enterprises (Galera and Borzaga, 2009).

2.2. Sustainable Development Goals

Based on the commonly known problem of the inconsistency of meaning and definition and the lack of legitimacy of social enterprises (Dart, 2004), the United Nations (UN) decided, in 2015 at the United Nation Conference on Sustainable Development, to develop concrete indicated goals for greater sustainability, applied worldwide. Thus, a set of 17 goals (*see figure 1*) have been documented into the United Nations' 2030 Agenda, the Sustainable Development Goals (SDGs) and have been in forced since 2016. During their development process they went through broad political negotiations and are now, firmly embedded in a policy frame, making them the strongest political commitment to advancing human well-being within the planet's ecological boundaries (Hák et al., 2015; Latapí Agudelo et al., 2019). All the 17 SDG's are build on three dimensions of sustainability: economic, environment and social and follow five core missions: putting human dignity at the center, protecting the planet, promoting prosperity for all, fostering peace and building global partnerships (UNPD, 2018; Saiz & Donald, 2017).



Figure 1: Overview of the 17 SDGs (Source: United Nations, 2015)

However, some concerns and criticisms have been raised questioning the SDGs (Ritschelova, 2015) and a review on the SDGs was conducted. The results showed that the main weaknesses identified were: the poor alignment of targets and goals with existing international agreements and political processes; lack of effective implementation; conflicts between Goals and targets, and non-quantified targets (ICSU, ISSC, 2015). According to Hák et al. (2015) the targeted goals are either too theoretical

(Pintér et al., 2012) or mostly of a strict methodological nature. Thus, the goals do not reach the operational level or concentrate mainly on the process of data processing and need to be strengthened.

Despite all the criticism of the SDGs in their formulation and implementation in their developments, it can be concluded that they provide a strong foundation for a common engagement process and serve as inspiration for further research and may define future data requirements (Moallemi et al., 2020; Hák et al., 2015).

2.3. Impact Investing

2.3.1. The Concept of Impact Investing

Until a few years ago social enterprises main funding source was mainly accessible through governments or charities. However, with the birth of more and more social enterprises, the need for accurate financing is needed. As a result, a new type of investing is required. Thus, ten years ago the concept of impact investing was created, with the basic idea of achieving both financial returns and social and/or environmental benefits from the investment opportunity (Höchstädter and Scheck, 2015; Millar and Hall, 2013). Monitor Institute (2009) defines Impact Investing as actively placing capital in businesses and funds that generate social and/or environmental good, with an at least nominal principal return to investors. It is considered that the investments primary goal is the intention to make social/environmental impact and place this as the centre of their value creation (Thompson, 2017; Battilana and Lee, 2014). The concept blends philanthropic goals with traditional financial decisions. Since it distinguishes itself from grant funding and philanthropy, because of the explicit goal to yield a financial return and the focus on some level of non-financial impact delimits from traditional investments (Addis et al., 2013; Wong, 2012).

2.3.2. Market Potential of Impact Investing

Impact investing is experiencing exponential growth in attention and capital (Clark et al., 2012). Recent studies from the Global Impact Investing Network (GIIN, 2020) estimated a current impact investing market size of USD 715 billion, with a collectively managing impact investing asset of USD 404 billion. These numbers are the largest GIIN has been reported to date, with high industry performance measurements, 88% met or exceeded their financial expectations and 99% met or exceeded their social or environmental impact expectations. According to Amit Bouri, Co-Founder and CEO of the GIIN, the numbers demonstrate an incredible growth and increase of sophistication in impact investing, with a growing interest. IFC (2020) argues that the growth is caused by the

pandemic, since awareness of climate change and social challenges such as unequal access to healthcare, race and gender inequality increased during these challenging period.

With regard to the growth of the industry, the private sector might be a better place to address social and environmental issues than the public sector or charities have shown so far (The Parthenon Group et al., 2010). Especially, since mainstream investments are not prepared to serve the changing economy, a combination of social and business strategy is needed (Bugg-Levine and Emerson, 2011; Kroeger and Weber, 2014). Thus, the Impact Investment sector stands poised to become a powerful vehicle both to address significant social and environmental issues and to chart a new course for the financial services industry to reclaim its stature as an engine of social and economical rise (The Parthenon Group et al., 2010; Cohen, 2013).

2.3.3. The Concept of Social Impact Bonds

To support the concept of impact investing, new instruments have been designed to target the investors of the market, that are seeking a monetary investment in initiatives whose primary purpose is delivering social services while ensuring a financial return (Kingston and Bolton, 2004; Loder et al., 2011; Mulgan et al., 2010). As a result, the Social Impact Bond (SIB) was born. It serves as an innovative financing mechanism which enters into agreements with social enterprises or non-profit organisations and investors, who are paying for the confinement of pre-defined social outcomes (Social Finance, 2012; OECD, 2015). The SIBs are mostly issued by the government or commissioners. It is a form of social impact investing and a possible response to the problem of funding service delivery through an instrument able to foster efficiency, effectiveness and innovation (Fox & Albertson, 2011). Policy makers in several countries are highlighted the need of creating an adequate ecosystem to enhance the use of these instruments (Cohen, 2013).

2.4. Impact Measurements

2.4.1. The Importance of Impact Measurements

To embrace the wider demands of people and planet, and the resulting rise of social enterprises and interest in impact investing, investors and stakeholders are demanding new reporting and assessment methods, to ensure that companies operate accurately, with respect to social and environmental conditions. However, as Florin and Schmidt (2011) mentioned measuring impact is one of the key concerns in the field, but metrics are needed to compare and assess the ventures among their effectiveness. Thus, standards for creating and measuring social impact are underdeveloped (Salazar

et al., 2012), however, it is impossible to manage what is not measured and what is measured will be more likely to succeed (Filho et al., 2019).

Reasons for the problematic, are first of all, the inconsistency of the definition and concept of social impact, which challenges the establishment of a unique reporting standard (Chmelik et al., 2016). Second of all, the diversity of social enterprises from ranging from financial services to agriculture, with different organizational structure and entities, including diverse activities, makes it difficult to find an aligned approach (Kroeger and Weber, 2014). The different key performance indexes and expectations from stakeholders, resulting in conflicting information needs and metrics to measure and evaluate impact performance (Arena, 2014).

Despite the lack of inconsistencies in the term definition and entity structure, the fact that value creation of impact is defined by subjective, malleable and variable characteristics (Watson and Whitley, 2017), causes difficulties in developing an adequate measurement, that captures all areas of impact investing, especially on a quantitative base (Chmelik et al., 2016). As a result, performance measurement frameworks are often undergoing a quantitative measurement on a profit-based perspective, which likely leaves out the inclusion of social and environmental value (Chmelik et al., 2016). As Maas and Liket (2011) mention, the challenge arises because of the difficulties to attach an objective value to the impact and to sum up the various qualitative expressions of impact.

However, according to the European Commission (2015) impact needs to become measurable in order to set standards and create incentives for companies to act in a way that will stop harm the environment (Höchstädter and Scheck, 2015; Bull, 2007; Ryan and Lyne, 2008). Since only then government, investors and stakeholder can set specific expectations on social enterprises and social enterprises can operate accordingly (Filho et al., 2019).

2.4.2. Impact Measurement Tools

Despite the challenges in finding a single reporting system to assess impact, developments have been made and impact measurement tools have been established (Diez-Busto et al., 2021). Since the 1990's research have been made and several tools were developed to serve as impact assessments for non-profits, governmental or for-profit corporations, whereas most methods are designed for a specific type of organization, but are adaptive to other types of organizations (Maas and Liket, 2011). Mulgan (2010) proposed an overview about the measurement of social impact, by identifying four methods to measure impact: cost benefit analysis, social accounting, basic efficiency resource analysis and social return on investment (SROI). Whereas, SROI is one of the most used methods because this

outcome is believed to be seen as important to investors (Lingane and Olsen, 2004), since it has the advantage to combine social impact assessment practices and cost-benefit analysis (Viviani and Maurel, 2019). The methodology accounts for the monetary equivalent of social value created and compares it to the equivalent input used. Thus, the focused objective is monetization. To overcome this problem, it is proposed to compare the subjective factors generated by different social programs (Kroeger and Weber, 2014). However, if this approach theoretically solves the problem, practically, it seems to be quite difficult to implement (Viviani and Maurel, 2018).

2.4.3. Impact Management Project

Out of all different possible impact measurement tools and frameworks, the dissertation decided to focus on the norms of Impact Management Project (IMP). IMP is an organisation hosted by Bridges Insights, an independent non-profit that was set up by the Bridges Fund Management. It was established with the mission to provide a common framework to support enterprises and investors in understanding their impacts on people and the planet to work towards a positive change (Impact Management Project, 2022). In order to fulfil this mission IMP designed a framework that serves as a consensus to measure impact across five dimensions on performance: what, who, how much, contribution and risk.

- What tells us what outcome the enterprise is contributing to, whether it is positive or negative, and how important the outcome is to stakeholders.
- Who tells us which stakeholders are experiencing the outcome and how underserved they are in relation to the outcome.
- How much tells us how many stakeholders experienced the outcome, what degree of change they experienced, and how long they experienced the outcome for.
- Contribution tells us whether an enterprise's and/or investor's efforts resulted in outcomes that were likely better than what would have occurred otherwise.
- Risk tells us the likelihood that impact will be different than expected.

The IMP reached global consensus that impact can be measured across five dimensions: What, Who, How Much, Contribution and Risk

Impact dimension	Impact questions each dimension seeks to answer
<input type="checkbox"/> What	<ul style="list-style-type: none"> •What outcome is occurring in the period? •Is the outcome positive or negative? •How important is the outcome to the people (or planet) experiencing them?
<input type="radio"/> Who	<ul style="list-style-type: none"> •Who experiences the outcome? •How underserved are the affected stakeholders in relation to the outcome?
<input type="checkbox"/> How Much	<ul style="list-style-type: none"> •How much of the outcome is occurring - across scale, depth and duration?
<input type="checkbox"/> Contribution	<ul style="list-style-type: none"> •Would this change likely have happened anyway?
<input type="checkbox"/> Risk	<ul style="list-style-type: none"> •What is the risk to people and planet that impact does not occur as expected?

Table 2: Five Dimensions of Impact (Source: Impact Management Project, 2022)

To further understand the performance on each dimensions, IMP designed a set of categories, to measure and report on specific types of data. The 15 categories provide information across all five dimensions and can be found in *Appendix 4*. These data categories will enable investors and enterprises to set impact goals and assess performance (Impact Management Project, 2022).

2.5. Conceptual Frameworks

The dissertation will introduce two conceptual frameworks, that should be applied when analysing the case study. Being frameworks that are extensively applied in the strategy management process (Rothaermel, 2014), the dissertation will focus on SWOT and PESTEL analyses.

2.5.1. SWOT Analysis

To develop a successful strategic planning process, it is significant to understand its business environment. The SWOT analysis was designed as one of the most important frameworks to analysis the business environment (Lozano and Valles, 2007). It serves organisations to gain a better perspective into their internal and external business environment during times of indecisions (Rozmi et al., 2018). The method that is in use since the 1960s, is a qualitative method identifying four different regions: strengths, weaknesses, opportunities and threats (Phadermrod et al., 2016), whereas strengths and weaknesses are factors that are linked to the internal business environment, meaning they can be controlled and influenced by the organization, opportunities and threats are linked to the external business environment and can not be controlled (Dyson, 2004). Clarifying these factors will help organizations to match strengths and weaknesses with the given opportunities and threats

(Nickles et al., 2019; Povilanskas and Labuz, 2012). Thus, according to Benzaghta et al. (2021) the SWOT matrix can serve with four different insights:

- Strengths – Opportunities: Taking advantage of the opportunities
- Strengths – Threats: Avoiding threats
- Weaknesses – Opportunities: introducing new opportunities by reduction of weaknesses
- Weaknesses – Threats: avoiding threats by minimizing weaknesses

SWOT is a favorable method to evaluate initial ideas of possible future consequences. It is a simple approach that provides a realistic interpretation of the performance of a business (Benzaghta et al., 2021). But because of its qualitative approach, it is argued if this method will lead to the right business decision, since the analysis is based on subjective perspectives, that likely includes biases and additionally, the factors are not measurable (Phadermrod et al., 2016). However, according to the Competitive Intelligent Foundation (Fehring, Hohhof, and Johnson, 2006) the analysis is the second-most frequently used analytic tool after the competitor analysis, because of the simplicity of the analysis. As a result, the dissertation will move forward with this analysis approach to recognize organizations core competencies for decision-making, planning and building strategies, by identifying the factors in these four fields (Phadermrod et al., 2016).

2.5.2. PESTEL Analysis

To understand specifically the external factors of the business environment, the dissertation will introduce a more convenient analysis, to identify systematic factors, factors that are beyond our control (Shatskaya et al., 2016). PESTEL is one of the most known framework capturing and analysing key factors of change in business environment. The analysis will on the one hand, help organizations to identify the environment the organization is currently operating in. On the other hand, the analysis will provide data and information to enable prediction of situations and circumstances that might encounter in the future (Dinçer, 2004). It is a combination of six external factors: political, economical, social, technological, environmental and legal factors (Rothaermel, 2014).

Political factors: Factors that are considering the political situation of a country and its relation to the world, including all the policies, the taxes laws and every tariff that government fix over a trade (Shatskaya et al., 2016).

Economical factors: Factors that needs to be modified by organizations to meet the current economical situation, since they have a big influence on the organizational performance, as well as profitability (Shatskaya et al., 2016).

Social factors: Factors that have a direct impact on how the market is understanding customers and their drivers. It is important in the global and international market and varies among the markets, since every market has its unique factors (Shatskaya et al., 2016).

Technological factors: Factors that have become essential to organizations, with a more and more rapid speed of change, impacting mainly its operations and resourcing (Shatskaya et al., 2016).

Environmental factors: Factors that raise increasing attention and is forcing organizations to perform on environmental needs, with a sustainable practice (O'Connor et al. 2016).

Legal factors: Factors in the legislation that influences the industry in spheres such as competition, employment, health and safety (Shatskaya et al., 2016).

By identifying all six factors the analysis provides a knowledge foundation in conceptual terms, for an analysis of the macro environment. However, the lack of quantitative data and the fact that the factors are measured and evaluated independently, limited the framework and does not allowed for a detailed and objective analysis (Dare, 2006; Katko, 2006; Shilei and Yong, 2009). Despite the limitations, the framework still serves as a general idea about the external environment and situation of an organization (Yüksel, 2012).

3. Methodology

This chapter describes and justifies the methodology used to develop the case study. It will outline the selection and use of data collection and defines the research method used, in order to identify the analysis of the collected data.

3.1. Research Method

This dissertation is following a qualitative method to examine the research objectives and develop the case. A qualitative research allows analysing subjective meaning of issues, events or practices by collecting, non-standardized data and analysing subjective data rather than numbers and statics (Flick, 2014). Since, the research topic is defined by its subjective nature, the dissertation aims to implement the qualitative method to have a broader ability to interpret feelings, opinions and experiences (Rahman, 2016), to better understand the problem of the ‘real life’ case.

The dissertation was limited by the lack of possibility of obtaining data, since required data are sensitive to the publicity or not yet available. Thus, with regard to time-constraints and cost-efficiency, this research method is the most compatible method to explore the research topic.

3.2. Data Collection

In order to create content for the case with sufficient information to represent the complexity of the ‘real world’, the dissertation used primary and secondary data. Primary data was collected using semi-structured interviews, which had the advantage of tailoring the data collection to the proposed research question, to ensure a coherent study (Hox and Boeijs, 2005). The framework offered the participant to freely respond to open-ended questions and this flexibility of response, provides the relevancy of the topic, while remaining responsive to the participant (Bartholomew et al., 2000). However, the primary data collection was used in combination with secondary data, since primary data was limited accessible and time-consuming.

The interviews were conducted with direct employees at MAZE, Antonio Miguel, Founder and Managing Partner and Tomás Vila Luz, Acceleration Analyst. In addition, two further interviews were conducted with the founders of two ventures from MAZE’s portfolio, Nevaro and Sensefinity. For the secondary data information from public institutions and reporting about the Portuguese economy were collected. Information about MAZE was found on their company website, blog posts and annual reports.

Primary Research		Secondary Research	
<i>Interview 1</i>	Antonio Miguel, Managing Director at MAZE	<i>Webpages</i>	MAZE; MSM; IMP
<i>Interview 2</i>	Tomás Vila Luz, Acceleration Analyst at MAZE	<i>Reports</i>	MAZE Impact Report, 2021; Driven by Purpose, 2019; Equity for social innovation, 2019
<i>Interview 3</i>	Orlando Remédios, founder of Sensefinity	<i>Blog posts</i>	Blog post published on MAZEs website
<i>Interview 4</i>	Francisca Canais & Rita Maçorano, founders of Nevaro	<i>Online article</i>	Articles written by employees at MAZE

Table 3: Data Collection

3.2.1. Sampling Design

For the sampling design, the dissertation was using the technique of purposeful sampling, a commonly used approach in qualitative researches for the identification and selection of information-rich cases related to the phenomenon of interest (Patton, 2002). This involves gathering data from individuals that are especially knowledgeable or experienced with a phenomenon of interest (Cresswell and Plano Clark, 2011).

The dissertation moved forward with the Managing Director and an Analyst from the impact investing firm itself, to gain an internal perspective about the topic of interest. The intention of the interview was to understand the mission and drivers of MAZE, their strategy and the challenges they currently are facing. The interviews with the founders, served to understand the intention of the founding an impact ventures and the challenges, as well as, the meaning of concept of impact investing and impact measurement.

3.2.2. Interviews

As mentioned before, the primary data collection was collected through semi-structured interviews. The questions for the interview were pre-defined, but not fixed, which allowed for a more flexible and natural conversation (Braun and Clarke, 2013). This type of data collection gives the possibility to obtain a certain degree of control over the conversation and directs the participants to specific areas of inquiry, as well as maintaining the participants' freedom (McIntosh and Morse, 2015). However,

it is also limited to the lack of depth the participant will provide, due to the freedom the participant has (McIntosh and Morse, 2015) and the subjective nature of interpretation of semi-structured interviews (Creswell, 2014; Braun and Clarke, 2013).

Despite the limitations, this dissertation moved forward with the primary data collection through semi-structured interviews, because it provided information about exclusive, internal experiences and opinions, which adequately serves to develop a most realistic case.

For the interviews two different interview guidelines were created. The first guideline was adapted to the two interviews with internal employees of MAZE (*see Appendix 1*). The guideline is divided into five sections: introduction, impact economy, investment strategy, impact performance measurement and conclusion. The second guideline served as script for the two interviews with the founders of the ventures and is, as well, divided into five sections: introduction, impact economy, financing source, impact performance measurement and conclusion (*see Appendix 2*).

All four interviews were conducted via an online call (Zoom) in English and all calls took place in January 2022 and lasted approximately 25-35 minutes. To better analyze the data, with the consent of the participants, all interviews were audio-recorded. However, due to confidentiality, the interview transcripts are not displayed in this study but will be provided to the committee upon request.

3.3. Data Analysis

To analyze the data collected, the dissertation started with the transcripts of the interview. Followed by a thematic analysis of the primary data collected. The thematic analysis will bring order, structure and interpretation to the collected data, to be able to search for general statements about relationships among categories and data, to identify content (Marshall and Rossman, 1999). The dissertation decided to move forward with the analysis method, since it provides a rich and detailed, but still complex, account of the data (Braun and Clarke, 2006).

The first step of the analysis, was to get familiar with the data, by carefully observing the transcripts multiple times. After getting familiar with the data, codes were initiated, featuring interesting and relevant content. To ensure analogous connection between the codes and themes, the themes needed to be reviewed and afterwards accurately defined and named (*see Appendix 3*).

3.4. Data Results

The conducted thematic analysis of the data resulted in four themes.

1. Need for Impact Investing

All participants highlighted the need for financial instruments in the Portuguese impact economy. They commented on the fact that awareness and interests in social and environmental concerns are increasing, which will lead to the establishments of more social enterprises. One interview confirmed the growth of social enterprises in Portugal and the lack of funding opportunities with the following statement:

“There were a lot of impact organizations that were looking for funding and there were no impact funds in the country.” (Antonio Miguel, MD at MAZE).

The founders among the interview partners, highlighted the challenge to receive accurate funding, especially, from VCs, since they are mostly still following a traditional approach of investing.

2. Economical opportunity

Most participants' belief, that doing business with respect to impact will not only benefit an ethical and moral perspective, but also results in economical outcomes. As interview partners state that the market will grow in terms of social enterprises, investors and most importantly consumers, that will drive the market. Investing in businesses that solve social and environmental problems is actually a very significant business from an impact standpoint and from a financial standpoint and will lead to the biggest economic opportunity of our time.

3. Better Performance Outcome

All participants described the performance outcome with impact measurement to be of higher value, resulting in an overall better performance outcome. Measuring impact sets standards to the company, to be able to set further goals and ambitions. It provides an overview on how companies are currently performing and how to best design infrastructures to develop and grow. One participant is adding to that:

“Proving that you are creating impact, makes you more valuable and increases interests towards investors, companies and users and this valuation increases our overall performance.” (Rita Maçorano, Co-founder of Nevaro).

Another participant comments on the internal team performance:

“We do not only measure our impact performance for external stakeholder, but moreover for our internal team, to help us focus and see what valuable impact we are creating.” (Orlando Remédios, Founder of Sensefinitly).

4. Impossibility of capturing absolute impact

All participants reflected on the challenges when measuring impact. The most common challenge is to capture all the details of impact, since the value of impact is subjective and has a very broad set of dimensions varying among different industries. One participant is supporting this fact, by saying that the information given is not just black and white and therefore, difficult to capture and measure (Francisca Canais, Co-founder of Nevaro).

Another participant is adding:

“It's impossible to get all the details, so we like to look at the whole picture, not just the KPIs, because the KPIs can be misleading sometimes. So we also look at the story of the company and see if the impact they're creating makes sense.” (Tomás Vila Luz, Acceleration Analyst at MAZE).

The results of the analysis will be used to develop the case study in chapter four.

4. Case Study

4.1. Portuguese Economy

Like several other countries in this world, Portugal has been dramatically affected by the pandemic, causing humans suffering and leading the country into a deep recession (OECD, 2021). However, the country's economy has been recovering fast after the collapse in 2020 (*see figure 2*).

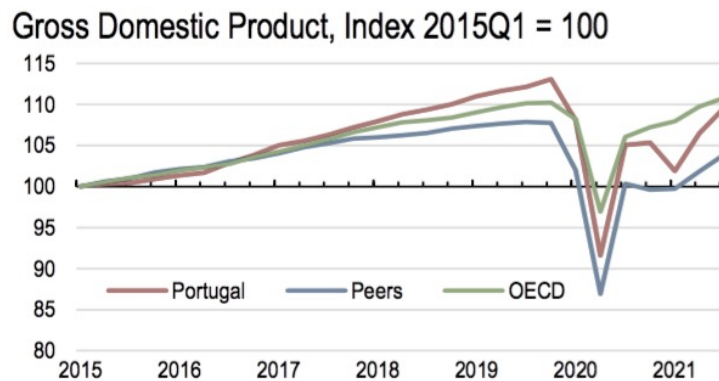


Figure 2: Portugal's GDP after pandemic (Source: OECD, 2021)

The positive affect of the Portuguese economy after the pandemic has also made itself noticeable in the low rate of unemployment of 6.3% in the third quarter of 2021, which is even below the rate before the pandemic, 6.5% in 2019. However, the pandemic has left tremendous remarks and shows areas of improvements, since the pandemic has increased poverty and inequalities among the society and has put the health system under enormous pressure. Therefore, Portugal has rolled out its recovery and resiliency plan to establish a robust and steady recovery and development of the country.

Despite the problematic the pandemic has caused and the challenge to strengthen its weak spots, Portugal wants to simultaneously focus on their developments and grows on a socially and environmentally sustainable path. The idea, therefore, is to effectively and rapidly implement the Next Generation EU Plan to assure economic activity, while focusing on long-lasting vulnerabilities of the economy. The priority of the plan lies in the reduction of water abstraction, which includes an innovative upgrade of the current water infrastructure. The ambitious goal of reaching a carbon neutral economy in 2050 has been set with the plan and requires action in combination with the intention of reducing environmental damages, financial support of activities with less polluting outcomes, as well as compensation for low-income households affected by the actions taken.

4.1.1. Impact Economy – Setting the Scene

Regardless of the crisis, Portugal is establishing an impact economy, an economic system, in which positive impact can be created. The aim is to include marginalized and underserved sectors of the society into the mainstream economy, with focus on the needs of the planet and its environment. As a result, Portugal's ambitious to strengthening its resilience on renewable energy sources has been taken serious. In its National Energy & Climate Plan for 2021 – 2030 they proposed, 47% of the gross final energy consumption should be delivered through renewable energy, within the next decades. Whereas fossil fuels is planned to have a reduction of 35% by 2030.¹

Besides the high ambitious among renewable energy, the country has already accomplished first steps into a greener economy. There are already over 55.000 social organizations settled in Portugal, representing approximately 2.8% of the country's Gross Value Added and 5.5% of total employment.² To further increase the number of social organizations, Portugal has created a broad range of accelerator, capacity-building and incubation programs, to support and encourage organizations to perform on a socially and environmentally impactful value, to drive the impact in Portuguese businesses.³

In consequence, Portugal decided to make Social Innovation and Social Entrepreneurship its key priority in its Partnership Agreement 2014 – 2020 and created an initiative called Portugal Inovação Social (PIS), that serves as a mediator to align needs, players and funding. The PIS sets the main scene for impact investing in Portugal and has made outstanding developments in setting the foundation for impact investment. As a result, Portugal is even serving as a benchmark country in social investments.

However further developments, independently from PIS, for impactful investments have been made through the launch of Mustard Seed Maze, the first impact investment fund in Portugal, which is a joint venture between Mustard Seed, an early-stage venture fund in London and MAZE, an impact investment firm in Lisbon. The fund has a size of USD 45 M, whereas the European Investment Bank is one of their investor and therefore, an important player in the impact economy. The fund should financially and operationally support ventures to create meaningful impact on a sustainable path.

¹ <https://www.corpowerocean.com/portugals-green-energy-stature-grows-with-world-first-eu-scores-project/>

² <https://evpa.eu.com/nexus/portugal>

³ GSG (2019). Country Profil – Portugal. Retrieved from: <https://gsgii.org/reports/country-profile-portugal/>

It can be said that, there have been strong developments in the impact investment market in Portugal, however, the sector is still dominated by traditional social organizations, like non-profit and charity organizations and the number of private actors supporting the social impact landscape remains limited. Nonetheless, the country needs the private sector to engage, since the public sector is yet not well equipped and is lacking expertise.

4.2. MAZE – Decoding Impact

With the mission to unlock capital towards social change in Portugal, MAZE – Decoding Impact was founded in 2013. The Lisbon-based organization serves as a social financial intermediary, by working with impact ventures, investors and the public sector to implement and scale effective solutions that addresses social and environmental challenges. It was initially born as Social Investment Lab originating from the IES Social Business School, in Lisbon, and became a legal entity of a non-profit association. In 2018, it got rebranded and was reborn as MAZE – Decoding Impact, a joint venture between London-based Mustard Seed and MAZE, in Lisbon and is now a public limited company, supported by the Calouste Gulbenkian Foundation. Towards the evolution of the organization the core mission that MAZE follows stayed the same: working towards a positive social change.



Figure 3: MAZE's milestones (Source: MAZE, 2019)

To achieve its mission, MAZE divided its work into different areas of focus, that work separately on the specific missions, however teams are existing that work horizontally across the organization. The complementary work that they do, is divide into three areas: public sector (government performance), accelerator and VC fund (investment).

4.2.1. Governmental Performance

Since MAZE has strong resources and experiences, the public sector decided to work together with MAZE to drive innovative change in social services, as well as, uses MAZE as their advisor for topics regarding social and environmental impact. Currently, MAZE is interacting in six different key projects together with the public sector. One of the projects is the Portuguese Social Investment Taskforce, the project was financed by the EU and was a collaboration of MAZE, Calouste Gulbenkian Foundation and Social Finance UK. The Taskforce developed a relevant final report, recommending approaches to grow the social investment market in Portugal.

Furthermore, MAZE is working on the before mentioned initiative Portugal Inovação Social (PIS), in collaboration with the public sector. The project was created to structure and manage the fund, that was assigned in 2014 of the European Structural Fund from the 2014 – 2020 funding cycling, to encourage social innovation. The details of the structure of the fund are summed up in table 3.

INSTRUMENT	TYPE OF FINANCING	MAXIMUM TICKET	DIMENSION	GOAL
CAPACITY BUILDING FOR SOCIAL INVESTMENT	Non-refundable grants	50,000	EUR 15M	Support social enterprises in: <ul style="list-style-type: none"> Operational efficiency Investment readiness Impact measurement
PARTNERSHIPS FOR IMPACT	Non-refundable grants co-financing up to 70% of project cost.	EUR 50,000	EUR 15M	Growth capital.
SOCIAL IMPACT BONDS	Social Impact Bond	Variable	EUR 20M	Push government and impact organizations towards outcome payments.
SOCIAL INNOVATION FUND	Guarantee instrument + equity co-investments with approved investors	Variable	EUR 55M	<ol style="list-style-type: none"> Attract private capital towards impact ventures De-risk impact debt deals in the banking sector

Table 4: Portugal Inovação Social fund structure (Source: MAZE, 2019)

A major key project MAZE is focusing on are Social Impact Bonds (SIB). Currently, they are managing 5 Social Impact Bonds themselves, out of 21 Impact Bonds in total in Portugal. The first SIB issued in Portugal was MAZE's Code Academy Jr Bond, which is targeting educational outcome as social issue, with an investment size of EUR 150 K and benefits 65 children. The bond is already completed and showed significant improvement in math and log reasoning among the participated children. The remaining SIB are still ongoing, focusing on different social issues with investment sizes up to EUR 724 K. Furthermore, MAZE did a benchmark analysis on international tax relief systems advocating the Portuguese public system to promote a tax relief on SIB, which was approved in 2018.

The close work with public entities arise out of the belief that impact concerns can not be solved putting the government aside, since they are by any means major social contributor. By collaborating, MAZE wants social service to be more impactful, more efficient and to be recognized by the value they bring to the economy.

4.2.2. Acceleration – MAZE X

In January 2019, MAZE launched its accelerator program, named MAZE X. It is a 4-month impact start-up accelerator, that offers an intensive program to attract European's top impact entrepreneur and future unicorns. The program is designed for entrepreneurs with a clear intention to create impact through their business model and believe that impact and profit are mutually reinforcing to drive businesses to value creation. The program will equip entrepreneurs with a range of skills to grow their solutions and impact. Because of MAZEs' expertise, network and established name in the industry, the impact ventures can benefit from not only skills and knowledge, but moreover from the network and reach that MAZE has.

For each program round, MAZE is looking for 10 tech-based early impact start-ups, focusing on solving social and environmental challenges, while creating attractive financial results. To participate the program, entrepreneurs have to apply and match their criteria. Currently, there are over 50 impact ventures graduated from the program and program aims to support at least 350 impact ventures.

4.2.3. Investment - Mustard Seed MAZE Fund

By starting to help founders to raise capital from investors in their network, MAZE dreamt of having their own fund to independently decide on investments. After a deep analysis of the market MAZE decided that the right vehicle for the European market is an impact venture capital fund focusing on early-stage impact ventures. Speaking to their friends from Mustard Seed, an early-stage venture capital in London, they decided to create together a European impact VC fund based in Lisbon, the Mustard Seed MAZE fund (MSM). The fund is backed up by investors, including the European Investment Fund, Calouste Gulbenkian Foundation and Atlântico Europa. The fund, MSM fund I, was committed by June 2019 and has a fund size of EUR 45 M. The fund is ranging from investments in pre-seeds to series B, with a targeted return of 20% IRR (internal rate of return) / 3.0x MOIC (multiple on invested capital). The geographic focus will be on Europe, however with first in line access to Portuguese dealflows.

The investment thesis, rooting on the unfair advantages of impact ventures that deliver superior impact outcomes alongside compelling financial returns, is supporting the overall mission that MAZE is following, by addressing social and environmental challenges. The fund is targeting a broad impact framework that at the same time is aligned with the Sustainable Development Goals, (*see figure 4*) with special focus on goal 3: good health and well-being; goal 4: quality education; goal 8, decent work and economic growth; goal 12: responsible consumption and production; and goal 13: climate action.

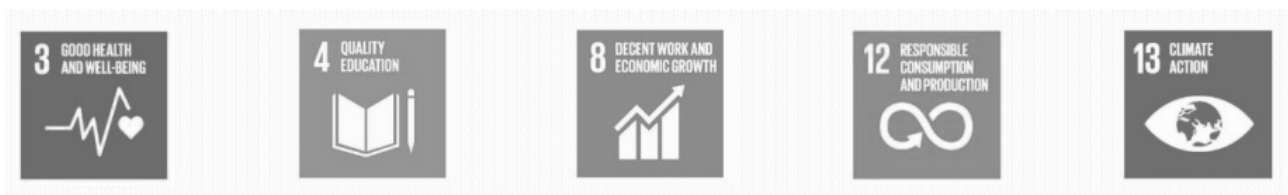


Figure 4: Targeted SDGs (Source: Santos, 2019)

With the increasing popularity among innovative start-ups settling in Lisbon, Lisbon is becoming a new trending entrepreneurial hub. The market gained a lot of attraction, especially among innovative technology, due to the annual residence of the Web Summit in the city. Consequently, the amount of newly founded ventures is high and thus, the VC activities. This sets the perfect scene for the MSM fund and allows for investments in great business models. Up until now, they invested in 27 impact ventures.

The MSM fund is offering impact ventures a clear journey (*see figure 5*), that starts with the impact expertise, to help the ventures develop a clear impact mindset, which is crucial for further steps in the development of an impact venture. With more than 25 years of expertise MSM has to offer they are able to strengthen the ventures on resilience and building an asymmetric advantage. Furthermore, MSM is offering capital and commercial outcomes. To make a business move forward, access to capital and introductions to the commercial network is significant. MSM will leverage its global networks of corporates and investors, as well as working with the ventures on financial modeling and cap table arrangements.

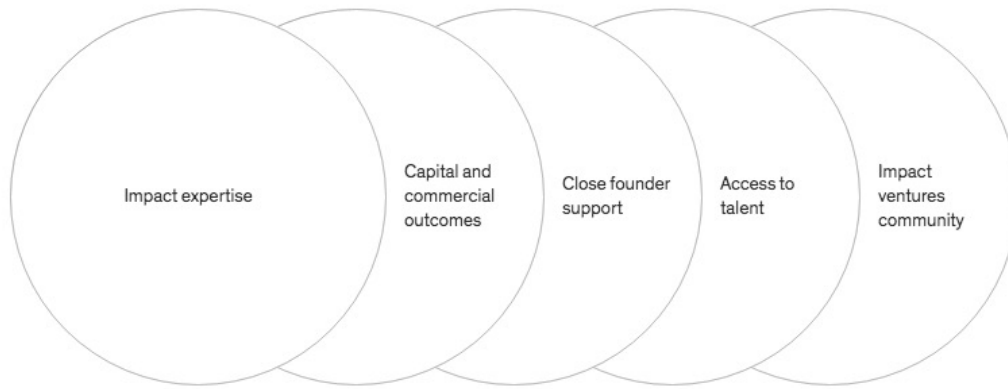


Figure 5: Journey of a venture at MSM (Source: MSM, 2022)

Being founders themselves, they have a great empathy for the challenges and problematic that will arise and offer a 24/7 support for their ventures. Throughout their work with Universities and the rising trend among young talents to work within an environment of high performance and intellectual stimulation, while making a positive change, the outstanding talents are attracted to MAZE directly or through their strong network. The journey ends with the impact venture community, an online place, shared with the accelerator program, with more than 100 founders. The community hosts founders, technical teams, mentors and experts, meetings will be scheduled for the founders to ask and find the right support or to share journeys. MSM makes sure to offer their founders the best possible support needed to grow and develop their mission and make the world a better place.

4.2.4. Approach to Impact - Impact Management

To follow MAZE's vision of creating environmental and social impact with their projects and portfolio, they have developed their own approach to impact (*see figure 6*). The approach is divided into four steps, starting with the impact classification, defining the impact the business is creating, followed by the matching of their three areas of focus: acceleration, government performance and investment, by evaluating the contribution MAZE can make to achieve impact. In step 3 the business will be classified in thematic areas, that are focused on SDGs and will define the SDG the business is contributing to. After the evaluations and classification, the impact needs ongoing management to include impact performance as a criteria of remuneration. They implemented a mechanism based on the Impact Management Project (IMP) guidelines.

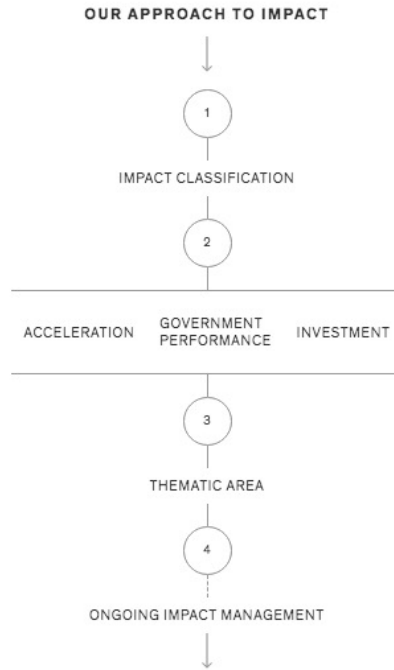


Figure 6: Approach to impact (Source: MAZE, 2022)

The IMP has brought a wide range of organisations together to build and further drive measurement, assessment and reporting of impact on society and environment. Its goal is to mainstream the practice of impact management. In 2016 IMP has released its guidelines on impact management assessments on five dimensions with the collaboration of more than 2000 enterprises and investors. The model measures impact across five dimensions:

- What tells us what outcome the enterprise is contributing to, whether it is positive or negative, and how important the outcome is to stakeholders.
- Who tells us which stakeholders are experiencing the outcome and how underserved they are in relation to the outcome.
- How Much tells us how many stakeholders experienced the outcome, what degree of change they experienced, and how long they experienced the outcome for.
- Contribution tells us whether an enterprise’s and/or investor’s efforts resulted in outcomes that were likely better than what would have occurred otherwise.
- Risk tells us the likelihood that impact will be different than expected.

The IMP frameworks allows MAZE to focus on a continuous management of impact, which encompasses different impact strategies that suits their holistic approach, while being a widely adapted international framework, with global narratives. However, to capture a deeper analysis of MAZEs’ portfolio and to account for the individual impact strategies given in the portfolio, MAZE needed an extension to the IMP framework. Thus, MAZE developed the Extended ABC Matrix (*see figure 7*), that classifies each project as either A (avoiding harm), B (benefiting stakeholders) or C (contributing to solutions). Each classification has three further levels that account for different impact strategy combinations, as a result, MAZE is now assessing venture from a range of nine different levels. The adaptation of the ABC Matrix makes it possible to assess impact on a deeper level of narratives, allowing for more accurate assessment of population served (well-served, underserved or mix) and level of impact effected (depth, scale or marginal).

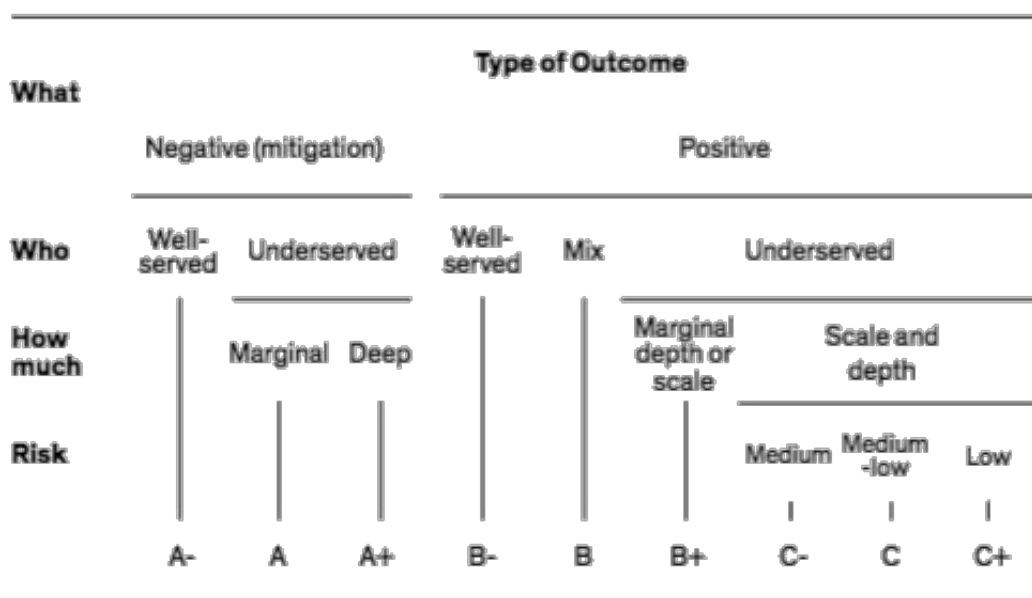


Figure 7: Extended ABC Matrix (Source: MAZE, 2021)

Up until now, MAZE is only working with projects classified as B or C, with the majority in B plus and C classifications (*see table 4*), since the belief is that the greatest gap lies in underserved populations which lack in depth solutions, with scalable potential, to address their needs (MAZE, 2021).

MAZE’s				11%	22%	28%	5,5%	28%	5,5%
Projects	A-	A	A+	B-	B	B+	C-	C	C+

Table 5: MAZE’s Project Classification (Source: MAZE, 2021)

To account for remuneration MAZE developed an approach to quantify the assessment. Therefore, they establish a quantified, annual target goal, for each venture individually, based on their mission and the investment thesis. Out of these target goals, MAZE calculates the so called ‘impact multiplier’, the ratio between the target goals established at the time of investment and the performance at the time of calculation. For the portfolio perspective, MAZE is calculating the ‘portfolio impact goal’, which is the weighting of the impact multiplier of each venture with the capital invested in each venture. With this valuation, MAZE is eligible to a portfolio impact goal of 60%, meaning regardless of financial performance of the portfolio, MAZE will receive no financial return, if the portfolio impact goal of 60% is not met. By meeting the targeted goal, the fund is entitled to a 50% performance fee, which is increasing correlating to the portfolio impact goal. Creating the right incentives to maximize both, impact and money.

Putting this valuation model into practice, table 5 shows an example as illustration of a portfolio with three ventures and their target goals, assuming the investments were made four years ago, at the time of the calculation.

Company	Student Finance	Omocom	NuiCare
Impact metric	# of job placements for people previously unemployed	Tonnes of CO ₂ savings	# of informal caregivers who report an improvement in their mental health
4-year Target Goal (illustrative)	10,000 people	500,000 tonnes	5,000 caregivers
4-year Performance (illustrative)	7,000 placements	600,000 tonnes	1,500 caregivers
Impact Multiple (illustrative)	0,7 (7,000/10,000)	1,2 (600,000/500,000)	0,3 (1,500/5,000)
Amount invested (€) (illustrative)	€2,000,000	€200,000	€1,000,000

Table 6: Example of Impact Multiplier (Source: Miguel, 2021)

The portfolio impact goal would be calculated as following, based on table 5:

$$\frac{(0,7 * 2,000,000) + (1,2 * 200,000) + (0,3 * 1,000,000)}{2,000,000 + 200,000 + 1,000,000} = 0,60 = 60\%$$

Equation 1: Impact multiplier calculation (source: Miguel, 2021)

Linking the impact performance straight to the remuneration, should demonstrate full commitment towards impact and demonstrates the focus of MAZE when investing. Despite the commitment MAZE is showing and the approach they developed, the difficulties remains in the fact that the portfolio includes mainly early-stage companies, where impact is not yet delivered and the fact that there are cases where it is easy to grasp impact and where impact is aligned with revenue, but there are also many cases where grasping impact is difficult, mainly in areas like social isolation, education, health and well being. It is impossible to get all the details, that is why MAZE likes to build a story makes sense. As a result, it is a challenge to provide number and the evaluation ends up being more qualitative. However, with that said a common challenge with impact measurement remains: the lack of quantified outcome, since as Managing Director Antonio Miguel is saying: “The only thing we end up measuring is the output⁴ [...] but not the outcome [...] so it ends up being more qualitative. And that's one of the biggest challenges.”.

4.2.5. Goals and Future Developments

With the increasing practice of impact investing, MAZE is motivated to keep its work going. It is a long way to go, that will not be easy, but it is what humans owe the planet. Antonio Miguel sparks about more funds to be issued and that MAZE will continue to bet on venture capital. MAZE has established itself strong in the Portuguese market, with its close connection to the public policies, investors and founders, MAZE has set the right foundation and the resources. The challenge will be to visualize impact outcome and make it tangible, to prove return on investments in terms of impact. It will not be easy, as well as, keeping the promise of the 20% IRR or 3.0x MOIC, on targeted return, but that’s what MAZE has been modeling and they will try to keep up to that high performance standard, but as the MD Antonio Miguel says, it is a forecasting exercise and we all are still learning. For the future MAZE wants to become the asset manager of choice for everyone when it comes to testing new financial instruments that are targeting impact, as they are already on the right track.

⁴ Tangible or intangible (services, products, interventions or other deliverables) things that an organization or project produces.

5. Teaching Notes

5.1. Case Overview

This dissertation presents the case of MAZE, an impact investment firm, based in Lisbon, with the mission to solve social and environmental problems, by investing into impactful businesses. The belief is that social and environmental topics are the biggest economic opportunity of our time and with that belief MAZE created its own impact venture capital fund, to take that opportunity and invest into impact ventures across Europe.

The main purpose of this case is to show how impact investing can support ventures in creating social and environmental value and what impact investing opportunities there are. The first part of the cases illustrates the current landscape and ecosystem of the Portuguese impact economy and its impact investing market, to show students the need and demand of the market and the current status quo. The second part of the case introduces MAZE and its three different instruments to create impact. Furthermore, the case will illustrate MAZEs' approach to measure impact and as a result to better manage and further drive impact. This should give the students a real life example of the effect of impact investing and potential impact assessments and management.

5.2. Target Group

The purpose of this case is the use as teaching material that should encourage in-class discussions in undergraduate- or master-level courses. With regard to the topic of the case, it is especially suggested to use in courses like impact investing, beyond that it can be used in courses like social innovation, social entrepreneurship, as well as strategic management.

5.3. Learning Objectives

The main learning objectives from this case is to introduce the students to the new concept of financing, impact investing and how impact can be assessed and measured to achieve targeted outcome on social and environmental dimensions. By analysing and discussing the case students should be able to get an industry overview of the Portuguese impact investing market, with its drivers and a real-life example of the practice of an impact investing firm, including the impact management approach. The case should give the students an idea on how impact investing is practiced and how impact can be assessed and managed. For this reason, the students should be able to perform the following:

- Identify the driver MAZE has in establishing an impact investing firm in the Portugal;
- Understand the impact management approach MAZE is following;
- Evaluate the impact management approach and suggesting possible improvements.

As a result, students will have a better understanding of the current drivers’ impact investing firms are facing and the complexity of impact measurement, as well as seeing impact measurement on a real-life example.

5.4. Board Plan

The case study should be guided by an instructor and can be discussed in a 90-minute class session. Table x shows a recommended schedule for the case discussion conducted in class.

Activity	Conducted by	Content	Time (min)
Introduction	Instructor	Recap of framework	10
		Recap of case study	10
TQ 1	Group of 3 to 5 students	Main driver (PESTEL analysis)	15
TQ 2	Students individual	Impact management approach	15
TQ 3	Group of 3 to 5 students	Challenges and improvements of approach (SWOT analysis)	15
Discussion	Class	Discussion of answers to the teaching questions	20
Conclusion	Instructor	Key takeaways	5

Table 7: Potential Board Plan

5.5. Assignment Questions and Analysis

The following section aims to provide guidance for the instructor by giving possible answers to the teaching questions, the thesis is focusing on. They are designed to help students to apply the previously studied frameworks on a real case. Analytical skills and managerial knowledge have to be applied to correctly answer the following questions.

5.5.1. Teaching Question 1

What was MAZE's main driver to start an impact investing firm in Portugal?

To answer this question students, need to understand external environment MAZE is operating in. The forces and factors that are given in the market and are beyond MAZEs' control. To best analyses the environment and evaluate the driver to start MAZE in Portugal, students should develop a PESTEL analysis, laid out in the literature review.

Political factors

Looking at the Portuguese Government, during and after the pandemic, it can be seen that the goal is a steady and robust recovery and development of the country with strong focus on a social and environmental path. With the global pressure on individual countries to practice environmental-friendly, Portugal has shown its commitment with the implementation of the Next Generation EU Plan, that includes activities with the intention of reducing environmental damages, financial support of activities with less polluting outcomes, as well as compensation for low-income households affected by the actions taken. On a domestic level Portugal has shown its interest in a social and environmental concerns in rolling-out is ambitious National Energy & Climate Plan for 2021. It can be concluded that the political interest in ensuring sustainable environmental needs is given and the secure of the low unemployment rate demonstrates that Portugal is taking actions.

Economical factors

The economical factors in Portugal are the most important drivers for MAZE to practice impact investing. Reasons are the high and rapid rise of start-ups settling in Portugal and even more interesting for MAZE the number of social organizations settled in Portugal, with over 55.000 social organizations. These organizations represent approximately 2.8% of the country's Gross Value Added and 5.5% of total employment. However, the interest in further strengthening the impact economy is high. Thus, Portugal has created programs to organisations to support and encourage them to perform on a socially and environmentally impactful value, to drive the impact in Portuguese businesses.

In its Partnership Agreement 2014 – 2020, Portugal decided to make Social Innovation and Social Entrepreneurship its key priority and created an initiative called Portugal Inovação Social (PIS), that serves as a mediator to align needs, players and funding. However, the sector is still dominated by traditional social organizations, like non-profit and charity organizations. Summing up, Portugal's

market is fertile ground for social enterprises to be created and established, with supportive programs rolled out by the government, however, accurate funding and capital is still limited.

Social factors

Social factors influencing MAZE are the growing interest among investors towards impact investing, according to IFC (2020) the reason for this growing interest is caused by the pandemic, since awareness of climate change and social challenges such as unequal access to healthcare and racial and gender inequality increased during these challenging period. Additionally, the high number of set-ups of social organisations demonstrates that sustainable topics, especially regarding environmental and social justice have never been more relevant and this also left an effect on founders across all business industries (Battilana and Lee, 2014). Thus, a clear trend towards creation of positive and lasting social and environmental outcomes that benefit the lives of people, especially those in a vulnerable situation among investors and founders can be identified.

Technological factors

With the progress and developments of technology these days, the importance and need is rising. With the residence of the Web Summit in Lisbon, Portugal has shown a great ambitious towards technology and has become a trending hub for innovative technologies. As a result, technology advance has led to many birth of start-ups in Portugal. The technological progress can also be seen as a hope to create solutions to social and environmental concerns, creating less damages and less effects on limited resources on our planet.

Environmental factors

Looking at our current climate it it no surprise that environmental factors are a driver of MAZE. With the constant climate disasters happening theses days, forest fires, flooding and many more, all caused by global warming, there is a significant need of change in all areas of practice. Humans have been consuming and taking from the planet without responsibilities and the planet is now suffering, which is shown drastically in climate change and disruption of habitats. As a result, MAZE is practicing with the responsible thought of owing the planet.

Legal factors:

With the lack of legal structure and entities for social enterprises, setting up social enterprises is a challenge. It is difficult to prove that companies are creating positive impact on society and planet.

Thus, the lack of a legal definition limits the growth of social enterprises and limits legal funding structures and capital for enterprises targeting impact.

Categories	Factors
<i>Political factors</i>	<ul style="list-style-type: none"> • Strong focus on social and environmental outcome • Global pressure to practice environmental-friendly, with responsible use of resources • Implementation of encouraging public policies
<i>Economical factors</i>	<ul style="list-style-type: none"> • Rising market attractiveness among start-ups • Increasing set-ups of impact enterprises • Lack of accurate funding opportunities
<i>Social factors</i>	<ul style="list-style-type: none"> • Rising awareness towards positive change • Changing expectations from consumers and investors
<i>Technological factors</i>	<ul style="list-style-type: none"> • Annual residence of Web Summit • Hub for innovative technology
<i>Environmental factors</i>	<ul style="list-style-type: none"> • Global warming causing environmental disasters • Resource short-cuts
<i>Legal factors</i>	<ul style="list-style-type: none"> • Lack of legal entities • Lack of legal policies

Table 8: PESTEL Analysis

To sum up the analysis, it is important to realize that the Portuguese market is well-established and sets the right ground for impact ventures to rise, as a result capital and accelerators are needed, however not given, and as Antonio Miguel puts it: “There was the need, there were a lot of impact organizations that were looking for funding and there was no impact fund in the country”. Thus, MAZE was convinced that is it the right move to establish an impact investing firm in Lisbon and make impact investing the biggest economic opportunity of our time.

5.5.2. Teaching Question 2

How is MAZE measuring impact to ensure impactful investments into their portfolio?

To answer this question, students need to understand the impact management approach of MAZE, including the IMP framework, the extended ABC matrix and the way they calculate the required KPIs.

The Impact Management Approach

To ensure continues impact creation, MAZE is following its four-step approach to impact. The approach starts with the classification of the type of impact the business is creating, followed by the evaluation on how MAZE can contribute to the impact of the company. As a result, the business will be placed into one out of three investment instruments from MAZE: government performance, accelerator or investment. Once the business is set up in one of MAZEs' instruments, the impact will be classified on thematic area – defining the SGD the company is contributing to. The SDGs' MAZE is considering in its portfolio are: Goal 3: good health and well-being; Goal 4: quality education; Goal 8, decent work and economic growth; Goal 12: responsible consumption and production and Goal 13: climate action.

After the classification of impact contribution, the last step is the ongoing impact management, executed with the Impact Management Project and adjusted with the ABC Matrix and the calculation on impact multiplier.

The Impact Management Project

The IMP framework was designed to enable enterprises and investors to measure impact on a consensus guideline. The framework measures impact along five dimensions: what, who, how much, contribution and risk.

- What: defines the outcome of the impact; positive or negative and the importance of the outcome
- Who: defines stakeholder effected by the outcome and the level of emergency (underserved)
- How much: defines the breath of the outcome; how many stakeholders, degree of change and duration of outcome
- Contribution: defines the degree of effectiveness of the outcome, compared to what would have happened without the outcome

- Risk: defines the likelihood of a different outcome of impact than forecasted/expected

MAZE is using the framework to continuously measure the impact, instead of using a one-off measurement, that only captures the value creation at one point of time. It encompasses different impact strategies which made it possible for MAZE to adapt the framework to their own holistic approach to impact. It is widely adopted internationally and allow MAZE to include their work as a part of a global narrative.

Extended ABC Matrix

To further elaborate on the impact performance of their ventures, they decided to fine-tune the IMP framework. Thus, each project will be assessed and classified as: A – avoids harm; B – benefits stakeholders; C – contributes to solutions. Among the three classifications each letter has three more levels, whereas MAZE is now assessing the ventures they work with among a range of nine different levels (*see figure 7, p.33*). All A levels account for a negative outcome, meaning the impact will mitigate outcome, instead of creating positive impact. A minus projects will effect the well-served population, A and A plus will effect the underserved population, whereas A projects have a marginal breath of outcome, A plus projects have a deep breath of outcome. All B levels account for positive impact, with B minus effecting the well-served population, B effecting a mix and B plus the underserved population. Adding on to that, B plus projects have a marginal depth or scale breath of outcome. All C levels account for positive outcome and all targeting the underserved population, with a scale or depth breath of outcome. C minus includes a medium likelihood of risk, C medium to low and C plus low likelihood of risk. To create as much impact as possible, MAZE has up to date only worked with projects classified B (benefits stakeholders) or C (contribution to solutions).

The extended matrix allows MAZE to account for diversification of the ventures they are having in the portfolio and understands the different impact strategies, while allowing for a combination of strategies. It provides a more detailed and actionable overview on how the ventures are delivering impact and how to design the best infrastructure for the ventures to develop, grow and perform towards higher positive change.

Impact Multiplier and Impact Portfolio Goal

To take into consideration the remuneration factor, MAZE established metrics that are quantifiable to present to the Advisory Board. As a result, the *Impact Multiplier* was developed, the ratio between the target goals established at the time of investment and the performance at the time of calculation.

Thus, for each project an annual target goal needs to be established and at the time of the calculation the actual performance of the project will be divided by the forecasted target goal. Subsequently, this calculation will provide the *Impact Multiplier* for a project. To account for the whole portfolio MAZE is looking at the *Impact Portfolio Goal*, the weighting of the impact multiple of each venture with the capital invested in each venture. In other words, the impact multipliers from all ventures added up together and divided by the capital invested in all ventures.

The Impact Portfolio Goal serves for remuneration purposes, since only an Impact Portfolio Goal equal to or above 60% will grant MAZE with the entitled performance fees. This demonstrates the commitment MAZE has towards creating impact, before financial return.

5.5.3. Teaching Question 3

What are main challenges and possible improvements in MAZE impact management strategy?

To answer this questions, students need to first of all understand the impact management approach of MAZE, recapped in teaching question two. To continue with the challenges and improvements, students should develop a SWOT analysis about MAZEs' impact management strategy.

Strengths

The major strengths that can be identified from the impact management strategy MAZE is following, is the development of an approach that manage to capture a detailed overview of impact created, that provides information, that helps the project to improve the impact creation path. The continuous evaluation, ensures steady development towards the targeted outcome. The whole approach is using IMP as a foundation which, makes the approach aligned with each other, while capturing different aspects with each analysis (IMP, Extended ABC Matrix, Impact Multiplier & Impact Portfolio Goal), allowing for a deep analysis and information on population served and level of impact affected, while corresponding to KPIs, reflecting the remuneration component.

Weaknesses

The limitations of the approach results in weaknesses of the impact measurement strategy and are mostly defined by the quantitative nature of the analysis, that results in a subjective evaluation and can be considered as vague. The extensions and adaptations of the framework, that allows MAZE to capture a more detailed analysis, results at the same time in a complex analysis approach, with different analyses. Even though the analyses are building up on each other and have the same

foundation, the approach can be time-consuming and in some cases repetitive. It can also be criticised that the IMP framework might be internationally known, but the adaptation and extension of the approach is not. In addition, the result of the approach is mainly based on the impact output of the project, meaning the activities completed by the project, rather the outcome, the observed effect of the output on the population served.

Opportunities

With the continues impact evaluation from an experienced and well-equipped team like MAZE, the projects have the opportunity to steadily improve their developments and design an infrastructure tailored to an individual path of impact creation. Since the approach is providing detailed and actionable information, allowing MAZE to assess projects' diverse impact strategies. The approach allows MAZE to develop a story around the impact that is created, that makes sense and can therefore, easily be accepted and understood by external stakeholders. However, since the approach has a linkage to remuneration, it is also highly likely that investors are willing to accept and adopt this approach and takes away the sceptics from investors regarding impact investing. Furthermore, with the establishment of strong foundation, reputation and resources in the Portuguese impact investing scene, MAZE has the opportunity to continue test impact management approaches to find the most successful approach.

Threats

The threats the strategy is facing are due to the fact that the evaluation is based on mostly qualitative components, that can lead to a biased evaluation and will not be aligned and standardized among the project anymore. Additionally, the complexity of the approach and the separated analysis, can influence the outcome of the analysis in being unclear and incoherent. As well as, the fact that the IMP is internationally accepted, does not include the fact that the adaptation of the ABC Matrix and the impact multiplier will be accepted on international dimensions or even domestic. However, despite all these threats, one of the major concern of the Managing Director, Antonio Miguel is that the approach only ends up measuring output and the real outcome remains unknown.

<i>Regions</i>	<i>Objectives</i>
<i>Strengths</i>	<ul style="list-style-type: none"> • Thematic classification (Clear defined impact goal, helps to assess the breath of impact created) • Ongoing and continuous impact measurement • IMP internationally adopted (globally consensus guideline) • Extension of the ABC Matrix, allows for a deeper analysis on nine levels, with more detailed overview and clearer actionable roadmap • Takes into consideration the diversity of the ventures • Including quantitative component, with reference to is remuneration factor
<i>Weaknesses</i>	<ul style="list-style-type: none"> • The whole measurement approach is mostly quantitative and subjective • Complex analysis, since one framework can not cover the necessary attributes of impact measurement • IMP framework serves as global narratives, but the adaption and extension is not globally known and accepted • Measuring output, but not outcome
<i>Opportunity</i>	<ul style="list-style-type: none"> • Steady improvements of projects infrastructure to ensure impact • Easily understood by external stakeholders • Accepted and adopted by investors • Resources to test best approach
<i>Threats</i>	<ul style="list-style-type: none"> • Biased evaluation of the impact created • Unclear and incoherent analysis • Not accepted by global and international stakeholders • Losing focus on outcome, due to only measurement on output

Table 9: SWOT Analysis

Evaluation

Putting the factors of the analysis into comparison, it can be summed up that MAZE has to *take advantage of the opportunities* they are facing, by continue testing and improving their impact management approach, making use of all its capabilities and resources. By *reducing the weaknesses* of the biased and complex analysis approach, *new opportunities* like the acceptance of the approach among external stakeholders and investors can be focused on. It is crucial to *avoid threats*, by make sure to run the assessments and evaluation as unbiased as possible and make a clear and coherent

analysis, by strictly following the established metrics, as this also supports the *minimization of weaknesses*.

	<i>Strengths</i>	<i>Weaknesses</i>
<i>Opportunities</i>	Taking advantage of the opportunities	Introducing new opportunities by reducing weaknesses
<i>Threats</i>	Avoiding threats	Avoiding threats by minimizing weaknesses

Table 10: SWOT Comparison Matrix

As a conclusion, the challenge MAZE facing are the difficulties in conducting an analysis with objective values, resulting in a qualitative outcome (Maas and Liket, 2011), as well as, finding an approach that is globally accepted as unique standards (Salazar et al., 2012). Thus, MAZE needs to continue testing the approaches and make use of their resources. However, its' current approach can be considered as well-established and captures essential metrics, that leads to a detailed overview. To add on their approach, it can be suggested that MAZE is developing an integrated approach that captures the metrics the IMP framework, extended ABC metrics and impact multiplier in one impact management approach, to make the evaluation process more straight forward. It can also be suggested that MAZE will add metrics into their analysis, limiting missing details in the analysis.

5.6. Discussion Wrap-up

To wrap-up the discussion, the instructor is recommended to use the last 10 minutes to sum up and conclude the outcomes of the assignment questions and analyses, leaving the students with main takeaways of the case. This can be done by reviewing each of the three questions, highlighting the importance of the findings and how it can be related to the MAZEs' performance.

In the end, students should be able to understand the impact investing market MAZE is practicing in and its main driver, as well as, understanding MAZEs approach to manage impact, the challenges of it and the reason why it is difficult to develop a standardized impact measurement strategy. Assignment question three leaves room for the students to be creative and think-out-side the box, when proposing improvements of the impact management approach, testing the understand of the student, with respect to the challenges.

6. Conclusion

The purpose of the dissertation was to understand how impact investing can keep its promise of social and environmental impact. On this account, the dissertation used a real-life example, to demonstrate how greater impact performance can be ensured by investing into impact and what influences the outcome. The use of a real-life case enabled the analysis of the main drivers of MAZE and the impact management strategy. To gain an informative perspective for the analysis interviews with experienced stakeholder were executed, relevant literature was reviewed and conceptual framework, like SWOT and PESTEL analysis were applied.

The main drivers to start practicing impact investing in Portugal was analysed with the framework of PESTEL. It became evidential that Portugal has an attractive market for impact ventures to be established, leading to the fact that supporting instrument like acceleration programs and funding is needed, however still underdeveloped. Given that opportunity MAZE has established itself as one of the major player in the Portuguese impact economy, with a well-developed approach to manage impact. The approach they are following is based in the global narratives of the framework of IMP. However, to account for a deeper assessment of impact, they adopted their own metrics, considering a clearer identification of populations served and level or breath of impact effected, while accounting for remuneration of the investment. This approach leaves MAZE with a more detailed and actionable overview on how projects are delivering impact. However, with the adaptation of own metrics, the approach is loosing its globally accepted narratives. Further limitations of the approach that needs to be considered, are the complexity and subjective characteristic of the analysis, which easily leads to incoherent and biased conclusion. Nonetheless, it will never be possible to capture an assessment of all the details of impact. MAZEs' approach is an example of how impact can be managed among different ventures in different industries to make it mostly tangible and comparable. MAZEs' task is now to exploit their resources to continue test and develop approaches to minimize limitations and to be able to provide information on how to design infrastructure for projects to grow impact creation.

The case demonstrated that the market is developed for social enterprises to rise and that the interest and engagement from public policies is given. But most importantly, it shows that it is possible to set standards and manage impact accordingly to develop individual roadmaps for projects to grow and perform towards higher positive change. As well as, the possibility to link remuneration to impact created, with a quantified key performance index, to capture the outcome of invested capital. Thus, it can be concluded that impact measurement is definitely a challenge, based on its subjective attributes,

however the case illustrated a good example on how impact measurement strategies can be developed and have an impactful outcome on advancing impact creation.

The dissertation raises some limitations in methodology used and data collected, since the research is based on qualitative data, which only provides a vague basis for scientific generalization (Yin, 1994). As well, as the fact that the case study is limited to a single market and a single impact investing company, this research may not be applicable to all impact investing companies or social enterprises. For further research of the practice of impact investing and impact measurement, an analysis of the actual impact measurement outcome from a portfolio or individual projects should be developed, can be suggested, in order to see and understand the actual outcome of the impact management approach.

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8. Appendices

Appendix 1: Interview Script

Appendix 1.1: Interview Script for MAZEs' Employees

1. Introduction
 - 1.1. Can you quickly introduce yourself and your company?

2. Impact Economy
 - 2.1. What was your main driver to start an impact investing fund?

3. Investment Strategy
 - 3.1. Where do you get your leads from?
 - 3.2. How do you access the fit and what are your investment criteria's?
 - 3.3. What business models do you invest in?
 - 3.4. Do you do follow up investments? How much do you save for it?
 - 3.5. Do you achieve your targeted return of 20% IRR/ 3.0x MOIC?

4. Impact Performance Measurement
 - 4.1. What objectives do you measure your performance on?
 - 4.2. Why did you decided to use IMP?
 - 4.3. What is your main challenge to measure and report impact?
 - 4.4. How important do you think is the tangibility of impact performance?

5. Conclusion
 - 5.1. What do you want to see more from founders?
 - 5.2. How do you think will the industry develop?
 - 5.3. Where do you see MAZE in the next few year?

Appendix 1.2: Interview Script for Founders

1. Introduction

1.1. Can you quickly introduce yourself and your company?

2. Impact Economy

2.1. What was your main driver to start a social enterprise?

2.2. Why did you decided to found in Portugal?

3. Financing Source

3.1. What was your first capital source?

3.2. How is the public sector supporting your social enterprise?

3.3. Would you consider funding from a VC?

3.4. What is your highest challenge in receiving funding?

4. Impact Performance Measurement

4.1. How are you measuring the success of your company (methodology)?

4.2. At which stage did you start measuring your impact?

4.3. How regularly are you measuring impact?

4.4. Can you recognize a correlation between impact created and financial performance?

4.5. How is measuring impact effecting your performance overall?

4.6. What is your main challenge to measure and report impact?

5. Conclusion

5.4. How do you think will the industry develop?

5.5. Where do you see your company in the next few years?

Appendix 2: Examples of PESTEL factors

Source: own illustration

<i>Categories</i>	<i>Factors</i>
Political factors	Employment & operational laws, Government leadership, Trade restrictions or reform, Tax regulations, Corruption levels, Bureaucracy issues, Stability of neighbors
Economical factors	Finance & Credit, Cost of living, GDP, Globalization, Inflation, Working practices
Social factors	Lifestyle Attitudes & beliefs, Social mobility Education, Demographics, Ethic & religion, Historical issues, Cross-cultural communications
Technological factors	Use of outsourcing, Research & development, Knowledge management system, Network coverage, Production efficiency, Quality & Pricing, Intellectual property, Government activity & legislation
Environmental factors	Infrastructure, Cyclical weather, Energy availability & cost, Social implications, Disposal of materials, Ecological consequences, Legislation, Contamination
Legal factors	Taxation, Employment, Consumer, Advertising, Import & Export, Health & Safety, Compliance, Regulatory bodies

Appendix 3: Process of Data Analysis in Thematic Analysis

Source: Braun & Clarke, 2006

Analysis phases	Description
<i>Familiarising with data</i>	Transcribing data, reading and rereading the data, noting down initial ideas.
<i>Generating initial codes</i>	Coding interesting features of the data systematically across the entire data set, collating data relevant to each code.
<i>Searching for themes</i>	Collating codes into potential themes, gathering all data relevant to each potential theme.
<i>Reviewing themes</i>	Checking if the themes work in relation to the coded extracts and the entire data set, generating a thematic map
<i>Defining and naming themes</i>	Ongoing analysis for refining the specifics of each theme and the overall story that the analysis tells, generating clear definitions and names for each theme.
<i>Producing the report</i>	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a report of the analysis.

Appendix 4: The Categories of IMP

Source: IMP, 2022

Enterprises and investors can assess their impact performance by assessing and reporting 15 categories of data

Impact dimension	Impact data category	Description
□ What	1. Outcome level in period	The level of outcome experienced by the stakeholder when engaging with the enterprise. The outcome can be positive or negative, intended or unintended.
	2. Outcome threshold	The level of outcome that the stakeholder considers to be a positive outcome. Anything below this level is considered a negative outcome. The outcome threshold can be a nationally or internationally-agreed standard.
	3. Importance of outcome to stakeholder	The stakeholder's view of whether the outcome they experience is important (relevant to other outcomes). Where possible, the people experiencing the outcome provides this data, although third party research may also be considered. For the environment, scientific research provides this view.
	4. SDG or other global goal	The Sustainable Development Goal target or other global goal that the outcome relates to. An outcome might relate to more than one goal.
○ Who	5. Stakeholder	The type of stakeholder experiencing the outcome.
	6. Geographical boundary	The geographical location where the stakeholder experiences the social and/or environmental outcome.
	7. Outcome level at baseline	The level of outcome being experienced by the stakeholder prior to engaging with, or otherwise being affected by, the enterprise
	8. Stakeholder characteristics	Socio-demographic and/or behavioural characteristics and/or ecosystem characteristics of the stakeholder to enable segmentation
≡ How Much	9. Scale	The number of individuals experiencing the outcome. When the planet is the stakeholder, this category is not relevant.
	10. Depth	The degree of change experienced by the stakeholder. Depth is calculated by analysing the change that has occurred between the "Outcome level at baseline" (Who) and the "Outcome level in period" (What).
	11. Duration	The time period for which the stakeholder experiences the outcome
+ Contribution	12. Depth counterfactual	The estimated degree of change that would have happened anyway - without engaging with, or being affected by, the enterprise. Performance of peer enterprises, industry or local benchmarks, and/or stakeholder feedback are examples of counterfactuals that can be used to estimate the degree of change likely to occur anyway for the stakeholder.
	13. Duration counterfactual	The estimated time period that the outcome would have lasted for anyway - without engaging with, or being affected by, the enterprise. Performance of peer enterprises, industry or local benchmarks, and/or stakeholder feedback are examples of counterfactuals that can be used to estimate the duration likely to occur anyway for the stakeholder.
△ Risk	14. Risk type	The type of risk that may undermine the delivery of the expected impact for people and/or the planet. There are nine types of impact risk.
	15. Risk level	The level of risk, assessed by combining the likelihood of the risk occurring, and the severity of the consequences for people and/or the planet if it does.