Towards social innovation strategy: an analysis of UK Social Enterprises

Granados, M. and de Souza Joao, I.

https://doi.org/10.1016/j.techfore.2022.122189

Technological Forecasting & Social Change

Towards social innovation strategy: an analysis of UK Social Enterprises

--Manuscript Draft--

Manuscript Number:	TFS-D-22-00101R2
Article Type:	Research Paper
Keywords:	Social innovation; Social enterprise; user-centred approach; Cooperation; intrapreneurship; performance
Corresponding Author:	Iraci de Souza João Roland, PhD Federal University of Sao Paulo: Universidade Federal de Sao Paulo São José dos Campos, SP BRAZIL
First Author:	Iraci de Souza João Roland, PhD
Order of Authors:	Iraci de Souza João Roland, PhD
	Maria L. Granados
Abstract:	This paper presents the management practices and organisational behaviours that influence and inform social innovation (SI) strategy in social enterprises (SEs). Based on previous studies, we theorise that a collaborative and user-centred approach and a participatory organisational culture are positively related to social innovation performance. Data were collected from 78 SEs in the UK and analysed with ordinary least squares (OLS) regressions. Findings confirmed that cooperation with community, beneficiaries and universities, development of solutions based on the community's needs, design thinking, and people inside the SE who have intrapreneur behaviour have a positive linear relationship with SI performance. Our paper proposes a framework that indicates the what, why, and when of the social innovation strategy, highlighting the essential role of community, universities, and embeddedness of users throughout the whole innovation process. This knowledge is crucial for both SEs and policymakers to assess which practices they should prioritise and focus their scarce resources on and what behaviours should be encouraged/developed to manage SI strategically.
Response to Reviewers:	

03 October 2022

Dear Editor and Reviewers

Manuscript ID: TFS-D-22-00101R1

We write to thank you for reviewing our manuscript titled “Towards social innovation strategy: an analysis of UK Social Enterprises”, for possible publication in Technological Forecasting & Social Change. We appreciate the positive comments and suggestions for improvement made by all.

We are pleased to learn that our manuscript following minor revision and modification has potential for publication. *In the revised manuscript, we have tried our best to address all* comments made by both Reviewers.

In the revised manuscript, we highlighted the changes in **red**. The responses to the Reviewers’ comments are provided below*. We hope that our revisions meet your approval.*

Responses to Reviewer 1 Comments

Reviewer 1 Comment #1

To clarify the conceptual framework, the results of the previous study are given to explain the emergence of the themes. The title of section 2.1 has been changed to make it more relevant to the discussion in that section. Although the authors use the terms "open approach" and "open innovation" interchangeably in this section (and throughout the whole text), I would say that these terms may not always mean the same thing. For example, the open approach can be understood as the "open dialogue", which is mentioned in the content. Based on this, I suggest keeping the jargon used. But, in general, the section has been improved.

Authors Response

Thank you for your comment and suggested improvement. In the revised manuscript, we have clarified the definition of “open approach” and used this term only. We hope that this definition clarifies the context of our study with regard to the concept of “open approach”.

Reviewer 1 Comment #2

I would suggest reviewing the manuscript in terms of typos (I noticed one, "breath" is used instead of "breadth") and visual design of the framework could be reviewed ("knowledge" under the University pillar started with a lowercase-unlike the others; line spacing between items under "User-Centred Approach" is not consistent).

Authors Response

Thank you for your comment and suggested improvement. In the revised manuscript, we have carried out a thorough proofreading of the text in order to correct typos and other language problems.

Responses to Reviewer 2 comments

Reviewer 2 Comment #1

First, on page 4, you claim the following: "In this setting it is important to acknowledge that, although SIs can become SEs, which are framed within the social economy, or SEs can generate SIs, not all SEs arise from or generate SIs (Guadarrama and Acosta, 2017; Solis-Navarrete et al., 2021)".
From my understanding, SI (as solutions) cannot become SE, but social initiatives or the social innovator(s) might decide to set up/start a social enterprise.

Authors Response

Thank you for your comment. We agree with your understanding and in the revised manuscript, we have amended the sentence.

Reviewer 2 Comment #2

Second, there are still several spelling mistakes in the article. I, therefore, recommend language washing the article before publishing.

Authors Response

Thank you for this comment, another reviewer also pointed out typos*. In the revised manuscript we have carried out a thorough proofreading of the text in order to correct* spelling mistakes *and other language problems.*

We wish to thank the Editor and Reviewers once again for their time in reviewing and handling our manuscript. As in the first time, your comments were very important for a significant improvement of the manuscript. Similarly, thank you for providing us with the opportunity to submit a revision. We hope that our revisions meet your approval.

Yours Sincerely,

The Authors
(Manuscript ID: TFS-D-22-00101R1)

Towards social innovation strategy: an analysis of UK Social Enterprises

Highlights

- The relationship between SEs' management practices and SI performance was investigated in 78 UK SEs.
- Results show cooperation with community and universities, user centred approach and intrapreneur behaviour are positively related to SI performance.
- We present a framework that indicates the what, why, and when of the SI strategy.
- Guidance on how practitioners can enhance the SE's ability to innovate socially is offered.

Towards social innovation strategy: an analysis of UK Social Enterprises

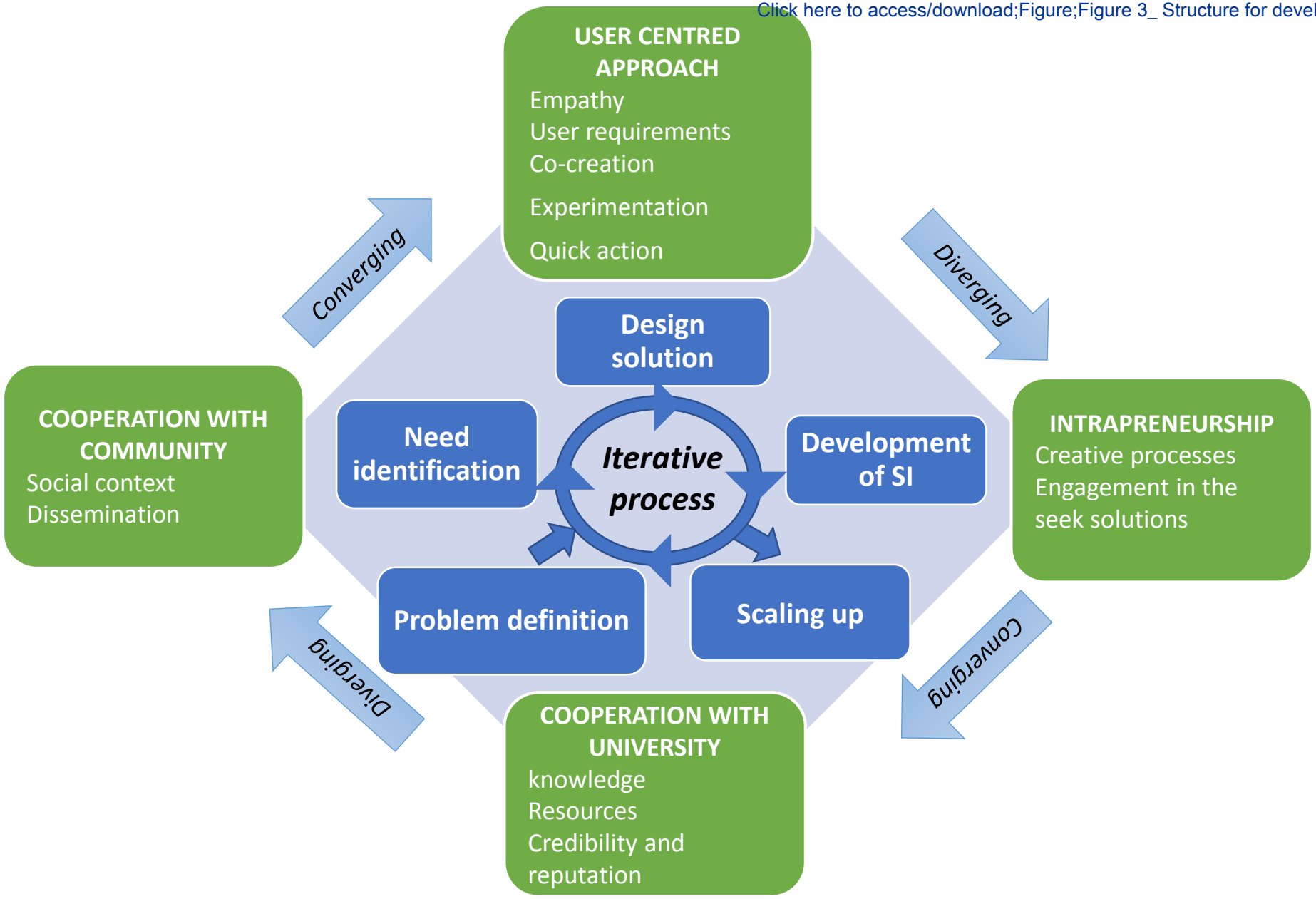
Iraci de Souza João-Roland

iraci.joao@unifesp.br - Institute of Science and Technology - 1201, Cesare Mansueto Giulio Lattes – room 8 - São José dos Campos, São Paulo State – Brazil - Post Code 12247 014 - phone number +55 (12) 39249785

Maria L Granados

M.Granados@westminster.ac.uk - Management and Marketing Department – University of Westminster - 35 Marylebone Road – London, United Kingdom – Post code NW1 5LS - +44 20 7911 5000 ext 67415

Figure



Iraci de Souza João-Roland

iraci.joao@unifesp.br - Institute of Science and Technology - 1201, Cesare Mansueto Giulio Lattes – room 8 - São José dos Campos, São Paulo State – Brazil - Post Code 12247 014 - phone number +55 (12) 39249785

Iraci João-Roland is a lecturer in Entrepreneurship and Innovation at the Federal University of São Paulo. She completed a postdoctoral research at the University of Westminster, developing research in social innovation management. She holds a PhD in Management of Organizations from University of São Paulo (USP), Brazil, with an internship at Research Centre on Economics and Society (CIES) – Barcelona University, Spain. Her research interests include social enterprise and social innovation. She is the current planning coordinator at the CIM/Unifesp unit at Brazilian Company of Research and Industrial Innovation (Embrapii).

Maria L Granados

M.Granados@westminster.ac.uk - Management and Marketing Department – University of Westminster - 35 Marylebone Road – London, United Kingdom – Post code NW1 5LS - +44 20 7911 5000 ext 67415

Maria L Granados is a senior lecturer in Innovation at University of Westminster in London, United Kingdom. She obtained her PhD from the University of Westminster in 2014 where she researched knowledge management capabilities in social enterprises. She is currently working with international research teams in Brazil and Colombia studying social innovation and entrepreneurship, informal entrepreneurship and sustainable development. She has authored/co-authored numerous papers in peer-reviewed journals, including Journal of Social Entrepreneurship, Social Enterprise Journal, Journal of Knowledge Management and International Journal of Entrepreneurial Behaviour & Research.

Towards social innovation strategy: an analysis of UK Social Enterprises

CRediT author statement

Iraci de Souza João-Roland: Conceptualization, Methodology, Formal analysis, Investigation Writing - Original Draft, Visualization.

Maria L Granados: Methodology, Writing - Review & Editing, Supervision.

Towards social innovation strategy: an analysis of UK Social Enterprises

Abstract

This paper presents the management practices and organisational behaviours that influence and inform social innovation (SI) strategy in social enterprises (SEs). Based on previous studies, we theorise that a collaborative and user-centred approach and a participatory organisational culture positively relate to social innovation performance. Data were collected from 78 SEs in the UK and analysed with ordinary least squares (OLS) regressions. Findings confirmed that cooperation with the community, beneficiaries and universities, development of solutions based on the community's needs, design thinking, and people inside the SE who have intrapreneur behaviour have a positive linear relationship with SI performance. Our paper proposes a framework that indicates the what, why, and when of the social innovation strategy, highlighting the essential role of community, universities, and embeddedness of users throughout the whole innovation process. This knowledge is crucial for SEs and policymakers to assess which practices they should prioritise and focus their scarce resources on and what behaviours should be encouraged/developed to manage SI strategically.

Keywords: social innovation, social enterprise, user-centred approach, cooperation, intrapreneurship, performance

1. Introduction

The last decade was a critical and fruitful period for developing social innovation (SI). There has been a significant increase in academic publications (Edwards-Schachter and Wallace, 2017), investment, and support programmes, such as the European Union Programme for Employment and Social Innovation (EaSI), with a budget of EUR 919.4 million for 2014-2020 (European Commission, 2019). SI is "a novel solution to a social problem that is more effective, efficient, sustainable, or just than existing solutions and for which the value created accrues primarily to society as a whole rather than private individuals" (Phills *et al.*, 2008, p. 36). SI is an alternative for addressing unmet social needs and delivering social welfare as an essential competitive strategy for a social enterprise (SE). An SE is considered an organisation guided by social values that sells goods and services in a competitive market due to its social mission or in support of it (Defourny and Nyssens, 2010).

For Tortia *et al.* (2020), SI is one of the main outputs of a SE as this type of organisation has the organisational context and routines that are adequate for the development of SI (Venugopal and Viswanathan, 2019). As they share aspects such as governance and motivation, including reinvesting dividends in the development of social goals, both concepts are closely related and have indistinguishable borders (Biggeri *et al.*, 2017; Mulyaningsih *et al.*, 2016a; Tortia *et al.*, 2020). Therefore, the choice to study the SI process in SEs is natural. SI becomes an essential element of SEs, which are required to develop, sustain and diffuse SI to enhance their impact on society and guarantee their sustainability as enterprises. Funders, policymakers, donors and communities are calling for SEs to be more innovative (Alvord *et al.*, 2004; Dees, 2007; Nielsen and Samia, 2008). However, the knowledge regarding SI and SE interaction is scarce (Tortia *et al.*, 2020), and academics and social entrepreneurs are still struggling to understand the determinants and the processes of their innovations (Doherty *et al.*, 2014; Phillips *et al.*, 2015). For instance, how to manage them effectively (Phillips *et al.*, 2015; Slimane and Lamine, 2017) and which elements of the innovation process significantly influence the creation of economic and socio-environmental value (Foroudi *et al.*, 2021).

Current studies exploring SI in SEs recognise managerial practices and organisational behaviours that can improve the SI process, such as partnerships, user integration and participatory culture (Baek *et al.*, 2019; Mulyaningsih *et al.*, 2016; Phillips *et al.*, 2017). Despite these critical findings, most studies provide a conceptual explanation, primarily based on case studies (Eichler and Schwarz, 2019; Phillips *et al.*, 2017; Silveira and Zilber, 2017). Although this provides good insights into the SE, it does not indicate how these practices and behaviours can be implemented and how they improve overall SI performance. To address this need, our paper aims to answer the following question:

- To what extent are management practices and organisational behaviours proposed in the literature influencing SI performance in SEs, and how can these practices and behaviour inform a SI strategy for SEs?

To answer this question, we used the findings from a previous systematic literature review (João-Roland and Granados, 2020) that identified management practices and organisational behaviours developing SI in SEs. We assessed them with a quantitative study with 78 SEs in the UK. Our focus was on management practices such as open innovation, collaboration, user-centred approach, and organisational/individual behaviours such as participatory organisational culture. Our findings indicated that a collaborative, participatory

and user-centred approach, driven by intrapreneurial teams, should be followed by SEs when designing their SI strategy. This knowledge is crucial for SEs and policymakers to assess which practices they should prioritise and focus on their scarce resources, what behaviours should be encouraged/developed, and how SI can be managed strategically in SEs.

The remainder of our paper is organised as follows. Section 2 presents the theoretical background and hypotheses exploring the management practices and organisational behaviours supporting SI in SEs. Section 3 presents the methods and data used, Section 4 presents the sample characteristics and results. Section 5 discusses the results and Section 6 concludes.

2. Theoretical background and hypotheses

There are many definitions of SI. While the sociological approach (e.g. Cajaiba-Santana, 2014) focuses on social practices, the economic conceptualisations (e.g. Dawson and Daniel, 2010; Pol and Ville, 2009) are more outcome-oriented (social impacts). However, they share two core conceptual elements: "1) a change in social relationships, -systems, or -structures, and 2) such changes serve a shared human need/goal or solve a socially relevant problem" (van der Have and Rubalcaba, 2016, p. 1932). More recent studies have argued that SI can also be defined from an institutional approach, considering cultural aspects, governance, and empowerment, recognising the different actors involved in the SI process (Solis-Navarrete *et al.*, 2021). This approach acknowledged that SI could generate different types of value, not only economic but also social, environmental, institutional, cultural and political, emphasising the breadth of the SI boundaries.

As a process, the mapping of social demands can be the first step of the process led by individuals (that may or may not benefit from the SI), social movements or organisations (Edwards-Schachter and Wallace, 2017; Nicolopoulou *et al.*, 2017; Senent-Bailach and Rey-Marti, 2017). It is argued that SI is a non-linear process with constant interactions and feedback loops creating learning opportunities (Terstriep *et al.*, 2021) but characterised by tensions that result from complementing a social mission and the need to remain financially stable (Kleverbeck *et al.*, 2017). It operates through partnerships and collaborative knowledge development, resulting in products, services or models that address social issues (Murray *et al.*, 2010). It may be radical when it proposes disturbing means, altering patterns of production, consumption, and distribution (Huddart, 2012) or incremental when it involves the

recombination and re-application of existing knowledge domains in new ways of meeting social goals (Bocken *et al.*, 2014; Yunus *et al.*, 2010).

The development of SI can occur in different settings, such as research institutions, the private sector, government and other institutions in civil society (Ludvig *et al.*, 2018; Schöning, 2013). The most common setting for it is within the social economy[1]. In this setting, it is essential to acknowledge that, although SEs, which are framed within the social economy, can be created to explore a SI, or SEs can generate SIs, not all SEs originate from SIs or aim to socially innovate (Guadarrama and Acosta, 2017; Solis-Navarrete *et al.*, 2021). Still, SEs are recognised by many researchers as a suitable environment for developing SI (Tortia *et al.*, 2020; Venugopal and Viswanathan, 2019) and because SIs have been considered an effective competitive strategy for SEs (Ko *et al.*, 2019). For this reason, this research focuses on SI developed by/in SEs.

Our previous systematic literature review (João-Roland and Granados, 2020) is used to address our research question. This study identified the SI process, its management and main drivers based on the analysis of 54 academic articles. The leading management practices and organisational behaviours (open approach/partnerships, organisational culture and community involvement in the innovative process) associated with the generation of SI in SEs compiled in our systematic review were grouped into the following three hypotheses.

2.1 Open approach and partnership

An open approach to innovation is understood as an organisation's willingness and readiness to open up to various forms of collaboration, including its propensity to implement open innovation practices and trust in external partners (Ahn *et al.*, 2016). In our review, at least a third of the papers analysed in the systemic literature review proposed 'partnerships' as a critical theme that plays the most prominent role in SI generation. For example, Bhatt and Ahmad, (2017) discovered that the financial capital was limited in all the SI processes performed by Indian SE. However, social connections facilitated cooperation and trust. The partnership and collaborative network were necessary for both the generation of SI and the growth of the newly created SEs (scale). Yun et al. (2017) studied ten Korean SEs and concluded that their success and growth depended on their striving to move towards open

[1] Generally speaking, social economy is characterized by different actions of hybrid agents (market, society and government) whose objective is to secure economic resources to meet social demands (Moulaert and Ailenei, 2005).

innovation after obtaining government support in the early stages. Similarly, in the study of Fab Labs, Rayna and Striukova (2019) concluded that the adoption of an open approach had allowed the programmes to be adapted to the environment in which they were inserted, with the necessary diversity to meet social needs and promote social impact in the short term.

For Chesbrough and Di Minin (2014), an open innovation strategy in the social context implies changes in organisations' business models, either inbound or outbound, to address social challenges. Hence, open innovation can be a strategy for SI (Ghazinoory *et al.*, 2020; Phillips *et al.*, 2017; Rayna and Striukova, 2019; Raynor, 2019; Selloni and Corubolo, 2017; Svensson and Hambrick, 2019). There could be three main reasons that justify the adoption of open innovation by social organisations: i) enable innovation and social activities of organisations through access to scarce resources and knowledge in SE (Castro-Arce *et al.*, 2019; Nicolopoulou *et al.*, 2017; Slimane and Lamine, 2017); ii) to align different partner objectives (not measured through financial accounts); and iii) improve the efficiency of proposed solutions, through exchange between several agents and continuous joint improvement, which potentialises the longevity and SI's capacity to generate systemic change (Santoro *et al.*, 2018).

Furthermore, an open approach can expand the frontiers of SI (Farmer et al., 2018), where partners may be called upon to explore opportunities mapped but not developed by SE due to scarcity of resources or different strategic interests (Phillips et al., 2017). In open SI, unlike technological innovation, commercialising intellectual property is not always the goal, focusing more on creating shared value (Mair and Gegenhuber, 2021). Instead, there is knowledge transmission and sharing of ideas, which guarantees diversity of resources and skills, a fundamental requirement for the SI process. That is, the value generated collectively is much greater than that which would be obtained by each organisation individually. Moreover, the learning process generated from knowledge obtained externally and its application in the organisation, through the use of open dialogue, is shown as an essential venue for the development of ideas and enhancing the organisation's ability to generate SI (Chalmers and Balan-Vnuk, 2013; Urban and Gaffurini, 2017).

Another benefit of a collaborative strategy is the achievement or improvement of the SE's credibility. The partnership with actors with an established reputation allows the SE, still unknown in a given ecosystem, to engage actors not involved in the process (Raynor, 2019), introduce (Biggeri et al., 2017) and scale the SI to new markets (Morais-da-Silva *et al.*, 2016).

Following these empirical findings, we proposed the following hypothesis:

Hypothesis 1 (H1): An open approach and partnership are positively related to social innovation performance.

2.2 User-centred approach

The user-centred approach is the heart of SI, given that the process starts with the identification of the needs in the community, and the solutions must be developed in partnership with, or preferably by the people that benefit from it (Dawson and Daniel, 2010; Nicolopoulou et al., 2017; Venugopal and Viswanathan, 2019; Vezina et al., 2019). In the systemic literature review carried out previously, eight papers addressed the importance of this theme as a precursor antecedent of SI. In addition, three articles presented techniques that aim to place the user at the centre of the innovative process, totalling 20% of the analysed papers.

The community involvement in the process of SI development results in advantages such as: a better understanding of the values, local needs and context (Venugopal and Viswanathan, 2019); greater confidence and, as a consequence, people and organisations are more inclined to collaborate; communities willing to collaborate (Farmer *et al.*, 2018), try and validate the SI (Bhatt and Ahmad, 2017; Rao-Nicholson *et al.*, 2017); access to external knowledge that facilitates the dissemination of SI by adapting it to other contexts and creation of SI ecosystems (Rao-Nicholson et al., 2017).

In addition, Judit et al. (2016) show that the lack of commitment/involvement of active local community actors can compromise the SI's success. Ahmed et al. (2018) showed that SIs that are easy to use and maintain resulted in successful dissemination, as users can replicate them. Lastly, Selloni and Corubolo (2017) suggest that design thinking could play a crucial role in the SI process because the method maximises the community's involvement by (i) putting the user in the centre of the innovative process, (ii) promoting constructive collaboration and (iii) facilitating the involvement of participants. According to Bennett and McWhorter (2019), design thinking is a human-centred approach to problem-solving comprising three main phases: inspiration – responsible for defining the problem in an empathic way; ideation – work to generate, develop and test viable ideas; and implementation - where ideas are tested, and implementation challenges are resolved. Despite the phases, it is an iterative process.

Further literature suggested two other management practices that promote a user-centred approach: the agile method and focus group. In the former, the process is divided into small stages with outputs where the next steps are defined in short meetings with all involved. The adaptive process based on the lessons learned facilitates the involvement of users and stakeholders (Castro-Spila et al., 2018). According to Beaumont Mitch (2017), companies (non-software product-based) have developed breakthrough product innovations using a mix of Agile and non-Agile methods. That is, while incremental innovations are developed in the traditional phase-gate pathway, an agile approach is applied to activities with substantial levels of uncertainty (breakthrough innovation) when iterative "loops" and prototypes are used to reduce uncertainties and clarify the desired solution. They also use multidisciplinary teams to ensure the customer's voice is heard.

Meanwhile, the focus group method is recommended for the initial stages of the innovation process by Mulyaningsih *et al.* (2014). The discussions generated by this tool contribute to equality in the perception and clarity in understanding a social problem and in selecting its solution. To Hamel (2001), a focus group applied to SI involves i) the aim of improving the individuals' or community's condition through the betterment of products, processes, services or approaches; ii) distinct agents involved in a planned process; iii) innovative practice; iv) an evaluation that considers previous notions and values or an *ex-post* impact evaluation of the SI.

Hypothesis 2 (H2): A user-centred approach is positively related to social innovation performance

2.3 Participatory organisational culture

A participative organisational culture was present in 18% of the papers analysed in the previous systematic literature review. This organisational factor is fundamental for the SI, as it provides open communication, constructive negotiation, and a decision process guided by joint reflection (Dawson and Daniel, 2010). Thus, it is recommended that organisations create physical or virtual spaces and conditions that favour dialogue and innovation (Biggeri *et al.*, 2017). Using data from South African SEs, Urban and Gaffurini (2017) confirmed that participative decision-making and organisational dialogue are positively linked with the frequency of SI. Learning occurs when different areas of the enterprise continuously communicate between themselves, and the increased involvement of employees can increase

their engagement. Finally, Biggeri et al. (2017) suggested that a participatory culture that encourages open minds towards new ideas and points of view from a multidisciplinary perspective enhance capacities of SEs' to produce SI.

Ko et al. (2019) affirmed that the sense of belonging to the organisation and entrepreneurial passion increase the motivation of employees to engage in creative processes and seek solutions to social problems. Therefore, managers of SEs should encourage this behaviour. The social intrapreneur uses the resources and infrastructure of the organisation in which she/he works to generate social value on a large scale by developing innovations that promote social and/or environmental objectives. The social intrapreneur increases the social value and economic benefit promoted by the employer (Portales, 2019). Participatory evaluation methods and feelings of shared ownership are also essential to evaluate SI's success as they minimise conflicts arising from different perceptions of performance (Szijarto et al., 2018).

Indeed, research in entrepreneurship and innovation has already identified the relationship between the company's culture and intrapreneurship. For example, Srivastava and Srivastava (2010) studied 150 private sector managers in retail food, confirming the hypothesis that participative organisation culture is positively related to intrapreneurship. Likewise, Eze *et al.* (2018) recommend that manufacturing companies enhance their shared organisational values and norms as the organisational culture plays a vital role in promoting intrapreneurial behaviour.

As a result of the reasoning above, we formulated a fourth hypothesis:

Hypothesis 3 (H3): Participatory organisational culture is positively related to social innovation performance.

3. Methods and Data

3.1 Instrument and sample

We followed a quantitative research design based on an online survey questionnaire to answer our research question and test the hypotheses proposed. The hypotheses were tested with three

models with several constructs. The constructs, the questions used in the survey instrument and the theoretical support are presented in Table 1.

Table 1: Data collection instrument description (theoretical support and question)

Construct	Citations examples	Questions in the instrument
H1: Open approach and partnership	"Without a platform of experience, in-depth knowledge of the field, and established reputation, it would be practically impossible to make a difference on a larger scale" (Westley et al., 2014, p. 23). "A high level of social capital and trust between different actors in the ecosystem positively influences the capacity of SEs to introduce SI" (Biggeri et al., 2017, p. 302). Credibility and reputation of the SE are of great importance for the final stages of the innovation process (scalability). (Morais-da-Silva et al., 2016). Credibility of the partners contributes to the engagement of actors not involved in the process (Raynor, 2019).	How useful/ valuable was credibility and reputation of the social enterprise, and the support network, in attracting resources?
	Belonging to a network of innovators that share the same values is recommended for social innovators as they work as a source of ideas, moral support and facilitate access to collaborators and resources (Lettice and Parekh, 2010).	How useful/ valuable was participation in specific networks for social entrepreneurs/innovators?
	Distribution of tasks and collaboration with more experienced partners (Senent-Bailach and Rey-Marti, 2017) "(...) collaboration of multiple actors, including the central and local governments, communities, public and private organisations, and individuals" (Castro-Arce et al., 2019, p. 13) SE "are more effective in creating innovation when working in partnership with others". (Phillips et al., 2017, p. 328) Local and foreign partners can stimulate SI (Rao-Nicholson et al., 2017) "(…) "social networks help to access or minimise financial resources necessary for new venture creation during social innovations" (Bhatt and Ahmad, 2017, p. 1783)	Indicate the type of collaborator the social enterprise collaborated with. ● Community/beneficiaries ● Other social enterprises ● Private companies ● Universities ● Government ● NGOs
	Associating external knowledge with the one produced internally impacts the levels of social innovation in social enterprises (Urban and Gaffurini, 2017). Creating new knowledge from lessons learned, experiences and best practices (Mulyaningsih et al., 2014) "(…) organisational learning is an important cultural element of the cases that enjoyed successful outcomes in scaling up" (Voltan and De Fuentes, 2016, p 461)	How useful/ valuable was the combination of external and organisational knowledge to innovate?
User centred approach	"(…) community participation in co-design led to low-cost and technically feasible evidence-based service and product innovations" (Farmer et al., 2018, p. 10) SI was "grounded in local community members' experiences of problems and context" (Farmer et al., 2018, p. 10) By enabling access to local knowledge, the community can perform an essential role in the customisation of the innovations (Svensson and Hambrick, 2019)	How useful/ valuable was the development of solutions (goods and services) based on the needs of the community?
	"(…)the success of the EMRI has been in tailoring social innovation to the Indian context" (Rao-Nicholson et al., 2017, p.235) If the SI is easy to use and maintain, it can be replicated by the users (Ahmed et al., 2018)	How useful/ valuable was the development of solutions that are easy to use?

	"Design thinking approach could play a crucial role, especially in supporting, accelerating, and democratising such innovation involving users and other actors" (Selloni and Corubolo, 2017, p. 790)	How useful/ valuable was design thinking?
	Focus Group Discussion – "(…) equality of perception over an emerging problem towards a mutually agreed solution" (Mulyaningsih et al., 2014, p. 4)	How useful/ valuable was the Focus Group?
	Agile prototyping process (potential users engaged and stakeholders) (Castro-Spila et al., 2018)	How useful/ valuable was the Agile Method?
Participatory organisational culture	"(…) less successful outcomes were experienced (to scaling up the SI) where the organisational culture was rigid, and control was centralised" (Voltan and De Fuentes, 2016, p. 463). "(…) open dialogue, constructive negotiation and reflective decision making", dialogue is essential to processes of SI (Dawson and Daniel, 2010, p.18) "(…) strong relationships and a sense of shared ownership were essential to the success of the evaluation SI phase" (Szijarto et al., 2018, p. 26).	The decision-making process is participative.
	Collaborative work and open discussions among employees encourage them to get involved in developing and sharing knowledge and producing news (Pasricha and Rao, 2018).	People inside the SE share knowledge
	Intrapreneurship (source of ideas and leadership) (Berzin and Pitt-Catsouphes, 2015) Employee training and less leader dependency (Morais-da-Silva et al., 2016) The entrepreneurial passion promotes greater team engagement in the development of solutions to social demands. (Ko et al., 2019).	People inside the SE have intrapreneur behaviour
	"Openness to new ideas and points of view and capacity to analyse issues in a multidisciplinary perspective enhance the social innovation capacities of SEs" (Biggeri et al., 2017, p. 301)	Is the team interdisciplinary?

Three sets formed the survey instrument: SE's characteristics (Main activity, age, number of employees and geographic scope); SE's management information (behaviours and practices, organisation culture and decision-making process, social entrepreneur and cooperation) and SI performance (number, originality, longevity and diffusion). The first and third parts of the questionnaire were based on the European Community Innovation Survey (CIS). It is the leading survey used by the European Union developed to monitor innovation activities (Mention, 2011). The literature review informed the second part of the questionnaire.

The questionnaire was collected through a self-completion online survey in the second half of 2019. According to Hughes and Preski (1997) the main types of biases related to key informants are related to the characteristics of the informant (organisational position and attributes not related to the position) or the complexity of the task (bias are errors of recall). To minimise the first type, the invitation emails were sent directly to the email of the CEO, social innovator or senior manager of the SEs. Such information was collected from the British government website (https://find-and-update.company-information.service.gov.uk/search?q=) or the organisation's website. This strategy was adopted because, in non-profit surveys,

executive directors are considered the best key informants since they are the most knowledgeable about organisations' routines (Kim and Daniel, 2020). As for recall bias, it was decided to include an option to pause and later resume filling out the questionnaire so that the retrospective of organisational events could be checked and confirmed. As we understand that providing respondents' personal data could extend the response time of the questionnaire and reduce the response rate, informant characteristics were not collected, minimising non-response bias.

SEs in the UK formed the population for this research. The sample was derived from a previous quantitative study by Granados and Rivera (2017), which contained contact details of 169 SEs interested in participating in further scientific research. Additionally, 136 organisations listed in UK SE networks were added to the database, resulting in a sample of 306 organisations. Self-assessment was used, meaning the UK government definition[2] of SE was presented, and the respondents self-defined it as a social enterprise or not.

The instrument was submitted for a pilot test with a panel of professionals and academics representing the SE community to ensure clarity and an appropriate number of questions for an average response time of 10 minutes. Small definitions of the concepts mentioned in the questionnaire were included to ensure the correct understanding of the questions and facilitate filling. Respondents were also rewarded with a report with the survey's main results at the end. The survey was made available over two and a half months, with two follow-up email reminders to increase participation. Despite the efforts described, only eighty-seven responses were received, but nine were dropped due to inconsistencies in the responses or because they did not self-define the SE. This resulted in a response rate of 29%. According to Hager *et al.* (2003), studies suggest that in organisational research, the concern with non-response bias due to low response rate is lower than in individuals because the similarity between respondents and non-respondents is significant. Thus, organisational research's return rates between 25 and 50% are not atypical.

3.2 Dependent variables

SI indicators are still lacking because there is no consensus about the concept of SI, its determining factors or appropriate metrics to measure and evaluate it (Unceta et al., 2016).

[2] Social enterprises are "businesses with primarily social objectives whose surpluses are principally reinvested for that purpose in the business or community, rather than being driven by the need to maximise profit for shareholders and owners" (Department for Business, Innovation and Skills, 2011).

According to Seelos and Mair (2017), the SI process can be divided into two phases: first, the act of innovation in which new solutions are developed with potential for future impact, and second, the act of scaling in which organisations create positive social impact. Therefore, we developed the SI performance index (SIPI) as our dependent variable to test our hypotheses. It is a synthetic unit of measurement of four indicators of innovative performance: i) the number of new or significantly improved SI (products/ services, process, marketing and organisational) introduced to the market in the last three years; ii) novelty degree, where the highest score means the SI is new to the market; iii) longevity that expresses the SI ability to continue in the long run, and iv) diffusion that indicates the reach and dissemination of SI. The calculation method of the index is the weighted sum of the four criteria mentioned.

$$SIPI = \sum (NI * 0.10) + (ND * 0.30) + (L * 0.20) + (D * 0.40)$$

The first and second indicators are adaptations based on the practices used in the Community Innovation Survey (CIS) to measure the enterprise's innovative activity levels and have been adjusted previously by Phillips et al. (2017) to be used in the context of SI in SEs. The first indicator aimed to measure the SE's ability to develop and significantly improve a SI within three years. The highest score is three for those who created three or more SIs and zero for those who did not socially innovate in the given period. A weight of 10% was applied to this indicator because producing a SI does not necessarily lead to the end of the SI process (Farmer et al., 2018; Murray et al., 2010; Tanimoto, 2012). The indicator measuring 'novelty degree' (0 - did not innovate; 1 - could not determine; 2 - new to SE only; and 3 - new to the market) weighted 30%. It indicated the enterprise's pioneering level of engagement with innovative activities (Phillips et al., 2017) and captured innovations based on a continuous change model (Mention, 2011).

The 'longevity' indicator contributed to 20% of the final score as it indicates the SE's capacity to develop and strengthen the SI, promoting its dissemination to other contexts (Mulyaningsih et al., 2014; Murray et al., 2010; Senent-Bailach and Rey-Marti, 2017; Tanimoto, 2012). The SEs received different scores according to the following: 0 - did not innovate; 1 - innovation being used for less than a year; 2 - innovation still in use after a year and 3 - innovation still in use after a year by the SE and others. Finally, the most crucial indicator (weight of 40%) was 'diffusion' as the SI process is only finalised when the innovation is institutionalised as a social practice (Bhatt and Ahmad, 2017; Farmer et al., 2018; Mulyaningsih et al., 2014; Murray et al., 2010; Tanimoto, 2012). The indicator measures the

realised capacity as it refers to the process of innovating, implementing and disseminating (Unceta *et al.*, 2016). The score ‘zero’ was attributed to enterprises that did not innovate, 'one' to SI implemented in niche markets, 'two' to SI implemented in other contexts/regions, 'three' to SI implemented by the SE and its partners, 'four' if the innovation was disseminated to other countries, and 'five' if the SI became part of a government program or public policy.

3.3 Control and Independent Variables

As in other studies with SI, models were run with dummy variables for the industry sector (Work Integration Social Enterprise – WISE, environment, renewables and energy, employment services, retail and leisure, business services and marketing, housing, education and youth services, financial services, health and social, cultural and other), geographical location (Northern Ireland, Scotland, Wales, North East, North West, Yorkshire and the Humber, East Midlands, West Midlands, London, East of England, South East and South West), age of SE and number of employees (Kickul et al., 2018; Ko et al., 2019a; Phillips et al., 2017).

Respondents indicated how much the management practices were extremely valuable or not at all valuable on a five Likert scale. Similarly, they agreed or disagreed with the decision-making process/culture and social entrepreneur/ innovator characteristics on a five Likert scale (1 = 'strongly disagree'; 5 = 'strongly agree'). All the information was coded into binary variables to analyse and create independent variables (answers 1, 2 and 3 = 0 and answers 4 and 5 = 1). The respondents also indicated the type of collaborator the SE collaborated with (community/ beneficiaries, other social enterprises, private companies, universities, government and non-profit organisations – NGOs). The internal reliability of the questionnaire was measured with Cronbach’s Alpha, with a value of 0.79, which is acceptable according to the parameters proposed by Hair Jr *et al.* (2005).

4. Sample characteristics and results

The final sample used in this study had 78 SEs. Albeit small, it presents data similar to the Social Enterprise: Market Trends 2017 report that was commissioned jointly by the Department for Digital, Culture, Media and Sport (DCMS) and the Department for Business, Energy and Industrial Strategy (BEIS) (Table 2).

The majority of the respondents' SEs operated in education (16), health (14) and Work Integration Social Enterprise - WISE (13), which shows a diversified selection of activities. The biggest SE employer in the sample had 275 employees, but most SEs were micro-businesses (1-9 employees). 47% of our sample employed between two to five employees. The average age of SE in our sample was 14 years old, and most SEs were located in the London area (25%), followed by North West, South West and South East (10% each). Wales had the smallest representation, with 1.15%, but a similar small figure was shown in the government report (2.8%) (Stephan *et al.*, 2017).

Table 2: Comparison between sample characteristics and the government report

	Our sample	SE: Market Trends 2017 report
Age (≥ 10 years old)	67%	72 %
Micro businesses (1-9 employees)	61%	68,5%
Region (England)	84%	86.1%

We used Stata® Statistics Software to test our hypotheses. As we were interested in not only testing our hypothesis but also measuring the magnitude of changes associated with the independent variables of interest, while controlling for confounding factors, regressions were run using ordinary least squares (OLS) with SIPI as the dependent variable. We found that H1 ($F= .041$, $p < .05$), H2 ($F= .026$, $p < .05$) and H3 ($F= .057$, $p < .10$) were partially confirmed. It is important to highlight that the robust standard errors do not change the significance of the coefficients in the three models.

The results showed that H1 explains 23% of the variation in SIPI (adjusted R squared= 0.2271). This means that, regarding the influence of an open approach and partnership, we found a positive linear relationship between SIPI and cooperation with community/ beneficiaries and universities (figure 1). On the other hand, a negative linear relationship was found between cooperation with NGOs and SIPI. This result can indicate that, just as the excessive use of bricolage[3] can prevent the development of innovations with a long-term systemic impact (Kickul *et al.*, 2018), cooperation with other NGOs can reduce diversity (same

[3] "The combination of existing resources for new problems and opportunities" (Fisher, 2012, p. 1031)

abilities, experiences and knowledge) and negatively influence the organisational and innovative performance of SEs (Cho *et al.*, 2017).

H1: Open approach and partnership	
Variables	P>[t]
Credibility and reputation of the social enterprise or the support network to attract resources	0.700
Combination of external knowledge and organisational knowledge to innovate	0.681
Participation in specific networks for social entrepreneurs/innovators	0.245
Cooperation with community	**0.074**
Cooperation with other SEs	0.642
Cooperation with private companies	0.355
Cooperation with universities	**0.054**
Cooperation with Government	0.510
Cooperation with NGOs	**-0.091**

H2: User-centred approach	
Variables	P>[t]
Solutions based on the needs of the community	**0.089**
Solutions that are easy to use	0.854
Focus Group	0.387
Agile Method	0.659
Design thinking	**0.021**

H3: Participatory organisational culture	
Variables	P>[t]
People inside SE share knowledge	0.275
Intrapreneur behaviour	**0.003**
Team is interdisciplinary	0.644
Decision-making process is participative	0.549

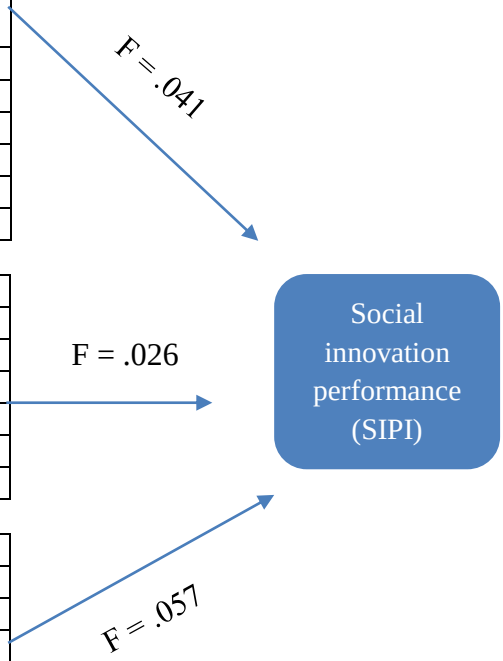


Figure 1: Conceptual model and main results

Regarding control variables, geographical location had no influence, only age and sector influenced the hypotheses. The age of SE decreases SIPI (significant at 1% level), but operating in the retail sector increases SIPI (significant at 5% level). Concerning age, our findings concurred with previous innovation studies that identified a negative impact of age on the intensity of innovative activities (see Balasubramanian and Lee, 2008). However, we acknowledge that more studies on SE are needed to determine precisely this relationship. Regarding the findings of the retail sector, our study found that the most frequent types of SI developed by the companies in our study in the last three years were new services, new processes and new management methods. This might explain retail companies' good performance as many provide services.

H2 explains 23% of the variation in SIPI (adjusted squared= 0.2295). We found a positive linear relationship between SIPI and the development of solutions based on the community's needs and design thinking. Afresh, operating in one sector increases SIPI, Housing ($p = .032$, $p < .05$).

The influence of participative organisational culture on SI performance was explored in H3, which explains 19% of the variation in SIPI (adjusted squared= 0.1858). We found a positive linear relationship between SIPI and people inside the SE who have intrapreneur behaviour. Again, retail ($p = .05$) was significantly associated with SIPI and housing ($p = .042$, $p < .05$), but it is worth noting that only one SE in our sample works in this last sector.

5. Discussion

Our hypotheses are designed to determine the management practices and organisational behaviours associated with SI performance in SEs. First, our findings confirm that cooperating with the community and universities increases the SE's ability to innovate socially. Models such as the 'Quadruple Helix Innovation System Framework' (see Carayannis et al., 2018 and Bellandi, Donati and Cataneo, 2021) and 'Triple Helix twins' (see Etzkowitz and Zhou, 2006) have already studied the relationship between the enterprise, universities, government and civil society, where the latter has the role of ensuring the balance between technological advancement and generation of negative externalities. The "interaction of the Triple Helix twins constitutes a social organisation that integrates a positive entrepreneurial dynamic into civil society" (Etzkowitz and Zhou, 2006, p. 80).

As already proposed by Bayuo et al. (2020), universities can play a crucial role in SI through their three pillars: research, teaching and third-mission. In research, by working with businesses and civil society organisations to co-produce and co-design SI projects supported by students. In teaching, for example, by using methodologies of active problem solutions, where students develop solutions to problems presented by the community. Lastly, regarding the university's third mission, by collaborating with other stakeholders to create living labs, science shops or do-it-yourself (DIY) labs (Lhoste, 2020). Similarly, Benneworth and Cunha (2015) suggested that universities can support the SI process in three different ways: 1) by providing knowledge that is necessary for innovation development; 2) by supplying infrastructure and assets, for example, the use of laboratories, and financing projects and 3) by

facilitating access to resources either by advising on external sources of funds or by persuading investors to support SI.

The importance of cooperating with the community lies in the ability of the SE to act as a 'bridge' between the community, universities, and the government. This ability increases SE's capacity to innovate because the community is the source of the innovative process (Farmer et al., 2018; Venugopal and Viswanathan, 2019). Hence, identifying and understanding a social need is the main reason motivating SE and community cooperation (see Figure 2). In this process, the SEs in our sample that appropriated the local experience and knowledge and developed solutions (goods and services) based on the community's needs presented a SIPI that was 13% larger than those that did not.

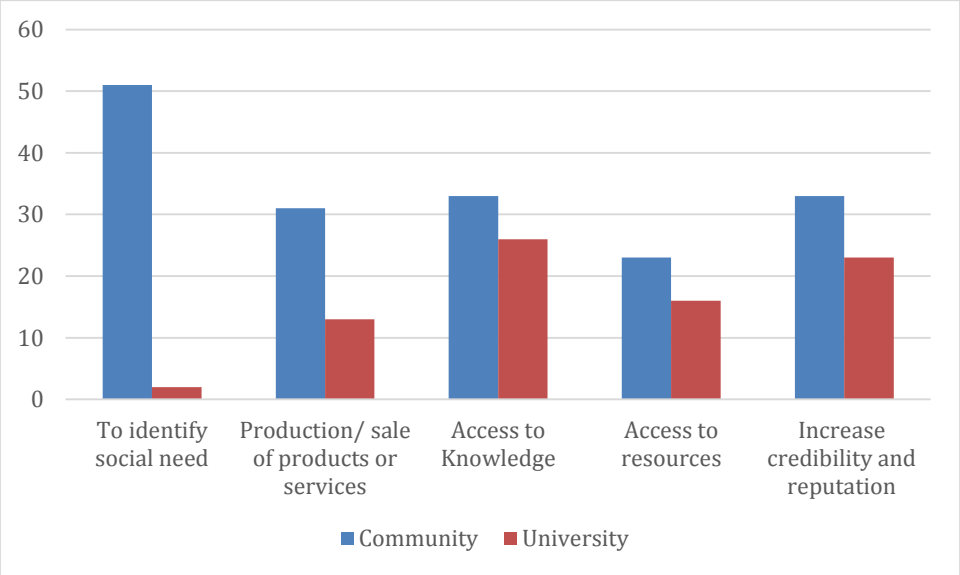


Figure 2: Type of partner and purpose of collaboration

After the ideation phase, the involvement of universities contributes to accessing scientific knowledge and resources for the project's development. Benneworth and Cunha (2015) argued that this type of cooperation is more beneficial when there is an alignment of interests between the university and the social innovators. The researchers and lecturers have helpful knowledge of SI from their previous teaching and research activities. The challenges associated with searching for a solution to social problems can originate new research ideas and practical activities, contributing to engaging and up-to-date lectures. Furthermore, the university's credibility and reputation are strategic assets for the SE and enable them to access

funding from the government, foundations and private companies, among others, through funding calls targeting the development of research projects.

Our findings demonstrated how the SEs improved their overall SI performance by following an open approach and partnership. Aligned to this finding was the acceptance of H3 about the user-centred approach. Specifically, the use of design thinking as a management practice increased the SE's SIPI by approximately 15 percentage points. Design thinking stimulates the search for solutions through experimentation and quick action, is iterative, based on collaborative work, and facilitates users' involvement (beneficiaries), who are the centre of the innovative process (Brown, 2008; Micheli *et al.*, 2019). According to Bennett and McWhorter (2019), empathy with potential innovation users is inherent to SI. Although this can happen without design thinking, the approach helps the social innovator to think about the new solution empathically, that is, from the awareness, feelings and experiences of SI end users.

Moreover, it aims to convert problems into opportunities, seeking to develop solutions that create value for the user whilst being technically and financially feasible for the company (Brown, 2008). In other words, it considers the desires of the government (solution to social problems), the SI beneficiaries, universities and the SE.

Our study found that a management behaviour, intrapreneurship, was identified as a SI boosting factor in the SEs supporting a participatory organisational culture. According to Dwivedi and Weerawardena (2018), extremely limited resources and a troubling operational environment make the social purpose organisations adopt an entrepreneurial stance. Similarly, the conception of innovative approaches to generate social value is intrinsic to social entrepreneurial behaviour. The intrapreneurial behaviour increased the SIPI of analysed SEs by 16.67 percentage points. This finding reinforces the view that using the knowledge, competency, partners, and relationships in the SE is a viable option to encourage innovative activities (Berzin and Pitt-Catsouphes, 2015). However, according to Portales (2019), the intrapreneurial potential to generate social impact must be accompanied by organisations encouraging and developing SIs.

Overall, the human resources in a SE (managers, employees, volunteers and trustees) are paid below the market rate. Still, they are attracted and motivated to work in such organisations due to their calling to the SE's social mission, usually a dual role as client and

employee (Doherty et al., 2014). These characteristics work as a powerful booster for intrapreneurship because, as they get involved in the SI process, their passions and beliefs guide them to expand their limits, promoting positive social change (Caringal-Go and Hechanova, 2018).

However, it is worth noting that salaries below-market rates are considered barriers to attract skilled employees (Doherty et al., 2014). This might have partially affected the innovative capacity of the SEs analysed, as only 9% of them reported developing entirely new innovations in the market. For Dawson and Daniel (2010), SI consists of new knowledge and technologies or the recombination of knowledge domains into new ways of meeting social objectives. Kickul et al. (2018) demonstrated that bricolage contributes positively to the ability to innovate up to a certain point. High levels of bricolage may hinder the use of non-traditional resources to expand work in neglected markets. This may suggest that the SEs in the sample present higher SIPI because their human resources can recycle existing knowledge into new projects. However, the lag in team building can lead to a lower capacity to produce radical SIs.

In cases where the beneficiaries of the social change form the SE, the intrapreneurship behaviour is also associated with empowerment (Edú Valsania *et al.*, 2016), which is a SI characteristic, especially in the final stages of the innovation process (Castro-Arce et al., 2019; Mongelli and Rullani, 2017). For some of the SE's employees, the involvement in the innovation process represents a motivational and empowering factor as they are often marginalised when it comes to decision-making in traditional organisations (Caringal-Go and Hechanova, 2018). However, to explore the empowering potential by/through SI, it is crucial to consider the power relations, which can result in (dis)empowerment of actors (Avelino *et al.*, 2019). In this way, design thinking can democratise SI's development, ensuring everyone's involvement (Selloni and Corubolo, 2017). Lastly, the intrapreneurial behaviour can be stimulated beyond the boundaries of the SE, involving the organisation's partners. Silva and Wright (2019) showed how different knowledge, skills, experience, and entrepreneurial characteristics from different organisations' actors contribute to integrating social and market mechanisms to generate social and business values.

In light of our results, we proposed a framework (Figure 3) that captures the management practices and organisational behaviours that can support a SI strategy in SEs. According to Tidd and Bessant (2015), the innovation strategy is based on the organisation’s ability to manage limited resources in a context of growing complexity to develop new

solutions that boost the company's growth. We proposed four pillars that support the SI strategy. Of the 18 variables investigated, grouped into three hypotheses, five showed a positive linear relationship between SIPI, which is why they became the pillars of the proposed framework. From H1, cooperation with communities and universities was represented by 'cooperation with university' and 'cooperation with community' pillars. In H2, design thinking and the development of solutions based on community needs were represented as a 'user centred approach', as both aim to place the user at the centre of the innovation process. In H3, intrapreneurial behaviour was represented by the 'intrapreneurship' pillar.

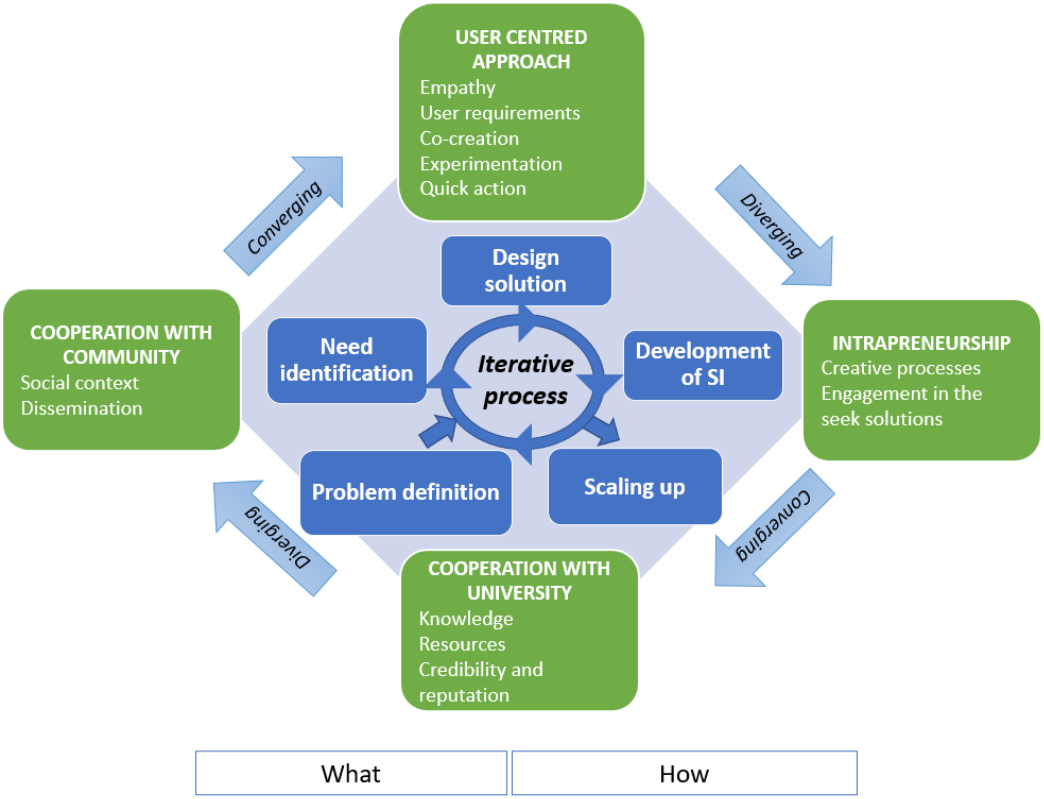


Figure 3: Structure for development of SI strategy

The SI process starts with cooperation with the community, identifying their needs, which become the source of the innovation process. Afterwards, an affective and cognitive exercise elicits the requirements for innovation. This exercise helps to understand and guide the process from the perspective brought by the living conditions of potential SI users. The solutions are then designed, developed and tested (prototypes) in an interactive and iterative process while stimulating intrapreneurship and cooperating with universities and the community.

The community is interested in improving quality of life, possesses knowledge of the local dynamics, increases the SE's credibility among potential users of the SI, and legitimises it (Bhatt and Ahmad, 2017; Farmer et al., 2018; R. Rao-Nicholson et al., 2017; Venugopal and Viswanathan, 2019). On the other hand, the university aims to increase its interaction with society and apply the newly developed knowledge to teaching activities and research. It can also access funding calls focusing on SI (Benneworth and Cunha, 2015), contributing advanced and up-to-date knowledge and skills (Silva and Wright, 2019).

The diamond represents the divergence and convergence of ideas, a common characteristic in user-centred approaches. Using tools like design thinking seems to contribute significantly to aligning interests, democratisation in participation, coordinating efforts, and accelerating the innovative process.

6. Conclusions

To answer the need for SEs to be more innovative and to help them understand how to manage innovation effectively, we asked the question: to what extent are management practices and organisational behaviours proposed in the literature influencing SI performance in SEs, and how can these practices and behaviours inform a SI strategy for SEs?. Based on our findings from 78 SEs in the UK, we confirmed how specific management practices and organisational behaviours could improve SI performance in SEs. Furthermore, we proposed a framework that helps SEs to develop a SI strategy.

Our paper contributes to both theory and practice. First, it informs SI and SE literature by indicating the determinants and the process of SI. It highlights the crucial role of practices and behaviours that proved effective in other types of enterprises, such as design thinking, and applies it in the context of SEs. Moreover, it contributes to current discussions about the particularities of SI, which makes it different from technology innovation (Vrontis *et al.*, 2021) and SE (Foroudi *et al.*, 2021). It includes the essential role of community and universities, the embeddedness of users throughout the whole innovation process, and the need for intrapreneurship.

Secondly, our paper’s contributions to practice are twofold. For SEs, it helps them understand how to manage the SI strategy. Our framework indicates the what, why, and when of the innovation activity. This means developing, reviewing, and updating their management practices and organisation's behaviours that are compatible with the organisation’s mission and

establishing targets for innovation. SEs need to realise that, to shape their SI strategy, they need to identify the community's social needs following emphatic principles, co-create solutions with them, and develop a solution that creates/transforms/sustain value. All this is supported by four critical pillars: the community, cooperation, user-centred approach and intrapreneurship. For universities and other supporting organisations, it emphasises their critical role in the innovation process of SEs. Universities can support SI in different ways, such as providing advisory services to social innovators, opening their networks, bringing resources, and becoming social change agents (Petersen and Kruss, 2021).

There are some potential limitations of our study. Firstly, the sample size was relatively small, although it represented the characteristics of the SE population in the UK. Further studies can include other potential organisations where SI happens, such as public and for-profit institutions, or different geographical contexts, such as developing countries. This will address current discussions about the role of SI in emerging economies (Arocena and Sutz, 2021; Rao-Nicholson *et al.*, 2017) and in different institutional contexts (Turker and Altuntas Vural, 2017). Second, our study did not find a significant influence of control variables such as geographical location, age and sector in the hypotheses. However, we acknowledge that the nature of the work developed in some sectors may influence the innovation process, sources and practices of SEs, and their location, which provide different access to resources or opportunities. Further research should consider the influence of different geographical ecosystems on the levels of innovation from SEs, as identified in entrepreneurial studies (Wurth *et al.*, 2022) and the difference between sectors and their particular innovation behaviours, as studied in technology innovation literature (Hashi and Stojcic, 2013). Finally, in our study, we did not explore further the types of innovations developed by SEs and how the different management practices and behaviours influence them. Our primary focus was on assessing the impact of these practices on SI performance. A more systemic exploration of SI, such as the one followed by the 'Problem-oriented innovation system' perspective (Ghazinoory et.al., 2020), could provide good insights into the social and technical areas of the innovations.

7. References

Ahn, J.M., Ju, Y., Moon, T.H., Minshall, T., Probert, D., Sohn, S.Y. and Mortara, L. (2016),

"Beyond absorptive capacity in open innovation process: the relationships between

openness, capacities and firm performance", *Technology Analysis & Strategic Management*, Vol. 28 No. 9, pp. 1009–1028.

Alvord, S.H., Brown, L.D. and Letts, C.W. (2004), "Social Entrepreneurship and Societal Transformation: An Exploratory Study", *The Journal of Applied Behavioral Science*, Vol. 40 No. 3, pp. 260–282.

Arocena, R. and Sutz, J. (2021), "Universities and social innovation for global sustainable development as seen from the south", *Technological Forecasting and Social Change*, Vol. 162, p. 120399.

Avelino, F., Wittmayer, J.M., Pel, B., Weaver, P., Dumitru, A., Haxeltine, A., Kemp, R., *et al.* (2019), "Transformative social innovation and (dis)empowerment", *TECHNOLOGICAL FORECASTING AND SOCIAL CHANGE*, Vol. 145, pp. 195–206.

Baek, J.S., Kim, S. and Harimoto, T. (2019), "The Effect of Cultural Differences on a Distant Collaboration for Social Innovation: A Case Study of Designing for Precision Farming in Myanmar and South Korea", *DESIGN AND CULTURE*, Vol. 11 No. 1, SI, pp. 37–58.

Balasubramanian, N. and Lee, J. (2008), "Firm age and innovation", *Industrial and Corporate Change*, Vol. 17 No. 5, pp. 1019–1047.

Bennett, E.E. and McWhorter, R.R. (2019), "Social Movement Learning and Social Innovation: Empathy, Agency, and the Design of Solutions to Unmet Social Needs", *Advances in Developing Human Resources*, Vol. 21 No. 2, pp. 224–249.

Bhatt, P. and Ahmad, A.J. (2017), "Financial social innovation to engage the economically marginalised: insights from an Indian case study", *Entrepreneurship and Regional Development*, Vol. 29 No. 5–6, pp. 391–413.

Biggeri, M., Testi, E. and Bellucci, M. (2017), "Enabling Ecosystems for Social Enterprises and Social Innovation: A Capability Approach Perspective", *Journal of Human Development and Capabilities*, Vol. 18 No. 2, pp. 299–306.

Bocken, N.M.P., Short, S.W., Rana, P. and Evans, S. (2014), “A literature and practice review to develop sustainable business model archetypes”, *Journal of Cleaner Production*, Vol. 65, pp. 42–56.

Brown, T. (2008), “Design Thinking”, *Design Thinking*, No. June, pp. 1–10.

Bulut, C., Eren, H. and Halac, D.S. (2013), “Which One Triggers the Other? Technological or Social Innovation”, *Creativity Research Journal*, Vol. 25 No. 4, pp. 436–445.

Cajaiba-Santana, G. (2014), “Social innovation: Moving the field forward. A conceptual framework”, *Technological Forecasting and Social Change*, Vol. 82, pp. 42–51.

Castro-Arce, K., Parra, C. and Vanclay, F. (2019), “Social innovation, sustainability and the governance of protected areas: revealing theory as it plays out in practice in Costa Rica”, *Journal of Environmental Planning and Management*, available at:https://doi.org/10.1080/09640568.2018.1537976.

Chesbrough, H. and Di Minin, A. (2014), “Open Social Innovation”, *New Frontiers in Open Innovation*, OUP Oxford, p. 369.

Cho, S., Kim, A. and Mor Barak, M.E. (2017), “Does diversity matter? exploring workforce diversity, diversity management, and organisational performance in social enterprises”, *Asian Social Work and Policy Review*, Vol. 11 No. 3, pp. 193–204.

Dawson, P. and Daniel, L. (2010), “Understanding social innovation: a provisional framework”, *International Journal of Technology Management*, Vol. 51 No. 1, pp. 9–21.

Dees, J.G. (2007), “Taking social entrepreneurship seriously”, *Society*, Vol. 44 No. 3, pp. 24–31.

Defourny, J. and Nyssens, M. (2010), “Conceptions of Social Enterprise and Social Entrepreneurship in Europe and the United States: Convergences and Divergences”, *Journal of Social Entrepreneurship*, Vol. 1 No. 1, pp. 32–53.

Doherty, B., Haugh, H. and Lyon, F. (2014), “Social Enterprises as Hybrid Organisations: A Review and Research Agenda”, *International Journal of Management Reviews*, Vol. 16 No. 4, pp. 417–436.

Edú Valsania, S., Moriano, J.A. and Molero, F. (2016), “Authentic leadership and intrapreneurial behavior: cross-level analysis of the mediator effect of organisational identification and empowerment”, *International Entrepreneurship and Management Journal*, Vol. 12 No. 1, pp. 131–152.

Edwards-Schachter, M. and Wallace, M.L. (2017), “‘Shaken, but not stirred’: Sixty years of defining social innovation”, *Technological Forecasting and Social Change*, Vol. 119, pp. 64–79.

Eichler, G.M. and Schwarz, E.J. (2019), “What sustainable development goals do social innovations address? A systematic review and content analysis of social innovation literature”, *Sustainability (Switzerland)*, Vol. 11 No. 2, available at:https://doi.org/10.3390/su11020522.

Eze, B.U., Abdul, A., Nwaba, E.K. and Adebayo, A. (2018), “Organizational Culture and Intrapreneurship Growth in Nigeria: Evidence from Selected Manufacturing Firms”, *EMAJ: Emerging Markets Journal*, Vol. 8 No. 1, pp. 39–44.

Farmer, J., Carlisle, K., Dickson-Swift, V., Teasdale, S., Kenny, A., Taylor, J., Croker, F., *et al.* (2018), “Applying social innovation theory to examine how community co-designed health services develop: Using a case study approach and mixed methods”, *BMC Health Services Research*, Vol. 18 No. 1, available at:https://doi.org/10.1186/s12913-018-2852-0.

Fisher, G. (2012), “Effectuation, Causation, and Bricolage: A Behavioral Comparison of Emerging Theories in Entrepreneurship Research”, *Entrepreneurship Theory and Practice*, Vol. 36 No. 5, pp. 1019–1051.

Foroudi, P., Akarsu, T.N., Marvi, R. and Balakrishnan, J. (2021), “Intellectual evolution of social innovation: A bibliometric analysis and avenues for future research trends”, *Industrial Marketing Management*, Vol. 93, pp. 446–465.

Ghazinoory, S., Nasri, S., Ameri, F., Montazer, G.A. and Shayan, A. (2020), “Why do we need ‘Problem-oriented Innovation System (PIS)’ for solving macro-level societal problems?”, *Technological Forecasting and Social Change*, Vol. 150, p. 119749.

Guadarrama, V.H. and Acosta, A. (2017), *Ecosistema de Innovación Social en México*, DF Mexico.

Hager, M.A., Wilson, S., Pollak, T.H. and Rooney, P.M. (2003), "Response Rates for Mail Surveys of Nonprofit Organizations: A Review and Empirical Test", *Non-profit and Voluntary Sector Quarterly*, Vol. 32 No. 2, pp. 252–267.

Hair Jr, J., Babin, B., Money, A. and Samouel, P. (2005), *Essentials of Business Research Methods*, Routledge, New York.

Hamel, J. (2001), "The focus group method and contemporary French sociology", *Journal of Sociology*, Vol. 37 No. 4, pp. 341–353.

Hashi, I. and Stojcic, N. (2013), "Knowledge spillovers, innovation activities, and competitiveness of industries in EU member and candidate countries", *Economic Annals*, Vol. 58 No. 198, pp. 7–34.

van der Have, R.P. and Rubalcaba, L. (2016), "Social innovation research: An emerging area of innovation studies?", *Research Policy*, Vol. 45 No. 9, pp. 1923–1935.

Huddart, S. (2012), "Renewing the Future: Social Innovation Systems, Sector Shift, and Innoweave", *Technology Innovation Management Review*, Vol. 2 No. 7, available at: http://timreview.ca/article/574.

Hughes, L.C. and Preski, S. (1997), "Using key informant methods in organisational survey research: Assessing for informant bias", *Research in Nursing & Health*, Vol. 20 No. 1, pp. 81–92.

João-Roland, I. de S. and Granados, M.L. (2020), "Social innovation drivers in social enterprises: systematic review", *Journal of Small Business and Enterprise Development*, Vol. 27 No. 5, pp. 775–795.

Kickul, J., Griffiths, M., Bacq, S. and Garud, N. (2018), "Catalysing social innovation: is entrepreneurial bricolage always good?", *Entrepreneurship and Regional Development*, Vol. 30 No. 3–4, pp. 407–420.

Kim, M. and Daniel, J.L. (2020), “Common Source Bias, Key Informants, and Survey-Administrative Linked Data for Nonprofit Management Research”, *Public Performance & Management Review*, Vol. 43 No. 1, pp. 232–256.

Kleverbeck, M., Terstriep, J., Deserti, A. and Rizzo, F. (2017), “Social Entrepreneurship: The Challenge of Hybridity”, pp. 28–48.

Ko, W.W., Liu, G., Wan Yusoff, W.T. and Che Mat, C.R. (2019), “Social Entrepreneurial Passion and Social Innovation Performance”, *Nonprofit and Voluntary Sector Quarterly*, available at:https://doi.org/10.1177/0899764019830243.

Lettice, F. and Parekh, M. (2010), “The social innovation process: themes, challenges and implications for practice”, *International Journal of Technology Management*, Vol. 51 No. 1, pp. 139–158.

Ludvig, A., Wilding, M., Thorogood, A. and Weiss, G. (2018), “Social innovation in the Welsh Woodlands: Community based forestry as collective third-sector engagement”, *Forest Policy and Economics*, Vol. 95, pp. 18–25.

Mair, J. and Gegenhuber, T. (2021), “Open Social Innovation”, *Stanford Social Innovation Review*, Stanford Social Innovation Review, Vol. 19, p. 2633.

Micheli, P., Wilner, S.J.S., Bhatti, S.H., Mura, M. and Beverland, M.B. (2019), “Doing Design Thinking: Conceptual Review, Synthesis, and Research Agenda: Doing Design Thinking”, *Journal of Product Innovation Management*, Vol. 36 No. 2, pp. 124–148.

Morais-da-Silva, R.L., Takahashi, A.R.W. and Segatto, A.P. (2016), “SCALING UP SOCIAL INNOVATION: A META-SYNTHESIS.”, *Revista de Administração Mackenzie*, Vol. 17 No. 6, pp. 134–163.

Moulaert, F. and Ailenei, O. (2005), “Social Economy, Third Sector and Solidarity Relations: A Conceptual Synthesis from History to Present”, *Urban Studies*, Vol. 42 No. 11, pp. 2037–2053.

Mulyaningsih, H.D., Yudoko, G. and Rudito, B. (2014), “Initial conceptual model of knowledge-based social innovation”, *World Applied Sciences Journal*, Vol. 30 No. 30 A, pp. 256–262.

Mulyaningsih, H.D., Yudoko, G. and Rudito, B. (2016a), “Knowledge-based social innovation process in social enterprise: A conceptual framework”, *Advanced Science Letters*, Vol. 22 No. 5–6, pp. 1393–1397.

Mulyaningsih, H.D., Yudoko, G. and Rudito, B. (2016b), “Knowledge-based social innovation process in social enterprise: A conceptual framework”, *Advanced Science Letters*, Vol. 22 No. 5–6, pp. 1393–1397.

Murray, R., Caulier-Grice, J. and Mulgan, G. (2010), “THE OPEN BOOK OF SOCIAL INNOVATION”, p. 224.

Nicolopoulou, K., Karataş-Özkan, M., Vas, C. and Nouman, M. (2017), “An incubation perspective on social innovation: the London Hub - a social incubator”, *R&D Management*, Vol. 47 No. 3, pp. 368–384.

Nielsen, C. and Samia, P.M. (2008), “Understanding key factors in social enterprise development of the BOP: a systems approach applied to case studies in the Philippines”, edited by Pitta, D.*Journal of Consumer Marketing*, Vol. 25 No. 7, pp. 446–454.

Petersen, I. and Kruss, G. (2021), “Universities as change agents in resource-poor local settings: An empirically grounded typology of engagement models”, *Technological Forecasting and Social Change*, Vol. 167, p. 120693.

Phillips, W., Alexander, E.A. and Lee, H. (2017), “Going it alone won’t work! The relational imperative for social innovation in social enterprises.”, *Journal of Business Ethics*, available at: http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2017-28183-001&site=ehost-live&scope=site.

Phillips, W., Lee, H., Ghobadian, A., O’Regan, N. and James, P. (2015), “Social Innovation and Social Entrepreneurship: A Systematic Review”, *Group & Organization Management*, Vol. 40 No. 3, pp. 428–461.

Phills, J., Deiglmeier, K. and Miller, D. (2008), “Rediscovering Social Innovation”, *Stanford Social Innovation Review*, Vol. 6 No. 4, pp. 34–43.

Pol, E. and Ville, S. (2009), “Social innovation: Buzz word or enduring term?”, *The Journal of Socio-Economics*, Vol. 38 No. 6, pp. 878–885.

Portales, L. (2019), *Social Innovation and Social Entrepreneurship: Fundamentals, Concepts, and Tools*, Springer International Publishing, Cham, available at:https://doi.org/10.1007/978-3-030-13456-3.

Rao-Nicholson, R., Vorley, T. and Khan, Z. (2017), “Social innovation in emerging economies: A national systems of innovation based approach”, *Technological Forecasting and Social Change*, Vol. 121, pp. 228–237.

Rayna, T. and Striukova, L. (2019), “Open social innovation dynamics and impact: exploratory study of a fab lab network”, *R and D Management*, Vol. 49 No. 3, pp. 383–395.

Raynor, K. (2019), “Assembling an innovative social housing project in Melbourne: mapping the potential for social innovation”, *Housing Studies*, Vol. 34 No. 8, pp. 1263–1285.

Santoro, Gabriele, Ferraris, Alberto, and Vrontis, Demetris. (2018), “Open social innovation: towards a refined definition looking to actors and processes”, *Sinergie Italian Journal of Management*, No. 105, pp. 25–42.

Schöning, M. (2013), “Social Entrepreneurs as Main Drivers of Social Innovation”, in Osburg, T. and Schmidpeter, R. (Eds.), *Social Innovation*, Springer Berlin Heidelberg, Berlin, Heidelberg, pp. 111–118.

Selloni, D. and Corubolo, M. (2017), “Design for Social Enterprises: How Design Thinking Can Support Social Innovation within Social Enterprises”, *Design Journal*, Vol. 20 No. 6, pp. 775–794.

Senent-Bailach, C. and Rey-Marti, A. (2017), “Creating Entrepreneurship through Social Innovation: The Case of I-Box Create”, *Contemporary Economics*, Vol. 11 No. 4, pp. 479–486.

Silveira, F.F. and Zilber, S.N. (2017), “Is social innovation about innovation? A bibliometric study identifying the main authors, citations and co-citations over 20 years”,

International Journal of Entrepreneurship and Innovation Management, Vol. 21 No. 6, pp. 459–484.

Slimane, K.B. and Lamine, W. (2017), “A transaction-based approach to social innovation”, *International Journal of Entrepreneurship and Innovation*, Vol. 18 No. 4, pp. 231–242.

Solis-Navarrete, J.A., Bucio-Mendoza, S. and Paneque-Gálvez, J. (2021), “What is not social innovation”, *Technological Forecasting and Social Change*, Vol. 173, p. 121190.

Srivastava, N. and Srivastava, S. (2010), “Culture-Intrapreneurship Relationship: Reward as a Moderator”, *Management and Labour Studies*, Vol. 35 No. 2, pp. 249–266.

Stephan, U., Braidford, P., Folmer, E., Lomax, S. and Mark, H. (2017), *Social Enterprise: Market Trends 2017*, Department for Digital, Culture, Media and Sport (DCMS) and the Department for Business, Energy and Industrial Strategy (BEIS), London, UK, p. 69.

Svensson, P.G. and Hambrick, M.E. (2019), “Exploring how external stakeholders shape social innovation in sport for development and peace”, *SPORT MANAGEMENT REVIEW*, Vol. 22 No. 4, pp. 540–552.

Terstriep, J., Krlev, G., Mildenberger, G., Strambach, S., Thurmann, J.-F. and Wloka, L.-F. (2021), “Measuring social innovation”, *A Research Agenda for Social Innovation*, Edward Elgar Publishing, pp. 263–286.

Tidd, J. and Bessant, J. (2015), *Gestão da inovação - 5.ed.*, Bookman Editora.

Tortia, E.C., Degavre, F. and Poledrini, S. (2020), “Why are social enterprises good candidates for social innovation? Looking for personal and institutional drivers of innovation”, *Annals of Public and Cooperative Economics*, Vol. 91 No. 3, pp. 459–477.

Turker, D. and Altuntas Vural, C. (2017), “Embedding social innovation process into the institutional context: Voids or supports”, *Technological Forecasting and Social Change*, Vol. 119, pp. 98–113.

Unceta, A., Castro-Spila, J. and Fronti, J.G. (2016), “Social innovation indicators”, *Innovation: The European Journal of Social Science Research*, Vol. 29 No. 2, pp. 192–204.

Venugopal, S. and Viswanathan, M. (2019), “Implementation of Social Innovations in Subsistence Marketplaces: A Facilitated Institutional Change Process Model”, *JOURNAL OF PRODUCT INNOVATION MANAGEMENT*, Vol. 36 No. 6, pp. 800–823.

Vrontis, D., Morea, D., Basile, G., Bonacci, I. and Mazzitelli, A. (2021), “Consequences of technology and social innovation on traditional business model”, *Technological Forecasting and Social Change*, Vol. 170, p. 120877.

Wurth, B., Stam, E. and Spigel, B. (2022), “Toward an Entrepreneurial Ecosystem Research Program”, *Entrepreneurship Theory and Practice*, Vol. 46 No. 3, pp. 729–778.

Yunus, M., Moingeon, B. and Lehmann-Ortega, L. (2010), “Building Social Business Models: Lessons from the Grameen Experience”, *Long Range Planning*, Vol. 43 No. 2, pp. 308–325.

Annex A – List of papers mapped in the systematic review (João-Roland and Granados, 2020) and used in developing the research questionnaire.

Title	Publication Title	Authors
Social innovation and SONO filter for drinking water	Society and Business Review	Ahmed, Jashim Uddin; Tinne, Wahida Shahan; Al-Amin, Md; Rahanaz, Maliha
Social innovation practices in sustainable waste management: Case study of successful social enterprises in Ahmedabad	International Journal of Scientific and Technology Research	Ambati, N.R.
The Effect of Cultural Differences on a Distant Collaboration for Social Innovation: A Case Study of Designing for Precision Farming in Myanmar and South Korea	Design and Culture	Baek, Joon Sang; Kim, Soyoung; Harimoto, Taiei
Defining Our Own Future: Human Service Leaders on Social Innovation	Human Service Organizations Management, Leadership and Governance	Berzin, S.C.; Pitt-Catsouphes, M.; Gaitan-Rossi, P.
How social capital is leveraged in social innovations under resource constraints?	Management Decision	Bhatt, P.; Altinay, L.
Enabling Ecosystems for Social Enterprises and Social Innovation: A Capability Approach Perspective	Journal of Human Development and Capabilities	Biggeri, M.; Testi, E.; Bellucci, M.
Social innovation, sustainability and the governance of protected areas: revealing theory as it plays out in practice in Costa Rica	Journal of Environmental Planning and Management	Castro-Arce, K.; Parra, C.; Vanclay, F.
Social innovation and sustainable tourism lab: an explorative model	Higher Education, Skills and Work-based Learning	Castro-Spila, J.; Torres, R.; Lorenzo, C.; Santa, A.
The importance of the technologically able social innovators and entrepreneurs: A US national laboratory perspective	Technological Forecasting and Social Change	Chavez, Victor A.; Stinnett, Regan; Tierney, Robert; Walsh, Steven
InterBoxes: A social innovation in education in rural China.	Children & Youth Services Review	Chow, Julian Chun-Chung; Ren, Cheng; Mathias, Brenda; Liu, Jiaying
Understanding social innovation: A provisional framework	International Journal of Technology Management	Dawson, P.; Daniel, L.
Transcending the pyramid: opportunity co-creation for social innovation	Industrial Marketing Management	De Silva, M.; Khan, Z.; Vorley, T.; Zeng, J.
Exploring the drivers of tensions in social innovation management in the context of social entrepreneurial teams	Management Decision	Dufays, F.
Social innovation and social entrepreneurship: discovering origins, exploring current and future trends	International Review on Public and Nonprofit Marketing	Farinha, L.; Sebastião, J.R.; Sampaio, C.; Lopes, J.
Applying social innovation theory to examine how community co-designed health services develop: Using a case study approach and mixed methods	BMC Health Services Research	Farmer, J.; Carlisle, K.; Dickson-Swift, V.; Teasdale, S.; Kenny, A.; Taylor, J.; Croker, F.; Marini, K.; Gussy, M.

Understanding the process of social innovation in rural regions: some Hungarian case studies	Studies in Agricultural Economics	Judit, Katonane Kovacs; Eszter, Varga; Gusztav, Nemes
Catalysing social innovation: is entrepreneurial bricolage always good?	Entrepreneurship and Regional Development	Kickul, J.; Griffiths, M.; Bacq, S.; Garud, N.
Social Entrepreneurial Passion and Social Innovation Performance	Non-profit and Voluntary Sector Quarterly	Ko, W.W.; Liu, G.; Wan Yusoff, W.T.; Che Mat, C.R.
Social innovation ties: A dilemma of product and employee orientation	Polish Journal of Management Studies	Krejčí, P.; Šebestová, J.
The social innovation process: Themes, challenges and implications for practice	International Journal of Technology Management	Lettice, F.; Parekh, M.
Social innovation in the Welsh Woodlands: Community based forestry as collective third-sector engagement	Forest Policy and Economics	Ludvig, A.; Wilding, M.; Thorogood, A.; Weiss, G.
Social innovation, social entrepreneurship and the practice of contemporary entrepreneurial philanthropy	International Small Business Journal	Maclean, M.; Harvey, C.; Gordon, J.
The social innovation Momentum: a qualitative analysis of governance and funding processes	International Review on Public and Nonprofit Marketing	Martins, T.; Braga, A.; Braga, V.; Ferreira, M.R.
Inequality and marginalisation: social innovation, social entrepreneurship and business model innovation	Industry & Innovation	Mongelli, Luca; Rullani, Francesco
Scaling up Social Innovation: A Meta-Synthesis	Revista de Administração Mackenzie	Morais-da-Silva, Rodrigo Luiz; Takahashi, Adriana Roseli Wünsch; Segatto, Andrea Paula
Initial conceptual model of knowledge-based social innovation	World Applied Sciences Journal	Mulyaningsih, H.D.; Yudoko, G.; Rudito, B.
Knowledge-based social innovation process in social enterprise: A conceptual framework	Advanced Science Letters	Mulyaningsih, H.D.; Yudoko, G.; Rudito, B.
Social Workers as Social Change Agents: Social Innovation, Social Intrapreneurship, and Social Entrepreneurship	Human Service Organizations Management, Leadership and Governance	Nandan, M.; London, M.; Bent-Goodley, T.
An incubation perspective on social innovation: the London Hub - a social incubator	R & D Management	Nicolopoulou, Katerina; Karatas-Ozkan, Mine; Vas, Christopher; Nouman, Muhammad
The effect of ethical leadership on employee social innovation tendency in social enterprises: Mediating role of perceived social capital	Creativity and Innovation Management	Pasricha, P.; Rao, M.K.
Going it alone won't work! The relational imperative for social innovation in social enterprises	Journal of Business Ethics	Phillips, Wendy; Alexander, Elizabeth A.; Lee, Hazel

Social innovation practices in the regional tourism industry: case study of a cooperative in Brazil	Social Enterprise Journal	Quandt, Carlos; Ferraresi, Alex; Kudlawicz, Claudineia; Martins, Janaina; Machado, Ariane
Social innovation in emerging economies: A national systems of innovation based approach	Technological Forecasting and Social Change	Rao-Nicholson, R.; Vorley, T.; Khan, Z.
Open social innovation dynamics and impact: exploratory study of a fab lab network.	R&D Management	Rayna, Thierry; Striukova, Ludmila
Assembling an innovative social housing project in Melbourne: mapping the potential for social innovation	Housing Studies	Raynor, K.
Design for Social Enterprises: How Design Thinking Can Support Social Innovation within Social Enterprises	Design Journal	Selloni, D.; Corubolo, M.
Creating entrepreneurship through social innovation: The case of I-box create	Contemporary Economics	Senent-Bailach, C.; Rey-Martí, A.
Towards a service system for social innovation in education: A possible application of MOOCs	Knowledge Management and E-Learning	Siddike, Md.A.K.; Kohda, Y.
A transaction-based approach to social innovation	International Journal of Entrepreneurship and Innovation	Slimane, K.B.; Lamine, W.
Social Innovation in Spain, China and Russia: Key Aspects of Development	Economic and social changes: facts, trends, forecast	Solov'eva, Tat'yana; Popov, Andrey; Caro-Gonzalez, Antonia; Hua, Li
Antecedents and outcomes of social innovation: A global study of sport for development and peace organisations	Sport Management Review	Svensson, P.G.; Andersson, F.O.; Mahoney, T.Q.; Ha, J.-P.
Exploring how external stakeholders shape social innovation in sport for development and peace	Sport Management Review	Svensson, P.G.; Hambrick, M.E.
On the evaluation of social innovations and social enterprises: Recognising and integrating two solitudes in the empirical knowledge base	Evaluation and Program Planning	Szijarto, B.; Milley, P.; Svensson, K.; Cousins, J.B.
The Emergent Process of Social Innovation: Multi-stakeholders Perspective	International Journal of Innovation and Regional Development	Tanimoto, Kanji
Organisational learning capabilities as determinants of social innovation: An empirical study in South Africa	SA Journal of Human Resource Management	Urban, Boris; Gaffurini, Elena
Implementation of Social Innovations in Subsistence Marketplaces: A Facilitated Institutional Change Process Model	Journal of Product Innovation Management	Venugopal, S.; Viswanathan, M.
Exploring the social innovation process in a large market based social enterprise A dynamic capabilities approach	Management Decision	Vezina, Martine; Ben Selma, Majdi; Malo, Marie Claire

Managing multiple logics in partnerships for scaling social innovation	European Journal of Innovation Management	Voltan, A.; De Fuentes, C.
Social Innovation in Tourism: Unleashing The Time-Money Constraint	Journal of the Knowledge Economy	Walker, Nina K. G.; Chen, Yong
Making a difference: Strategies for scaling social innovation for greater impact	Innovation Journal	Westley, F.; Antadze, N.
Five Configurations for Scaling Up Social Innovation: Case Examples of Non-profit Organisations From Canada	Journal of Applied Behavioral Science	Westley, F.; Antadze, N.; Riddell, D.J.; Robinson, K.; Geobey, S.
Dynamics of Social Enterprises-Shift from Social Innovation to Open Innovation	Science Technology and Society	Yun, Jinhyo Joseph; Park, KyungBae; Im, ChoongJae; Shin, ChangHwan; Zhao, Xiaofei
Scaling up social innovation for sustainability: The roles of social enterprise capabilities	Management Science Letters	Zainol, N.R.; Zainol, F.A.; Ibrahim, Y.; Afthanorhan, A.
Social Innovation to Sustain Rural Communities: Overcoming Institutional Challenges in Serbia	Sustainability	Zivojinovic, Ivana; Ludvig, Alice; Hogl, Karl