The impact of innovation management on the performance of NPOs: Applying the Tidd and Bessant model (2009)

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Abstract

The literature is consistent in stating that innovation helps in improving the performance of nonprofit organizations (NPOs), highlighting how there remains the scope for further research designed to better understand the dimension supporting social innovation. Through the application of the Tidd and Bessant model, which reflects an important contribution to this specific sector, this study seeks to meet a shortcoming in analyzing just which innovation management factors influence the performance of NPOs. To this end, we applied a quantitative methodology based on a survey made of Portuguese NPOs that received a total of 135 valid responses. Based upon the application of multiple linear regression models, this study concludes that there are five innovation management models with a positive impact on NPO performance levels. In terms of the implications, these results, consistent with earlier research of a different nature, strengthen the idea that private business sector methods may undergo successful adaptation to the social sector and assist such entities to implement measures that offset their organizational, and consequent financial, weaknesses.

KEYWORDS

nonprofit organizations, performance, social innovation, social performance, third sector, Tidd and Bessant
Schumpeter (1942) pioneered the recognition of innovation as a company’s factor of success. In a globalized economy, innovation has become crucial to guaranteeing sustainability, development, and the success of any organization (Ferreira et al., 2015). Nevertheless, only seven decades after Schumpeter’s work did the idea of innovation begin getting applied on a more general basis to social issues, beyond the market in its pure sense, with the emergence of the concept of social innovation (SI) (do Adro & Fernandes, 2019). SI, a term subject to its own controversy (Tracey & Stott, 2017), represents a concept that despite itself not being especially recent (Mehmood, 2016), has experienced growing levels of interest and increasingly impacts on and due to contemporary society and the profound political–economic and social changes currently ongoing (Dawson & Daniel, 2010; do Adro & Fernandes, 2019; Edwards-Schachter et al., 2012; Salamon & Sokolowski, 2016; Shier & Handy, 2020; Unceta et al., 2017). Thus, the social and development sectors likewise promote SI as a key driver of progress, an imperative to tackle the challenges of the 21st century, and social entrepreneurs and their innovations as the key to our social ills (Seelos & Mair, 2020).

The constant uncertainty in the economic and social panorama shapes and conditions the innovation management of organizations (Ferreira et al., 2015). OECD (2015) proposed the “Innovation Imperative: Contributing to Productivity, Growth and Well-Being” for civil society and every worldwide community (governments, businesses, etc.); innovation foundational role is recognized for economic growth and for addressing social and global challenges. But even if the literature is almost unanimous in stating that innovation helps in improving the efficiency and performance of nonprofit organizations (NPO), enabling them to provide better quality services to their users (Suh et al., 2018), one should not go down the path of innovation blindfolded but with some caution, indeed Seelos and Mair (2020) remind us that innovation is not always synonymous of success.

According to Shin and Choi (2019), the need for innovation becomes more acute in environments of scarcity. After having experienced the global financial and economic crisis of the last decade, NPOs now face a health pandemic (COVID-19). While different in nature, these two global crises nevertheless share in common their impacts on NPO revenues, especially those deriving from resident households that, caught up in the rising tide of unemployment, are unable to meet their former commitments. Innovation is thus critical to the NPOs that face pressures to adopt methods traditionally reserved to the private sector (Dover & Lawrence, 2012; Suh et al., 2018), not only due to the downturn in the level of public funding (Roque & Rocha, 2019) but also due to the heightened demands from their financiers in terms of accounting, reporting and efficiency (do Adro & Leitão, 2020). Given these circumstances, NPOs have to a certain extent found themselves obliged to manage innovation while implementing innovative measures capable of improving their performance (Shin & Choi, 2019).

The role of innovation management in the performance of organizations has been the subject of earlier research (Drucker, 1985; Shin & Choi, 2019). According to Tidd and Bessant (2009), innovation aligns with the ability to establish relationships, visualize opportunities, and gain advantage from them. In a systematic literature review, João-Roland and Granados (2020) demonstrate there are four organizational factors influencing the SI process in NPOs: the business models, partnerships, knowledge management, and culture. We may correspondingly state that the innovation management of NPOs depends on the institutional conditions necessary for the implementation of SI (João-Roland & Granados, 2020), hence on the tangible and, in the majority, the intangible (Khallouk & Robert, 2018) facets of organizations.
Therefore, and in keeping with Penrose (1959), the application of resources and capacities conditions the level of organizational innovation as well as its success. Furthermore, in a sector where shortcomings of a financial nature predominate, such tailored management practices make every sense. Thus, studying the factors able to bring about innovation in the social sector represents a fundamental goal. The objective of our research is to empirically grasp to what extent innovation management impacts on the performance of NPOs.

Our study thereby seeks to answer the following research question: *what are the management factors that influence the performance of NPOs?*

Analysis of the literature clearly finds that there is the scope for further research designed to understand just which dimensions best support SI (García-flores & Martos, 2019). Despite the third sector accounting for an important weighting in economies (do Adro & Leitão, 2020; Mitchell & Clark, 2019), research has broadly overlooked the sector and hence studies of innovation management in the social economy are rare (Anwar et al., 2020) even while, for example, Khalilouk and Robert (2018) approach the obstacles to innovation in the nonprofit sector. Various authors (Choi & Choi, 2014; Dover & Lawrence, 2012; Meyer & Leitner, 2018) effectively align with this view in stating that in keeping with the relative lack of recent studies of innovation in the third sector, the organizational pre-requisites for this innovation management still require further study. To the best of our opinion, no study has hitherto applied the Tidd and Bessant (2009) to the nonprofit sector, specifically to the Portuguese case. Hence, this study serves to remedy this shortcoming.

Our research seeks to cast light on SI, specifically on the management of innovation by NPOs. NPOs face many of the management concerns of the for-profit sector: issues of strategy in a changing environment, creating incentives for managers, and developing leadership and vision. But, there are at least some characteristics that distinguish these organizations from standard corporate operations and, in many cases, complicate the management process: the kind of product or service produced, the use of fundraising as an income source, the inadequate access by NPOs to capital, and the absence of quantitative criteria for managerial performance (Oster, 1996). Another characteristic, the dependence of NPOs on volunteers no longer holds true for a large majority of these organizations that do not rely mostly on volunteers, regarding the operational workforce, although they call themselves voluntary organizations (Salamon & Dewees, 2002).

We also know that NPOs differ to the extent they face their challenges: some suffer considerably for their failure to define strategies enabling them to offset their weaknesses, while others, through proactive measures, are able to detect opportunities. Hence, this research project makes various contributions to this field of study.

Firstly, this adds to the literature by testing the innovation management model put forward by Tidd and Bessant (2009) to the performance of NPOs. This model was only otherwise subject to testing by Ferreira et al. (2015) and represents an approach enabling the evaluation of innovation management across five constructs: strategy, process, learning, networks, and organization. The management of innovation may aid companies in navigating their courses through more turbulent periods, identifying new opportunities, and enabling greater leveraging of their performance and thereby prospering in periods of growth.

Secondly, this opens up new lines for future research on the relevance of the Tidd and Bessant (2009) to the performance of NPOs. In fact, this brings about a deepening of the knowledge on the internal workings of NPOs as regards their innovation management and more precisely as regards their management of the aspects fundamental to their appropriate and effective provision of services to more vulnerable and disadvantaged populations. This study aims to present solutions capable of guiding the drafting of organizational processes and thus
representing a source for NPOs to better understand the ways and means of becoming more efficient and proactive when faced by dynamic and uncertain socioeconomic environments.

The structure of this article is as follows: following this introduction, we set out the literature review followed by the methodology, the presentation, and discussion of the results before closing with some final considerations.

2 | LITERATURE REVIEW AND HYPOTHESIS

2.1 | Social innovation management

Since the 90s of the last century, in the United States and progressively at a global level, with the emergence and multiplication of university courses related to ethics, social innovation, and entrepreneurship, these concepts have gained interest among students, researchers, and professionals (Bassiry, 1990; Frumkin, 2013; Jeong, 2019): everyone would like to change the world for the better, and social entrepreneurship is the big new idea for doing just that.

Governments around the world are launching projects to promote social innovation. As for our concern, the Portugal Social Innovation platform allocated €150 million from PT2020 European funds program to promote social innovation projects in the national territory.

However, innovation management is underrepresented in the literature and one of the reasons identified for the stems from its tacit and implicit nature and the corresponding difficulties in either observing innovation or even defining it as a concept (Crossan & Apaydin, 2010; Khallouk & Robert, 2018).

The measurement of organizational performance gains recognition as an essential tool for the survival and success of organizations (Colbran et al., 2019). The literature already establishes the relationship between innovation and performance (Colbran et al., 2019; Fonseca & Baptista, 2013). Innovation is valuable to obtaining the level of desired performance (Kim, 2010). The study by Nuñez-Pomar et al. (2020) identifies innovation as a core factor for obtaining a good level of social performance. According to Jaskyte (2020), various theoretical perspectives are applicable to exploring the relationship between the innovation and performance of an organization: open systems theory, resource dependence theory, entrepreneurial orientation, organizational change, and theories of learning as well as institutional theory. As regards NPOs, managerial performance is often extraordinarily difficult to monitor (Oster, 1996), the operational implementation and measurement of performance have constituted a challenge to third sector academics and professionals for two reasons: the absence of any requirements over financial results and the multiplicity and diversity of stakeholders, thus the regulators, associates, users, etcetera (Buonomo et al., 2020; Colbran et al., 2019; Fonseca, 2014; Pinheiro et al., 2020). Innovation constitutes a precious asset within the framework of any organization even while an intangible asset, and nonprofit area is not an exception. At a time when conflicting pressures are driving NPOs to choose between their social role and the need to guarantee their own financial sustainability, managing these intangible assets provides a meaningful resource (Buonomo et al., 2020). Decisions about social innovation thus put a sizable responsibility on the shoulders of those who promote, fund, or enact innovation (Seelos & Mair, 2020) and the NPO’s boards. Innovation in organizations may adopt various different configurations even while creative ideas, the introduction of new processes, the resolution of structural problems, and the adaptation to new environments reflect the more frequent forms of innovation (Shin & Choi, 2019).
But when social innovation does not produce expected results, the failure of a NPO can, at the very least, lead to a stagnation in the process of improving the living conditions of beneficiaries, in a degradation of these and, at worst, can deprive whole community of essential services, but the truth is that contrary to the for-profit sector, NPOs are rarely faced with bankruptcy or insolvency. Little has been written about the consequences of innovation failures (Seelos & Mair, 2020). If in the private sector, a failure of the innovation process can lead to insolvency and even the outright disappearance of a company; in the nonprofit sector, this is unlikely, namely in low-density territories, local authorities use to pay off their debts in order to guarantee social services and employment levels.

According to Seelos and Mair (2020), sometimes, NPOs intend to target inequality and help disadvantaged members. However, it is not always easy to find an access point to their target communities. Having an adequate what-knowledge of the complex problems faced is fundamental, and Seelos and Mair (2020) continuous learning and absorptive capacity are precious instruments to reduce uncertainties in the innovation process.

2.2 | The Tidd and Bessant (2009) innovation management model

Tidd and Bessant analyzed saturated markets and understood that companies had no other option other than innovating. Whether through means of inventions, new services, or simply restructuring and refurbishing already existing products, innovation becomes an imperative to survival and growth. Through the examples of cases related, for example, to the car industry, air transport, and the healthcare sector and supplements targeting those doing sporting activities, they explain in a didactic fashion the relevance of innovation and entrepreneurship. Initially oriented to private business markets and technological innovation, we here apply this model to the nonprofit sector. As we have already mentioned, NPOs tend more and more to adopt behavior similar to for-profit organizations. Given the lack of studies that we have already mentioned to exist at this level, it is our intention to demonstrate that models for for-profit organizations are also applicable to NPOs.

We subsequently approach each one of the five pillars in the Tidd and Bessant (2009) as regards the capacity for organizations to innovate: strategy, organization, learning, processes, and networks.

2.2.1 | Strategy

Irrespective of the sector of activity, the company size, or even its legal structure, innovation holds crucial importance to the growth and longevity of organizations that in any case face a global panorama defined by radical and spontaneous change (Anwar et al., 2020; Serrano-Bedia et al., 2016) whatever its respective type. Correspondingly, innovation generates a means for organizations to generate value (Tidd & Bessant, 2018). Innovation in management conveys the propensity of managers to adopt new methods for the provision of care, seeking out new opportunities to render services and adopt new technologies. These measurements may contribute to formalizing the latest professional practices and generating greater efficiency to the NPO and improve the care provided (Amirkhanyan et al., 2018). Compliance with the social mission furthermore requires economic viability and differentiation from the competition. Acting in increasingly competitive markets, NPOs thus need to adopt competitive strategies for the
delivery of services and products (Lückenbach et al., 2019). Therefore, for NPOs, innovation constitutes an important strategy for ensuring the creation of social value coupled with their own sustained viability (João-Roland & Granados, 2020). Strategic planning for human resources hiring, procurement strategy, NPOs strategic politics, business–nonprofit collaboration strategy, public–nonprofit collaboration strategy in order to guarantee more support constitute core strategic options for NPO’s board of directors. Appropriate internal communication about the organization represents another important factor for innovation (Ferreira et al., 2015) alongside the involvement of staff in innovation processes. Over the last decade, a range of academics (Choi, 2016; Laurett & Ferreira, 2018; Lückenbach et al., 2019; Weerawardena & Mort, 2012) have focused their research on NPO innovation strategies and the impact that they generate for their levels of performance and correspondingly reflected in our first hypothesis:

**H1.** Strategy has a positive impact on the performance of NPOs.

### 2.2.2 | Processes

The perception of innovation extends to its capacity to act as an essential tool for guaranteeing a better future across diverse areas of society, whether at the organizational level, by restructuring institutional norms, a process in which sometimes age-old practices are reinvented, revamped, and ultimately validates as a new way of doing business (Frumkin, 2013), or through implementing measures and/or creative processes (Shin & Choi, 2019). Participative processes and the empowerment of individuals reflect crucial aspects of SI (Edwards-Schachter et al., 2012). In turn, this interrelates with the development and implementation of products and services, within this scope including productive processes, legislation, social movements, interventions as well as any such combination (Morais-da-Silva et al., 2017). Thus, the introduction of innovation management assumes a series of dimensions: motivation, intervention, and the establishment of routines (Khallouk & Robert, 2018). Shier and Handy (2015) verify how SI based on processes include adaptations of the ways in which organizations render their services internally, such as improvements to systems and procedures that lead to more complete social results.

Innovations in processes and in organizations generate positive and significant influences on their performance (Anwar et al., 2020). However, excessive levels of formalism hinder the emergence of new ideas (Shin & Choi, 2019) with this chilling the emergence of innovation. Innovation and internal communication thus appear to be essential to the success of any organization (Suh et al., 2018). The establishing of internal structures and processes for the involvement of members of staff, their willingness, support, and the sounding out and openness to innovative ideas and the sharing of decisions as well as understanding how to recruit and retain the right staff all contribute positively to SI (Shier & Handy, 2020).

As explained above, process management is an essential component of innovation management: user process management, quality processes, human resources assessment and performance processes, internal and external procurement processes. An effective control of these processes throughout the entire chain is essential in any organization's innovation management, and NPOs are no exception.

Thus, we arrive at our second research hypothesis:

**H2.** Processes positively influence the performance of NPOs.
2.2.3 | Organization

The literature determines how organizational performance flows from the results of the organization in accordance with their goals and objectives (Buonomo et al., 2020). According to Frumkin (2013), at the organizational level, managing the work, managing people, and managing yourself fertilized by strong personalities and enduring organizational cultures is a critical part of NPOs’ success. However, the factors interrelated with the management of organizations also deserve particular attention within the framework of innovation management (João-Roland & Granados, 2020).

Earlier studies have identified certain organizational characteristics, such as organizational culture (Crossan & Apaydin, 2010; Jaskyte & Dressler, 2005), longevity, size (Jaskyte & Dressler, 2005; Shin & Mcclomb, 1998), centralization, leadership (Jaskyte, 2004; Lutz-Allen et al., 2013) and market competitiveness, as determinant to organizational innovation (Shin & Choi, 2019). The study by Jaskyte and Dressler (2005) reports that the internal environment and cultural consensus negatively interact with innovation by NPOs. In small NPOs, innovation may receive support and priority due to such organizations taking swifter decisions in keeping with their small-scale structures while, at larger NPOs, the level of flexibility and greater autonomy represents the drivers of innovative ideas (Shin & Choi, 2019). The active role of senior managers, the decentralization of the organizational structure represents key issues in facilitating innovation at NPOs, especially among those facing resource difficulties (Shin & Choi, 2019). Organizational centralization emerges as an obstacle to innovation (Shin & Choi, 2019) whenever organizations concentrate decision-making powers and authority at the peak of the hierarchical pyramid. In turn, innovation and the sharing of power interrelate with better service provision (Amirkhanyan et al., 2018). Hernández-Perlines and Araya-Castillo (2020) demonstrate how the “servant leadership” style positively influences performance in NPOs. The study by Meyer and Leitner (2018) identifies how the lack of human resources has a more positive impact on NPO innovation than any actual lack of financial resources. The benefits of innovation to NPO performance levels receive particular emphasis from Christensen (2013) who deploys the expression “disruptive innovation” to qualify the introduction of fundamental changes, such as entering new markets or alterations to working methods. The benefits of innovation normally emerge with the passage of time with the resilience of participant actors (whether actual persons or collective entities) a fundamental facet (Mehmood, 2016).

We may correspondingly set out our third research hypothesis:

**H3.**: The organization positively influences the performance of NPOs.

2.2.4 | Learning

The importance of organizational learning has recently gained greater relevance as society has become increasingly knowledge-based (Choi, 2014). As previously referred, continuous learning, absorptive capacity through peers benchmarking are prized tools to reduce uncertainties in innovation processes.

An innovation orientation consists of the openness of an organization to accept new ideas and deploy new technologies, resources, tools, and processes (Chad, 2013). Chen and Hsu (2013) refer to how NPOs should learn from the business sector within the scope of ensuring more efficient management. However, to achieve success, SI is not susceptible to pure and simple copying but rather requires tailoring to the local reality (Mehmood, 2016) and the
prevailing social, economic, and political environment. The organizational orientation toward learning assumes investment in education and training (Choi, 2014), even while the limited resources of the nonprofit sector do not always extend to such means.

Lückenbach et al. (2019) explain how organization learning may replace management choices in the sense that the results obtained may define the future strategies. The conclusions of the study by Ferreira et al. (2015) demonstrate how in the traditional business sector, companies with lower levels of innovation are also those reporting lower levels of turnover. This study also conveys how the awareness of members of staff as regards the importance of innovation to company competitiveness and their understanding of the correlation between distinct competences and competitiveness make up two factors able to foster innovation. The literature deems organizational learning to be fundamental to building sustainable competitive advantage and measures this as a process, in keeping with the prevailing behaviors, or as a culture, through measuring the beliefs and values in effect. In an uncertain socioeconomic panorama, organizational learning underpines any innovative process able to guarantee sustainability (Choi, 2014).

Therefore, we now arrive at our fourth research hypothesis:

**H4.** Learning positively influences the performance of NPOs.

### 2.2.5 Networks

Intersectoral partnerships have gained importance as a vehicle for social innovation (Rey-García et al., 2019). The cooperation of NPOs with the community, with institutional authorities, and also the networks of individuals are fundamental to them maintaining their goals and founding objectives (Frumkin, 2013; Vannebo & Grande, 2018).

The NPOs do not have shareholders but their structures incorporate a series of stakeholders/interested parties such as associates, staff, users, donors, suppliers, the local authorities, and the supervisor/regulator (Khallouk & Robert, 2018). Therefore, NPO managers need to deploy swift flexibility in order to please the significant diversity of participants and thereby guaranteeing not only financial sustainability but also the desired social impacts (Khallouk & Robert, 2018).

According to Shier and Handy (2020), earlier studies report that partnerships may support the innovative initiatives of NPOs. The case study made by Eng et al. (2011) about the British nonprofit sector approaches the ways in which NPOs apply their networks to acquiring financial resources and human capital so as to successfully achieve their mission and ensure the expansion of their activities. Collaboration with peers with similar missions fosters access to greater financial and human resources, enabling innovation and consequently higher performance standards enhanced by the deeper knowledge of the exterior environment around the organization (Buonomo et al., 2020). Nevertheless, collaboration also needs to occur on the internal organizational scale given that innovation takes place through a theoretical framework focused on the “micro-interactions” built up by interpersonal relationships (Shier & Handy, 2020).

The dynamics of the market and the community also play a role in managing innovation: the ways in which users deal with new products and/or services require taking into consideration. Similarly, the political environment also needs accounting for in terms of guaranteeing, for example, the viability of innovation dissemination (João-Roland & Granados, 2020).

While cooperation among NPOs nurtures the creation of value (Klafke et al., 2019), competition among them brings about efficiency in areas as different as obtaining financing and the provision of services to third parties (Buonomo et al., 2020). Donors from the private sector
return a positive effect on the performance of NPOs that rises to the extent that the corporate
donor–NPO relationships extend across various periods, consistent with the enhanced capacity
of regular donors to wield greater influence over a particular NPO (Eng et al., 2011; Finley
et al., 2020). Currently, donors are already more attentive to the final destination given to their
support, and to transparent and efficient management methods (do Adro & Leitão, 2020).

We therefore arrive at our fifth research hypothesis:

**H5.** Networks generate a positive impact on the performance of NPOs.

Figure 1 sets out our research model.

3 | METHODOLOGY

The majority of academic research includes efforts to clarify and, to a greater or lesser extent, to
conceptualize the concept with the different approaches to SI above all qualitative and descrip-
tive in nature (Foroudi et al., 2020; Ng & Jenkins, 2018; van der Have & Rubalcaba, 2016),
hence our adoption of a quantitative methodology.
3.1 Questionnaire and data collection

This research deploys a correlational design to examine the relationships among the characteristics of NPOs and performance, innovation management, and social performance. To test these relationships, we drafted a research tool and developed measurement scales.

The questionnaire measurement scales applied consist of items representing the knowledge and opinions of the interviewees about the innovation management and social performance of their organizations. In order to construct the questionnaire, we applied existing scales following their adaptation and verification for this context. We discuss all of the items measuring these variables and the respective scales below.

The data collection process was heavily conditioned by the pandemic that has swept Portugal since March 2020. Initially planned to begin in April, the collection process only launched with the progressive ending of the first period of lockdown. While in periods deemed “normal”, institutions relegate responding to questionnaires as a second or third level priority, the health crisis rendered this entire process still more difficult with clear consequences from the additional efforts that these NPOs were having to produce to control the pandemic in the midst of their own organizations.

According to Salamon 2002, our data collection took into account several criteria for evaluating their source: accuracy and reliability (although in data collection, the researcher must assume that the respondent fills in the questionnaire conscientiously, without bias of social acceptance, extremes, or even consent), timeliness (primary data were directly collected in a specific moment from NPOs), quality of NPO identification (collection of data related with location, size, and type of social responses offered to community), comprehensiveness (our data collection covers a wide range of NPOs: childhood and youth, disability, seniors), cross-sector comparability (as our scale was adapted from for-profit sector, data can be easily compared), appropriate unit of analysis (questionary was adapted to NPO and a pretest was made to validate it) and geographic detail (data were collected at regional level to allow a geographical interpretation).

We submitted the questionnaire, via e-mail through the Google Forms application, to the social economy organizations of mainland Portugal and the Autonomous Regions of the Azores and Madeira between June 1 and September 30, 2020. We initially sent this to the CNIS – the National Confederation of Solidarity Institutions and the respective UDIPSS – the District Unions and the URISS – the Regional Unions, the Union of Portuguese Charitable Associations and the Union of Portuguese Mutual Associations, following a prior telephone contact to present the study and request their assistance in sending the questionnaire to their respective association members (3653 institutions, of which 3004 are members of the CNIS according to the 2019 management report even while this total is subject to frequent variation). In a second phase (July and August), we contacted, first by telephone and then by e-mail, the coordinating entities of the CLDS4G program present in 232 of the 278 councils on mainland Portugal. Finally (in September), we established contact with the social municipal networks of 100 councils located not only from the north to the south of continental Portugal but also in the Autonomous Regions of the Azores and Madeira. This social network is a national program first launched in 1997 that seeks to empower social actors in the councils in order to combat poverty and social exclusion and foster social development (Presidência do Conselho de Ministros, 1997).

Through this strategy, and given not every institution is a member of the confederations and federations, this sought to contact the 5647 population of the IPSS – the Private Social Solidarity Institutions or their equivalent existing in Portugal according to the report on the “economic and social importance of the IPSS in Portugal” published in December 2018 by CNIS (Mendes, 2018).
The final sample totalled 135 NPOs located across all the national territories with different sizes and providing a varied range of social responses (children and youth, disabilities, elderly persons, and others).

3.2 | Variables

3.2.1 | Dependent variables

This study adapted the construct for social performance from Sanzo et al. (2015) and similarly including a Likert scale from 1 to 7 (from “not at all important” to “very important”), with 16 items (see Annex 2) subdivided into three different dimensions:

1. Internal marketing, including aspects such as the human resource and training policies of the organization, appropriateness of the tasks to the capacities of employees, internal communication, and listening to members of staff (10 items, Cronbach’s Alpha = 0.926);
2. Benefits from partnerships, particularly listening to the organization’s interested parties (3 items, Cronbach’s Alpha = 0.791);
3. Compliance with the mission as regards satisfying the requests and expectations of the organization’s interested parties (3 items, Cronbach’s Alpha = 0.869).

The items making up each of the factors (Internal marketing, Partnerships benefits, Mission compliance) report considerable levels of reliability and internal consistency. The second-order construct referring to social performance obtained very high levels of reliability and internal consistency (Cronbach’s alpha = 0.939).

For each dimension and for the social performance in overall terms, we calculated the score corresponding to the average for the items.

3.2.2 | Independent variables

Control variables

In order to characterize the institutions, we took into account diverse aspects such as the location (NUT2), the type of social response, the number of staff (directly employed and service providers), the number of volunteers, the number of users, and whether or not the respective institution had implemented a quality management system.

Innovation management

In order to operationally apply the innovation management variables, we adopted the Tidd and Bessant (2009) already previously applied by Fernandes (2011). Within the scope of tailoring the survey to the specific characteristics of the third sector, as well as ensuring great harmonization, we replaced the terms “company, foundation, institution, organisation” with the word “organization”. In turn, this substituted the words “user” or “beneficiary” with that of “user” in order to adopt the terminology of the Institute of Social Security present in the cooperation agreements signed by this supervisory organism and the respective organizations. This furthermore replaced the expression “target areas” with “target publics”.

Following these adaptations, we sent the questionnaire, with its measurement incorporating a seven-point Likert scale, to the NPOs. The 40 questions (Annex 1) break down into five dimensions:

1. Strategy “There is clear communication of the innovation strategy so that all employees know the targets for compliance” (8 items, Cronbach’s Alpha =0.799),
2. Processes “The involvement of employees includes suggesting ideas for the improvement of services and processes” (8 items, Cronbach’s Alpha =0.866),
3. Organization “Organisation staff hold a clear idea about how important innovation is to competitiveness” (8 items, Cronbach’s Alpha =0.882),
4. Learning “The organisation is able to ‘archive’ what it learns so that other persons in the organization may subsequently apply this learning” (8 items, Cronbach’s Alpha =0.839),
5. Networks “The organisation acts to develop external networks with individuals able to provide assistance (for example, knowledge specialists)” (8 items, Cronbach’s Alpha =0.869)

4 | DATA ANALYSIS

4.1 | Econometric modeling

To characterize the sample under study, we determined the descriptive statistics (means and standard deviation) for the variables included as well as their respective correlations (Table 1).

As regards the modeling of the variables influencing performance (measured by the variables making up social performance), we applied the following multiple linear regressions with three models estimated:

I. \[ \text{PERF} = \beta_0 + \beta_1 \text{NOR} + \beta_2 \text{CEN} + \beta_3 \text{LVT} + \beta_4 \text{IDO} + \beta_5 \text{IJ} + \beta_6 \text{DEF} + \beta_7 \text{TRA} + \beta_8 \text{AVE} + \beta_9 \text{VOL} + \beta_{10} \text{UT} + \beta_{11} \text{QL} \]

II. \[ \text{PERF} = \beta_0 + \beta_1 \text{EST} + \beta_2 \text{PRO} + \beta_3 \text{ORG} + \beta_4 \text{APR} + \beta_5 \text{RED} \]

III. \[ \text{PERF} = \beta_0 + \beta_1 \text{NOR} + \beta_2 \text{CEN} + \beta_3 \text{LVT} + \beta_4 \text{IDO} + \beta_5 \text{IJ} + \beta_6 \text{DEF} + \beta_7 \text{TRA} + \beta_8 \text{AVE} + \beta_9 \text{VOL} + \beta_{10} \text{UT} + \beta_{11} \text{QL} + \beta_{12} \text{EST} + \beta_{13} \text{PRO} + \beta_{14} \text{ORG} + \beta_{15} \text{APR} + \beta_{16} \text{RED} \]

In order to estimate the various different model parameters, we made recourse to the maximum likelihood method and with robust standard errors to eliminate any potential problems with heteroscedasticity. For all the regressions, we analyzed the existence of variables with potential multicollinearity effects through variance inflation factor (VIF), with the results ideally coming in below five (Hair et al., 2010).

We processed the data obtained through IBM SPSS version 27.0 (IBM Corporation, New York, USA) software.

4.2 | Results

Table 2 sets out the characterization of the 135 institutions included in the study. The predominant locations of the sample correspond to the regions Centro (47.4%), Norte (18.5%), and Lisboa e Vale do Tejo (18.5%). In terms of the social responses provided by these organizations, 45.2% and 11.9% of the organizations cater for children and youth and disabled groups,
respectively. The institutions employed an average of 60.1 ± 77.6 contracted staff and with an average of 693.7 ± 2458.4 users.

### 4.3 Analysis of the results and discussion

Table 3 presents the results for the different multiple linear regression models estimated. As regards the characteristics of these entities:

- The existence of a social response for disabilities returns a positive impact on the internal marketing performance (Model I: $\beta = 0.70; p < 0.05$) as well as on mission compliance.
(Model I: $\beta = 0.43; p < 0.05$), on total performance (Model I: $\beta = 0.71; p < 0.05$) and on the performance of partnership benefits (Model I: $\beta = 0.85; p < 0.05$).

- The number of contracted employees (Model III: $\beta = 0.01; p < 0.05$) as well as those providing services/freelancers (Model I: $\beta = 0.01; p < 0.05$) returns a positive impact on the internal marketing performance. This effect (number of employees) also extends to mission compliance (Model I: $\beta = 0.01; p < 0.05$).

- As regards the location, entities from the Norte region return higher mean scores for mission compliance (Model III: $\beta = 0.53; p < 0.05$). Those from Lisboa e Vale do Tejo region return higher mean scores for the performance of partnership benefits (Model I: $\beta = 0.73; p < 0.05$).
<table>
<thead>
<tr>
<th></th>
<th><strong>Internal marketing</strong></th>
<th><strong>Partnership benefits</strong></th>
<th><strong>Mission compliance</strong></th>
<th><strong>Performance</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I</td>
<td>II</td>
<td>III</td>
<td>I</td>
</tr>
<tr>
<td>NOR</td>
<td>0.01 (0.24)</td>
<td>0.03 (0.15)</td>
<td>0.41 (0.26)</td>
<td>0.18 (0.26)</td>
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<tr>
<td>CEN</td>
<td>−0.29 (0.20)</td>
<td>−0.01 (0.17)</td>
<td>−0.13 (0.25)</td>
<td>−0.03 (0.25)</td>
</tr>
<tr>
<td>LVT</td>
<td>0.44 (0.26)</td>
<td>0.21 (0.17)</td>
<td>0.73 (0.35)*</td>
<td>0.58 (0.32)</td>
</tr>
<tr>
<td>IDO</td>
<td>0.10 (0.21)</td>
<td>−0.12 (0.21)</td>
<td>0.18 (0.29)</td>
<td>−0.05 (0.28)</td>
</tr>
<tr>
<td>IJ</td>
<td>0.03 (0.19)</td>
<td>0.05 (0.15)</td>
<td>0.20 (0.23)</td>
<td>0.22 (0.22)</td>
</tr>
<tr>
<td>DEF</td>
<td>0.70 (0.23)*</td>
<td>0.17 (0.18)</td>
<td>0.85 (0.25)*</td>
<td>0.48 (0.28)</td>
</tr>
<tr>
<td>TRAB</td>
<td>0.01 (0.01)</td>
<td>0.01 (0.01)*</td>
<td>0.01 (0.01)</td>
<td>0.01 (0.01)</td>
</tr>
<tr>
<td>AVE</td>
<td>0.01 (0.01)*</td>
<td>0.01 (0.01)</td>
<td>0.01 (0.01)</td>
<td>0.00 (0.01)</td>
</tr>
<tr>
<td>VOL</td>
<td>−0.02 (0.01)</td>
<td>−0.01 (0.01)</td>
<td>−0.01 (0.02)</td>
<td>−0.01 (0.01)</td>
</tr>
<tr>
<td>UT</td>
<td>0.01 (0.01)*</td>
<td>0.01 (0.01)*</td>
<td>0.01 (0.01)*</td>
<td>0.01 (0.01)</td>
</tr>
<tr>
<td>QL</td>
<td>−0.17 (0.20)</td>
<td>−0.22 (0.15)</td>
<td>0.02 (0.23)</td>
<td>−0.26 (0.25)</td>
</tr>
<tr>
<td>EST</td>
<td>0.37 (0.15)*</td>
<td>0.30 (0.14)*</td>
<td>0.02 (0.26)</td>
<td>0.32 (0.23)</td>
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<tr>
<td>PRO</td>
<td>0.39 (0.15)*</td>
<td>0.29 (0.15)</td>
<td>0.50 (0.20)*</td>
<td>0.26 (0.25)</td>
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<tr>
<td>ORG</td>
<td>0.19 (0.12)</td>
<td>0.17 (0.11)</td>
<td>0.18 (0.18)</td>
<td>0.24 (0.19)</td>
</tr>
<tr>
<td>APR</td>
<td>0.67 (0.15)*</td>
<td>0.76 (0.18)*</td>
<td>0.26 (0.30)</td>
<td>0.29 (0.33)</td>
</tr>
<tr>
<td>RED</td>
<td>0.28 (0.12)*</td>
<td>0.27 (0.11)*</td>
<td>0.03 (0.19)</td>
<td>0.06 (0.18)</td>
</tr>
<tr>
<td>$R^2$</td>
<td>12.5%</td>
<td>48.0%</td>
<td>55.9%</td>
<td>16.9%</td>
</tr>
<tr>
<td>$R^2$ Ajustado</td>
<td>5.0%</td>
<td>46.0%</td>
<td>50.0%</td>
<td>9.1%</td>
</tr>
<tr>
<td>N</td>
<td>135</td>
<td>135</td>
<td>135</td>
<td>135</td>
</tr>
</tbody>
</table>

*p < 0.05.
The number of volunteers reports a negative impact on the internal marketing performance (Model I: $\beta = -0.02; p < 0.05$; Model III: $\beta = -0.01; p < 0.05$).

The number of users has a positive impact on the internal marketing performance (Model I: $\beta = 0.01; p < 0.05$; Model III: $\beta = 0.01; p < 0.05$), on partnership benefits (Model I: $\beta = 0.01; p < 0.05$; Model III: $\beta = 0.01; p < 0.05$), as well as the same effect on social performance (Model I: $\beta = 0.01; p < 0.05$; Model III: $\beta = 0.01; p < 0.05$).

As regards the innovation management dimension:

The “strategy” (Model II: $\beta = 0.37; p < 0.05$; Model III: $\beta = 0.30; p < 0.05$) returns a positive effect on the internal marketing of NPOs. This effect does not take place (positively or negatively) for mission compliance and total performance. Hence, we may find in favor of our H1: Strategy has a positive impact on the performance of NPOs. This result aligns with the conclusions of several authors who have approached this theme. Laurett and Ferreira (2018) refer to the importance of NPOs developing a daily management strategy in order to better adapt to the market; Amirkhanyan et al. (2018), in their research on elderly person homes in the United States of America, find that innovation management interlinks with greater compliance with the rules established by the regulator and even to better classifications among audited institutions. In fact, the planning of activities and tasks, whether for a daily basis or for longer timeframes, requires increasing amounts of attention from NPO management. One of the regulatory requirements specifically provides for the setting out of provisional budgets and annual activity plans with the objective of ensuring NPO managers program and plan the life of the institution so as to avoid routine and directionless management practices.

The “processes” (Model II: $\beta = 0.39; p < 0.05$) also hold a positive impact on internal marketing, on partnership benefits (Model II: $\beta = 0.50; p < 0.05$) as well as on performance (Model II: $\beta = 0.38; p < 0.05$) and thereby demonstrating the validity of our H2: Processes positively influence the performance of NPOs. This result thus finds in favor of the conclusions reached by Anwar et al. (2020) and de Lückenbach et al. (2019) that detail the importance of internal processes to the overall performance of NPOs. The fundamental role of NPO efficiency processes has received extensive coverage in the media since the outbreak of the COVID-19 health crisis. The NPOs that have resisted best to the COVID-19 pandemic are those that already had processes implemented and in effect for a long period in order to, for example, plan for the replacement of staff during holiday periods or for reasons of ill-health, whether through means of subcontracting or through recourse to existing human capital.

The dimension incorporating the “organization” (Model II: $\beta = 0.44; p < 0.05$; Model III: $\beta = 0.51; p < 0.05$) provides a positive impact on the mission compliance performance. This, therefore, finds in favor of H3: The organization positively influences the performance of NPOs. This result meets the findings of the study by Jaskyte and Dressler (2005), which recommends the inclusion of factors related to organizational culture in their innovation models for NPOs. Furthermore, Hernández-Perlines and Araya-Castillo (2020) refer to how service leadership makes a positive input on both the innovation capabilities and on the performance and how the capacity for innovation returns a mediating effect on NPO performance. Indeed, in an organization in which the activities ongoing closely interrelate with the human capital, the organizational culture and the relationships among the diverse participant actors constitute a fundamental facet. Thus, running effective channels of communication, in-person (meetings) or formal (service notes) channels becomes an essential means of clearly and precisely conveying the mission, the values, and the objectives of the organization.
As regards the “learning” dimension (Model II: $\beta = 0.67; p < 0.05$; Model III: $\beta = 0.76; p < 0.05$), this also generates a positive effect on the internal marketing of NPOs as well as on the total performance (Model II: $\beta = 0.48; p < 0.05$; Model III: $\beta = 0.56; p < 0.05$) and therefore supporting our H4: Learning positively influences the performance of NPOs. This conclusion receives the backing of various studies, including those by Choi (2014); Fonseca and Baptista (2013) and Khan and Bashir (2020), who approach this issue and underline the importance of the orientation toward learning within the scope of innovation processes and the performance of NPOs whether directly or through conveying a mediating effect. The systematic literature review by Buonomo et al. (2020), which covers the role of intangible assets at NPOs in their performance levels, refers exactly to the primacy of intellectual capital, directly interconnected with learning, in this process. The training of human capital and benchmarking represent tools of relevance within this framework. Training is important for clear reasons even while tending to get attributed a secondary role for a series of eventualities: the lack of human resources to replace staff receiving training, the resistance of some staff members to training due to prejudice around the age of the trainer, usually a younger individual, or because such training does not reflect in terms of remuneration and/or promotion, the lack of importance some management teams still attribute to the continuous training of their staff. In turn, benchmarking enables the scope for sharing best practices or, leading onto our final point, the NPO network of contacts. Finally, the “networks” dimension (Model II: $\beta = 0.28; p < 0.05$; Model III: $\beta = 0.27; p < 0.05$) turned in a positive impact on internal marketing performance. Thus, we may also find in favor of H5: Networks generate a positive impact on the performance of NPOs. This result is consistent with the studies by Álvarez-González et al. (2017) that focus on Spanish NPOs, and Eng et al. (2011) that analyses the ways in which entities in the British nonprofit sector apply their networks of contacts to strengthen their assets and achieve their social missions. The conclusions from Rey-García et al. (2019) illustrate the dynamic interactions between the key dimensions and factors (hierarchical commitment/horizontal; competition/collaboration; management efficiency/social transformation) that shape the potential and the limitations of intersectoral relationships for SI and also conditioned by their management. A good network of contacts for NPOs is crucial to rendering them more competitive. This enables the timely internalization, whether formally or informally, of market trends, remaining updated on the legislation and in addition to sharing best practices with peers. However, the profitability of such networks directly relates to and is strongly dependent on the organization’s respective management.

In Table 4 we present a summary of our findings.

5 | THEORETICAL AND PRACTICAL IMPLICATIONS

There is no doubt that the competitive environment prevailing has profoundly altered the dynamics of organizations in general and NPOs in particular. The latter have turned to innovative strategies as the means of overcoming the challenges they face daily as they set about attempting to comply with their missions. This study, consistent with prior research, opens up the understanding of how NPO performance undergoes influence from various different factors and correspondingly presenting various implications of potential use whether to managers of such entities or to political decision makers.

In terms of the theoretical implications, this is the first ever application of the Tidd and Bessant (2009) to the nonprofit sector and represents further evidence that the methods of the business world may be successfully applied to this sector. This also helps in understanding the
connections underlying these constructs (innovation management, performance, internal marketing, partnership benefits, mission compliance).

As regards the practical implications, this duly emphasizes how evaluating innovation management in the nonprofit sector represents a complex undertaking for various reasons: firstly because the human factor holds a consequential weighting in the sector (whether in financial terms, this being a sector Baumol (2004) terms as wounded by weakness; or in operational terms) and preventing everything from automation to preplanning; secondly because of the extremely varied range of stakeholders, ranging from users, collaborators, volunteers, suppliers, the regulatory authorities, and the community in general (local and/or national politicians, user families, etcetera), as well as the existence of the means to assist in measuring innovation management at NPOs being of primary importance in the uncertain socioeconomic environment currently experienced given the confirmation this variable returns a direct impact on the performance of NPOs. Indeed, while true that up until recently NPOs might draw upon donations and major public funding to balance their accounts, this is no longer the case (Jaskyte, 2020; Roque & Rocha, 2019; Weerawardena et al., 2010), which forces them to take a more proactive and innovative stance toward fundraising and organizational innovation (do Adro & Leitão, 2020), which become feasible through the deploying of the current model and correspondingly representing a path worth exploring. The current health crisis brought about by COVID-19 has worsened the already foreboding panorama for NPOs in the wake of the subprime crisis over a decade ago since when many such entities have incurred additional costs due to supplying extra services (social canteens, for example), sometimes without any equivalent benefits and, furthermore, experiencing a downturn in their revenue streams due to the
rise in unemployment and the consequent lack of income in user households. The pandemic has served to delay the financial recovery of many NPOs for a further few years.

Given this scenario, studies such as the present may assist these entities to implement measures that offset their organizational weaknesses and consequently improve their financial outlook. In the case here, our analysis opens up insights into how these entities should advance with the implementation of new and more participative leadership styles (servant leadership or transformational leadership) as well as fostering their own innovative capabilities through, for example, participative processes that involve the intermediate management entering into direct contact with operational staff and users. A surprising result was the number of volunteers provoking a negative impact on the performance of NPOs. In their study based on interviews with 26 leaders of volunteer groups and other professionals from eight European countries, De Wit and Mensink (2019) refer to how volunteers are the eyes and ears of institutions as they are the persons who have a coffee with users and are extremely relevant to reporting on that which can and should be improved. However, their findings also add that volunteers may themselves feel demotivated by the lack of receptiveness of their observations by senior staff. This may therefore provide an explanation for our result that then leads onto another reflection: how to motivate volunteers given that this clearly does not extend to the usual financial means? Through recognition? This is especially relevant given that cross-referencing the study of the aforementioned authors with our own results, we gain the impression that demotivated volunteers may represent a drag on the performance of NPOs.

6 | FINAL CONSIDERATIONS, LIMITATIONS, AND FUTURE LINES OF RESEARCH

The objective of our research involved empirically grasping the ways in which innovation management impacts on the performance of NPOs and to this end we posed the research question: what are the innovation management factors that influence the performance of NPOs?

After having identified the innovation management factors (learning, strategy, organization, processes, and networks), these were subject to testing through recourse to a questionnaire responded to by 135 Portuguese NPOs covering every district and autonomous region of the country. The results obtained confirm the five working hypotheses and align with the findings of earlier research carried out in different countries on various continents. Factors interrelated with learning, strategy, organization, processes, and networks generate positive impacts on the performance of NPOs in Portugal.

Innovation management methods, when correctly implemented, emerge as highly valuable tools for resolving the problems of organizations, and NPOs represent no exception. Hence, encouraging collaborative innovation management platforms may facilitate access to financial resources, normally a scarce resource in the nonprofit sector, as well as boosting the internal efficiency of organizations, for example, through fostering debate on ideas.

This duly perceives the importance of innovation management in the daily realities faced by NPOs. One of the collateral effects of the health pandemic that has swept Portugal stems exactly from innovation management, or more precisely the lack of such activities at the majority of NPOs. Indeed, media outlets have reported how the NPOs experiencing the worst effects of COVID-19 are frequently those lacking in efficient organizational management (absence of implemented processes and/or means of registration, lack of human resource qualifications and training, overpowering and centralizing management, etcetera).
This also details how innovation interlinks with better classifications from the regulatory authorities. Furthermore, the innovation management strategy would also appear to positively relate with the capacity of elderly persons homes to fill their beds with clients on higher incomes and correspondingly limiting access to lower-middle or lower class residents (Amirkhanyan et al., 2018), which certainly represents a major argument in favor of developing good management practices.

This study suffers from certain limitations with the key issue surrounding having taken only performance into consideration; in fact, additional dimensions of the NPO literature would strengthen its contribution considerably. Data collection took place between June and September 2020, at that time there was a lack of volunteers in the NPOs, largely because of the fear of contracting COVID and putting their family and friends at risk. Interestingly, in 2021, and most likely thanks to the strong vaccination rate in Portugal, there was an increase of close to 30% of people registered in the volunteer platform created by Cooperativa Antonio Sergio for the Social Economy (Lusa, 2021). Future analyses could therefore test our findings, especially related to volunteers, during different circumstances. Future studies might also analyze the impact that innovation management has on the financial results of NPOs while also attempting to establish a relationship between innovation management and the level of income of their users. Another future line of research undoubtedly arises from studying the effects the aforementioned pandemic is having both on innovation management and more broadly on the organizational management of NPOs.

CONFLICT OF INTEREST
The authors declare that they have no conflict of interest.

ETHICS STATEMENT
Compliance with Ethical Standards.

DATA AVAILABILITY STATEMENT
The data that supports the findings of this study are available in the supplementary material of this article.

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