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# **Benefits Realization Management: Social Impact Analysis**

#### **ABSTRACT**

The Social Impact Assessment and Benefits Management is commonly measure in Social Communities intervention plans. Although, it's combined use lacks from a methodology or framework which can assist in measuring those benefits and impacts. To achieve this, a Business Case Tool has been applied in order to measure the benefits and Social Toolkit has been developed to assist the social impact. The results of these measures provided a substantial incremental in terms of Benefits Measurements and Social Impact Assessment in the social impact assessment of the "Community Intervention of Proximity" initiative, which aims to support families affected by poverty and / or victims of social exclusion. The results have shown that has been a decrease in social exclusion and poverty reduction for needy families.

**Keywords**: Social Impact; Benefits Management; Social Impact; Intervention; Business Case Tool

#### 1. INTRODUCTION

Nowadays the Social Impact Assessment is a framework which is widely used by several communities or institution in order to measure it's impact and benefits in social community (Mahmoudia et al., 2013). The two main goals of Social Impact Assessment according to Finsterbusch (1977) are assisting decision making by determining the full range of costs and benefits of a proposed action; Improving the design and administration of policies in order to mitigate disadvantages and increase benefits. Although the social impact and it's efficiency it is rather a more complex category and is difficult to express in one dimension (Terziev, 2019) than benefits measurement, the adoption of these two approach provide an added value to a community proximity intervention than only a social or even a economic evaluation. Thus, it's crucial to provide several different approaches to measure the social impact assessment in a Proximity Community Intervention. The development and application of the Business Case Tool has been a crucial improvement in terms of Benefit Measurement applied to the benefits of social intervention and a different approach measure the social impact assessment since it provides a clear overview and a reducing the rate of uncertainty and facilitating the process of evaluating a project before, during and after its implementation.

The "Proximity Community Intervention" initiative appears as a response to families affected by poverty and/or excluded from social exclusion, with the main concern about families that do not isolate under the support systems of the Portuguese State. Given the context of the past economic crisis (Dias et al., 2021), it is possible to state that there was an increase in social needs related to situations of material and financial need due to current social situation of the area where this institution it's located. This initiative aims to promote collaboration, improve social interaction, increase productivity, and to improve organizational performance among several organisations (Dias et al., 2020; Millen et al., 2002).

This paper has the objective of providing inputs based in a Business Case methodology in order to contribute and develop sustainable measures in terms of benefits and cost reduction to needy families and the decrease the social exclusion of these families affected by poverty. In this paper it has been applied several methods such as Business Case Tool (BC Tool) and it has been developed a toolkit to measure the Social Impact of benefits management and cost reduction in the adoption of new metrics in a social institution named Cáritas Diocesana de Lisboa based in the Social Return of Investment (S-ROI).

The article is structured as follows. The next section is dedicated to the literature review. Section three details the methodology and the case study procedures. Section four presents the results and provides a discussion of the main findings. Finally, section five presents the

theoretical conclusions and limitations and future research.

## 2. LITERATURE REVIEW

## 2.1. The community's engagement and social impact concept

The community's engagement and social impact is mentioned by several authors (Milton et al., 2012; Popay et al., 2015; Esteves et al., 2012). There focus is to measure how the support to families affected by poverty and / or to evaluate their social exclusion has been conducted due to social impacts and benefits available to measure it.

The Social impact Assessment is defined as being the process of managing the social issues of development with planned interventions (Esteves et al., 2012). The practice of Social Impact Assessment (SIA) may be seen as the process of providing evidence that an organization is providing a real and tangible benefit to the community or the environment (Grieco et al., 2015). This assessment linked to social community proximity is based in the need of evaluating the social needs from the community focused in scenario of families affected by several needs, which will be defined in the next paragraph. Although assessing that impact is difficult when approaches to community engagement vary so widely (Bolam et al., 2006) and are quantified based in different clusters since the fact that organizations differ in size, capacity, activities, and focus (Grieco et al., 2015).

The social impact assessment in institutions like Cáritas Diocesana de Lisboa, described in 2.2 – table 1, is measured using different frameworks in order to evaluate, properly, their social impact. For instance, the author Sureau et al., (2018) proposed 14 distinct Social Life-cycle Assessment of Products (S-LCA) frameworks, for which we propose a classification according to the rationale behind the definition and selection of Criteria and Indicators (C&I): value-based, context-oriented, theory-structured, impact-based, and applicability-oriented. Another author, Haaster et al., (2016) developed a framework based on four categories and 11 indicators and following a life-cycle perspective. The author Fontes et al., (2016) proposes a practical method for organisations to assess the social impacts of a product or a service along its life cycle. According to Pereira and Santos (2020) the analysis must follow a Problem-Solving analysis to capture the benefits based in past knowledge of the company (Pereira et al., 2021; Costa et al., 2020).

#### 2.2. Social Institution Cáritas Diocesana de Lisboa

The Cáritas network is constituted, in Portugal, by twenty Diocesan Caritas, united in Portuguese Caritas, and countless local groups that work in proximity, in parishes and communities. Although they belong to the same network not all act in the same services or even have the same social benefits from the Portuguese Government due to the number of people they have or type of support. This network supports the following services (table 1):

1 – Health	2 – Housing	3 – Teaching	4 – Work
5 – Income	6 – Social Orientation	7 – Basic Needs, materials and services	8 – Migrants Legalization
9 – Other Support to Migrants	10 – Elderly	11 – Childhood	12 – Social Services
13 – Domestic Violence	14 – Homeless	15 – HIV	16 – Drug Addiction
17 – Migrations	18 - Formation	#	#

Table 1 – Caritas Network Services
Source: the authors

Caritas wants to be a witness of the fraternity of the Christian community towards the poorest through the Social Action of the Church that builds a solidary and participatory society. As such justice, peace, freedom and solidarity prevail in the service of human dignity. Portuguese Caritas is based in the following values: Centrality and dignity of the human person; Equal opportunity; Social Opinion; The care of creation; The universal destiny of earthly goods; Solidarity; Subsidiarity, cooperation and fraternal communion. This institution is enrolled in several funding projects (Diocesan Sharing Fund, Priority to children, Dignity ABEM) with the objective of helping communities and have several services such as Solidarity store, Caritas Week, Social Service, Collection of school supplies, peace initiatives and formation. The institution selected for this work, in terms of benefits provided to the supported services, was Cáritas Diocesana Lisboa. This institution acts in this social aspect throughout the district, in full and strong articulation with the Diocese. This is a non-profit entity, whose objective is to testify to the fraternity of the Christian community towards the poorest through the Church's Social Action, which builds a solidary and participatory society, where justice, peace, freedom and solidarity in the service of dignity. This institution provides support to the

following services: Elderly; Childhood; Social Services and Domestic Violence.

# 2.3 Benefits Management in Social Institutions

The concept of Benefits Management is linked with the target benefits as strategic project goals that following project completion will enhance organizational performance (Zwikael et al., 2018). The objective of measuring the benefits management of a social institution aims to provide crucial information to the Business Case during the product, service or process exploitation period. This step is of high value as it allows the organization to not only measure the quality of the investment in the decision-making process, as well as identify new investment opportunities to add continuous value to the organization (BCBOK, 2015). A correct and successful approach of analysis of organizational project benefits management makes it possible to determine the importance of criteria and the ability to evaluate the options to be decided (Hamidi, 2017).

Although the concept of Benefits Management has been applied to several different areas such as financial institutions (Terlizzi et al., 2017) and digital technology (Love et al., 2019) its application in Social Institutions in terms of Community Proximity Intervention is not so often measured. Thus, there's a gap in this field. Basically, the measurement intervention is not so widely used with exceptions of some authors (Renold et al., 2019 and Serra et al., 2015).

#### 2.4 Business Case Tool

The Business Case Tool is a tool that allows the analysis of investment initiatives based in a Business Case methodology, which can be applied to several different markets, areas or economies (Barnett, 2019; Velenturf et al., 2019). It has been created, developed and maintained by Winning Scientific Management.

This tool has multiple components and modules (8), for instance it integrates the economic, financial, operational and strategic components in its calculations, as well as the modeling of uncertainty, integrating a level of risk or confidence at the user's choice and it is developed using machine learning algorithms such as a complex modules designated "problem solving", "benefits tracking" and "sensitive analysis". This tool guarantees their high robustness, predictability and reliability, allowing a real return on their investment initiatives, in an intelligent way, and within the respective budget. Using this tool users can profit with a decision making with a degree of confidence above 80%, alignment of its initiatives with the operational strategy and have greater agility in the evaluation of dozens of initiatives.

In terms of modules, has mentioned previously, it has 8. The Project Request; Strategic Alignment; Benefits Estimation; Cost Estimation; Economic Evaluation; Context Readiness; Decision Making and Benefits Measurement (BCBOK, 2015).

#### 2.5 Toolkit Evaluation Measurement

Within the scope of the project with Cáritas Diocesana de Lisboa, a more comprehensive toolkit was developed, which allows any Caritas to carry out an assessment of its impact, in its three areas of activity - Non-Protocol Services, Protocol Services and Training. The development of this Toolkit has been based in the Social Return on Investment (SROI). The SROI can assist in developing strategies to increase the social and environmental value that the organization creates (Pereira et al., 2021), manage activities by comparing performance with forecasts and help communicate with funders and beneficiaries (Nicholls et al., 2009). The use of SROI in organizations that have social goals and want to know if those goals are being achieved is fundamental since it ensure the information they need and demonstrate the effectiveness and efficiency of their programs (Cooney, 2014).

This toolkit is based in the following structure (figure 1).









Figure 1 – Toolkit Structure Source: the authors

From each of this fields described in figure 1 there are several variables which will be fulfilled with the information collected. For instance, the Non-Protocol Services have the following variables: Health; Housing; Teaching; Job; Income; Guidance; Basic necessities, materials and services; Migrants legalization; Migrants; other supports. The Protocol Services have the following ones: Elderly; Childhood; Social services; Domestic violence; Homeless; HIV; Drug addiction; Migrations. The formation has only the variable formation. The last field, Fixed Costs, has the variable Fixed Costs.

The indicators of SROI applied to this toolkit are present in the figure 2.



Figure 2 – SROI Contributions
Source: the authors

During and after each social action intervention, through good practices, sensitivity analysis and business case analyzes must be carried out so that there is greater reliability of the values to be analyzed.

#### 3. METHODOLOGY

The methodology was developed to reply to the following objectives: Knowledge of cases and social problems; Cooperation in finding solutions and Mediation with other entities to seek solutions. As for IIES methodologies, it is based on three main axes: Parish Social Action, Spirituality and Support Programs. For each axes it has been made a different intervention. Regarding Parish Social Action the intervention was made based in weekly visits to social action groups, with the objective of encouraging and supporting using emotional intelligence principals and self-awareness strategy. Regarding the axes Spirituality and Support Programs it has been adopted the reinforcement of support for Parochial Social Action Groups (Caritas, SSVP and others) that aim to promote and stimulate existing social action groups in parishes and help in the establishment of new socio-charitable groups in parishes where they do not yet exist. To measure this impacts it has been created a toolkit to Impact Measurement based in the Social Return on Investment (SROI).

The target population for this study were families affected by poverty and / or victims of social exclusion, with main concern about families that are not under the support systems of the Portuguese State. These families have been identified and selected from this Institution. The information gathering was conducted through semi-structured interviews allowing the parties involved to freely identify what they believe are the major constraints and strengths they face (or have encountered) at the institute.

The data were collected over a period ranging from 2018 to 2019. The year 2018 was chosen because around that year the social requests have been reached a maximum number. The final year, 2019, is the last year for which data have been collected. This time range is considered

to be sufficient for investigating the long-term impact in social proximity communities. The data was obtained from different acquisition methods, namely focus groups (with the responsible of the Carítas Lisboa (President of Caritas, Director of the Diocesan Carítas of Lisboa and Priest from the community)) with the duration of 1 hour, individual interviews with closed answers (the same actors mentioned in the focus groups) and online inquires (email with a total of 62 valid answers). It has been defined 5 questions related with the social communities (1 - Do they Pay and transport beneficiaries to medical appointments? 2 - There is any help with bureaucratic aspects (IRS, payment of water, electricity)? 3 - Do they offer support and help to victims of domestic violence 4 – Do they Hold events to collect monetary funds? 5 – Do they collect and distribute food?) and applied to all acquisition methods. The several options to acquire data have been decided due to the fact of obtain a higher number of replies from the community.

The data acquisition for the toolkit based on the SROI has been based in the 7 principles defined by the author Nicholls et al., 2009. Which are the following ones:

- 1 Involve stakeholders: Whoever is the beneficiary or is involved in the initiative must be involved in the planning of benefits (what is medical and how it is measured);
- 2 Understand what changes for these stakeholders: identify and explain the rationale for change, as well as collect evidence of positive and negative change;
- 3 Valuing what matters (also known as the "monetization principle"): Need to recognize the values of stakeholders, where value refers to the relative importance of different results and is informed by stakeholder preferences;
- 4 Include only what is material: To measure SROI, determine what information and evidence should be included in the accounts to provide a true and fair picture, in order to define conclusions about the impact generated by the initiative;
- 5 Do not demand too much: Ensure that the results (value) presented reflect the values of the activities responsible for creating them, and no more;
- 6 Transparency: Demonstrate the basis and justification used for the analysis, to support an accurate and reliable process;
- 7 Check the result Avoid biased data or subjectivity, guarantee team impartiality.

In summary, Table 2 will present the objective of the study, the four research questions that are inherent to them and, the basic literature review with which it is intended to discuss the results of this investigation.

Objetivo	Questões de Pesquisa	Revisão de Literatura
OBJ 1 - Provide inputs based on a Business Case methodology that demonstrates the contribution of a tool that can contribute to the development of sustainable measures in	(Q1). Can SROI tool assist in developing strategies to increase the social and environmental value that organizations can create?  (Q2). Does the SROI tool enable better activity management in order to compare the performance obtained with the forecasts?  (Q3). Can the SROI tool help to communicate more efficiently with funders and beneficiaries?	Nicholls et al., (2009),
terms of benefits and cost reduction to families in need	(Q4). Can the use of SROI in organizations of a social nature allow them to understand whether their objectives are being achieved, as well as demonstrate their perception concerning the effectiveness and efficiency of their programs?	Cooney, 2014

# 4. PRESENTATIONS AND DISCUSSION OF RESULTS

The results obtained with the Business Case Toolkit are presented in the next tables (2, 3, 4 and 5). These tables represent the type of services provided by this institution (mentioned previously), there activities (described in each table) and the total number of patients. It also represents the benefits, total amount of benefits per patient and the cost, which indicates the total value in euros provided by the Portuguese Government to each activity with patients. It's important to mention that not all activities have patients as described in the following tables. Thus, the benefits and costs are only estimated for the activities with patients. In terms of calculations Total Benefits are obtained by the following equation:

Benefits  $*N^{\circ}$  of Patient's

The cost is obtained using the following equation:

# Cost per Activity \* Cost of Structure

The cost of the structure existing in the institution it's measured based in the following fields (Cost of goods sold and materials consumed; Supplies and external services; Staff costs; Depreciation and amortization expenses; Impairment losses; Losses due to reduction of fair value; Provisions for the period; Other expenses and losses; Social support granted; Other expenses and losses; Financing expenses and losses).

In table 3, the Elderly service, provided by Carítas Lisboa, has only 3 patients, thus the total amount of benefits are 9,396 euros. There's no costs with this activity reported. The activities described in table 3 are well explained in the next paragraphs:

- The unit value of the benefits with Home Support Service corresponds to the financial contribution paid by social security to Private Social Solidarity Institutions or legally equivalent (261 € monthly) Source: OneValue;
- The unit value of the benefits with the Social Center corresponds to the financial contribution paid by social security to Private Institutions of Social Solidarity or legally equivalent (55 € monthly) Source: OneValue;
- The unit value of Day Care benefits corresponds to the financial contribution paid by social security to Private Social Solidarity Institutions or legally equivalent (113 € monthly) Source: OneValue;
- The unit value of the Night Center benefits corresponds to the financial contribution paid by social security to Private Social Solidarity Institutions or legally equivalent (€ 274 monthly) Source: OneValue;
- The unit value of the benefits with Family Reception corresponds to the amount paid per stay in a home ( $\epsilon$  6,600 annually) Source: DECO;
- The unit value of the benefits with residential structures corresponds to the financial contribution paid by Social Security to Private Social Solidarity institutions or legally equivalent (383 € monthly) Source: OneValue;
- The unit value of the benefits with the Holiday and Leisure Center corresponds to the average cost per family in Leisure, Recreation and Culture (1,919.3 € per year) Source: INE, Pordata.

Elderly						
Activities	Benefits (€)	Patients	Costs (€)	Total Benefits (€)		
Home Support Service	261,00	3	0	9.396		
Social Center	55,00	0	0	0		
Day care	113,00	0	0	0		
Night center	274,00	0	0	0		
Family care	550,00	0	0	0		
Residential Structures	383,00	0	0	0		
Holiday and leisure center	159,94	0	0	0		

Table 2 – Elderly Activities

Source: the authors

The Childhood (table 3) is one of the main activities which has the highest benefits per patients and cost for each item that, in this case, are only 2 (Nursery and Preschool education establishment). The costs are higher than the benefits which means in this service there is a negative impact because the costs are higher than the benefits. The detailed description of the activities are described next:

- The unit value of the benefits with Early Childhood Intervention, Day Care (Nursery) and Preschool Education Establishment correspond to the average cost of children in day care (€ 265 monthly) Source: OneValue;
- The unit value of the benefits with the Leisure Activity Center corresponds to the average value of costs with ATL (3,796 € per year) Source: 4Change Report;
- The unit value of the benefits with the Holiday and Leisure Center corresponds to the average cost per family in Leisure, Recreation and Culture (€ 1,919.3 per year) Source: INE, Pordata.

Childhood

Activities	Benefits (€)	Patients	Costs (€)	Total Benefits (€)
Early childhood intervention	265,00	0	-	-
Nursery	265,00	35	127 134,39	111 300,00
Preschool education establishment	265,00	37	109 939,03	117 660,00
Leisure activities center	316,33	0	-	-
Holiday and leisure center	159,94	0	-	-
Other	265,00	0	-	-

Table 3 – Childhood Activities

Source: the authors

The table 4 represents the Social Services Activities. In these Social Services the number of patients is considerable high (489), which represents the social patterns where this center is located and the needs from the social community. In these table the benefits are higher than the cost, thus there is a positive impact in terms of benefits in this activity. The activities are the following ones:

- The unit value of the benefits with Social Assistance and Monitoring, Self-help group, community center, life support center and insertion community at the average cost of a psychiatric consultation in a day hospital (€ 60 monthly) assuming that there are two consultations per month Source: OneValue;
- The unit value of the benefits with the Holiday and Leisure Center corresponds to the average cost per family in Leisure, Recreation and Culture (€ 1,919.3 per year) Source: INE, Pordata;
- The unit value of the benefits with the Reception Center / Home corresponds to the annual amount paid per stay in a home (€ 6,600 annually) Source: DECO;
- The unit value of the Food benefits corresponds to the cost of school meals (€ 32.12 monthly) Source: Diário da República, 2nd series No. 148 July 31, 2015, August 17;
- The unit value of the benefits with food aid corresponds to the average cost per family in Food, beverages and tobacco (6 260,50 € per year) Source: INE, Pordata.

Social Services						
Activities	Benefits (€)	Patients	Costs (€)	Total Benefits (€)		
Service and social support	60,00	489	198 837,44	352 080,00		
Self-help group	60,00	0	-	-		
Community Center	60,00	0	-	-		
Holiday and leisure center	316,33	0	-	-		
Social Canteen	0	0	-	-		
Life Support Center	60,00	0	-	-		
Insertion community	60,00	0	-	-		
Temporary Housing Center	550,00	45	101 617,93	297 000,00		
Food Aid	521,71	0	-	-		
Other	0	0	-	-		

Table 4 – Social Services Activities

Source: the authors

The last measured service is presented in table 5. For these services the costs are considerable high compared with the benefits, which means the need to increase the benefits for each patient. The total number of patients regarding this service is worrisome and represents the need for these types of Association to be present and near social excluded areas. The description of the activities is the following one:

- The unit value of the benefits with the Call Center corresponds to the average cost of a psychiatric consultation in a day hospital (60 € monthly) assuming that two consultations are carried out per month Source: OneValue;
- The unit value of the shelter benefits corresponds to the amount paid per stay in a home ( $\in$  6,600 annually) Source: DECO.

Domestic Violence						
Activities         Benefits (€)         Patients         Costs (€)         Total Benefits (€)						
Call Center	60,00	303	52 904,86	18 180,00		
Shelter	550,00	0	0	0		
Other	0	0	0	0		

Table 5 – Domestic Violence Activities
Source: the authors

To summarize these tables (2, 3, 4, 5) it's presented the final results in table 6 in terms of benefits, costs and SROI. Measured the benefits and the costs, it is important to check which SROI originates from the social intervention. In this way, it will be possible to perceive the social value arising from IIES. The toolkit developed by the authors based in the SROI concept and to measure the benefit provided by each invested euro was calculated based in the following formula presented in the figure 3:

Figure 3 – SROI Toolkit formula

The results of SROI in table 6 (obtained based in the equation available in figure 3) indicates that, for each euro invested in the Childhood services there is a return of  $\in$  0,47, for each euro invested in Social Services there is a return of  $\in$  2,16 and for the service "Domestic Violence" there is a return of  $\in$  0,34. In the service Elderly it hasn't possible to measure the SROI due to the absent of costs measurements.

Service	Benefits (€)	Costs (€)	SROI (€)
Elderly	9 396	-	-
Childhood	228 960	237,073	0,47

Social Services	649 080	300,455	2,16
Domestic Violence	18 180	52,905	0,34
Total	905 616	835,623	1,08

Table 6 – Social Benefits for each service Source: the authors

The next tables represent the SROI obtained for each service except the service "Elderly" since it did not have a SROI result due to the absence of measured costs. The SROI calculated for the service Childhood (table 7) have a low average between the different confidence level. The SROI benefit for each euro invested for Confidence of 99% and a low risk of 1% is € 0,13. This low value, although positive, is due to critical difference between the costs and the benefits. For a confidence level of 1% and risk 99% is obtained 1,13 euros for each euro invested.

Risk (%)	Benefits (€)	Costs (€)	Confidence (%)	SROI (€)
1	82 997	633 962	99	0,13
5	125 756	589 522	95	0,21
10	148 551	565 832	90	0,26
15	163 930	549 848	85	0,30
20	176 154	537 144	80	0,33
25	186 640	526 246	75	0,35
30	196 057	516 459	70	0,38
35	204 784	507 389	65	0,40
40	213 064	498 783	60	0,43
45	221 076	490 457	55	0,45
50	228 960	482 263	50	0,47

55	236 844	474 069	45	0,50
60	244 856	465 742	40	0,53
65	253 136	457 136	35	0,55
7	261 863	448 067	30	0,58
75	271 280	438 280	25	0,62
80	281 766	427 381	20	0,66
85	293 990	414 678	15	0,71
90	309 369	398 694	10	0,78
95	332 164	375 003	5	0,89
99	374 923	330 563	1	1,13

Table 7 – SROI Childhood Source: the authors

In table 8 is presented the SROI Social Services. In this table the SROI is considerable positive in terms of social return due the fact that his higher than 1 euro of investment until the confidence level of 90% and a risk of 10%, thus the benefits obtained with the service Social Services are substantial beneficial.

Risk (%)	Benefits (€)	Costs (€)	Confidence (%)	SROI (€)
1	314 622	464 608	99	0,68
5	412 600	416 520	95	0,99
10	464 832	390 884	90	1,19
15	500 072	373 588	85	1,34
20	528 080	359 842	80	1,47

25	552 109	348 049	75	1,59
30	573 687	337 458	70	1,70
35	593 683	327 644	65	1,81
40	612 656	318 332	60	1,92
45	631 014	309 322	55	2,04
50	649 080	300 455	50	2,16
55	667 146	291 588	45	2,29
60	685 504	282 579	40	2,43
65	704 477	273 266	35	2,58
70	724 473	263 453	30	2,75
75	746 051	252 862	25	2,95
80	770 080	241 069	20	3,19
85	798 088	227 322	15	3,51
90	833 328	210 026	10	3,97
95	885 560	184 391	5	4,80
99	983 538	136 303	1	7,22

Table 8 – SROI Social Services Source: the authors

In table 9, the SROI for the activity "Domestic Violence" the return of the investment is the lowest from the all services measured in this study. For a 99% confidence level the return is only  $\in$  0,08 for each 1 euro invest. By the contrary and with a higher level of risk 99% the return will be  $\in$  1,41 a considerable low value compared with the other services.

Risk (%)	Benefits (€)	Costs (€)	Confidence (%)	SROI
1	11 726	139 932	99	0,08
5	2 965	114 438	95	0,03
10	1 705	100 847	90	0,02
15	4 856	91 677	85	0,05
20	7 361	84 389	80	0,09
25	9 509	78 137	75	0,12
30	11 439	72 522	70	0,16
35	13 227	67 319	65	0,20
40	14 923	62 382	60	0,24
45	16 565	57 606	55	0,29
50	18 180	52 905	50	0,34
55	19 795	48 204	45	0,41
60	21 437	43 427	40	0,49
65	23 133	38 490	35	0,60
70	24 921	33 287	30	0,75
75	26 851	27 673	25	0,97
80	28 999	21 420	20	1,35
85	31 504	14 133	15	2,23
90	34 655	4 963	10	6,98
95	39 325	8 628	5	4,56

99	48 086	34 122	1	1,41

Table 9 – SROI Domestic Violence Source: the authors

The overall services SROI ratio obtained by the intervention "Community Intervention of Proximity" assumes a value of  $\in$  0,29 with a 95% confidence level (table 10). This value means that for every euro invested in the intervention, it generates a return of  $\in$  0,29 of social value with 1% of risk, thus it's almost certain that  $\in$  0,29 is obtained for each euro. The accuracy attributed to the results derived can be no better than the accuracy inherent in the 3 initial points, and there are clear dangers in using an assumed form for an underlying distribution that itself has little basis. In this practical application of the three-point estimate, through the obtained results in table 8 it is possible to verify that for a level of confidence between 80% and 99% the variation of the benefits value is considerable low with a small variation of  $\in$  0,43. With a Risk of 99% the return of investment is  $\in$  3,55 for each invested euro.

Risk (%)	Benefits (€)	Costs (€)	Confidence (%)	SROI
1	369 597	1 264 911	99	0,29
5	526 621	1 139 153	95	0,46
10	610 33	1 072 111	90	0,57
15	666 809	1 026 879	85	0,65
20	711 696	990 930	80	0,72
25	750 205	960 089	75	0,78
30	784 788	932 392	70	0,84
35	816 833	906 727	65	0,90
40	847 242	882 374	60	0,96
45	876 662	858 812	55	1,02

50	905 616	835 623	50	1,08
55	934 570	812 434	45	1,15
60	963 990	788 872	40	1,22
65	994 399	764 519	35	1,30
70	1 026 444	738 854	30	1,39
75	1 061 027	711 158	25	1,49
80	1 099 536	680 316	2	1,62
85	1 144 423	644 367	15	1,78
90	1 200 901	599 135	10	2,00
95	1 284 611	532 094	5	2,41
99	1 441 635	406 336	1	3,55

Table 10 – SROI Overall Source: the authors

In the figure 4 is presented the evolution of the SROI – S Curve for each confidence level. The information description is available in table 10. For each increasing level of confidence, the benefits obtained for each euro invested decreases. It's important to point out that, the figure 4 represents the overall S-ROI for the available information of the 4 services described previously. Thus, it's affected by the highest S-ROI value from the Social services ( $\notin$  7,22) for a Confidence level of 1% and the lowest value of Domestic Violence ( $\notin$  1,41).

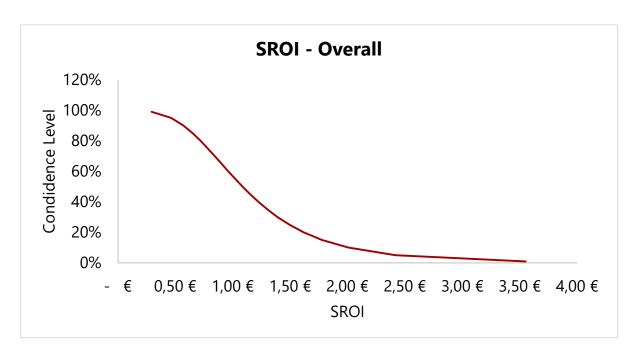


Figure 4 – SROI Overall Source: the authors

Thus, and according to Nicholls et al., (2009), we can observe that the Toolkit used in this research was based on the Social Return on Investment (SROI), verifying that this in fact; (1) can assist in the development of strategies to increase the social and environmental value that organizations can create, (2) in enabling a better management of activities in order to compare the performance obtained with the forecasts, as well as, (3) can help to exercise a more efficient communication with funders and beneficiaries. Similarly, it has been proven that the use of SROI in social organizations can allow them to understand whether their goals are being met, as well as demonstrate the perceived effectiveness and efficiency of their programs (Cooney, 2014).

This article had as a contribution to the state the application of this tool based on the 7 principles defined by Nicholls et al., (2009), applying it to a specific Portuguese non-profit institution, fulfilling the initially proposed objective of providing inputs based on a Business Case methodology that demonstrates the contribution of this same tool for the development of sustainable measures in terms of benefits and cost reduction for needy families and for the reduction of social exclusion of these same needy families.

# 5. CONCLUSIONS

#### 5.1. Theoretical contributions

The study of Social Impact Assessment in Proximity Communities is highly recommended since the information that can be extracted by the content of these studies can contribute significantly to increase the population benefits and welfare. The social benefits measured in this study allow to quantify the contribution of each activity in the social impact and to apply properly the incentives they have for each activity. Thus, this institution can define properly it's policies and support more precisely the population that requires the social support.

The Business Case analysis has proved an added valuable tool since it allows a considerable benefit for the foundation. Besides the measurement benefits this work allowed to collect several inputs as added value for several different social services. These inputs aim to increase the level of efficiency of these services and provide a considerable increase of the provided services.

In terms of benefits, the adoption of the BC Tool allowed to extract several intangible and tangible benefits related with the social benefits since the efficiency increase or cost reduction since they are expressed differently over time. Thus, the efficiency measurements are considerable better and provide a different overview which supports several different services more accurate.

#### 5.2. Limitations and Future Work

Despite its important theoretical and practical contributions for the social communities, this research suffers from some methodological limitations. It has been only analysed a Social Community in that geographical area, thus there's no comparation level to compare the services or activities between more institution. By comparing different institution, it will be possible to measure the benefits for each association and adopt better initiatives. Other limitation is the lack of Costs Assessments for the Service "Elderly" it couldn't be compared with the other services since the absence of costs measurements. Another limitation is related with the sample. Thus, future research might be including not only more than one social institution but also more stakeholders and population by using direct interviews to certain clusters of people.

This work could be completed if other social and benefits tools can be applied in order to quantify, measure and correlate different approaches for a Social Community Proximity. The use of different tools can provide a complementary outcome of the social intervention plan and benefits measurement, as suggested by Duque et al. (2020). After the development and

implementation of a prototype to test the final solution, the methodology for the roadmap (figure 5) for the implementation of the final solution is defined, with the entity's training objectives and application of the SROI calculation methodology for other entity's current IES or future.

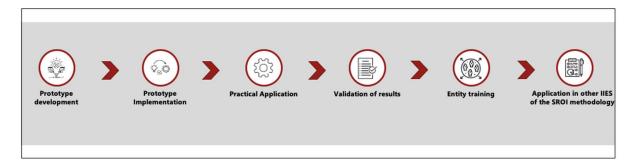


Figure 5 – Roadmap Source: the authors

#### REFERENCES

- BCBOK® (2015). A Guide to the Business Case Body of Knowledge. BCI (Business Case Institute). 2<sup>th</sup> edition. Pa: Business Case Institute.
- Barnett, M. L. (2019). The business case for corporate social responsibility: A critique and an indirect path forward. *Business & Society*, 58(1), 167-190.
- Bolam, B., Mclean, C., Pennington, A., & Gillies, P. (2006). Using new media to build social capital for health: a qualitative process evaluation study of participation in the CityNet project. *Journal of health psychology*, 11(2), 297-308.
- Cooney, K., & Lynch-Cerullo, K. (2014, October). Measuring the social returns of nonprofits and social enterprises: The promise and perils of the SROI. In *Nonprofit Policy Forum* (Vol. 5, No. 2, pp. 367-393). De Gruyter.
- Costa, R., Resende, T., Dias, A., Pereira, L., & Santos, J. (2020). Public sector shared services and the lean methodology: implications on military organizations. Journal of Open Innovation: Technology, Market, and Complexity, 6(3), 78.
- Dias, Á. L., Manuel, E. C., Dutschke, G., Pereira, R., & Pereira, L. (2021). Economic crisis effects on SME dynamic capabilities. International Journal of Learning and Change, 13(1), 63-80.
- Dias, Á. L., Santos, J. M. B. D., & Pereira, R. T. D. F. B. (2020). The role of entrepreneurship on the foundations of dynamic capabilities. International Journal of Entrepreneurial Venturing, 12(2), 208-227.
- Duque, L., Costa, R., Dias, Á., Pereira, L., Santos, J., & António, N. (2020). New ways of working and the physical environment to improve employee engagement. Sustainability, 12(17), 6759.
- Esteves, A. M., Franks, D., & Vanclay, F. (2012). Social impact assessment: the state of the art. *Impact Assessment and Project Appraisal*, 30(1), 34-42.
- Finsterbusch, K. (1977). The potential role of social impact assessment in instituting public policies. *Methodology of social impact assessment. Pennsylvania: Dowden, Hutchinson & Ross*, 2-12.
- Fontes, J., Tarne, P., Traverso, M., & Bernstein, P. (2018). Product social impact

- assessment. The International Journal of Life Cycle Assessment, 23(3), 547-555.
- Grieco, C., Michelini, L., & Iasevoli, G. (2015). Measuring value creation in social enterprises: A cluster analysis of social impact assessment models. *Nonprofit and voluntary sector quarterly*, 44(6), 1173-1193.
- Hamidi, H. (2017). A model for impact of organizational project benefits management and its impact on end user. *Journal of Organizational and End User Computing* (*JOEUC*), 29(1), 51-65.
- Love, P. E., & Matthews, J. (2019). The 'how' of benefits management for digital technology: From engineering to asset management. *Automation in Construction*, 107, 102930.
- Mahmoudi, H., Renn, O., Vanclay, F., Hoffmann, V., & Karami, E. (2013). A framework for combining social impact assessment and risk assessment. *Environmental Impact Assessment Review*, 43, 1-8.
- Millen, D. R., Fontaine, M. A., & Muller, M. J. (2002). Understanding the benefit and costs of communities of practice. *Communications of the ACM*, 45(4), 69-73.
- Milton, B., Attree, P., French, B., Povall, S., Whitehead, M., & Popay, J. (2012). The impact of community engagement on health and social outcomes: a systematic review. *Community Development Journal*, 47(3), 316-334.
- Nicholls, J., Lawlor, E., Neitzert, E., & Goodspeed, T. (2009). A guide to social return on investment. Office of the Third Sector, Cabinet Office.
- Pereira, L., Pinto, M., Costa, R. L. D., Dias, Á., & Gonçalves, R. (2021). The New SWOT for a Sustainable World. Journal of Open Innovation: Technology, Market, and Complexity, 7(1), 18-31.
- Pereira, L.; Santos, J. (2020). Pereira Problem Solving. International Journal of Learning and Change. Vol. 12, No. 3, 274-283.
- Pereira, L.; Da Costa, R.; Dias, A.; Santos, J.; (2021). Knowledge Management in Projects. International Journal of Knowledge Management. Vol. 17, Issue 1, Article 1.
- Popay J, Whitehead M, Carr-Hill R, Dibben C, Dixon P, Halliday E, et al. (2015). The impact on health inequalities of approaches to community engagement in the New Deal for Communities regeneration initiative: a mixed-methods evaluation. *Public Health Res.* 3-

- Renold, U., Rageth, L., Caves, K., & Buergi, J. (2019). Theoretical and methodological framework for measuring the robustness of social institutions in education and training (No. 461). KOF Working Papers.
- Serra, C. E. M., & Kunc, M. (2015). Benefits realisation management and its influence on project success and on the execution of business strategies. *International Journal of Project Management*, 33(1), 53-66.
- Sureau, S., Mazijn, B., Garrido, S. R., & Achten, W. M. (2018). Social life-cycle assessment frameworks: A review of criteria and indicators proposed to assess social and socioeconomic impacts. *The international journal of life cycle assessment*, 23(4), 904-920.
- Terlizzi, M. A., & Albertin, A. L. (2017). IT benefits management in financial institutions: Practices and barriers. *International Journal of Project Management*, 35(5), 763-782.
- Terziev, V. (2019). Social efficiency as a measure of social activities. *Proceedings of SOCIOINT*.
- van Haaster, B., Ciroth, A., Fontes, J., Wood, R., & Ramirez, A. (2017). Development of a methodological framework for social life-cycle assessment of novel technologies. *The International Journal of Life Cycle Assessment*, 22(3), 423-440.
- Velenturf, A. P., & Jopson, J. S. (2019). Making the business case for resource recovery. Science of the Total Environment, 648, 1031-1041.
- Zwikael, O., Chih, Y. Y., & Meredith, J. R. (2018). Project benefit management: Setting effective target benefits. *International Journal of Project Management*, 36(4), 650-658.