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Research Article

Spread and conditions of Social Innovation Research in Austria in the field of Social Sciences

Difusión y condiciones de la Investigación en Innovación Social en Austria en el ámbito de las Ciencias Sociales

Klaus Schuch[1]

Centre for Social Innovation, Linke Wienzeile 246, A-1150 Wien, Austria.
Correspondence: schuch@zsi.at

Abstract: This paper scrutinises the spread and the conditions of social innovation research in Austria in social sciences. Although the empirical results are inconclusive, social innovation is definitely not a marginal topic in social sciences in Austria. More than 80% of the responding social scientists deal with social innovation at different levels of intensity. It also seems that social innovation works well for the overall self-representation of the universities. The construct of social entrepreneurship has probably contributed most to anchoring the notion of social innovation in the higher education sector in Austria, especially in teaching. Although some curricula and courses are more confined to traditional business school topics, some transcend the narrow business focus towards sociological and political approaches. The academic embedding of social innovation in Austria, however, is still hampered by structural factors. Our findings show a lack of both tangible and intangible support measures.

Keywords: social innovation; Austria; social innovation in Austria; third mission; support measures.

Resumen: Este artículo examina la difusión y las condiciones de la investigación sobre la innovación social en Austria en el ámbito de las ciencias sociales. Los resultados obtenidos muestran que, aunque los datos empíricos no son concluyentes, la innovación social en Austria no es un tema marginal en el contexto de las ciencias sociales. Más del 80% de los científicos sociales que participaron en la investigación se ocupan de la innovación social en diferentes niveles de intensidad. Asimismo, se revela que la innovación social funciona bien para la autorrepresentación general de las universidades. El concepto de emprendimiento social es el que más ha contribuido a afianzar la noción de innovación social en el sector de la educación superior en Austria, especialmente en la enseñanza. Aunque algunos planes de estudio y cursos se limitan más a los temas tradicionales de las escuelas de negocios, algunos trascienden el estrecho enfoque empresarial hacia enfoques sociológicos y políticos. Sin embargo, la integración académica de la innovación social en Austria sigue viéndose obstaculizada por factores estructurales. Por tanto, los resultados muestran una falta de medidas de apoyo tanto tangibles como intangibles.

Palabras clave: innovación social; Austria; innovación social en Austria; tercera misión; medidas de apoyo.

[1] The author sincerely thanks Nela Šalamon from the Centre for Social Innovation, Austria, for supporting him in data recording and analysis.

1. Introduction

This paper scrutinises the spread and the conditions of conducting social innovation research in Austria in the field of social sciences. It builds on the assumption of an alleged academic reluctance towards social innovation. This assumption is not new, but often raised in the literature (Roessler und Brinkmann, 2020; Howaldt, 2019; Schuch, 2019; Brundenius, 2017). Renault et al. (2017) identify a gap in the literature regarding the role that universities play in promoting social innovation and inclusion in development processes. Howaldt (2019: 40) asserts, "the marginal engagement of research and education facilities is in strong contrast to their essential role as knowledge providers in classical innovation processes (Mowery/Sampay, 2005) and as one actor of the triple helix model." The global mapping of social innovation initiatives during the SI-DRIVE (Social Innovation Driving Force of Social Change)[2] project empirically confirmed that academia was only marginally involved in social innovation processes (Howaldt, 2019). Cunha and Benneworth (2013) confirm this assessment by stating that community engagement has remained a relatively peripheral activity within universities and that it still operates on a piecemeal basis. However, this is contrasted by increasingly inclusive practices of universities to initiate and implement social innovations - especially involving student engagement - both within the university and in its neighbourhood (Fassi et al., 2020, for example, give an account on this).

To sketch the overall picture how social innovation research is perceived in the academic sector in Austria, we start with an empirical observation about the self-portrayal of Austrian institutions with regard to the occurrence of terms such as "social innovation" and – "social entrepreneurship" on their websites. This first empirical impression is completed by survey results, which show how around 60 senior social scientists in Austria assess the importance of social innovation in the perception of their universities, as a research topic and as a transdisciplinary field of university practice.

We then ask whether social innovation has found its way into university practice through the backdoor of engaging in social entrepreneurship.

Finally, we discuss the lack of institutional and organisational support for social innovation research in the field of academic research in Austria as a reason that negatively affects a stronger academic relationship to the practice field of social innovation.

2. The spread of social innovation research in Austria in the academic sector based on a web analysis

Our initial hypothesis is that social innovation research or – in more precise words – the academic embedding of social innovation in social sciences in Austria is still fragile.

Table 1 shows the results of a simple google search of the websites of major Austrian higher education institutions and non-university research organisations for distinct terms such as "social innovation", "soziale Innovation" as the German language expression for it and "social entrepreneurship". The scrutinised terms are under quotes to search for the term exactly as typed by using the 'site:' search function of google. We are aware that this methodology has many shortcomings and calls for a cautious interpretation, not at least because of the non-transparency of the google site search algorithm or the lifetime and architecture of each of the scrutinised websites, which can be very different.

[2] http://www.si-drive.eu/; accessed on 12 November 2020.

Table 1. Postings of the terms "social innovation", "soziale Innovation" and "social entrepreneurship" at the websites of Austria's major universities and non-university research organisations, ministries and religious and non-religious social welfare organisations.

Organisations	**No. of "social innovation" postings**	**No. of "soziale Innovation" postings**	**No. of "social entrepreneurship" postings**
University of Vienna	502	399	264
Vienna University of Economics and Business	1,320	214	3,070
University of Salzburg	15	8	16
Karl-Franzens-University of Graz	128	84	181
Johannes Kepler University Linz	382	80	213
University of Applied Sciences Upper Austria	120	60	182
University of Innsbruck	122	188	40
ZSI-Centre for Social Innovation	12,500	13,700	589
AIT-Austrian Institute of Technology	209	87	111
Joanneum Research	40	27	32
Salzburg Research	116	96	39
FORBA - Forschungs- und Beratungsstelle Arbeitswelt	34	26	2
L&R Sozialforschung	7	33	1
Diakonie	2	28	1
Caritas	4	7	9
Volkshilfe	2	19	2
Arbeit plus	57	47	23
Armutskonferenz	39	70	49
SENA Social Entrepeneurship Network Austria	4	4	105
Federal Ministry of Education, Science and Research	16	88	23
Federal Ministry of Climate Action, Environment, Energy, Mobility, Innovation and Technology	23	41	3
Federal Ministry of Social Affairs, Health, Care and Consumer Protection	4	1,130	24
Federal Ministry of Labour, Family and Youth	5	7	1

Note: Using the site: operator limits the search results to the ones found in the specified top-level domain. Specifying more parts of the URL narrows the search (see Berry, 2015).

Sources: site:univie.ac.at; site:wu.ac.at; site:uni-salzburg.at; site:uni-graz.at; site:jku.at; site:fh-ooe.at; site:uibk.ac.at; site:zsi.at; site:ait.ac.at; site:joanneum.at; site:salzburgresearch.at; site:forba.at; site:lrsocialresearch.at; site:diakonie.at; site:caritas.at; site:volkshilfe.at; site:arbeitplus.at; site:armutskonferenz.at; site:sena.or.at; site:bmbwf.gv.at; site:bmk.gv.at; site:sozialministerium.at; site:bmafj.gv.at; all accessed on 13 November 2020.

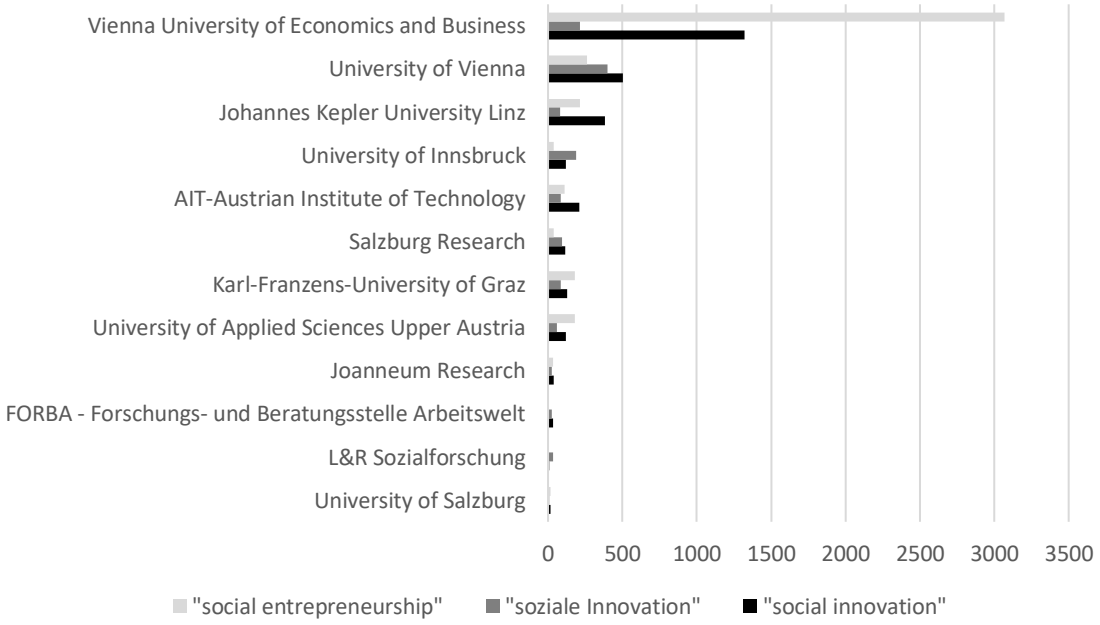
Table 1 clearly shows that one single non-university research institution, ZSI – Centre for Social Innovation, tops all others with regard to the frequency of the searched terms "social innovation" and "soziale Innovation" by a factor of at least 9 and 12 respectively. As regards the term "social entrepreneurship", ZSI tops all but the Vienna University of Economics and Business by a factor of at least 2. While the number of researchers at ZSI is around 45, the University of Vienna in comparison, which is one of the largest universities in Europe with a strong and internationally acknowledged focus on social sciences and humanities[3], counts around 6,850 researchers (BMBWF, 2019); i.e., 152 times more than ZSI.

[3] According to the most recent Times Higher Education Ranking 2021, the University of Vienna is worldwide ranked no. 71 as regards social sciences and on place 34 as regards arts and humanities.

The number of postings of the scrutinised terms "social innovation", "soziale Innovation" and "social entrepreneurship" are in general quite limited. Exceptions, next to ZSI and the University of Vienna, are especially the Vienna University of Economics and Business and the Federal Ministry of Social Affairs, Health, Care and Consumer Protection, where the German term "soziale Innovation" could be identified 1,130 times.

As a side remark, the scrutinised terminology has apparently also found little entry into the self-portrayal of the large Austrian welfare and advocacy organizations Caritas (belonging to the Catholic Church), Diakonie (belonging to the Protestant Church) and Volkshilfe (non-confessional). Smaller advocacy organisations like "Arbeit plus" or the "Armutskonferenz" have comparably more postings. Maybe terminology and definitions are not as important in the practice of welfare provision or advocacy as in academic science. However, these bleak numbers could also be an indication to reject our assumption that social innovation is a practice field. Anyway, the sober numbers certainly also encourage to reflect more on the perception of social innovation in Austria.

Figure 1. Postings of the terms "social innovation", "soziale Innovation" and "social entrepreneurship" at the websites of Austria's major universities and non-university research organisations (except ZSI)



Source: google search (search:) of the following websites between 21 and 23rd October 2020: uni-salzburg.at; www.uni-graz.at/de; www.wu.ac.at/; www.zsi.at; univie.ac.at; www.fh-ooe.at; www.salzburgresearch.at; www.ait.ac.at; www.forba.at; www.lrsocialresearch.at/; www.sozialministerium.at; www.bmafj.gv.at; arbeitplus.at; www.armutskonferenz.at; www.gemse.or.at; diakonie.at; www.caritas.at; /www.bmk.gv.at; www.bmbwf.gv.at; www.jku.at; www.volkshilfe.at; www.joanneum.at; www.uibk.ac.at.

If we exclude ZSI, which obviously has a unique selling proposition within the Austrian social innovation ecosystem, and focus only on higher education and the other non-university research organisations than we can identify from Figure 1[4] some interesting features:

1) The sheer numbers of postings of the catchwords "social innovation", "soziale Innovation" and "social entrepreneurship" at the websites of the most important Austrian higher education institutions and non-university research centres (except ZSI), which have a strong focus on social sciences, is in general quite low. This could be

[4] The research performing organisations are sorted by the sum of the postings containing "social innovation" and "soziale Innovation" in descending order.

interpreted as a proxy that social innovation is not a priority in the Austrian academic sector.

2) Exceptions to this disillusioning result, which, however, should not be overrated in terms of its explanatory power, are in particular the Vienna University of Economics and Business (WU) and the University of Vienna. While the WU is especially visible as regards the term "social entrepreneurship" with more than 3,000 postings (and in this respect also overshooting ZSI), the entries of the catchwords at the University of Vienna are more balanced.
3) Among the non-university research organisations (except ZSI), AIT is in the lead, closely followed by the much smaller Salzburg Research.
4) From a geographical point of view, it seems that academic engagement in Austria as regards "social innovation" and "social entrepreneurship" is mostly taking place in Vienna (where also ZSI is located), followed by Upper Austria and Innsbruck, and to a lesser extent in Salzburg and Graz.

We then scrutinised the context in which the term "social innovation" appeared on the websites of a few universities (University of Salzburg, University of Graz, Vienna University of Economics and Business, University of Vienna, University of Applied Sciences Upper Austria). Semantic mapping was neither straightforward nor free of overlap. It turned out that the term "social innovation" was most frequently used in connection with "news announcements", "teaching or outreach offers to students and teachers", and in relation to "publications" and "CVs". Mentions related to "research groups/institutes," "references to third parties," or in "strategic documents" were less frequent, as were mentions of specific "social innovation projects".

To balance the one-dimensionality of google search, we also sent a survey to 163 senior social scientists from five Austrian higher education institutions[5]. All of them were either deans or vice-deans of social sciences faculties, heads of social scientific institutes, departments and centres or heads of primarily interdisciplinary research platforms in which social sciences are included. 61 responded to the survey out of which we collected full responses to all first-order questions from 56 respondents. The response rate was slightly above a third and relatively well balanced across the five surveyed higher education institutions.

Table 2. The importance of social innovation in the perception of five Austrian universities, as a research topic and as a transdisciplinary field of university practice.

Question 1/ Answer categories	The current significance of social innovation in the self-image or self-representation of your university (overall level) as a whole in %	Question 2/ Answer categories	Social innovation as a topic that your institute or research platform deals with in research in %	Question 3/ Answer categories	Development of social innovations in cooperation with practice partners over the last 12 months
Social innovation has almost no significance as a topic	5%	Yes, often	30%	Yes	41%
Social innovation is a niche topic	48%	Selectively, but then mostly as a central theme	20%	No	41%

[5] The five higher education institutions together comprise a substantial part of the Austrian university-based social scientific disciplines. The five organisations are the University of Vienna, the Karl-Franzens University in Graz, the Vienna University for Economics and Business, the Paris-Lodron-University Salzburg and the University of Applied Sciences from Upper Austria (with several locations).

Social innovation is an important topic	33%	Selectively, but then pre-dominantly only as a marginal topic	34%	I do not know	18%
I do not know	15%	Pretty much never	11%		
		I do not know	5%		
Sum	100%	Sum	100%	Sum	100%

Note: The following five universities were scrutinised: University of Vienna, the Karl-Franzens University in Graz, the Vienna University for Economics and Business, the Paris-Lodron-University Salzburg and the University of Applied Sciences from Upper Austria.

Source: own survey, n for all 3 questions is 61.

As we can see from Table 2, the respondents consider social innovations to be of relatively high importance in university practice. 33% consider social innovation to be an important topic within the self-understanding respectively self-representation of their university. 48% consider it a niche topic. Only 5% responded that social innovation has almost no significance as an overall topic for their universities and 15% did not know.

Moreover, 30% regard social innovation as a topic that their institute, research group or research platform often deals with in research. 20% deal with it selectively, but then mostly as a central theme. 34% deal with it only marginally and 11% never. The latter value, which only refers to the consideration of social innovation in social scientific research, is more than double as high than the value of those who responded that social innovation has almost no significance as an overall topic for their universities. Finally, 41% of the responding social scientists confirmed that their institute respectively research group or platform worked together with practitioners on the development of social innovations within the last 12 months. Just as many denied this question (see Table 2).

Although the results are inconclusive, it can definitely not be said that social innovation is only a marginal topic in the university-based social sciences in Austria. Thus, the survey findings do not seem to coincide with the disillusioning results from google search. More than 80% of the respondents deal with social innovation research at different levels of intensity. It also seems, that social innovation works well for the overall self-representation of the universities, is a wide-spread issue in social scientific research in Austria, and is for almost half of the respondents also an object of practical development with practice partners. The latter refers especially to the University of Applied Science of Upper Austria and the Vienna University for Economics and Business, which also can be considered as the two most application-oriented universities within our sample.

After this first candlelight look at how social innovation is perceived by academic institutions in Austria, we were asking if the construct of social entrepreneurship has probably contributed most to anchoring the notion of social innovation in the Austrian higher education sector.

3. Social entrepreneurship: a stepping stone for the spread of social innovation in Austria's higher education sector or a gatekeeper?

We hypothesize that the construct of social entrepreneurship has probably contributed most to anchoring the notion of social innovation in the Austrian higher education sector. There is hardly any university of economics and business or higher education business school that does

not offer a course, an 'academy' or at least some lectures on social entrepreneurship. Social entrepreneurship has become also structurally visible in form of departments and centres. The Vienna University of Economics and Business for example has a 'Social Entrepreneurship Center', which is active in all three pillars of a modern university: education, research and third mission. Another well-known example from Germany is the 'Social Entrepreneurship Academy', a distinct organisation based on the cooperation of universities located in Munich (including the Ludwig-Maximilians-University Munich, the Technical University of Munich and the Munich University of Applied Sciences). It should be noted, however, that capacity building for social entrepreneurship is also offered by a number of non-university organisations in Austria such as the Impact Hub Vienna[6] or ZSI, sometimes in cooperation with higher education institutions.

Social entrepreneurship as a tool to promote social innovation has also been strongly encouraged at the European level. Examples for this are the European Social Innovation Competition[7] (EUSIC) and the Social Innovation Tournament[8]. There were, however, also some European initiatives that focussed more on innovations in the field of social policies, such as the Employment and Social Innovation Programme[9], or on social innovation in research[10], but in general the focus on social entrepreneurship prevails at the European level[11].

Davies (2014) even argued that social entrepreneurship was dominating discussions of social innovation and that the two terms were often discussed synonymously although their essence is not the same. While it is assumed that social innovation transcends sectors and aims for changes at various levels from micro-level to macro-level or even system's level, social entrepreneurship is regarded as limited to market-orientation, business and centred on individual entrepreneurs (Nicholls & Huybrechts, 2012; Westley & Antadze, 2010; Phills et al., 2008). For a more in-depth reflection on the relation between social innovation and social entrepreneurship we recommend Davies (2014), who argues that social entrepreneurship partly overlaps with social innovation, but does not entirely fall under it. In Figure 2, Davis (2014) aims to schematically elaborate the different conceptual extensions of social innovation, social entrepreneurship and social enterprise. He shows in the diagram that these partly overlap, but also have their own distinct characteristics.

The question remains how narrowly (i.e., centred only on theories of non-profits and on their commercial activities) social entrepreneurship materialises empirically in educational offers of higher education institutions or if also an extended view, in which also social innovators beyond business (Perrini, 2006) are considered. The answer is ambiguous, at least with a view on Austria. The compulsory optional subject "social business"[12] offered by the University of Applied Sciences Burgenland, for instance, rather belongs to the 'narrow' concept. Most of the topics are clearly related to more traditional business school subjects, such as "social economy", "social enterprises", "marketing and fundraising", "social entrepreneurship", and "digital business", but also a course on "international relations and development policies" is offered, that transcends the narrow business focus. On the other hand, the "social economy" BSc course offered by the University of Linz (JKU, 2020) is clearly an example for a 'wider' approach by explicitly

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[6] https://vienna.impacthub.net/; accessed on 22nd December 2020.

[7] https://ec.europa.eu/growth/industry/policy/innovation/social/competition_en; accessed on 28 October 2020.

[8] https://institute.eib.org/social-innovation-tournament-2/; accessed on 28 October 2020.

[9] https://ec.europa.eu/social/main.jsp?langId=en&catId=1081; accessed on 28 October 2020.

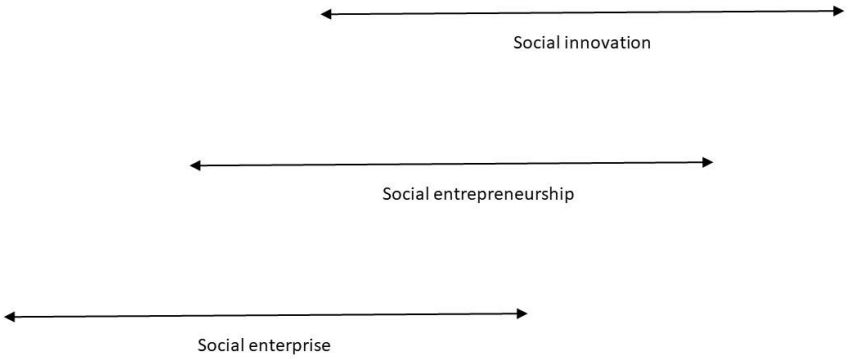
[10] https://ec.europa.eu/digital-single-market/en/collective-awareness; accessed on 28 October 2020. The collective awareness platforms supported under Horizon 2020 are a good example for a more technology-oriented approach to social innovation support.

[11] https://ec.europa.eu/growth/industry/policy/innovation/social_en; accessed on 28 October 2020, provides a – slightly outdated – overview.

[12] https://www.fh-burgenland.at/studieren/bachelor-studiengaenge/bakk-internationale-wirtschaftsbeziehungen/lehrveranstaltungen/#c2807; accessed on 29 October 2020.

integrating societal and political topics in the curriculum, such as sociological theories, history of sociology and social philosophy, and gender studies.

Figure 2. Relationship between social innovation, social entrepreneurship and social enterprise.



Source: Taken from Davies (2014).

We assume that this ambiguous Austrian situation is not an exception within the European Higher Education Area and that almost every higher educational niche is occupied by remarkable variations that differentiate the educational offers and unique selling propositions of the various higher education institutions. Our conclusion is, thus, to confirm the hypothesis that the construct of social entrepreneurship has probably contributed most to anchoring the notion of social innovation in the higher education sector through the establishment of varied curricula and courses. Some of them are more confined to traditional business school topics, but some transcend the business focus towards sociological and political approaches. Our assessment is at least by tendence supported by the feedback of senior social scientists in Austria. 48% (n= 56) at least tend to agree that social innovation has found its way into university teaching primarily through the topic of social entrepreneurship, while 18% tend to disagree. 34% have no opinion on this.

As regards educational offers in higher education institutions we must not forget, however, that universities also offer courses for studying social innovation per se, which also penetrated the higher education sector[13]. In Austria, the first master's program "social innovation" was offered by the Danube University Krems in cooperation with ZSI as a part-time course, but ended after a few years due to a lack of demand. Currently the University of Applied Sciences Upper Austria and the Salzburg University of Applied Sciences offer Master courses in "Management Social Innovation" respectively "Social Innovation". The content of Salzburg's Master's degree on "Social Innovation" is broadly based on four macro modules, within the framework of which the respective professional qualifications are conveyed. They include "Social change and ethics", "Science of Social Innovations", "Fields of action (social innovation)" and "(Innovation) action and methods".

[13] To name a few, examples are the Master of Studies in Social Innovation of the Cambridge University, Judge Business School (https://www.jbs.cam.ac.uk/programmes/mst-social-innovation/), the MA in Social Innovation of the University of San Diego (https://www.sandiego.edu/peace/academics/social-innovation/) or the MSc Social Innovation of the Glasgow Caledonian University.

At the international level, we can observe an increasing differentiation as regards social innovation curricula. While the London School of Economics and Political Sciences for instance bridges in its master course conventionally social innovation and entrepreneurship[14], other interesting connections emerge, such as between social design and sustainable innovation[15] or between social innovation and sustainable development[16], just to name a few.

However, despite some inspiring examples of academic 'social innovation' curricula around the globe, the number of social entrepreneurship courses seems to outweigh the number of social innovation courses. While "social entrepreneurship" has been very well received in business schools as a distinct course format, "social innovation" seems to be rather dispersed across different social science courses with different focuses. We wondered whether epistemological reasons related to the broader understood and fuzzy focus of social innovation are to blame for that. However, our question if the concept of social innovation is epistemologically unhelpful for gaining new insights was mostly refused by 62% of the respondents from social sciences in Austria. 27% had no opinion on that.

Table 3. Is the concept of social innovation epistemologically unhelpful for gaining new insights? (n=56).

Answer categories	Univ. of Applied Sciences Upper Austria	Karl-Franzens-University Graz	Paris-Lodron-University Salzburg	University of Vienna	Vienna University of Economics and Business	Total	Total in %
Do not agree	1	1	2	3	5	12	**21%**
Rather not agree	3	1	2	8	9	23	**41%**
Rather agree	0	0	1	3	1	5	**9%**
Agree	1	0	0	0	0	0	**2%**
No opinion	3	3	1	3	5	15	**27%**
Total	8	5	6	17	20	56	**100%**

Source: Authors' elaboration.

In the next session, we show that the academic embedding of social innovation in Austria is also hampered by structural reasons, which have to do with how universities function.

4. Structural shortcomings at university-level to support social innovations

In this section we discuss structural problems that make it difficult to deal with social innovation at university level. Our hypothesis is that the existing support structures for social innovation solutions (e.g., in contrast to technical innovation solutions), if they exist at all, do not go far enough in the university structure. We refer here to Brudenius (2017: 43), who claimed that "Not very much is written on the role of social innovation at universities, and vice versa about

[14] https://www.lse.ac.uk/study-at-lse/Graduate/Degree-programmes-2020/MSc-Social-Innovation-and-Entrepreneurship; accessed on 29 October 2020.
[15] https://www.lse.ac.uk/study-at-lse/Graduate/Degree-programmes-2020/MSc-Social-Innovation-and-Entrepreneurship; accessed on 29 October 2020.
[16] https://www.masterstudies.com/Master-in-Social-Innovation-for-Sustainable-Development/Italy/TSD/#requestinfo or https://www.masterstudies.com/Master-in-Social-Innovation-for-Sustainable-Development/Italy/TSD/#requestinfo; accessed on 29 October 2020.

the role of universities when it comes to social innovation activities" and Howaldt (2019: 37) who argues that "It will be a major challenge for the development of social innovation to ensure a much higher involvement of research and education facilities. In these processes social sciences will be challenged to redefine their functions with regard to innovation".

As already argued in another paper (Schuch, 2019), several structural shortcomings exist why universities do not play a significant role for the co-creation of social innovations in an ideal quadruple helix composition:

1) Social innovations are often bottom-up and straightforward in scope and scale. They are mostly initiated by practitioners in their own field of work and expertise. Financing needs and relational capital needs are usually more pressing, or at least seem so, than knowledge deficits. The most often raised knowledge deficits relate to a segment of business-related disciplines, namely to issues of taxation, marketing and financing. This limits the demand for support from academic knowledge providers to business related issues.
2) The financial precariousness of most social innovations is another demand-side problem. Social innovations often operate in low-cost segments, while the cost structures of universities hardly fit to the tight budgets of social innovators. While 'normal' technology transfer enjoys a high reputation at universities (and especially of funding agencies and R&I policy-makers), knowledge transfer for social purposes is often perceived as an altruistic free of charge exercise. The limited prospect of acquiring third-party funding reduces the attraction for higher education institutions to deal with it. It also means that the social sciences do not have a lucrative field of activity that would be comparable to those of the technical sciences and engineering.
3) While technological (commercial) innovation is recognised as a potential income source for universities, and thus facilitated by institutionalised support structures such as technology transfer centres, there are only exceptionally material and immaterial professional university structures available for supporting social innovations. Examples are the '6I research model' at the University of Deusto (Caro-Gonzalez, 2019), the "Tellus Innovation Arena" and the "Oulu Think Tank of Science and Society" at the University of Oulu (Tuunainen et al., 2019) or the Knowledge Transfer Centre for SSH in Austria (Russegger, 2019).
4) Social innovations do not count for the performance accountability of universities and their faculty. Thus, they lack promotional quality and significance. Neither social innovations initiated by higher education institutions, nor practices and systems how to monitor, measure and promote their way from universities to society are regularly documented and in the focus of attention of university management (systems).
5) Universities lack the appropriate infrastructure and resources for social innovation, although – together with their students - they could have a large mobilisation effect. Places designed to meet, to exchange, to co-design and prototype social innovations with practitioners are still scarce within the academic infrastructure. The lack of interfaces also means that little is known about specific needs that emerge from the practice field.
6) Despite the fact that SSH scholarship (and also other fields of science) is often committed to do research for the good of society, the interest of researchers is often not oriented towards producing usable results such as social innovations (see the various aspects discussed in Reale et al. 2017; Benneworth, 2015; Brewer, 2013; Nussbaum, 2010).

The findings from our survey confirm that structural shortcomings at university-level to support social innovation exist. We have already shown that around 41% of the responding senior social scientists from selected Austrian universities were engaged in developing social innovation with practitioners during the last 12 months, which is a remarkable high level. However, only 25% of the respondents confirmed the existence of support measures to facilitate the cooperation with practitioners as regards the development of social innovations at their universities or

faculties. 35% explicitly negated and 40% did not know. The latter means in practice, that no support structures were accessible for those 40% of respondents.

Table 4 shows which support measures are available at the five scrutinised Austrian universities which all have a strong social science focus. It is striking that only one of the potential 'support measures' queried is frequently encountered, namely that students can work in courses on the development of social innovation together with practice partners. But 25% of the respondents stated that this was not possible. However, the overall number of respondents is too small to make any generalisation.

38% of the already small number of respondents who were able to report on specific support measures from their university or faculty said that they were encouraged by the university or faculty to work together with practice partners to develop social innovations. 31% confirmed that the university or faculty management actively forwards requests from practice partners to them. 31% also confirmed that their work on developing social innovations with practice partners is used by the university or faculty for PR purposes. The other respondents denied this.

All other inquired potential support measures were only very sporadically mentioned. These include in particular

- The lack of university or faculty funds to finance participation of the university's faculty in the development of social innovations.
- The lack of inclusion of social innovation development projects in the performance reporting of universities.
- The lack of a cooperation platform where practice partners can regularly inform about their needs to support social innovations.
- The lack of possibility to participate in the development of social innovations through university-funded research projects[17].

Table 4. Support measures provided by the university or faculty to work on the development of social innovations with partners from practice (n=16).

Statements	**Yes (%)**	**No (%)**
A cooperation platform exists where practice partners can regularly report their needs to support social innovations	19%	81%
A small university or faculty fund through which we can finance our participation in the development of social innovations exists	6%	94%
We are allowed to work with students in our courses on the development of social innovation with practice partners	75%	25%
We can contribute to the development of social innovations through research projects financed by the university	25%	75%
The university/faculty management encourages us to cooperate with practice partners to develop social innovations	38%	63%
The university or faculty management actively forwards requests from practice partners for the development of social innovations to us	31%	69%
Our work on the development of social innovations with practice partners is positively supported by the university in career promotion and performance assessment	6%	94%
Our work on the development of social innovations with practice partners is used by the university resp. faculty for PR purposes	31%	69%
Social innovation development projects with practice partners are considered in our performance reporting	13%	88%

Source: Authors' elaboration.

[17] If research projects make this possible at all, then they are usually externally funded projects.

With the exception of one respondent from the Vienna University of Economics and Business, all other respondents who mentioned structural support measures at their university or faculty for social innovations reported that their work on the development of social innovations with partners from practice is not taken into account by the university in career promotion or performance assessment. 59% of all respondents (n=56) agreed with the statement that as long as contributions to social innovations in career promotion or performance assessment are not equated with contributions to technical-economic innovations, the importance of dealing with social innovations at universities will remain rather marginalized. 26% did not agree with this statement and the rest had no opinion on that.

These empirical findings do indeed confirm our hypothesis that systematic structural precautions and support measures for social innovation are still little or not at all developed at Austrian higher education institutions. The importance of technical-economic innovation performance is considered to be much higher in the university system than the contribution to social innovation. Although the number of respondents is too small to make robust and reliable statements, it would be worth considering whether the situation at the universities for applied sciences is better than at the 'regular' universities. The feedback from the FH Upper Austria at least points in this direction. This would certainly fit in with the application orientation of the universities for applied sciences.

5. Conclusions

First, we have been able to prove empirically, but limited to Austria, that social innovation plays a role in the consciousness of senior social scientists and has also entered research and teaching. Our findings, however, also indicate that, with few exceptions, terms such as "social innovation" or "social entrepreneurship" appear infrequently in the documented self-image of Austrian academic institutions on their homepages. In this respect, the Centre for Social Innovation (ZSI) outperforms all universities with the exception of WU, where social entrepreneurship plays a very important role in the university's self-representation.

Second, we hypothetically assumed that primarily social entrepreneurship found its way into the formal academic field at universities, especially into teaching. Although social entrepreneurship seems to dominate academic courses, it has not necessarily limited social innovation only to its economic dimension. The results of our survey also support that social entrepreneurship has become a door opener for social innovation in the academic world. Thus, we can consider the second hypothesis as largely confirmed, more in an enabling than in a distorting sense as far as the essence of social innovation is concerned.

Thirdly and finally, we put forward the hypothesis that structural and organizational reasons also stand in the way of a further academic breakthrough of social innovation. These include demand-side problems related to the very bottom-up and practical nature of social innovation, but also to a lack of market potential. Moreover, incentive systems and support systems are both lacking to nurture the willingness of social scientists to engage in the development of social innovations with practitioners. The empirical findings from our survey have clearly shown that there is a lack of both tangible and intangible measures that could contribute significantly to anchoring social innovation more firmly in the university sector. Thus, our third hypothesis can be regarded as confirmed.

Our final appeal is therefore directed at science, research and innovation policy as well as the strategic management of universities. A broadly understood third mission of universities beyond the university-industry nexus often exists only in Sunday speeches, but is little structurally operationalized in reality. Our results have shown that social scientists, although of course not all of them, are interested in both the theoretical discussion of social innovation and its practical development but the bridge between universities and social practice must be strengthened by adequate support measures.

For future research on the perception and take-up of social innovation in academic research and teaching, we would like to see international comparisons based on a uniform scheme of recording and analysis. In particular, further research on the interface between social innovation and academic acceptance should be more attentive to differences between individual disciplines and, among other things, address the question of why the embedding of a more broadly understood scope of social innovation in university teaching lags behind the more narrowly understood 'social entrepreneurship' focus. If epistemological reasons play only a small role in the lagging institutionalisation, then it should be explored whether organisational reasons due to the inter-disciplinary nature of social innovation play a role in this, or whether a lack of a professional profile or other reasons are significant.

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Research Article

The emergence of a Social Innovation Ecosystem in Portugal: An exploratory approach based on the perspective of strategic stakeholders

La emergencia de un Ecosistema de Innovación Social en Portugal: Un enfoque exploratorio basado en la perspectiva de los actores estratégicos

Hugo Pinto[1]*, Silvia Ferreira[2] and Jorge André Guerreiro[3]

[1] Centre for Social Studies, University of Coimbra & Faculty of Economics, University of Algarve.
[2] Faculty of Economics, University of Coimbra & Centre for Social Studies, University of Coimbra.
[3] Centre for Social Studies, University of Coimbra.
*Correspondence: hpinto@ces.uc.pt

Abstract: The concept of ecosystem has been used to describe a dynamic set of relationships, services and interdependencies that potentiate the creation, renewal and growth of organizations. Social innovation is largely influenced by ecosystem conditions. The Portuguese social innovation ecosystem is a particularly interesting case study, as it assumes a hybrid structure that expresses a variety of policy schemes, networks and support structures. This article debates the concept of social innovation ecosystem and presents an exploratory approach to its mapping. Based on interviews with strategic stakeholders in the social and solidarity economy and social enterprises, the study elaborates on the specificities of the social innovation ecosystem. The Portuguese ecosystem is comprised of three sub-ecosystems that show different weights, limited connections and overlapping: social economy, social business, and the social solidarity ecosystem. The article concludes with an overview of the current state of social innovation, emphasizing the perspectives of stakeholders on recent experiences that the Portuguese state has developed in establishing dialogue within organizations integrating social innovation dynamics.

Keywords: social innovation; ecosystems; complexity; social economy; social enterprises.

Resumen: El concepto de ecosistema se ha utilizado para describir un conjunto dinámico de relaciones, servicios e interdependencias que potencian la creación, la renovación y el crecimiento de las organizaciones. La innovación social se ve influida en gran medida por las condiciones del ecosistema. El ecosistema portugués de innovación social es un caso de estudio particularmente interesante, ya que asume una estructura híbrida que expresa una variedad de esquemas políticos, redes y estructuras de apoyo. Este artículo debate el concepto de ecosistema de innovación social y presenta un enfoque exploratorio para su mapeo. A partir de entrevistas con actores estratégicos de la economía social y solidaria y con empresas sociales, el estudio profundiza en las especificidades del ecosistema de innovación social.

El ecosistema portugués se compone de tres sub-ecosistemas que muestran un peso diferente, conexiones limitadas y solapamientos: la economía social, la empresa social y el ecosistema de la solidaridad social. El artículo concluye con una visión general del estado actual de la innovación social, haciendo hincapié en las perspectivas de las partes interesadas sobre las recientes experiencias que el Estado portugués ha desarrollado para establecer el diálogo dentro de las organizaciones que integran la dinámica de la innovación social.

Palabras clave: innovación social; ecosistemas; complejidad; economía social; empresas sociales.

1. Introduction

Social innovation (SI) is a relatively old concept that attained a considerable degree of popularity over the last decade and a half (Nicholls & Ziegler, 2019; Godin, 2012). It is a different take on the concept of innovation (or a return to its roots, to be more precise) since it focuses on the social aspects and ends of innovation. More recently, Social Innovation Ecosystem (SIE) has garnered some interest by social innovation scholars, who find value and usefulness in using the ecosystem metaphor as a way to highlight the complex dimensions of the social innovation concept (Granstrand & Holgersson, 2019).

As one of the first countries to adopt social innovation into public policies and create a dedicated financing program to foster social innovation in the aftermath of the 2008 crisis, Portugal can provide useful information for other countries attempting to enact similar policies. This is more so the case when we consider the country's recent democratization (in 1974) and the weight that social organizations have in a considerable portion of its population. Some of these social organizations have existed for centuries and remain important to the present day. One of the emerging questions regard the meaning of the recent evolution of the social innovation landscape, with the implementation of new policies and consolidation of new (types of) players. Can this change be associated with the existence of a Social Innovation Ecosystem?

This article seeks to answer to this research question, reviewing recent changes in the Portuguese SIE, analyzing this process through the lens of complexity. We understand SIE as an inherently complex, multi-dimensional social system, that comprises several subsystems and a plethora of diverse actors and organizations. We attempt to understand the changes from the plurality of points of views shown by several stakeholders and identify the shortcomings, problems and tensions that have arisen from new policies enacted in recent years.

The analysis presents data collected from interviews conducted with major key players and stakeholders in the Portuguese SIE. Main findings are presented in a descriptive manner, detailing what issues and struggles the interviewees face and how they can be understood as part of larger transformations in the Portuguese SIE in the aftermath of the 2008 crisis.

2. Social Innovation Ecosystems

2.1. What is Social Innovation?

Social innovation designates a different set of phenomena when compared to the strict concept of innovation, more commonly applied to technological or economic innovation, even if originally referred exclusively to social phenomena as well (Godin, 2015). While all forms of innovation aim to produce improvements and create value that ultimately has a positive effect on society as a whole, SI aims to satisfy needs that are not addressed by the market, while promoting social inclusion and transforming social and power relations (Noya, 2011).

As western Europe faced an unemployment crisis during the late 70s through the 90s, many countries experienced difficulties dealing with social problems surfacing at this period (Kerlin, 2006). At the same period, neoliberal ideas became prominent in power circles and governments

progressively laxed social protection legislation and workers' rights, deregulated markets and promoted the privatization of previously protected sectors of the economy (Schneider, 2014), culminating in what has been described as the beginning of the "crisis of the welfare state" (Habermas, 1986). This crisis led to decentralization, privatization and reduction of services offered by the State, aggravating the already fragile conditions of many citizens. These increasing needs paved the way for the emergence of different types of social responses that filled those gaps (Kerlin, 2006). It is in this context that SI emerged as a possible solution for existing and emerging challenges in society, becoming a prominent subject from the 2000s onwards (Moulaert, MacCallum & Hillier, 2013; Moulaert & MacCallum, 2019).

SI as a subject of research gained popularity from the 90s onwards by being employed in studies dealing with novel social problems, such as how innovation can lead to social change through social movements, new forms of social relations and new approaches to social problems (cf. Ayob, Teasdale & Fagan, 2016). Some authors go as far as to consider it a new socially recognized solution (product and process), implying collective action, that aims and generates social change with three attributes: satisfaction of human needs, promotion of social inclusion and empowerment, allowing for the transformation of power relations (André & Abreu, 2006; Moulaert, MacCallum & Hillier, 2013).

With such promise, SI became regularly featured in research, having attained great popularity in public spheres, policy making and with supranational organizations (McGowan, Westley & Tjornbo, 2017). Unfortunately, this rapid growth was not accompanied by a conceptual maturation, resulting from the fact that research about SI has been "largely based on anecdotal evidence and case studies lacking unifying paradigms", and build upon technological innovation knowledge that, to this day, still dominates innovation research (Van Der Have & Rubalcaba, 2016), without repositioning itself or creating a specific paradigm to this effect (Cajaiba-Santana, 2013:42).

The fact that SI research is particularly interdisciplinary – and has been so since its earliest usages (cf. Taylor, 1970) – has also contributed to some of the difficulties with the concept's development, as the different disciplinary traditions manifest into different approaches that don't always dialogue with each other, thus contributing to a fragmented landscape of SI research (Moulaert, MacCallum & Hillier, 2013).

SI is a complex phenomenon, as it involves a variety of actors in complex and dynamic relationships and interdependencies. But this is also what allows it to effectively address complex problems that defy conventional solutions, as it is not a standard formula or linear process, but rather quite adaptable to new circumstances.

It should come to no surprise that SI was heavily influenced by complexity theory, given that it began to grow theoretically in the early years of the 2000s (Moulaert & MacCallum, 2019), around the same time that evolutionary, adaptative and complexity were becoming crucial ideas in innovation literature (Floysand & Jakobsen, 2010). But even more so, complexity sciences became interested in social problems as they became more intricate and complex in their nature – or perhaps when science became aware that social problems were far harder to deal with than what had been thought for decades. SI gained popularity for the same reason: the end of the XX century was marked by the realization that complex social phenomena were becoming ever more common and the usual solutions were no longer valid, which also meant that social theory itself had to adapt to this brave new world (Strasser, Kraker & Kemp, 2020; Asenova & Damianova, 2019).

In Portugal, the term SI gained visibility after the 2008 crisis, mainly to describe transformations and new dynamics in the social and solidarity economy, as well as the emergence of a new wave of social enterprises and social entrepreneurs. The emergence of social enterprises and other non-profit organizations that offer social services with or instead of the State to answer social needs is rather recent and is still in a development phase. The 2008 economic crisis accelerated this process, but also saw the State implementing cutbacks in public spending on

welfare services and to social organizations. Recently, in the framework of the European Structural and Investments Funds 2014-2020, the Portuguese government launched an initiative – *Portugal Inovação Social* (Portugal Social Innovation) –, especially oriented to finance the social innovation-related organizations and to create the necessary framework conditions to generate a SI ecosystem in the country.

2.2. Complexity and Innovation

Complexity is a defining characteristic of current societies. Complexity is, of course, not something conceived in these last few years nor a novelty of our age – it has been ever-present in human civilizations in one form or another. What is novel is the sheer level of complexity we find in our world today, in no small part due to innovation (whether technological, social or of any other kind) and globalization (Turner & Baker, 2019). This pace of change hitherto unknown has greatly affected our ability to predict and anticipate what is to follow, something that has had a profound impact on how organizations operate. Concurrently, the need to deal with a greater amount of information and dominate a larger number of skills to be effective at one's task is equally representative of these transformations that highlight the growing complexity of the dynamic social world. It is a process of complexification that affected businesses, governance, research or media (Williams, 2020).

Complexity theory seeks to make sense of complex systems made up of interdependent heterogeneous and adaptative agents and processes that interact, learn and affect each other (Campbell-Hunt, 2007; Borzillo & Kaminska-Labbe, 2011). The key premise of complexity theory is that the whole is different from the sum of its individual parts, thus meaning that we cannot understand a complex system by looking at its individual parts and attempt to extrapolate from the fragments to the whole (Richardson, 2004).

Much of the recent developments in complexity theory stem from acknowledging the contributions of theoretically proximate fields, such as systems theory, complex adaptive systems, as all these fields delve into similar phenomena, share a similar language and are concerned with the complex relations and dynamic properties that define the current world (Turner & Baker, 2019). The interdisciplinary character of complexity theory (Cairney & Geyer, 2017) is also shown by its recent popularity with mixed-methods approaches, something that reflects the diverse disciplinary roots of complexity theory and explains how the theory grew with such wide range of contributions (Kallemeyn, Hall & Gates, 2020), from physics, biology, social sciences or cybernetics, to name but a few.

Of particular interest to this article is the usage of complexity as a means to identify issues in innovation policy that can act as barriers to innovation (Frenken, 2017). As an inherently complex system, a national innovation system is the product of different elements: laws, regulations, organizations, social actors and macro-phenomena that can exert an external pressure on the system, such as economic crisis, pandemics or disruption in supply chains (Bristow & Healy, 2018). In less abstract terms, were we to consider this landscape as an innovation ecosystem, one would thus be able to identify vulnerabilities and possibilities for its disruption, especially with innovation becoming more interactive, collaborative and multidirectional (Russell & Smorodinskaya, 2018).

Recent advances in complexity theory, especially that which intersects complex adaptive systems theory, stress the potential of innovation in crisis resistance and recovery, thus sharing a similar position to regional economic resilience (Bristow & Healy, 2017). Both theories hold the view that the complexity arises from relations, interactions and the interconnectivity of the elements that comprise the system and between the system and the larger environment, which relates closely to the ecosystem metaphor that stresses however smaller elements or subsystems may affect the whole and create disruptions that vary in severity depending on the system's resilience or adaptive capacity (Cooke, 2012).

This line of research has garnered some popularity within evolutionary economic geography, especially in the aftermath of the 2008 crisis – both in the search for explanations for why it affected regions so differently and how the post-crisis policies prompted transformations at a territorial (regional) level, with complexity becoming an important asset for these studies (cf. Martin & Sunley, 2010). Equally relevant is the concept of panarchy i.e., how a healthy system can experiment and seek to improve from innovations while avoiding negative effects that destabilize it (Holling, 2001). Indeed, the theoretical proximity between complexity theory, complex adaptive systems, resilience theory and panarchy theory have been known for over a decade and there are many examples of fruitful research that combine and intersect these theoretical fields (Germestani, Allen & Gunderson, 2009; Moore & Westley, 2011).

2.3. Social Innovation Ecosystems

Although the usage of ecological concepts in management and organizational theory dates as far back as the early 1950s (Durst & Poutanen, 2013), and in social sciences to the mid XIX century, the concept of innovation ecosystem has a much shorter history. According to the Oxford English Dictionary, in ancient Greek, the word sústēma meant a "whole made of several parts or members", referring to musical scales and how the different notes combined and arranged would produce a set of melodies and tunes. Later, the Romans would use systēma much in the same way and the word passed down through the scholastic tradition and make its way into the English language.

In the late XIX century, with the development of power engineering and the growing complexity of the industrial machines, the word system was reintroduced, as these constructs could better be described as a system made of several, smaller machines, parts and components that worked together to deliver a specific function only attainable by their particular arrangement (Bertalanffy, 1968). After the 1940s, biology would influence physiology, information theory and cybernetics, and something resembling a theory of systems would begin to develop, with contributions from all these fields (Stichweh, 2011).

Influenced by this movement in the natural sciences, sociology renewed its interest in systems (Castellani & Hafferty, 2009), with the influential Talcott Parsons (1951) outlining an approach to the analysis of the structure and processes of social systems. This line of thinking would be further developed by Niklas Luhmann (1995) but focusing on the idea that systems processed complexity and information, several years after the decline in popularity that systems theory experienced in the social sciences, by the late 1960s, partly due to a rejection of Parsonian structural functionalism and the emergence of micro and meso level, actor-centered competing social theories.

Nonetheless, disciplines such as management and economics would continue on using the term system in their theories (Vancouver, 2013). In sociology, on the other hand, the complex systems approach developed into complex networks analysis, sociocybernetics, new social systems theory, computational sociology and the British school of complexity (Castellani & Hafferty, 2009). The concept of ecosystem was coined in ecology by Tansley (1935), in an attempt to make sense of how plant communities both affect and are affected by their environment. The existence of these communities was explained by concepts such as evolution, competition, predation and mutualism, and the flows of material and energy, as well as connections and flows (Shaw & Allen, 2018). Thus, the ecosystem concept not only predates systems theory, but was also part of the focus on systems by biology that would popularize the term system in the following years (Stichweh, 2011). An example of the influence that biology held over systems theory can be show by Luhmann (1974), who borrowed the term ecological dominance to describe the capacity of a given system to influence other systems through its higher degree of organized complexity and flexibility.

But biology's influence would be felt in other domains of social theory as well. In 1993, Moore introduced the concept of ecosystem to management studies, suggesting that companies

should be viewed as "not as a member of a single industry but as part of a business ecosystem that crosses a variety of industries." (Moore, 1993: 76). He argued further that "in a business ecosystem, companies co-evolve capabilities around a new innovation: they work cooperatively and competitively to support new products, satisfy customer needs, and eventually incorporate the next round of innovations." (op. cit.).

While Moore's analogy would feature in some articles in the following years, it would not be until late 2007 that the subjects of innovation ecosystem and business ecosystem would recurrently feature in scientific papers and business publications (Gomes, Facin, Salerno & Ikenami, 2018). Since then, ecosystem saw its way into thousands of scientific and research materials, who found that the term, in the sense that Tansley gave it, could be used as a metaphor to "evoke and highlight interdependencies between organizations and to provide a fresh way to think about specialization, co-evolution, and co-creation of value" (Thomas & Autio, 2012: 2).

The concept is increasingly being used in management and business to describe "(…) collectives of heterogeneous, yet complementary organizations who jointly create some kind of system-level output, analogous to an 'ecosystem service' delivered by natural ecosystems, and one that extends beyond the outputs and activities of any individual participant of the ecosystem" (Thomas & Autio, 2020: 2). These authors underline the common attributes of ecosystems: participant variety (meaning that ecosystems are composed of heterogeneous participants with various roles), systemic services (ecosystems facilitate an output that is more encompassing than any single participant could deliver alone), interdependence (strong linkages, reciprocity, trust and social capital, among ecosystem participant), and non-contractual governance (which relies primarily on non-market mechanisms and institutions, such as role definition, complementarities, co-design and co-alignment).

In his seminal article, Adner, taking inspiration in Moore's previous usage of ecosystem, combined it with innovation to create his concept of innovation ecosystem, which he defined as "the collaborative arrangement through which firms combine their individual offerings into a coherent, customer-facing solution" (Adner, 2006: 99). This concept, although close to that of business ecosystem (Moore, 1993), became more popular than its predecessor in the following years, coming close to replacing it altogether, even if some authors have yet still to agree on whether the concepts are synonymous or have quite different meanings (cf. Gomes, Facin, Salerno & Ikenami, 2018).

The concept of innovation ecosystem would prove itself appealing, particularly to policymakers and would widen its scope in relation to its predecessor. The concept was used in macro, meso and micro approaches to innovation, since "an ecological system of innovation can be constructed at a number of levels of abstraction and detail – from an individual technology project, to the enterprise, to the industry sector, to the national, regional and even global level" (Yawson, 2009: 4) and thus prove to be more adaptable to different contexts and situations.

It is also relevant to underline that there are different kinds of ecosystems and that a given ecosystem can have several sub-ecosystems. Recently Thomas and Autio (2020) have identified significant overlap in the use of the concepts of innovation ecosystems, business ecosystems, technology ecosystems, platform ecosystems, entrepreneurial ecosystems and knowledge ecosystems. As such, it is paramount to clearly identify the specific subset of the ecosystem chosen and clearly delimitate what is part of it.

Over the last few years, some authors began questioning if the eco prefix in innovation ecosystem added anything new to the innovation system paradigm. These criticisms focused mostly on how one could easily replace ecosystem with system in journal articles and policy reports, and get the same exact result, without any loss of intelligibility, since "these contributions do not depend on the eco-prefix, and their eco-pretensions are metaphorical rather than rigorous" (Oh, Phillips, Park & Lee, 2016: 2). The conceptual fragmentation of ecosystem is visible in two main aspects (Thomas & Autio, 2020). First, the fact that the ecosystem concept, broadly speaking, can be applied at different spatial levels (suburban, city, regional, to national and global) and

types of 'units' of analysis (a focal firm, a cluster, platforms, and even entire industries). Secondly, the nature of the 'ecosystem services' or ecosystem outputs collectively generated can be very different. This means that ecosystems can be inserted in many broad categories, depending in their ecosystem output: knowledge ecosystem if the focus is the creation of new knowledge, business ecosystem if the goal is the creation and improvement of firms, or innovation ecosystem, should one be focused on the creation of innovations (Valkokari, 2015).

Today, after several noteworthy contributions (Gomes et al., 2018; Granstrand & Holgersson, 2019; Oh, Phillips, Park & Lee, 2016; Ritala & Almpanopoulou; Thomas & Autio, 2012), it has become clear that the concept of innovation ecosystem has grown faster than it has matured, considering that many authors use flawed definitions that at no point distinguish themselves from the concept of system, or simply study ecosystems without attempting to define it, which given that the concept itself is a metaphor originated in a very different field, can be problematic.

Nevertheless, the concept of innovation ecosystem has merits that should not be overlooked. This is the case of its added emphasis on the interdependency between actors and organizations, which supports a more holistic view of the process of (social) innovation in a given institutional context (Ritala & Almpanopoulou, 2017) while allowing for, at the same time, to account for the contributions and hindrances that the process of SI face at multiple levels, for different reasons. In this sense, innovation ecosystem draws heavily upon complex systems theory, as it is made of many interconnected and dependent components that interact with each other and collectively (Phillips & Ritala, 2019).

Recently, Granstrand and Holgersson (2019: 3) proposed a more comprehensive definition that broadened the scope of the concept to better accommodate for different kinds of innovation, understanding innovation ecosystems as "the evolving set of actors, activities, and artifacts, and the institutions and relations, including complementary and substitute relations, that are important for the innovative performance of an actor or a population of actors."

Taking into consideration what was previously established about SI, understanding the SIE as a complex adaptive system, we suggest a definition that attributes importance to the several aspects discussed in this article: A social innovation ecosystem is the evolving meso-level environment created by non-market and market interactions of collectives of heterogeneous components, actors and institutions, with different roles and complementarities, that develop linkages to generate innovative answers to explicit or latent social needs, restructuring social and power relations and inducing social change.

Establishing a SIE requires: a mode of governance that integrates actors from civil society and the social, economic and academic field; SI hubs, labs and transfer centers, as intermediaries that accelerate SI activities; and the integration of different modes of innovation in transformational innovation strategies (Terstriep, Rehfeld & Kleverbeck, 2020). SIEs are not homogeneous and different types do exist. Pel, Wittmayer, Dorland and Jørgensen (2019) suggested five types of SIE (the 'SI machine', the 'thin' ecosystem, the discursive field/SI memes, the local co-creation Hub, the political movement) that move between the dilemma of SI agency of 'innovation heroes' and the more structural characteristics of 'ecosystems'.

3. The Social Innovation Ecosystem in Portugal

3.1. Methodology

The research is based in semi-structured interviews with twenty-two strategic stakeholders that operate within the field of SI. These were researchers, directors of organizations that operate and assist in the sector, as well as social entrepreneurs, that were chosen for their prominent role in the Portuguese SIE. The criteria employed in the selection of the interviewees focused on the dimension and type of organizations that they represented, in an attempt to assure a high level of diversity and heterogeneity. Availability and convenience were also relevant criteria, although to a lesser extent.

The average length of the interviews was 1 hour and 45 minutes. The recordings of these interviews were fully transcribed and analyzed to highlight potentially relevant themes for future research. The textual information from the interviews was carefully scrutinized in order to identify recurring subjects and themes. This serves as to familiarize the researchers with transcripts as a whole, before proceeding to the next steps that involve reducing information (i.e. selecting what is deemed relevant to the research) and identifying themes (Creswell & Poth, 2018). After that, a referential content analysis was employed, which is a qualitative approach to content analysis, allowing for a deeper understanding of how actors, actions and events are portrayed and perceived by individuals (Franzosi, 2009). This was done to highlight the most important issues (Perakyla & Ruusuvuori, 2017), while reducing the amount available data, in order to be more manageable, in turn facilitating the process of creating categories (Margolis & Zunjarwad, 2017).

The approach to map the ecosystem is inspired by Bloom & Dees (2008), considering the need to identify players and environmental conditions. We were particularly interested in the understandings of the interviewed actors about the ecosystem. First, it was consolidated, from the content analysis, the main perspectives about the ecosystems' characteristics in Portugal. Second, extracts that described the interviewees thoughts about the difficulties of working in the SIE and how that experienced changed in the last few years, following the legislation change and more recent financing programs that exclude some legal forms of organizations. These excerpts, while giving insight into the key-actors point of view and relating it to the context, try to highlight a coherent narrative about the transformation in the ecosystem and how this affected social enterprises.

3.2. The Portuguese Social Innovation Ecosystem

The Portuguese SIE has become more important to the national economy over the last few years and encompasses several types of organizations. The organizations that it encompasses have worked with the State in assuring the provision of welfare services, both during the late monarchy days in the XIX century and before the democratic revolution of 1974 (Garrido & Pereira, 2018). This is more so the case of older legal forms, such as mercy houses, charitable foundations, social cooperatives and welfare associations, which became more important after 1974, working closely with the State to assure the provision of welfare services to the population. These organizations gained a renewed interest in the aftermath of the 2007/2008 crisis, due to political attention devoted to the social and solidary economy and the cutbacks on public spending and social services in general dictated by the financial assistance programme negotiated with the European Central Bank, International Monetary Fund and European Commission.

Recent data divulged by the Satellite Account of the Social Economy (INE/CASES, 2019) shows that the social economy sector, in 2016, represented 3% of the Portuguese Gross Value Added (GVA), 5.3% of remunerations and total jobs and 6.1% of paid jobs. The report also highlights that there was an increase of 17.3% in the number of entities that comprise the Social Economy sector in relation to 2013, as well as increases in GVA (14.6%), total jobs (8.5%) and paid jobs (8.8%). These values grew above the national average during this period and show a clear positive evolution and its importance to the economy, despite the cries that the solidarity sector is in financial trouble. Health and social services were the largest contributors to these results, representing 48.9% of the sector's GVA. Education follows as a distant third, representing 13.9%.

Table 1. Types of Organizations in the SSE in Portugal.

Types of entities	Units	Remunerated jobs	GVA	Remuneration	GVA/ FTE	Average income
	Nº	ECT	10^3 Euros	10^3 Euros	10^3 Euros per remunerated FTE	
Cooperatives	2 343	24 402	604 241	572 240	24.8	23.5
Mutualist associations	97	4 842	387 971	212 094	80.1	43.8
Mercy houses	387	39 445	596 630	555 267	15.1	14.1
Foundations	619	14 113	332 321	304 296	23.5	21.6
Community and self-managed subsectors	1 678	305	1 174	3 795	3.9	12.4
Associations with altruistic ends	66 761	151 779	2 896 871	2 673 894	19.1	17.6
Social economy	71 885	234 886	4 819 210	4 321 587	20.5	18.4
National economy	–	3 839 523	162 226 133	81 854 147	42.3	21.3
% of the national economy	**–**	**6.1%**	**3.0%**	**5.3%**	**48.6%**	**86.3%**

Source: INE (2019).

It should be noted that understandings of social economy, social enterprises and social entrepreneurs vary greatly across countries, even if the western European countries do have many similarities to them (Kerlin, 2006; Defourny & Nyssens, 2017). While there are fundamental differences between the concepts, we discuss them as a whole in this article, drawing attention to specific sectors or legal forms when relevant. We use the SIE designation as a broad, generic category for social organizations, as to avoid confusion between the formal social economy sector (which is legally defined in Portugal) and the social sector as a whole (Osborne, 2008). Definitions tend to be grounded in specific empirical realities that not always translate well into cross-country comparisons (Lee, 2015), with these particularities resulting from historical differences, which is precisely the Portuguese case.

3.3. Variety of Social Enterprises in Portugal

Social enterprises are not defined solely by what services they offer, nor by their mission. Some enterprises were created to address specific problems of their community, while others use their revenues to support social missions. This means that profit/return generation is not so much an end in itself, but rather a means to an end (Lee, 2015). The same logic applies to social entrepreneurs, who are not so much interested in financial profits: "Social entrepreneurs are seen as individuals/organizations who catalyze social change and address important social needs in innovative ways, but with a relatively higher priority given to promoting social value and development rather than capturing financial benefit" (Lee, 2015: 271).

If it is somewhat easy to explain what social enterprises do, it is quite harder to define them, since definitions are frequently grounded on what a specific set of social enterprises do or where they are located. Borzaga et al. (2020: 26) in their comparative report on SE across Europe, for example, distinguish between two major definitions, i.e., "organizational definitions, focusing on intrinsic features that social enterprises show" and "sector-specific definitions, looking only at specific types of organizations". Also problematic is the fact that social businesses, community

enterprises, social ventures or social-purpose businesses are used interchangeably with social enterprises (Lee, 2015), fragmenting the empirical and theoretical knowledge produced about the subject, as it was the case with SI – a trend that appears to be ever-present in this field of research, one might add.

This article draws upon the Social Business Initiative (SBI) of 2011, promoted by the EU, as the basis for our conceptualization of social enterprises. The SBI specified three key characteristics that define a social enterprise, namely: a) the primary objective being the achievement of social impact rather than the generation of profit reverting to owners or shareholders; b) the existing surpluses are employed towards the desired social goals; c) the management of said enterprises is both innovative and transparent, involving workers, customers and stakeholders in the process (cf. Ferreira, 2019).

Research on social enterprises in Portugal has taken place since the year 2000, mostly in the framework of international research projects. A recently published European Commission study – Social Enterprises and their Ecosystems in Europe (Ferreira, 2019) –, found that the intervention areas of the Portuguese social enterprises were diverse and worked mostly in social assistance. These social enterprises work in areas such as protected employment and professional education targeting vulnerable groups, social and health services, as well as education (infant education through high school). The study concluded that most of these interventions correspond to the non-profit entrepreneur model, social cooperatives and social insertions enterprises, with Private Institutions of Social Solidarity – a specific status for welfare organizations awarded by the State – and social solidarity cooperatives being predominant.

Subsequent research (Ferreira & Almeida, 2020)[1] identified the variety of social enterprises in Portugal: five models, each with their specific discourses, social actors, privileged legal forms and frameworks, boundaries and industry fields: i) the entrepreneurial non-profit model, ii) the work integration social enterprise model, iii) the social cooperative model iv) the social solidarity social enterprise model and the v) and the more recent, widely EU driven social business model. Whereas models i to iv can be described inside the social economy, model v tends to spill over the social economy.

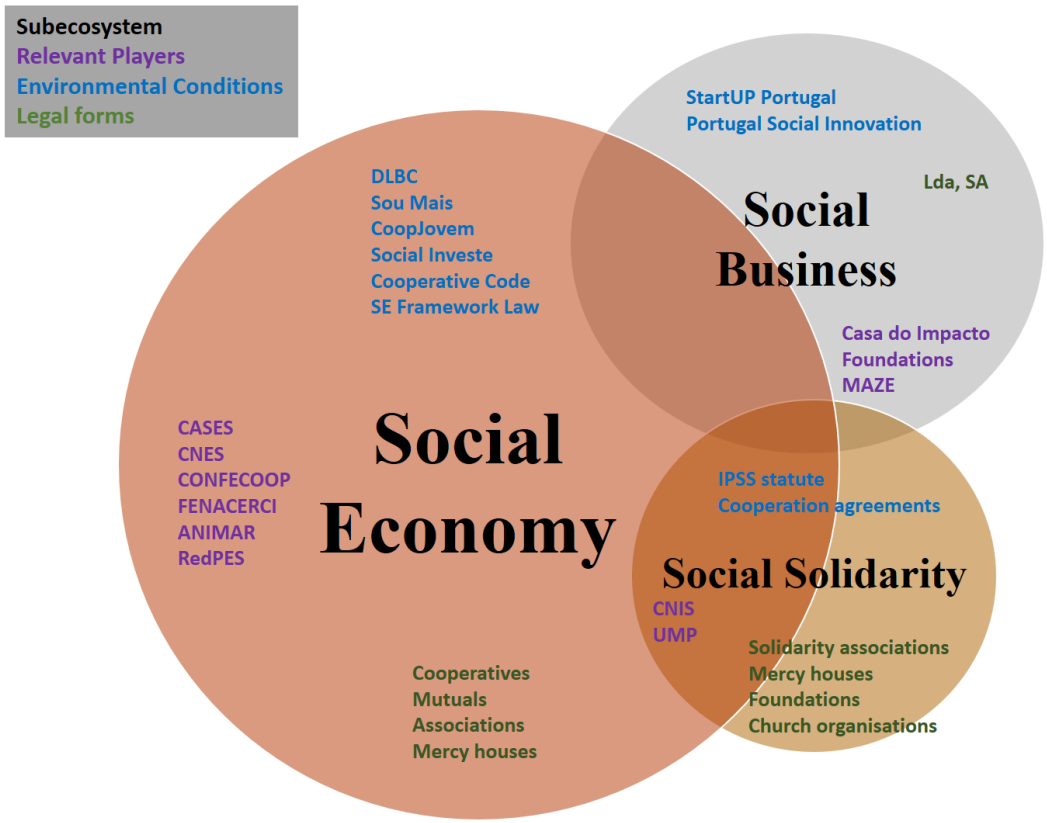
3.4. The Social Innovation Ecosystem in Portugal

The content analysis of the interviews indicates that the Portuguese SIE is characterized by the existence of three very different and somewhat disconnected sub-ecosystems, from which different social enterprise models emerge, with trajectories shaped by the differing dynamics of these ecosystems. These sub-ecosystems are designated as the social economy ecosystem, the social business ecosystem, and the social solidarity ecosystem. A Venn diagram (Figure 1) illustrates the relative weight, proximities and overlapping areas in the sub-ecosystems.

The social economy ecosystem is the one with the strongest expression, followed by the social business as a distant second, and the social solidarity ecosystem. Drawing from literature review and documental analysis, different social enterprise models were identified (Ferreira & Almeida, 2020) and can be located within each of these ecosystems. The social economy ecosystem is mostly comprised of social cooperatives and social and solidarity economy enterprises. The social solidarity ecosystem encompasses entrepreneurial nonprofit model as well as the work integration social enterprises, and in the newer social business ecosystem we find the social business model.

[1] Research carried out in the context of TIMES, focusing the meaning, profile, institutional context and roles of social enterprises in Portugal (please cf. Ferreira et al. (2021). This project is connected to the conceptual and methodological proposals of ICSEM – International Comparative Social Enterprise Models, and with the COST Action EMPOWER-SE – Empowering the Next Generation of Social Enterprise Scholars.

Figure 1. Portuguese Social Innovation Ecosystem and Sub-ecosystems.



Source: Authors' elaboration.

The 'social economy ecosystem' size should not be a surprise, given how it is comprised by the most common and important organization types: cooperatives, associations, mutualist associations and mercy houses. This also shows the variety of legal forms that exist in this subsector, which, in turn, partly explains the difficulty of creating financing programs, credit lines and specific legislation for the sector, as the interviews show. This ecosystem is enhanced by the relatively recent structuration of the social economy around a set of principles and legal forms defined in the Framework Law of the Social Economy (Almeida & Albuquerque, 2020), enhanced by the main body in charge of developing the sector, CASES – António Sérgio Cooperative for the Social Economy, and a voice in government through the National Council of the Social Economy.

Several support programmes for the social economy are managed by CASES such as the microcredit program Sou Mais and Social Investe or the cooperative entrepreneurship program CoopJovem. Within this ecosystem, the social cooperative and the social solidarity enterprise models are prominent. It rests in the setting up of multi-stakeholder cooperatives for people with disabilities and evolved for a specific social cooperative branch, represented by the umbrella FENACERCI and it emphasizes the entrepreneurial dimension of cooperatives, the aim of social integration as expression of social citizenship rights, and participation of all stakeholders in governance.

The 'solidarity economy social enterprise' model comprises diverse organizations, founded since the 1990s and includes local territorial development-oriented organizations that make use of EU funded projects for rural and disadvantaged areas and publics (Moreno, 2003; Amaro, 2009). More recently, they were joined by new types of organizations, mostly cooperatives, created around concerns related to local and sustainable development and environmental protection, articulated with the willingness to doing economic activity differently and in service

of local communities, with a strong emphasis on stakeholders' participation. The two main networks organizing these players are ANIMAR and the Portuguese Network for the Solidarity Economy (RedPES).

The 'social business ecosystem' is the second-largest subsystem, being closer in terms of relevance to the smaller social solidarity than the social economy ecosystem. It mostly comprises enterprises and philanthropic foundations interested in SI and impact investment. Social businesses only recently gained traction in the sector and are becoming more prevalent. They greatly benefit from favorable legislation and programmes, since other legal forms are sometimes excluded from specific financing programs and have restrictions on the activities and services offered, while the legal forms of commercial enterprises are more flexible, being able to adapt more quickly and diversity their activities.

The 'social business model' is influenced by international and European frameworks and structured nationally around new actors such as business schools, consultants, foundations and some public policies. This social enterprise model is often associated to the idea that the commercial form may be the more adequate legal form as long as it balances social and market goals. Several initiatives carried out by consultants, business schools, foundations and support organizations have tried to foster social businesses in light of the adoption of EU frameworks on SI and social entrepreneurship (e.g., Social Business Initiative).

The 'social solidarity ecosystem' has the smallest weight of the three subsystems and includes the entrepreneurial non-profits and the work integration social enterprises. While the IPSS (Instituições Particulares de Solidariedade Social) designation dates back to 1983, some of the legal forms included in this sub-ecosystem are centuries old, such as the charitable foundations, mercy houses and church organizations, having played a key role in the provision of welfare services since the XIX century, and represented by federative bodies such as the social solidarity institutions (CNIS), the mutuals unions (UMP and APM) and the mercy houses union (UPM). With the democratic revolution of 1974, these organizations grew in number and today there are close to five thousand registered IPSS (Ferreira, 2019). These organizations have cooperation agreements with the welfare administration which are stable quasi-contracts. However, they are also underfunded and struggle to assure the viability of their operations. This has been accentuated as of late, given the tendency of the Portuguese State to reduce costs with social expenses, with many offering paid services and developing commercial relations in order to finance their social work, even if they are not part of their core function (Guerreiro & Pinto, 2021).

The work integration social enterprises exist mostly within this ecosystem as they are most often related IPSS. Sheltered Employment Centers are adapted units of production created by public, private or cooperative organizations aiming at providing access to paid work by people with disability. Social Insertion Enterprises were enterprises dependent on public funding and mostly managed by non-profit organizations and social cooperatives, usually without a legal form. They were created by public policy, under a top-down logic, in 1996, to promote the employment of socially vulnerable groups, legally limited to certain areas of activity, less attractive to the market, since they should not be competing with for-profit organizations. Since the extinction of this program in 2015, only a few became independent organizations and others became services in non-profit organizations.

It should be noted that there is very limited overlap between the different sub-ecosystems, especially between social business and social solidarity. This can be explained by the relative novelty of social enterprises, as well as by the more substantial differences in their ecosystems. However, some social solidarity organizations and elements of their SIE are becoming oriented to the social business framework and model. The social economy sub-ecosystem has a greater overlap with the other sub-ecosystems, given both the tradition associated to the cooperative sector, and the recent policy activism around the concept of social economy, with the convergence of both the cooperative and the charitable traditions – eg., CASES includes both the cooperative

and local development federative bodies as well as those of IPSS. While the social business ecosystem is more recent, its resonance in the strategic actors and policies – such as Portugal Social Innovation – is becoming significant. This shows that this sub-ecosystem is growing fast and is a crucial component of the recent trend in SI.

3.5. Strategic Actors' Perspectives on the Social Innovation Ecosystem

The traditionally fragmented landscape that characterizes the third sector did not vanish with the effort to develop a SIE. During the interviews, several aspects were raised regarding the possibilities for the SIE to develop.

One of the key issues is the lack of density and few actors populating this ecosystem:

> *The development of social enterprises depends on the actual social enterprises, with a more favorable ecosystem from a legal, institutional and cognitive point of view ... And it requires through a fundamental idea that they have to cooperate with each other. (E2, Director of a Financial Cooperative).*

Whereas the stakeholders from the social solidarity ecosystem are seen by social economy stakeholders as maintaining a distant and parallel ecosystem, very reluctant to enter in a collective SIE dynamics.

> *[Some organizations are] here but not of their own decision. They were almost forced to. There is a risk in creating this: either we can move on from this sentiment and manage to work together, or they will remain being forced to work with us and it will be a formal collaboration only. (E2, Director of a Financial Cooperative).*

Not all types of stakeholders are comfortable in the new emphasis given to SI. For the cooperatives, the recent years have been disempowering. During the crisis, and the structural adjustment promoted by the EU Central Bank, the IMF and the European Commission, cooperatives lost some fiscal benefits and have more difficulty accessing EU funding targeted for enterprises, given that cooperatives are not eligible. As one stakeholder indicates, the Cooperative Code limits their activities by restraining them to specific branches where they are registered, creating an unequal situation with commercial enterprises. Stakeholders from the cooperative sector identified some loss of identity, support and autonomy of their sector, in the name of the SIE development.

> *…we lost our previous statute, which was a differentiated statute with financial benefits… we had an institute solely for the cooperative sector, specialized programmes for the cooperative sector. And all that has been lost. I am not saying that this is bad, because we ended up being in the right place, which is in the big social economy family. (E1, Vice-President of a National Federation of Cooperatives).*

Despite improvements in terms of registration procedures for cooperatives (e.g., Cooperativa na hora), it is easier to set up a commercial business than a cooperative. The pressure towards market isomorphism is present, as exemplified in the change of the Cooperative Code to allow investor-members and creating the possibility that in some cooperatives' members vote may vary according to capital.

> *[We are not a cooperative] because, from the bureaucratic, fiscal point of view it is a lot heavier and more complicated and, in the last few years, the associative statute allows us, for example, to access applications that a cooperative statute would difficult. Until this day, it has never been justified having that work. (E4, Director of an Association).*

Access to funding is problem in the SIE, especially for smaller scale organizations, that do not fulfil requirements for having access to EU funding.

> *Innovation is done through EU programs, but some of them are not accessible to cooperatives, or at least to some cooperatives that have an entrepreneurial dimension, and not any other kind of condition to developed. Often, to develop a project, I have to guarantee with my personal bank account, in order to receive funding, or otherwise I'm*

> *not paid and not all cooperatives have this possibility. (E1, Vice-President of a National Federation of Cooperatives).*

This is in fact agreed by many of the interviewed stakeholders in the SIE, in the sense that this policy is targeting very specific initiatives which can be of interest for investors with the capacity to generate financial return and an organizational form where investors can participate. Among the issues raised, in the social solidarity organizations, the relationship with public agencies creates doubts. Stakeholders claim that the State is not complying with its part in the funding. On the other hand, the new program Portugal Inovação Social is not seen by some stakeholders in the social economy sub-ecosystem as oriented towards these organizations.

> *Who is being financed by PIS at this moment? […] There were social projects' funds with millions of Euros that just stood there. Where was all this money (…) Why didn't it reach the entities who need it daily to pay their bills and manage social projects that minimize the effects of the crisis, that created job opportunities, prevented families and firms from going into bankruptcy, or that assisted several families and firms that actually went into bankruptcy? So, where is this money? (E5, Coordinator of a Cooperative).*

This funding-centered (subsidized) approach is also heavily criticized by the social business ecosystem actors. It is crucial for the ecosystem consolidation to mitigate these tensions among different sub-ecosystems actors, but that may be difficult to achieve.

> *We may radicalize the two groups. The group of the youngest social entrepreneurs that is of the social business and the group of the more traditional social sector. In the more traditional social sector there is a terrible fear that there will be an invasion of capitalist models within their sector. In the entrepreneurial sector there is great ignorance about what the traditional social sector is. And so, the problem is fear on the one hand and ignorance on the other. And what we are trying to do is to slowly, delicately, create points of contact here and there. But this is a slow process and it has to have a different policy contribution. (E7, Coordination of PIS).*

The underfunding of the SIE in Portugal is known in government spheres, even if the recent changes to funding policies have had debatable results. But the management of social projects has also been an issue, especially given the growing complexity of both national and EU programs. Organizations often lack the structure or means to implement projects, even when the funding is assured. PIS was designed with this in mind, as it promotes private investment in SI and social entrepreneurship projects:

> *150€ million were channeled towards this mission, in the form of four financing instruments. These four instruments were created with two premises in their design. The first premise is that each of them is oriented towards a specific development phase of the social innovation project. It follows what is, in principle, the life cycle of a social innovation or social entrepreneurship project. The second premise is that they all assume the development of partnerships between social organizations and the public or private investors dependent of the financing line. (E7, Coordination of PIS).*

It is troubling that the concepts that guide these national programs are often murky or not defined at all, a fact admitted by officials that manage said programs. They often do not know how some understandings of what social enterprises are or who is illegible for what programs or financing lines. It is suspected that many problems derive from the acritical usage of older definitions that remain in the official documents that guide and applications to these programs, which in turn hinder the process.

> *I think that, from the point of view of the promotion of social and solidary economy, there would be advantages in a unified and clear policy, because the current one is very fragmented between cooperatives, IPSSs and foundations… from a political standpoint, everything is still very fragmented and none of this helps and once again we remain riddled with corporations inside the social economy… nothing helps. (E4, Director of an Association).*

Still, PIS as well as other initiatives have proven themselves important in moving the SIE forward, even with all their shortcomings.

> *When [my institute] was born in 2008, social innovation wasn't even discussed. Today there are social investors, enterprises that are ever more worried with impact, not only because of the ecosystem development, but because of societal pressures… 92% of collaborators, mostly millennials, want to have impact as a result of their work, want a purpose, and that influences organizations (…) I think that there is a tendency of the society and the national ecosystem evolved greatly. I think the IES had an important role, but PIS had a fundamental role, the creation of the social investment market had a very important role and all these things helped the discussion to evolve to a whole different level. (E8, President of the Board of a Social Business School).*

4. Conclusions

The metaphor of ecosystem was explored in this article to underline the creation of a new type of complex, systemic and evolving group of collectives of heterogeneous components, actors and institutions, with varied roles and complementarities, in the Portuguese SI landscape. We underlined that SI aims at creating innovative answers to explicit or latent social needs, restructuring social and power relations and inducing social change and that it was adopted by Portuguese public institutions in order to restructure the social economy sector and how it operates. In a moment when complex wicked problems characterize contemporary society, it is particularly relevant to understand reality using definitions and methods that take into account the existing complexity, more so than using abstract concepts without fully understanding how they will translate into practice and affect the everyday life of organizations.

We use the SIE metaphor to highlight relevant aspects of the evolution of the SI landscape and to illustrate the emergence and connections of new sub-systems. The Portuguese SI landscape has changed a great deal over the last few years but it is too soon to refer that a robust SIE exists at all. Three different sub-systems remain disconnected as the main driving forces of the ecosystem. Much of the social economy sector was anchored in organizations and legal forms that dated back decades and only during the post 2008 crisis period the debate around SI and social economy was seriously discussed by political actors (Garrido & Pereira, 2018). Still, the definition of many concepts remains unclear in the national legislation and programs, and this is the root of the problems related to the eligibility of some legal forms for financing lines, as the efforts to properly relate the scientific concepts to the legal requirements and necessities of the social economy organizations were not successful.

This is ever more so the case when one considers the variety of traditions and legal forms of social organizations operating in the country and how programs such as the Portugal Inovação Social create disparities in terms of eligibility and legal frameworks fail to deliver all social enterprises the same development opportunities, fostering an environment in which these organizations compete with each other or are outright excluded from financing lines because of their legal forms, something that comes as a surprise for organizations that have been financed for providing social services for decades.

There is a growing concern that the attention given to the SIE attests the diminishing role of the state in the promotion of welfare, relying instead on social entrepreneurship and social businesses to perform these services, a trend that has been described as neoliberal in principle (Pel et al., 2019) and the prominence given to the market tools as ecological dominance (Luhmann, 1974). On the other hand, the fact that the welfare state lacks the resources to maintain high standards of the social services offered is undeniable and inevitable, which has motivated governments and institutions to look for alternate means of assuring that these services are accessible (Kerlin, 2006).

Still, the potential of the SI cannot be denied and no matter what stance one assumes about the subject, developing a robust SIE will play a major role in the quality of responses to social

needs in the years to come. And while public policy has much to catch up with in terms of concepts, methods and procedures, it has shown signs of improvement and openness to adapt to the new paradigm of SI in the promotion of positive social change.

In the perspective of interviewees, the Portuguese SIE suffers from a lack of enabling policies that foster SI and empowers both organizations and citizens in promoting social change. The stakeholders regret the difficulty in establishing dialogue and communication lines with institutions and policymakers, who work in a more abstract level, too far from the day-to-day operations of social organizations to fully grasp the complexity of their activities when also faced with ever more complex legal requirements to ensure funding.

The stakeholders also hold the belief that the SIE will become more important in the following years, an argument supported by the growing GVA that official statistics present (INE, 2019). While Portuguese economy is doing better than in pre-crisis years, inequalities and social issues have proven persistent and show no signs of significant improvements and social organizations are expected to complement the state in providing social welfare services, answer unmet needs and tackle complex social problems.

From this perspective, the emergence of SI has not been as successful, given that it created new untimely challenges that these organizations have to deal with. While perceived as well-meant by several interviewees, the compulsory nature of the Portuguese legislation and funding guidelines make it so that SI is a means to an end rather than an end in itself. This is made apparent by the lack of understanding of social innovation shown by some documents and legal requirements that overfocus the formal dimension of the processes, rather than the social change social innovation promises.

These findings and considerations serve as a cautionary tale for the application and adoption of social innovation as a social policy design. While it is difficult to say that Portugal enacted profound changes too fast for the social organizations to keep up with, it is clear from the stakeholder's perspectives that there were considerable issues in terms of planning, as several legal and programmatic changes were not accounted. Several social organizations were left without funding and because of that, as not all forms were eligible for funding, which can be seen as disconcerting, as it appears that the State is choosing what kind of organizations it wants to fund based not on their results and performances, but rather on their legal form.

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Research Article

Challenges of impact assessment in Social Innovation: A qualitative study from two European rural regions

Desafíos de la evaluación de impacto en la Innovación Social: Un estudio cualitativo de dos regiones rurales europeas

Marina Novikova

ISCTE - Instituto Universitário de Lisboa, Lisbon, Portugal.

Correspondence: marina_novikova@iscte-iul.pt. Tel.: +351 210464031.

Abstract: Over recent years, various approaches to assessing the impacts of social innovation (SI) have developed without a uniform method having arisen. There are some issues around how impacts can be assessed, connected with the questions on the nature of impacts, the levels of analysis and effects of a purely positivist approach to impact assessment. While attempting to assess such impacts, various SI initiatives face the diversity of challenges. To this end, the aim of the article is to investigate the experience of said initiatives promoting social innovation related to impact assessment of social innovation. The paper is based on an empirical study conducted with the local development associations and local action groups involved in social innovation projects in two rural regions of Austria and Portugal. The results indicate that, despite recognising the importance of impact assessment regarding social innovation activities and the opportunities it provides, local organisations in question face many challenges in assessing the impacts of social innovation, including conceptual and practical difficulties.

Keywords: social innovation; impact assessment; rural regions; local development initiatives; Austria; Portugal.

Resumen: En los últimos años se han desarrollado diversos enfoques para evaluar los impactos de la innovación social (IS) sin que haya surgido un método uniforme. Existen algunas cuestiones en torno a la forma de evaluar los impactos, relacionadas con las preguntas sobre la naturaleza de los impactos, los niveles de análisis y los efectos de un enfoque puramente positivista de la evaluación de impactos. Al intentar evaluar dichos impactos, varias iniciativas de IS se enfrentan a la diversidad de desafíos. Para ello, el objetivo del artículo es investigar la experiencia de dichas iniciativas que promueven la innovación social en relación con la evaluación del impacto de la innovación social. El artículo se basa en un estudio empírico realizado con asociaciones de desarrollo local y grupos de acción local que participan en proyectos de innovación social en dos regiones rurales de Austria y Portugal. Los resultados indican que, a pesar de reconocer la importancia de la evaluación de impacto en relación con las actividades de innovación social y las oportunidades que ofrece, las organizaciones locales en cuestión se enfrentan a muchos retos a la hora de evaluar los impactos de la innovación social, incluyendo dificultades conceptuales y prácticas.

Palabras clave: innovación social; evaluación de impacto; regiones rurales; iniciativas de desarrollo local; Austria; Portugal.

1. Introduction

Social innovation (SI) is growing in prominence in the fields of research, policy and practice. As a consequence, SI has been widely discussed and debated within various disciplines and traditions, leading to many different understandings of the SI nature. This has resulted in definitions and approaches that vary greatly. A number of studies has been done into SI, looking at the phenomenon from the perspective of urban studies and territorial development (MacCallum, 2009; Nyseth & Hamdouch, 2019), rural studies (Bock, 2016; Neumeier, 2017), organisational studies (Tracey & Stott, 2017), and business research (Van der Have & Rubalcaba, 2016). Within all of the abovementioned fields, the questions surrounding the impacts of SI - and the ways in which such impacts can be evaluated, measured or assessed, - remain of utmost importance, since having an impact is said to be a cornerstone for any SI (Baturina & Bezovan, 2015). However, such an array of diverse approaches to SI leads to the challenges of identifying SI and implementing assessments of SI impacts. Simultaneously, other challenges have been identified in previous research (Maas & Liket, 2011; Grieco, 2015), including the difficulty of linking an objective value to impacts and summarising the various qualitative expressions of impacts (Liket & Maas, 2015) and the contribution of many components to the impact while taking into account causality issue and the alternative attribution.

As such, the challenges that local development initiatives (LDIs) face go beyond the conceptual ambiguity of SI, and include other challenges that make the SI impact assessment a complicated task to carry out. The aim of this paper is, therefore, to present the results of the exploratory study discussing the challenges experienced by LDIs working on SI projects when it comes to the impact assessment of said SI interventions. In approaching this, the paper gives an overview of some key points from the field of impact assessment (IA) relevant to the current research, and then goes on to present the findings from empirical research examining the challenges that LDIs face concerning the impact assessment of their SI projects. By identifying SI as an action that a) is innovative with regard to the context or beneficiary, b) meets needs more effectively than previous actions/ projects/ initiatives, c) provides long-term solutions, and d) is adopted beyond the initial group/network that developed it (Neumeier, 2012, elaborated), the paper goes on to discuss the challenges of the local action groups (LAGs) and local development associations (LDAs), representing LDIs, with regards to the impact assessment. In the current paper, LDIs are considered to be important actors working in the field of SI in rural areas (Novikova, 2021). As such, the main contribution of the paper lies in providing the insights regarding challenges of impact assessment of SI projects, taking into account the rural context, hoping to further elaborate not only on the challenges, but also on the potential ways for improvement and some policy suggestions. As such, an attempt is made to suggest ways to address the challenges in a systematic manner and provide the directions for further discussion.

The paper is structured as follows. First, a brief overview of the state of the art in SI impact assessment will be presented. Second, the paper introduces the methodology of the current study. Following that, the main findings, discussing the challenges associated with assessing the SI impacts faced by local initiatives in two case studies, will be presented. Finally, some conclusions, alongside the limitations of the research and some policy recommendations, will be drawn.

2. Theoretical framework

2.1. Social innovation: a brief introduction to the concept

SI has been a concept on the rise over the last decades, both in academia and policy. Such attention to the concept and its core principles resulted in a myriad of understandings that revolve around new solutions in order to meet pressing needs that have not been met otherwise (Moulaert et. al., 2005), reconfiguration of social practices (Howaldt et al., 2016), changes in attitudes of local actors (Neumeier, 2012, 2017), as well as the ability of such innovation to

challenge, alter and/or replace existing institutions and structures by recombining, transposing and reinventing specific elements (Avelino, 2021).

While there is no agreed definition of SI, there is a consensus that SI represents both "a process of the transformation of social practices (i.e., attitudes, behaviors, networks of collaboration) and the outcomes in terms of new products and services (i.e., novel ideas, models, services, and new organisational forms" (Ravazzoli et al., 2021: 2). As such, SI has been approached in a two-facet way that represents both the process and the outcomes achieved by such a change in the process and practices, with a particular focus recently being put on the transformative potential of SI. The transitions research (e.g Köhler et al., 2019) emphasises the potential of SI to contribute to the systemic change, seen as necessary in tackling 'wicked' (e.g., Nicholls et al., 2015) and 'persistent' (Schuitmaker, 2012) challenges modern societies are faced with. Being a motor of change (Bock, 2016), SI is also said to have a transformative potential (Avelino et al., 2019). Thus, transformative social innovation (TSI) is conceptualised as "social innovation that challenges, alters and/ or replaces existing social relations and practices, primarily by co-producing new social relations, involving new ways of doing, organising, framing and knowing" (Avelino et al., 2019: 198). Such an approach is echoed in the conceptualisation proposed by SIMRA where SI refers to "the reconfiguring of social practices, in response to societal challenges, which seeks to enhance outcomes on societal well-being and necessarily includes the engagement of civil society actors" (Ludvig et al., 2018: 147).

Consequently, SI is understood to represent "changes of attitude, behaviour and/or perception that result in new forms of collaborative action", which, then, improve the lives of those involved (Neumeier, 2012: 55). Thus, SI is not only about meeting unmet needs, it is also concerned with the way in which this is done (e.g., through enhancing the capacity of actors, building networks and empowering disadvantaged groups). It involves new forms of organisation at both an institutional and personal level, which are developed at the local level and result in social changes beneficial to the communities involved (Moulaert et al., 2005). As such, in view of Moulaert et al. (2005, 2013), SI (a) acst towards the satisfaction of human needs that are not currently satisfied; (b) provokes changes in governance to enable this satisfaction, and to increase the level of participation of all actors; and (c) fosters empowerment by enhancing socio-political capability and access to resources.

At the same time, the underlying importance of SI manifests due to a growing consensus among researchers, practitioners and policy makers that technological innovations alone are not capable of overcoming the challenges that modern societies are facing (Howaldt et al., 2018). Building upon the existing research, in the current paper SI is understood to trigger the reconfiguration of practices through changing, altering and/or replacing the previously existing practices with SI a) being innovative with regard to the context or beneficiary, b) meeting needs more effectively than previous actions/ projects/ initiatives, c) providing long-term solutions and d) being adopted beyond the initial group/network that developed it (Neumeier, 2012; Avelino et al., 2019).

2.2. Social impacts and impact assessment in social innovation field

The issue of impact is a cornerstone of the notion of SI, with some scholars arguing that having an impact is an inevitable part of the SI process, with an implicit emphasis on the SI impacts on individuals and society (Baturina & Bezovan, 2015). Simultaneously, scholars argue that core elements of successful SI are durability and broad impact (Westley & Antadze, 2010). Yet, one of the main challenges SI initiatives face is to show the impact it is having and how it is positively transforming society. Despite its relevance, the impact is an important issue addressed in the study of SI only to a certain extent (Portales, 2019).

With the research done on the topic of impact assessment, measurement and evaluation, one of the key questions in this area is still concerned with the notion of impact itself. In general,

impact can be understood as the value created as a consequence of someone´s activity and the value experienced by beneficiaries and all others affected (Kolodinsky et al., 2010). Simultaneously, (social) impact is understood as the change caused within a 'social system' (outcomes that result from outputs delivered by an intervention minus the change that would have happened anyway ('deadweight') (Clark et al., 2004; Ebrahim & Rangan, 2014; Nicholls, 2009). Therefore, the impact represents the "effect at the final level of the causal chain that connects the action to the eventual impact on society" (Maas & Grieco, 2017: 114). Such a causal chain, often referred to as impact value chain, makes a distinction between the initial resources used by the organisation to introduce an action (input); the action undertaken (project or activity); the immediate quantitative result of the action (output); the direct changes in the community, people, organisations, systems and institutions (outcome) followed by the highest order effects of the initial action undertaken (impact) (Ebrahim & Rangan, 2014; Liket et al., 2014; Maas & Grieco, 2017).

There is a growing understanding that accounting, measuring and reporting of the (social) impacts of organisations is important both for the organisations themselves and society at large (Mulgan, 2010; Epstein & Yuthas, 2014; Arena et al., 2015; Nicholls, 2018). For the organisations, good social impact data holds an important added value in terms of informing and shaping strategy and operations; for the society, such data is vital as it supports legitimacy and marketing claims and "can be a key part of a sustainable resource strategy with key stakeholders" (Nicholls, 2018, p. 132). In broad terms, impact assessment describes a process in which an organisation itself or an external body develops and applies a methodology for capturing the measurable outcomes (impacts) of an organisation's specific activity or project from both a short and long-term perspective. Specifically, social impact assessment (SIA) is understood as "processes of analysing, monitoring and managing the intended and unintended social consequences, both positive and negative, of planned interventions (policies, programs, plans, projects) and any social change processes invoked by those interventions" (Vanclay, 2003:5).

Although the importance of (social) impact assessment has been pointed out by many scholars (e.g., Epstein & Yuthas, 2014; Vanclay, 2020), one of the main obstacles when it comes to IA of SI is that both concepts of (social) impact and that of social innovation are understood differently depending on the field. Moreover, the existing approaches do not show a common understanding of what should be measured, why or for whom and how to measure it (Maas & Liket, 2011). At the same time, conventional assessment and reporting approaches quite often fail to generate social impact data effectively (Ebrahim & Rangan, 2010, 2014) or have been regarded as dysfunctional (Arya & Mittendorf, 2015). Therefore, there is no common language, to date, on the impact assessment of SI activities and/or projects. Such IA faces several challenges such as causality issues where impacts cannot be attributed necessarily to a given activity, the intangible character of some impacts, the lack of available resources for the IA to be carried out at the level of the SI initiatives, and the lack of systematised data. At the same time, the nature of SI poses several challenges on the IA procedures. First, SI is always embedded into the context of a given community - with its relations, social capital and political environment, - which makes it sometimes difficult (or even hardly possible) to attribute the effects of such SI to the changes happening in the community. Second, being a dynamic process, SI takes place in ever-changing environments, thus needing to be changed and adapted to the wider context. Third, SI is a concept that has been adopted and used in many research fields and practices, which points to its cross-cutting nature. Since SI does not represent only one specific field or sector, IA should be applied in a sensitive matter in order to take all those differences into account. Finally, since most of the time SI emerges within complex systems, the challenges - and the SI as a response to those challenges - are nonlinear and uncertain, which poses further difficulties in applying the IA to SI projects (European Commission, 2014).

However, with several attempts to suggest possible tools and frameworks for IA of SI (Antadze & Westley, 2012; Nijnik et al., 2019; Ravazzoli et al., 2021), few studies addressed the

challenges of the impact assessment of SI, providing a deeper understanding of the issue and analysing how such challenges affect the practices (and the possibility) of impact assessment of SI projects. As such, the current study takes a closer look at the specific experiences of the LDIs in two rural regions, with the methodology of the study presented in the following section.

3. Methodology

Current paper presents the results of an explorative study based on qualitative methodology. The data was collected between September 2018 and May 2019 in two rural regions, Baixo Alentejo in Portugal and Muehlviertel in Austria (Figure 1).

Two regions were selected as the areas under study due to their status as predominantly rural European regions (Eurostat, 2019), facing challenges such as outflow of the young population, aging population and lower or weakened economic activity. Such processes nominally correspond to the "circle of declining rural regions" (OECD, 2006) when regions experience low population density that leads to the lack of critical mass for infrastructure and services. In turn, fewer businesses are being created in those regions and fewer jobs are available for the younger population. This leads to the out - migration and aging population which feeds back into the 'circle of decline' (OECD, 2006). However, despite the perceived similarities, both Baixo Alentejo (PT) region and Muehlviertel (AT) region have undergone different rural development processes. Indeed, both regions under study have been regarded as rural regions; however, the two regions experience significant differences in recent developments that can be associated with their rural status. In recent decades, rural development has paid great attention to the necessity for the future development of rural regions looking beyond the challenges and turning such challenges into opportunities. Thus, the LDIs working in the field of SI have contributed to the development of their respective regions and have found their own approach to addressing existing challenges through SI, such as population decline, outflow of young people, lack of services, weakened economic performance, and overall rural marginalisation (Di Iacovo et al., 2014; Bock, 2016).

Figure 1. Map representing two regions under study.

Source: Author's own elaboration based on Eurostat.

The choice of two regions is also based on the fact that both territories represent case studies wherein a significant number of LDAs and LAGs pioneer in and contribute to local development and the promotion of SI (Novikova at al., 2020). In the current paper, LAGs and LDAs are understood to play an important role in developing, implementing and promoting bottom-up SI taking place in rural areas. As such, six LDAs corresponding to the Muehlviertel region and five LDAs corresponding to the Baixo Alentejo region were chosen since they exemplify a variety of initiatives in various fields of intervention such as sustainable agriculture, circular economy, community engagement, and capacity building, with the main aim of contributing to development of rural regions which they operate in.

Narrative data was collected through expert interviews. At the initial stage of the research, several groups of experts were identified. Following that, the sampling procedure was done through the snowballing technique (Noy, 2008), with key experts identified through the networks of other actors in the field. Despite the potential bias of such a technique that heavily relies on experts' personal connections and networks, this was done in an attempt to allow access to the specific groups with relevant experience in SI within local and regional settings. The groups contained representatives of actors from the local, regional, and national levels (see Table 1). In order to ensure the representation of many perspectives on the challenges associated with assessing the impacts of SI, some experts from the related fields were recruited for the interviews. Thus, together with the members and managers of LDAs and LAGs, policy makers, regional development experts, as well as project partners of the local initiatives took part in the research. This resulted in 15 interviews for Muehlviertel (AT) and 14 interviews for Baixo Alentejo (AT) regions, with a total of 29 interviews conducted.

Table 1. Number of interviews conducted with various experts.

Group of experts	Muehlviertel, AT	Baixo Alentejo, PT
Managers and Staff of LAGs/ LDAs	6	5
Policy Makers and External Experts	3	2
Project Partners	3	4
Extended Network	3	3
Total	**15**	**14**

Source: Author's own elaboration.

The interview guide included open-ended questions that could be broken down into several categories. Alongside the questions focusing on a) the challenges two rural areas face (initial triggers), b) the responses provided by stakeholders aimed at solving those challenges through the projects, and c) the collaborative dimension of such work through exploring wider networks of actors involved in SI, a designated block was targeting the questions concerning the challenges in IA of SI. Such questions addressed the issues of i) (existing/ non-existing) practice of IA at the level of the SI initiative, ii) understanding of IA procedures, iii) challenges related to SI IA, including conceptual and practical challenges.

In order to comply with the ethical concerns of the research (e.g., Vanclay et al., 2013), informed consent was obtained for all interviews, elaborating both on the research procedures and the possibility for the interviewees to withdraw at any time. In both regions, the interviews

were conducted either through the medium of English, or through the medium of the local language (German and Portuguese respectively).

Following the data collection, the interviews were transcribed and analysed using thematic analysis. As a method, thematic analysis helps in "identifying, analysing and reporting patterns (themes) within data" (Braun & Clarke, 2006:79) constituted by several stages (ibid). The first stage includes generating of the initial codes which includes coding interesting features of the data in a systematic fashion across the entire data set. After the first stage of initial coding, the produced initial codes were used in order to identify emerging patterns and search for themes by collating codes into potential themes, gathering all data relevant to each potential theme. Following these steps, the process of reviewing themes was initiated where the themes were checked in relation to the coded extracts and the entire data set. As the themes that were identified as a result of coding were covering many domains, the current paper focuses on the various challenges the local development initiatives face associated with the impact assessment of their SI interventions.

Based on said analysis, the following section presents the results of the study, focusing on the challenges the actors of LDIs experience with assessing the impacts of the SI projects implemented in two regions under study.

4. Challenges in capturing the impacts of social innovation projects

LDIs in question face some crucial challenges when it comes to the impact assessment of the SI projects they implement, drawing the results based on the commonalities across both cases.

- *Absence of a unified approach to SI impact assessment.* In both research and practice, there is no agreement on what kind of indicators or metrics might capture the SI impacts or allow for the evaluation of SI to be carried out (Nicholls, 2015; Cunha & Benneworth, 2020). Being cross-sectoral and multi-dimensional by its nature, SI impacts are difficult to measure since SI involves actors at a range of spatial scales, focusing on creating social value and community development (Baturina & Bežovan, 2015), the dimensions that do not easily translate into the numerical forms. Such a quantitative-based approach to the impact assessment also puts at risk more intangible impacts (discussed later in more detail) where *"what can be measured will be reported on"* (Member of a local development association, May 2019), suggesting that the, on the one hand, not all the impacts have a numerical expression; on the other hand, those impacts that are difficult to attribute a numerical value to (or are not measurable), will end up not being reported on. Simultaneously, the complexity of impacts puts the possibility of such a universal SI IA under question.

  The overall debate regarding whether there is a need - and, indeed, the possibility, - for one unified, universal assessment approach was discussed by the interviewees and regarded as one of the challenges they faced throughout the process of any assessment and/or evaluation of the impacts of their work. The fact that in the case of LAGs there are many variations in the way the indicators are being applied and that it leads to the confusion and even questioning of the need and purpose behind the whole assessment, was expressed by one of the experts:

  > *LAG creates its own indicators [...] for each action. And that means that its LAG has 15, 20, 30 indicators and 77 LAGs and each LAG has its own indicators. It means that the accumulation of indicators makes no sense. (Member of a LEADER forum, Austria, November 2018).*

  As such, the said absence of a unified approach to SI impact assessment is perceived as one of the most pressing challenges for LDIs wherein the actors find it difficult to navigate through the overwhelming diversity of approaches and identify (or design new and suitable) applicable tools that would capture the complexity of SI impacts.

- *Intangible character of the SI and its impacts.* SI is understood in terms of new ideas, changes in attitudes, re-establishing practices and does not necessarily result in the development of a product (Krlev et al., 2014). It most often brings about an improvement in communities´well-being, altering and changing the existing practices, triggering more empowerment, eventually contributing to a more dynamic and productive society (BEPA, 2010). In addition to that, Phills et al. (2008) note that quite often SI produces something intangible, such as a principle, an idea, a piece of legislation, a social movement, or a civic intervention, rather than a tangible output (e.g., a product, process or technology). In the context of the rural studies, Neumeier (2012) echoes this idea, suggesting that SI is non-material, and any material outcome is a solely supplementary feature of it. Thus, the SI impacts are considered to be much more intangible than those of technical innovations, particularly those leading to the creation of new products or services. This helps explain the relative paucity of approaches measuring SI impact (Nicholls, 2015).
  The question about the tangible and intangible character of the impacts was raised by the experts in both Muehlviertel and Baixo Alentejo. Interviewees describe the impacts of their work as being mostly 'intangible', long-term outcomes of the projects implemented. While describing the impacts as 'intangible', interviewees referred to the impacts that lead to a) the improved well-being of community members as a whole or some target groups, b) established and enhanced networking opportunities among and for the members of the community and c) the increased capacity of local communities, e.g., when it comes to starting their own initiatives and/ or enterprises. The supposed intangible nature of such impacts associated with the LDIs' actions imposes some restrictions on applying some of the existing assessment strategies, which frequently deal with measurable, clear outputs. Despite the fact that, for the said initiatives, such intangible impacts are difficult to assess, in both cases interviewees point out the importance of such 'quality work' being rooted in collaboration with local communities. Furthermore, they place a higher value as to the relevance of such interventions based on the opinion of local stakeholders, over tangible, measurable outputs. This indicates that factors such as an intervention's relevance to local stakeholders, the appreciation of action taken, and the public's perception (and satisfaction) opinion and personal assessments carry a significant weight in informal evaluation of the action taken than the results of the (formal) impact assessment procedures. As one of the interviewees puts it:

  > *[The impact is] more than statistics can say. If you look at impact as the way people perceive the relevance of that intervention in their own lives, this is what matters to me and this I would very much like to know (Manager of a local development association, Baixo Alentejo, March 2019).*

  Both LAGs and LDAs in the two regions under study put greater emphasis on those impacts - as a consequence of their work - that enhance community cooperation, improve networking among members of a local community, and contribute to capacity building among the local population rather than the outputs that can be necessarily measured and presented in numerical form.
- *Complex, non-linear nature of SI processes - and the issue of causality.* SI is a change that comes about as a result of linkages between complex phenomena, social processes, and involves differentiated outcomes (Nicholls & Dees, 2015). SI is not a static process, rather SI takes place within complex systems, while the wider transformative change is taking place (Wittmayer et al., 2019). Additionally, since most of the time SI emerges within complex systems, the dynamics of the challenges and the innovation are nonlinear, uncertain, and unpredictable (Goldstein et al., 2010; Westley & Antadze, 2010) and the "cause-and-effect" means of IA are not

easily applicable to SI projects (European Commission, 2014). As such, it is often hard to link activities and impact because of the causality issue as well as the alternative attribution mentioned previously. While discussing the impact assessment strategies and tools used by LDIs, the issue of causality and the link between the project implemented and the attribution of the impacts was brought up in both Baixo Alentejo and Muehlviertel regions. As put by a member of LDA from Portugal:

> *Even if you could realise that they were [connected], how could we really relate [it]to the project itself and not to any other factor that just happened during the same period? So [the impacts] it's always something very personal. (Member of a local development association, Portugal, March 2019).*

The causal relationship between the action taken and impacts that have been observed cannot always be traced back to or attributed to a specific project implemented. In fact, the interviewees expressed the opinion that quite often other (contextual) factors have come into play where the importance of taking into account the context was explained through the high embeddedness of SI and its impacts. SI is advocated to emerge in a local, bottom-up process, where such initiatives are highly contextualised and respond to pressing needs of a specific group embedded in a specific territory. As such, any SI impact assessment has to account for a multitude of various (unique) features and factors corresponding to the needs specific to both community and territory, with SI processes being regarded as complex and socially embedded (Bund et al., 2015).

- *Focus on output and outcome reporting.* A common thread within the LDIs working in both regions is a strong shift towards output reporting rather than on impact assessment. This means that, at the end of each project or a broader time period, the initiatives prepare a report in which they present the outcome based evidence of the work done. Additionally, sometimes the impact assessment cannot be done by the local organisations because of specific time frames that do not allow for a longer post-evaluation over a period of time (e.g., 'projectification' of LDIs' work). While trying to implement the impact assessment strategies, the said initiatives face overall difficulties in delineating output and outcome reporting and the impact assessment. The main challenge here manifests itself when they have to go a step further after reporting on the outcomes and develop a set of impact indicators that will eventually be causally linked to the implementation of a project and its outputs and outcomes. One of the interviewees put it as follows:

  > *Of course, we have both qualitative and quantitative results and present [them] in the end, in the final report. And those we can say that we achieved or not, but even being qualitative [results], there are not really impact indicators (Member of a local development association, Portugal, March 2019).*

  An important illustration of the difficulties regarding the delineation of outcome reporting and impact assessment was brought up by a LAG manager in the Baixo Alentejo region. While reflecting on impact assessment implementation, the interviewee said:

  > *We do this [impact assessment]. One of the areas of this calculation is about the indicators of the employment created by enterprises. We report how many projects we supported, 10 projects, how many employees you got from this. We have all these in mind. Then we transform this in the reports and in this moment, we try to collect these results (LAG manager, Portugal, March 2019).*

  Supported by the above example, the LDIs find it challenging to trace the impacts rather than concentrating their reporting activities on outputs (e.g., number of participants in workshops) or outcomes (e.g., number of local enterprises started by

the participants as a direct result of participating in an activity/ a workshop) of a project implemented.

- *Practical challenges and bureaucratic burdens.* The interviews revealed several other challenges related to the practical implementation and execution of IA. Firstly, the actors addressed the complexity of tools and methods of IA that exist in academia and practice. Having limited resources, actors both in Muehlviertel and Baixo Alentejo pointed out the need for additional training and support to actually engage in a meaningful assessment of the SI projects' impacts. Secondly, the actors pointed out the limited data availability on the SI projects, further leading to the challenges of ex-post evaluation. Such limited data availability is perceived as a great challenge since there is no structured way to gather the data needed for evaluation (Preskill & Beer, 2012). Furthermore, one of the main challenges that was pointed out by the interviewees is the lack of necessary time required to execute such assessments. In addition to that, the LDIs are experiencing the lack of other resources needed to carry out IA. The issue of scarce resources is especially pressing since the members (and partners) of LDIs often lack the specialised knowledge and the know-how required to implement and carry out IA. This is in part due to lack of a suitably universal impact assessment of intangible impacts, which constitute a substantial portion of their work. Compounding this issue, quite often actors also find themselves caught between pressures coming from the monitoring bodies while at the same time being poorly supported in the process of impact assessment. Therefore, it is evident that the LAGs and LDAs find themselves in a situation where the impacts that they consider important are difficult to assess in a way that is strategically useful for them in terms of operation, finding funding etc. Last but not least, the interviews revealed insufficient culture for ex-post evaluation. Building upon the issue of the prevailing outcome reporting practices, one of the interviewees pointed out the constraints related to reporting on the impacts. As it was put,

  > *We have to do it at the end of the project and there is no time, I think, at least from what I think of impact means, there is no time to really evaluate an impact, it cannot be something that you can evaluate a month after the project is .... When we apply, we usually have to propose results do not impact. (Member of a local development association, Portugal, March 2019).*

  As such, initiatives in question are quite often faced with the fact that the SI impact assessment requires a longer period of time to observe where the impacts manifest themselves later on - either throughout the project or upon assessing its impacts once the projects have been completed.

5. Conclusions and discussion

Current paper addressed some of the challenges faced by the LDIs in identifying the impacts of the SI projects run by those LDIs.

The results indicate that the organisations in question face some challenges when it comes to assessing impacts of the SI projects they implement. Firstly, one of the main challenges identified through the study was the absence of a unified approach to SI impact assessment with no agreement on what kind of indicators or metrics might capture the SI impacts or allow for the evaluation of SI to be carried out. Secondly, the results suggest that the impacts of SI projects of LDIs under study often take on an intangible character, with SI projects producing new principles, ideas, creating new social practices or changing attitudes within local communities towards cooperation, rather than producing a tangible output. Thirdly, the interviewees pointed out the challenges associated with attributing the impacts of an SI to a specific project and/or intervention due to the complexity and non-linearity of SI processes, as well as high embeddedness of SI in local context. Fourthly, the interviews revealed the intertwined character

of outcome reporting and the impact assessment. Quite often, LDIs carry out what may be better understood as outcome reporting rather than impact assessment. This only partially concerns the long-lasting impacts of a given project where the impacts of the activities implemented by organisations are usually not documented over a period of time and, secondly, such impacts as there are difficult to attribute necessarily to any specific activity implemented (Maas & Liket, 2011).

Additional challenges with the impact assessment come into play when it concerns the resource allocation for such activities. As to the main challenges concerning what resources are available for the impact assessment, the interviewees pointed out: 1) the lack of financial resources needed to support sustainable impact assessment procedures, 2) the lack of human resources required to keep the impact assessment last and 3) the lack of knowledge and expertise on how to develop and integrate the sustainable impact assessment culture into their work. As such, the combination of said factors makes the task of impact assessment rather difficult to carry out for the local development initiatives.

While having presented new insights into the challenges associated with impact assessment of SI among rural LDIs, current study has some limitations. First, a closer look into the assessment strategies of potential negative impacts of SI is required in order to gain a deeper understanding of how SI, while targeting and favouring some communities and/ or groups, can potentially create undesirable, sometimes even negative impacts. Second, an inclusion of other groups of stakeholders, such as monitoring bodies and external experts in IA, could benefit current research by providing a range of opinions regarding other challenges, as well as ways of addressing these challenges, driving forces and necessities behind the impact assessment of SI in rural regions.

Having discussed challenges of the SI impact assessment, the paper suggests some direction for the future research. Despite the fact that SI is often seen and discussed in light of its potential for a positive change, it can be misused. There have been several cautionary remarks about the potential for SI to contribute to the ever-growing trend of public withdrawal from social services (Ziegler, 2017; Grieco, 2015). As SI is often used as a policy design tool to find new means to fund and support alternatives to public services, there has been a growing number of authors questioning if SI is not furthering neoliberal interests. This side of SI —and, indeed, of innovation in general—is often overlooked, as the discourse on SI tends to stress the positive dimensions and hide the less desirable outputs (Epstein & Yuthas, 2014) which has been called the pro-innovation bias of innovation (Goldstein et al., 2010). As such, further research is needed in the domain of the pro-innovation bias, and whether such bias is intertwined with the IA of SI.

Despite the impacts being approached by interviewees as indeed being present as a result of their work and as having a positive influence on the communities they work in; it should be noted that negative impacts were rarely spoken about in the context of SI. The absence of potential negative impacts vis-a-vis SI in the narratives and discourse around SI activities could be explained through an overly idealised perception of SI as a 'perfect solution' for the challenges that rural regions face. Since potential negative impacts were not in the scope of the study, it is important to address the issue in further research, and to explore the potential factors that may come into play when talking about, as well as assessing the negative impacts that could emerge.

Future research could also benefit from a stronger focus on the contextual factors of the environment LAGs and LDAs work in, alongside a more in-depth examination of the political and institutional frameworks under which those organisations operate. Such research could shed more light on the issues as to for what reasons and in what ways the organisations are expected to assess the impacts and report on them.

Resulting from the issues discussed above, several policy suggestions can be made in order to address the challenges of impact assessment for the organisations in question. Despite still being quite general, policy suggestions presented might give a sense of direction to both the policy makers and the practitioners in their endeavours concerning the SI impact assessment. Firstly, SI initiatives require more (extensive) knowledge on the existing and available tools for

conducting impact assessments of their socially innovative projects. This can be achieved through partnering with peers (other LDIs and SI initiatives) and/or other partners (e.g., universities) that have more theoretical and practical skills in impact assessment. Secondly, the initiatives working in the field of SI could benefit from more exchanges of know-how and experiences with other organisations and expert bodies focusing on impact assessment procedures. The neo-endogenous approach comes into play when local actors are seeking support from extra-local bodies in the procedures of assessing and evaluating the impacts of the projects implemented (e.g., the support of intermunicipal communities, federations of local action groups). Thirdly, impact assessment requires extensive resources – both human and financial – that quite often are lacking at the organisational level. Therefore, more support infrastructure could be offered by the regional and national frameworks and institutions (such as Rural Development Program, LEADER contact points), to the SI initiatives in implementing and running impact assessments in a comprehensive way. Fourthly, the long-term character of SI impacts requires some time and perspective in order to be assessed and evaluated. One of the potential solutions arising from empirical research might be a task force allowing follow-up with the participants of the project to provide a platform to reflect on the potential impacts after finalising the projects. Lastly, as suggested, SI might have a "dark side", e.g., the potential negative impacts of innovation policy on society (Fougère & Meriläinen, 2019), socially divisive or destructive objectives and intentions (Nicholls et al., 2015), as well as deviant or unintended consequences that achieve negative social effects (e.g., widened social exclusion as a result of some groups falling out of focus). Therefore, SI initiatives should strive for a more reflective impact assessment approach concerning the potential negative impacts produced as a result and/or as a by-product of the SI implemented.

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Research Article

Social movements in a time of pandemic: The case of Tech4Covid19 in Portugal

Movimientos sociales en tiempos de pandemia: El caso de Tech4Covid19 en Portugal

Fernando Almeida

University of Porto, ISPGAYA & INESC TEC, Portugal.
Correspondence: almd@fe.up.pt

Abstract: The COVID-19 pandemic had a strong impact on Portuguese society and raised the need for new technological projects to help frontline professionals in the fight against coronavirus and its effects on the local population and economic agents. It is in this context that the Tech4Covid19 movement was founded by Portuguese technological startups. This initiative brings together more than 5000 volunteers and offers technological solutions in the areas of health, education, and local economy. This study aims to understand and explore the organizational model and dynamics of Tech4Covid19 through the adoption of qualitative methods based on primary and secondary sources that have allowed the movement to be explored from multiple perspectives. The findings reveal that Tech4Covid internally promotes the development of its own projects, but also accepts projects proposed by external entities that are aligned with the principles and values of the movement. The organization of the movement is supported by autonomous self-managed teams regarding each project, and there is a coordination group responsible for the aggregate management of the various initiatives and for establishing communication with partners, the media, and social networks.

Keywords: COVID-19; innovation; startups; technology; volunteering; crowdfunding.

Resumen: La pandemia de COVID-19 tuvo un fuerte impacto en la sociedad portuguesa y planteó la necesidad de nuevos proyectos tecnológicos para ayudar a los profesionales de primera línea en la lucha contra el coronavirus y sus efectos en la población local y los agentes económicos. En este contexto, se fundó el movimiento Tech4Covid19 por parte de startups tecnológicas portuguesas. Esta iniciativa reúne a más de 5.000 voluntarios y ofrece soluciones tecnológicas en las áreas de salud, educación y economía local. Este artículo pretende comprender y explorar el modelo organizativo y la dinámica de Tech4Covid19 mediante la adopción de métodos cualitativos basados en fuentes primarias y secundarias que han permitido explorar el movimiento desde múltiples perspectivas. Los resultados revelan que Tech4Covid promueve internamente el desarrollo de sus propios proyectos, pero también acepta proyectos propuestos por entidades externas que estén alineados con los principios y valores del movimiento. La organización del movimiento se apoya en equipos autónomos auto gestionados con respecto a cada proyecto, y existe un grupo de coordinación responsable de la gestión agregada de las distintas iniciativas y de establecer la comunicación con los medios de comunicación y las redes sociales.

Palabras clave: COVID-19; innovación; startups; tecnología; voluntariado; crowdfunding.

1. Introduction

The crisis provoked by COVID-19 has completely different characteristics from the previous sovereign debt crisis in the EU countries of 2008. Some unique characteristics of this crisis should be remarkable. This crisis was motivated by a global and abrupt shock in which demand and supply were simultaneously destroyed. This situation occurs when the world is much more integrated, as demonstrated by the speed with which the COVID-19 spread throughout the world (Hennig, 2020). This crisis also comes at a time when governments are more in debt and therefore have less capacity to absorb shocks. Moreover, the economic impact of this crisis is asymmetric. For example, some industries like tourism are more affected than others. This means that the sectoral composition of countries will influence the impact of the crisis.

In an open economy like the Portuguese one, the negative effects of the COVID-19 pandemic were significantly felt. Firstly, COVID-19 forced the confinement of the population at home and the closure of non-essential economic activity. In this way, the effects of the crisis were felt in the main sectors of the economy and in the life of Portuguese companies and their employees. In a country where the business sector is mainly made up of small and medium-sized enterprises (SMEs), and where export activity represents 44% of the national GDP, the opening up of foreign markets to Portuguese goods and services will be a key factor in the recovery of economic activity. However, the business structure in Portugal is fundamentally aged and dominated by micro family companies (Marques & Couto, 2017). Hence, startups with strong support in technology are more agile business structures with better conditions to adapt to sudden changes in the market, despite strong cash flow constraints.

As Seijts and Milani (2020) state, it is in the context of critical, volatile, and highly uncertain situations that the leaders of organizations assume a decisive role in society. Giones et al. (2020) refer that the startups due to the uncertainties of the management of their activities and difficulties in predicting the success of their commercial projects have the challenge in the short term to continue with their projects or adapt their activities to respond to the challenges posed by COVID-19. The Portuguese startups quickly sought to respond to the challenge of COVID-19 and converted their production activity to the manufacture of personal protective equipment that is in short supply in Portugal and the world. At the same time, apps were also developed with the fundamental objective of mitigating the economic and social effects of this crisis on the population and companies. On March 16, 2020, the Tech4Covid19 movement was created by the founders of Portuguese technological startups. This movement emerged from an informal conversation in which the founders of these companies wondered how they could organize themselves to respond to this crisis by developing technological solutions to combat the effects of the virus. There was a consensus that none of these companies alone would be able to respond to a challenge of this magnitude, but that together they could make a difference in the lives of many people and companies. In just six days the movement managed to gather 120 startups and more than 2500 people, who were working on about 20 autonomous projects to combat the new coronavirus. The Tech4Covid19 movement aims to bring together talent, resources, and technology to fight the spread of COVID-19 and the social, economic, and environmental problems that have arisen due to the pandemic. Furthermore, Tech4Covid19 strongly contributed to Portugal being considered by the Organization for Economic Co-operation and Development (OECD) as the country with the largest number of innovative projects in the fight against COVID-19. It is currently the world's leading country in this area according to the OECD data (Simões, 2020).

This manuscript aims to explore the Tech4Covid19 organizational model and dynamics. The purpose of this work is to explore how a movement of this large dimension can be organized and coordinated, in which several projects coexist in parallel, and several companies from very different areas can come together and work towards a common goal. To achieve the proposed objective, qualitative methodologies were used through the analysis of primary information

sources (i.e., interviews with the founders of the initiative) and secondary information sources (i.e., social networks, streaming video channels, press releases).

This paper is organized as follows: Initially, a theoretical contextualization on the role of digital technologies and the emergence of social movements is performed and the Tech4Covid19 initiative is presented. Next, the various phases of the study methodology are described. After that, the results are presented and discussed according to their relevance to understanding the organizational structure and dynamics of the movement. Finally, the conclusions are outlined, and the practical impact of this study is presented. In this section, the limitations of this study are also discussed, and some indications of future work are provided.

2. Background

2.1. The Role of Digital Technologies

The technological revolution has given rise to a desire and a need for companies to innovate and use technologies as a primary resource. The use of the Internet is now indispensable both for companies and enterprises. Through the use of information and communication technologies (ICT), it is possible to access a very diverse range of information in real-time, as well as to exchange data. In fact, the services have been simplified and facilitated by the adoption of ICT. A good example of this impact is teleworking, which was a measure widely adopted by companies to continue their activity in times of pandemic (Belzunegui-Eraso & Erro-Garcés, 2020). However, technology has also been seen by some as an element that can pose new challenges in the society like the reduction of the human labor force (Dahlin, 2019; Gentili et al., 2020). However, this situation has fostered the emergence of specialized occupations in the ICT field, such as software engineers, digital marketing professionals, bloggers, or youtubers.

Various sectors of society are adopting technologies to combat the COVID-19 pandemic. Some of these initiatives are new and limited to certain countries and use apps to offer services in isolated situations. In this field, there have also been apps developed in a local context to alert to potential sources of contagion through the smartphone (Lee, 2020). These apps essentially aim to identify sources of contagion more quickly and consequently reduce the rate of spread of the coronavirus. Although the idea is potentially interesting and effective, its adoption is still viewed with some distrust in some countries in the face of the difficulty in guaranteeing full privacy of citizens' data (Abeler et al., 2020). However, the role of technology is even broader. Drones and robots have been used by civil protection authorities to detect and control crowds. The 5G network has also assumed an important role in enabling the functioning of artificial intelligence systems and in facilitating interaction between people who are physically distant (Fisher, 2020).

However, one of the lessons of this crisis is that technology becomes relevant in interaction with people. The Internet has enabled people not only to be consumers of information but also to interact with other people and companies. The channel has progressively become two-way, so technological solutions must not lose focus on people. It is in this context that the concept of Human2Human arises. According to Kramer (2014), in the current information age, people want to be part of something bigger than themselves, feel, and be included. In this context, although people can represent companies and businesses, they are still humans, susceptible to mistakes and emotions. Therefore, Almeida (2020) advocates that it is indispensable for companies to opt for new models of relationship with clients, in which the human component is fundamental in this process, through the establishment of relationships of transparency and trust. This is a central element in the technological solutions that can be developed in the context of this pandemic, in which companies take on the challenge of establishing affective bonds with their clients.

2.2. The Emergence of Social Movement Organizations

Today's society is characterized by being highly diverse and dynamic, in which a huge range of differences coexist daily. The individuals that make up our society have needs embedded in different realities. Staggenborg (2015) notes that these needs, often constituted by minorities, need to be represented in our political context to be met. However, in our society we observe that interests and needs of certain groups are not properly met by government entities. It is from this conflict of interests that social movements become a tool for intervention.

Social movements have emerged to challenge political, economic, and cultural authorities. They also fundamentally arise in times of major emergencies such as calamities and strong repression of individual and collective freedoms (Desposato & Wang, 2020; Gillan, 2020). As Yadav (2015) argues, social movements are directly linked to solving social problems, rather than to claiming material goods. However, they are not only about claiming rights or demanding representation for a group, because a movement can emerge as a constructive agent of a proposal for social reorganization to change one or another aspect of a society. According to Snow and Soule (2010), a key element of social movements is challenging the authorities by making demands that imply fundamental and structural changes in society. These movements can collaborate with other organizations or associations which allows them to increase their reach and impact on society. The importance of organizing these movements is great for building a more egalitarian and just society (Deveaux, 2018; Laville, 2010). However, the power of collective action is only effective when directed. In this way, the emergence of leaders who directly represent the group's demands and the organization on behalf of common demands or ideas are the pillars and the driving force behind these groups.

Times of deep crisis as currently experienced with COVID-19 can generate the creation of alternative forms of protest and new social movement organizations. Social movements create and recreate links by building on existing networks, but also in their way of acting and connecting that allow these links to multiply (Snow & Soule, 2009). Faced with the manifest shortcomings of governments and the market, social movement organizations are constituted in mutual support groups that promote social action by helping the most vulnerable populations.

Social movements, in times of deep crisis, are propagated by the perception of a drastic and profound threat, contributing to cognitive openings. While everyday life changes drastically, there are also spaces for reflection on a future that cannot be thought of as a continuation of the past. In this way, reflection in social movements increases our ability to understand the economic, social, and political causes of the pandemic (Pinckney & Rivers, 2020). Furthermore, social movements can explore the spaces for innovation that arise in times of uncertainty (Farzad et al., 2020; Grasenick & Guerrero, 2020). The need for sharing and broad support to deal with the pandemic can bring recognition of the richness of civil society mobilization.

In a social movement like Tech4Covid that already features the involvement of many private sector entities, it is important to explore the motivational factors that make this movement grow in an organized and coherent way. A key pillar of the Tech4Covid19 movement is how different organizations and individuals contribute to the development of solutions with high social impact. Another fundamental pillar of this movement is that all the entities participating in this movement do not seek profit and can constitute a non-profit movement that builds a complete support network in multiple areas (e.g., health, education, trade).

In the contextual dimension, the purpose is to characterize the contextual factors where the Tech4Covid19 operates. First, it becomes relevant to define the objective of the organization and the motivations for its emergence considering the perspective of the stakeholders. Equally relevant is to characterize the competition that exists in the area and the cultural barriers that can act as barriers to acceptance of the social movement. Therefore, and to understand the context of the emergence of the Tech4Covid19 movement, the following research questions were established:

- *RQ1. What are the objectives of the Tech4Covid19 movement?*
- *RQ2. What have been the obstacles encountered in establishing the movement?*
- *RQ3. What have been the key values transmitted by the movement to people?*

In the content dimension, it is relevant to explore the strategic positioning of the social movement and the existing forms of collaboration between its members. In Tech4Covid19 this is an element of great relevance since its members are not permanently allocated to the initiative and perform their professional functions with the business sector, especially with startups incubated in technology parks. Two research questions were established:

- *RQ4. What is the organizational structure of the movement?*
- *RQ5. How is the coordination of the various projects within the movement carried out?*

Finally, in the process dimension, it turns relevant to explore the processes associated with the current management of Tech4Covid19 movement. It is explored the ways of balancing work, communication, and distribution channels in the market, and existing transactional costs. Furthermore, and considering the highly unstable and uncertain effects of the pandemic, it is equally relevant to explore the future role of this movement after a few months since its inception. In the end, three more research questions were defined:

- *RQ6. What are the selection criteria used for the acceptance/creation of the suggested projects?*
- *RQ7. What is the expected relationship between the movement and its partners?*
- *RQ8. What has been the progress of the movement?*

Finally, a synthesis of the research questions that have been determined in this study with their associated dimensions is shown in Table 1.

Table 1. Association between dimensions and research questions.

Dimension	Research question
The Context	RQ1. What are the objectives of the Tech4Covid19 movement?
	RQ2. What have been the obstacles encountered in establishing the movement?
	RQ3. What have been the key values transmitted by the movement to people?
The Content	RQ4. What is the organizational structure of the movement?
	RQ5. How is the coordination of the various projects within the movement carried out?
The Process	RQ6. What are the selection criteria used for the acceptance/creation of the suggested projects?
	RQ7. What is the expected relationship between the movement and its partners?
	RQ8. What has been the progress of the movement?

Source: Developed by the authors.

3. Methodology

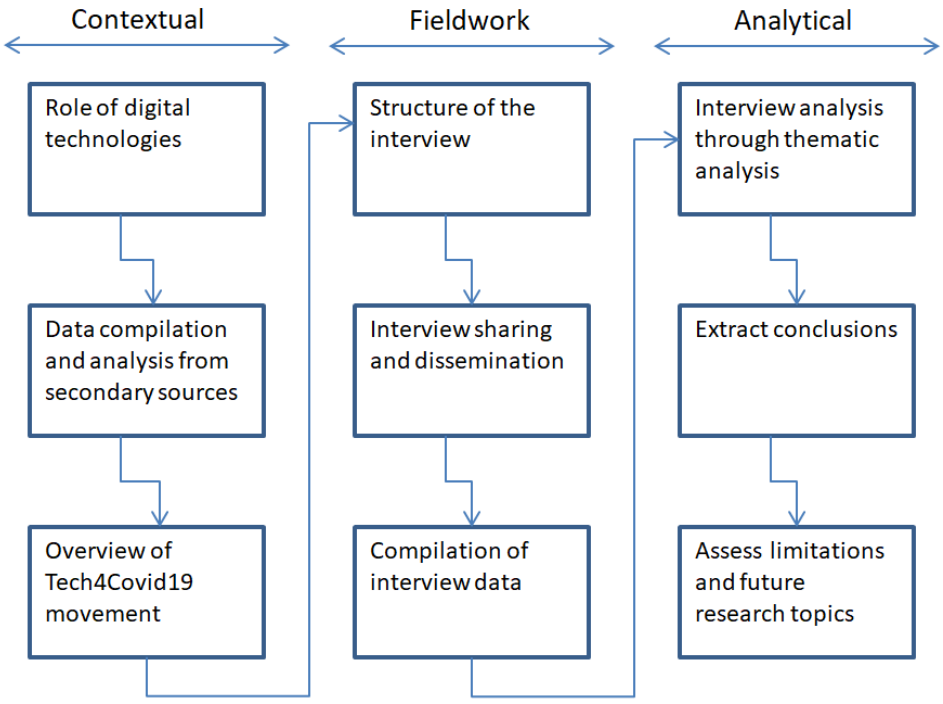
3.1. Research Design

The objective of this study is to explore the Tech4Covid19 movement namely to understand how it is possible to organize a movement with these dimensions and characteristics. Furthermore, it aims to assess how this initiative was received by the community, to perceive its internal functioning and organizational dynamics, and to comprehend the strategy defined for the distribution of functions in a highly dynamic and multidisciplinary team. To this end, this study uses both primary and secondary data sources. As primary data sources, an interview with

the founders of the initiative was conducted and secondary data sources published by the movement on Slack, Instagram, and Facebook social networks were explored.

Figure 1 presents the various phases of the research design. In the contextual dimension, the role of digital technologies in the fight against COVID-19 has been contextualized. Next, a gathering of information on the Tech4Covid19 movement was performed considering secondary data sources. Secondary data sources were used such as social networks (i.e., Slack, Instagram, Facebook), the movement's official web page, and written and digital press news. This information was fundamental to the description of Tech4Covid19 considering its lines of action and evolution over time, both in terms of the composition of its teams and projects. The second phase comprised teamwork and included, in the first place, the definition of the interview structure. After that, the interview was disseminated by the founders of the movement. Given the number of project teams and their distributed organization, the spokesperson of the project was contacted, who then took on the mission of dividing the semi-structured questionnaire by the leaders of their teams. This process took about three weeks until the various responses were compiled into a single written document and verified by the coordination team to check eventual redundant and incomplete information. Finally, in the analytical phase, a thematic analysis of the interview was carried out. This approach has enabled us to identify results and discuss them against the existing literature in the field. Finally, we sought to assess the limitations of this study, and some topics for future research were considered.

Figure 1. Phases of the research design.



Source: Developed by the authors.

3.2. Data collection and analysis

We The semi-structured interview was conducted considering three dimensions of analysis: (i) the context; (ii) the content; and (iii) the process. These dimensions were established with the purpose of understanding the context of the movement's emergence, the decisions taken regarding the organization of the movement and the follow-up given to each project, and the evolution of this project considering the challenges posed by COVID-19. These interviews were

conducted between May to August 2020. The interviews were transcribed and then loaded into webQDA software to identify common themes for each research question. The themes were generated through a thorough, inclusive, and in-depth coding process. All relevant excerpts were grouped into themes. The different themes were compared to each other and contrasted with the original text. Attention was sought to ensure that each theme is internally coherent, consistent, and distinct from other themes. Table 2 presents the final themes associated with each research question. A total of 22 themes were identified among the 8 established research questions. Among the identified themes emerge the challenges of managing large autonomous teams, the very rapid and accelerated growth of the movement which required changing the movement's organizational paradigm and its communication and coordination dynamics, and the challenges of deconfinement in which emerged the need to ensure a balance between concerns about people's health and the financial sustainability of companies. This balance is a huge challenge and is being explored by several authors such as Gong et al. (2020) and Pronk and Kassler (2020), in which the aim is to minimize economic losses while preserving people's health.

Table 2. Themes associated with the research questions.

Dimension	Research question	Final themes
The Context	RQ1. What are the objectives of the Tech4Covid19 movement?	FT1. Technology-based FT2. COVID-19 challenges FT3. Common channel FT4: Priority areas
	RQ2. What have been the obstacles encountered in establishing the movement?	FT5: Celerity FT6: Volunteerism FT7: Communication
	RQ3. What have been the key values transmitted by the movement to people?	FT8: Transparency FT9: Solidarity FT10: Technological ecosystem
The Content	RQ4. What is the organizational structure of the movement?	FT11: Coordination group FT12: Project managers FT13: Spokesperson
	RQ5. How is the coordination of the various projects within the movement carried out?	FT14: Self-managed teams FT15: Project leader FT16: Partnership team
The Process	RQ6. What are the selection criteria used for the acceptance/creation of the suggested projects?	FT17: Internal/external projects FT18: Alignment
	RQ7. What is the expected relationship between the movement and its partners?	FT19: Dedicated team FT20: Association
	RQ8. What has been the progress of the movement?	FT21: Progressive growth FT22: Deconfinement challenges

Source: Developed by the authors.

4. Discussion of results

4.1. The Context

The Tech4Covid19 movement brings together engineers, scientists, designers, healthcare professionals, and several other areas who have come together to develop and launch projects, which tend to be technology-based, to mitigate some of the many challenges created by this pandemic context. Initially, the movement focused on the health area and everything related to it, considering the most urgent need/problem or challenge. Some startups already working to fight this pandemic decided to join the movement with their ideas, such as improving the screening of infection networks, facilitating video calls between doctors and patients, creating a support network for displaced doctors and nurses, or even supporting people who simply needed help to go to the grocery store or pharmacy. The second priority area of the movement is education because the Portuguese educational structure was not prepared for distance learning. First, the movement decided to help teachers with two projects: (i) Tools4Edu, consisted of a portal with tutoring to help teachers; and (ii) Student Keep, contributed to combating the problem of inequality in access to education with a sponsorship system. The third major area is the local economy, which consisted of helping local businesses that were strongly affected by the closure of their businesses. One of the most important projects in this area is Preserve, which in practice allows anyone to buy a voucher of their favorite local trade.

The Tech4Covid19 emerged informally and was founded by Portuguese technology start-ups. This conversation started on March 13, 2020, at WhatsApp grew in just one day to a Slack channel with over 150 people. After 48 hours, more than 300 people were already involved in this movement, in which each member sought to help health professionals and the population according to their specific area of expertise. Although the process of creating this initiative was extremely fast, the objectives were clear and shared by stakeholders as proposed in RQ1. However, some relevant obstacles emerged that are explored in RQ2. The fast evolution of the project required great organization and cooperation between all volunteers and project leaders. In addition to the challenge of creating technologically advanced solutions that would have an immediate impact on society, it was also necessary to ensure the legal and logistical side of the initiative. In this sense, the movement appointed a task force that is responsible for liaison and communication with health institutions. Although there were not exactly any obstacles encountered in the face of the high level of project reception, some lack of celerity felt by some public bodies was notorious, which became more evident in a context of exception and pressure on public bodies.

The existence of social values is a central element in a social movement and leads to the exploitation of RQ3. Transparency is a key value for the Tech4Covid19. The different projects gradually communicate on their websites and respective social networks their state of development, results, and their impact on society. This is done as regularly as possible, ensuring that the information is always up to date for those who follow the movement's initiatives. As Balog-Way and McComas (2020) state, transparency is a fundamental value for society to feel comfortable in getting involved and participating actively in activities in times of pandemic. Tech4Covid19 also intends to convey to the entire population other values. Since this is a movement created by founders of the Portuguese technological community, cooperation and teamwork are other pillars. For that, the Portuguese technological ecosystem was joined around the objective of supporting the Portuguese population in the fight against COVID19. The sharing of knowledge and experience among volunteers belonging to several companies, some of them competitors, ended up creating an even greater link between this sector, which also led to the improvement of the movement's work. Finally, solidarity is a fundamental value in the responses to the COVID-19 pandemic as highlighted by West-Oram (2021), which can be found in all the initiatives that make up Tech4Covid19. The outcomes of the projects only intend to support those who need it most, and there is no monetary benefit. Additionally, almost 100% of the received

donations were oriented to the projects and their objectives. Currently, the Tech4Covid19 movement gathers more than 5000 volunteers, 6000 donors, 200 thousand euros raised, and 34 active projects.

4.2. The Content

In RQ4 it is revealed the existence of two types of projects are found in the Tech4Covid19 movement: (i) those developed internally and therefore launched by the movement; and (ii) those developed by external entities and supported by the movement. The projects developed and launched by the movement are the result of the work of volunteers. Anyone can join the movement, become a volunteer, and join a project of their choice or who is looking for a person with that know-how. The movement has felt a great adhesion of people to the cause of volunteering in this phase of the pandemic due to factors such as the urgency of this initiative, the motivation to help others, and the search for personal well-being on a physical and emotional level. These elements are aligned with the study carried out by Butt et al. (2017) in which it is mentioned that alignment with the cause and personal beliefs are fundamental elements for companies to engage in volunteer activities. Moreover, and as the startups are essentially made up of young and high qualified professionals, this element has also been a catalyst for the rapid growth of this movement, since as Shah et al. (2015) point out, young people are strongly committed and willing to participate in solidarity initiatives.

Each project is managed by self-managed autonomous teams that address the organizational model posed in RQ5. Each team has a person in charge, who is responsible for reporting to the movement coordination team on its results and evolution. In terms of achieving the results of each initiative, the movement considers that this effort should essentially be made by the teams of the different projects, as they follow their growth and are in touch with those they aim to support. The movement helps each project through human resources and internal organization skills - both through the partnership team, responsible for finding the best companies to support each of the projects, and through the communication and marketing teams, which disseminate information on social networks and ensure media presence. This is relevant work given the many requests the movement have received to participate in public debates and interviews with the media. It also helps to relieve the pressure on the development teams.

4.3. The Process

The ideation process up to the launch has some stages, among which the transition from prospect to project, which is dependent on its maturity. In the second case, the companies approach the movement with projects that have already been developed by them. These projects are evaluated considering the terms and conditions of Tech4Covid19, namely whether the product or service has a positive social impact, is solving a problem caused by the pandemic, or complies with the movement's commercial policy. Once these conditions are verified, all project coordinators are consulted to decide whether projects should be supported by the movement and, if so, whether the movement contributes to their promotion. This is the way defined by the movement to evaluate the viability of each project as established in RQ6.

Donations and free services are key elements in answering RQ7. The movement has the support of several companies and institutions that have volunteered to help these projects, both with their talent and sometimes with donations and free services. To work on this front, Tech4Covid19 has a team dedicated exclusively to partnerships that manages the contacts and ensures that the support that arrives is directed to the project of the most appropriate movement.

The exploration of RQ8 allows us to analyze the movement according to the dynamic evolution of the pandemic itself. The Tech4Covid19 has experienced progressive growth, which has been accompanied by the creation of several projects. Despite this evolution, the initial objectives of the movement were only related to solving immediate problems and were not projected in the long term or in a global and integrated way. As the movement identifies a

problem that they have the capacity to solve, a project is created for this purpose, and its objective is always well defined. It was on this axis that the movement grew until reaching more than 30 active projects today. Despite their high number, they also had to follow the pandemic situation itself, about the risk of no longer making sense or being necessary anymore. In this sense, it is essential to ensure constant innovation and adaptation of the solution. Innovation can take multiple perspectives. On a more technological level, it has enabled the creation of technologically advanced projects as a means of diagnosis and detection of COVID-19, but it has also encouraged the emergence of new channels of communication and collaborative work on cloud environments (Sheridan, 2020).

The current deconfinement is bringing new challenges to society, since more than a health crisis, we are now facing a major economic crisis and, consequently, several projects have been launched to address this front. An example of this is TeamLoan, a platform that aims to match companies that need to strengthen their team and companies that, on the contrary, are struggling to secure some jobs. The platform matches the needs and promotes an agreement between the two companies so that the work of the employee is guaranteed. Several companies have joined this platform in areas such as accommodation, food retail, catering, social service, and entertainment. A change of focus is evident in the movement that was initially primarily directed at the health area but quickly expanded into the economic and social spheres.

The movement is also focused on ensuring that if the 2nd wave of the disease spreads, the projects remain active, or can reactivate in a short period of time to help the population again. Finally, many of the needs that arise with isolation remain and, therefore, most of the projects launched by the movement remain valid.

5. Conclusions

The rapid spread of COVID-19 led the Portuguese technological startups to come together to implement a movement entitled Tech4Covid19 that aims, through the development of technological solutions, to provide the necessary tools to stop this outbreak and assist the Portuguese in this period of isolation. The Tech4Covid19 movement is based on three major domains such as health, education, and local economy. This non-profit movement gathers professionals from the most varied areas, from health professionals, scientists, engineers, designers, to other specialties, with the objective of developing numerous projects that can mitigate the consequences of this pandemic, as well as promoting support to health professionals and access to hospital equipment.

Organizing a movement with over 5000 volunteers, 6000 donors, and 34 active projects is a demanding challenge, namely to ensure that each volunteer is collaborating on projects in their area of interest and competence, and in communication between the various groups and members. The movement simultaneously includes internal projects developed by its teams but also accepts external projects that are aligned with the principles and values of the movement. Although the movement emerged informally in WhatsApp and supported its internal communication on the Slack platform, it became necessary to establish some more formalism by forming an association for this purpose. This was a key element in legal, accounting, and transparency terms to enable the collection of donations and the establishment of formal partnerships with the business sector. The movement has been a progressive growth in both the number of volunteers involved and active projects, which means that the needs caused by the pandemic are still present. Currently, the great challenge is to keep the movement operational and the projects active, avoiding redundancy and duplication of effort between them. Also important is to consider the new challenges posed by the several waves and variants of COVID-19, and the emergence of digital vaccination certificates.

This paper offers essentially practical contributions by helping to understand and explore the organizational model and dynamics of Tech4Covid19. This is one of the most important technological movements in the fight against the consequences of COVID-19 in society and

contributed decisively to the appearance of technology-based innovative projects. This study allows practitioners to learn how a social movement can be formed and organized to meet the challenges posed by COVID-19. It also highlights how technology can be used to build inclusive solutions to bring people together and address health, economic, and social challenges. The main limitation of the study is the highly dynamic nature of this movement in a context of great uncertainty; hence it is difficult to predict the sustainability of most of these initiatives in the near future. Other limitations can also be pointed out. This study did not explore the effects of the Tech4Covid19 dimension and mission on the findings assuming that the challenges posed to each self-managed autonomous team are similar. Neither was explored the receptivity of the projects developed particularly with the most vulnerable population. The support of this project mainly in cloud and mobile technologies brings more difficulties to the most disadvantaged segments of society. As future work, it is intended to carry out an exploratory and benchmarking study that can compare the various initiatives to combat the effects of COVID-19, in an attempt to identify convergent and divergent points between them. It will also be relevant to explore the barriers to the adoption of each project considering its beneficiaries and to include minority populations in these groups to realize to what extent these projects contribute to social inclusion.

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Research Article

Responsible Research and Innovation (RRI): Scientometric Analysis

Investigación e Innovación Responsables (RRI): Análisis Cienciométrico

Akbar Mohammadi

University of Tehran
Correspondence: imohammadi@ut.ac.ir

Abstract: Innovation and research in various fields should be done responsibly. In the last years, there is this responsibility towards different stakeholders. One of the most important stakeholders are the community and the society. In this context, the concept of social responsibility and social innovation has become very widespread. The purpose of this study was scientometric analysis of concepts in the field of responsible innovation and responsible research. R software has been used to achieve this purpose. In this study, by analyzing the information extracted from related articles (572 articles from Web of Science), the new concept of RRI and the network of researchers in this regard have been identified and analyzed. In this study, based on a systematic literature review (SLR) and scientometric methods, the evolution of the concept of "Responsible Research" and "Responsible Innovation" in the literature is investigated. Also, the selected articles identified by the SLR method from different textual dimensions regarding journals, collaboration network, co-citation network, collaboration worldmap, historical direct citation network, and emergence of new concepts are analyzed. The results of this study indicate the development of related concepts in the literature in recent years and indicate the need for further studies in this regard.

Keywords: Responsible Research and Innovation (RRI); scientometric analysis; responsible research; responsible innovation; Web of Science (WOS).

Resumen: La innovación y la investigación en diversos campos deben realizarse con responsabilidad. En los últimos años, existe esta responsabilidad hacia las diferentes partes interesadas. Una de las partes interesadas más importantes es la comunidad y la sociedad. En este contexto, el concepto de responsabilidad social e innovación social se ha extendido mucho. El objetivo de este estudio es realizar un análisis cienciométrico de ambos conceptos en el ámbito de la innovación responsable y la investigación responsable. Para ello, se ha utilizado el software R. En este estudio, mediante el análisis de la información extraída de los artículos relacionados (572 artículos de Web of Science), se ha identificado y analizado el nuevo concepto de RRI y la red de investigadores al respecto. Basado en una revisión sistemática de la literatura (SLR) y en métodos cienciométricos, se investiga la evolución del concepto de "Investigación Responsable" e "Innovación Responsable" en la literatura. Asimismo, se analizan los artículos seleccionados e identificados por el método SLR a partir de diferentes dimensiones textuales relativas a las revistas, la red de colaboración, la red de citación conjunta, el mapa mundial de colaboración, la red de citación directa histórica y la aparición de nuevos conceptos.

Los resultados de este estudio indican el desarrollo de conceptos relacionados en la literatura en los últimos años y señalan la necesidad de realizar más estudios al respecto.

Palabras clave: Investigación e innovación responsables (RRI); análisis cienciométrico; investigación responsable; innovación responsable; Web of Science (WOS).

1. Introduction

Exploring the concepts of responsible innovation and responsible research in the literature brings us to a new concept that has emerged in recent years. This is the concept of Responsible Research and Innovation (RRI). Responsible research and innovation is a transparent and interactive process in which actors and innovators of society are held accountable based on acceptance (ethical), sustainability and social desirability, based on the process of innovation and marketable products (René Von Schomberg, 2012; Rene Von Schomberg, 2013). While the origins of RRI date back to the early 1990s, the concept has received a great deal of attention since 2011 in the EU's policy and research communities (Owen, Macnaghten & Stilgoe, 2012). Responsive Innovation (RI) and Responsive Research and Innovation (RRI) have emerged in recent years as the most important issues in the relationship between innovation and research with society (Stilgoe & Guston, 2017; Thapa, Iakovleva & Foss, 2019). Rocco et al. (2011) listed four characteristics of responsible innovation as: (1) changes in existing arrangements, (2) consideration of equitable access, health, safety, and environmental concerns, (3) partnerships between government agencies, and other stakeholders and (4) long-term measures for anticipation and compliance (Roco et al., 2011). The concept of RRI has been challenged by discourses on emerging technologies and research ethics in innovative fields (Owen et al., 2012) It has been driven by EU's research and innovation policy over the past few years (Auer & Jarmai, 2018). RRI can be considered as a concept that has been developed to expand the scope of policy-making, to show the path of innovation and to determine the role of actors in society (Burget, Bardone & Pedaste, 2017; Levidow & Neubauer, 2014). The concept of RRI is an attempt to promote a new method of governance in the direction of research and innovation. This method has been described as "a way to think more systematically about the general benefits of scientific and technological research." (Baldwin et al., 2013; Timmermans et al., 2017).

After the concept of entrepreneurship was added to scientific and research centers in science and technology studies in completing educational and research functions, we are witnessing a new paradigm shift in recent years. The responsibility paradigm seeks to be a suitable replacement for the entrepreneurial paradigm. In the entrepreneurship paradigm, research and technology are committed to improving the state of industry and society (Babaei & Tavakkoli, 2015). That is, research should be conducted in a way that increases the productivity and efficiency of the market and the production capacity of artisans and reduces the problems of society (Babaei & Tavakkoli, 2017). But in the paradigm of responsibility of research and innovation, researchers' commitments to social values and environmental considerations are evident. For example, concepts such as safety, justice and sustainability in this paradigm play a more prominent role in researchers 'studies and policy makers' decisions (Mohammadi & Mohammadi, 2021).

In this study, based on a systematic literature review (SLR) and scientometric methods, the evolution of the concept of RRI in the literature is investigated. Also, the selected articles identified by the SLR method from different textual dimensions regarding journals, collaboration network, co-citation network, collaboration worldmap, historical direct citation network, and emergence of new concepts are analyzed. The paper concludes with an account of the theoretical

contribution and managerial implications of our study for innovative responsibility activities and practices.

2. Literature Review

There are several definitions of the main factors of RRI discourse. For example, the broad definition offered by von Schomberg (2013) is closely related to the trends and values set out in EU policies (Stilgoe, Owen & Macnaghten, 2013). Von Schomberg defined RRI as "a design strategy that drives innovation and achieves the desired goals of society" (von Schomberg, 2013). Most researchers in the definition of RRI have emphasized von Schomberg's definition (Bremer et al., 2015; Forsberg et al., 2015). However, several other authors have provided their definition of RRI. Most of them who have given academic definitions of RRI have mentioned public engagement as a vital part of RRI. Other dimensions and aspects such as foresight, responsiveness, reflectivity, desirability, acceptability and innovation are sometimes mentioned (Burget et al., 2017). Stahl (2013) considers RRI as a trans-responsibility that defines the concept as follows:

> *"RRI is a macro-level responsibility or trans-responsibility that aims to shape, maintain, develop, coordinate and align existing and new processes related to research and innovation, actors and responsibilities in order to ensure desirable and acceptable research results "*

RRI explicitly addresses issues of social development, social justice, and the extension of STI benefits. However, it is rarely articulated about these concepts in the subject literature (Ribeiro et al., 2018). Responsible Research and Innovation emphasize the importance of governance in innovation process (especially in the field of key stakeholders' interaction and the need for inclusive and sustainable development) in the field of regional development (Thapa et al., 2019). Another important definition stems from another policy document issued in 2013 (p. 3) by the European Commission entitled "Options for strengthening responsible research and innovation". In recent years, another comprehensive definition has been provided as follows:

> *RRI is a policy-driven discourse that has been grounded in the European Commission (EC) since 2011. At the macro level, its goal is to foster a comprehensive and sustainable research and innovation plan, with an emphasis on co-creation with society. "Science with society and for society" (Owen & Pansera, 2019).*

Based on the EU's RRI Framework for Horizon 2020, RRI became a formal issue, and project funding began in the Science for Society program (now known as Science for and by Society). Therefore, in 2014, the mainstream RRI was introduced throughout the EU region through the "Rome Declaration on RRI" project (Thapa et al., 2019).

The EU demonstrated its commitment to RRI through a number of related measures (including funding a program of research support and coordination activities under the Fourth Plan (FP7) in the Horizon 2020 project) and formed a committee to promote RRI-related programs in 2011. After that, in 2012, the EU Commissioner for Research, Innovation and Science Maire Geoghegan-Quinn formally announced her support for EU RRI policies. The EU's recent "Open Global Interaction" agenda in partnership with non-European countries is also on the RRI discourse (Owen & Pansera, 2019). However, beyond Europe, there is a relative awareness of the concept of RRI in emerging global economies (Brazil, India and China) as well as in some advanced economies (Japan, Australia) (Brom et al., 2015).

If the RRI is to be considered as a concept recognized in other countries and other research initiatives and fields, it must be able to take significant relevant action. Participating and interacting with global science and technology actors and their distinct needs can work for nations where the RRI discourse is underdeveloped and not considered a priority. To be able to make innovation and research transparent and responsible (Macnaghten et al., 2014). The European Commission described six distinct dimensions termed as follows: engagement, gender equality, science education, ethics, open access and governance (Regulation (EU) No 1291/2013,

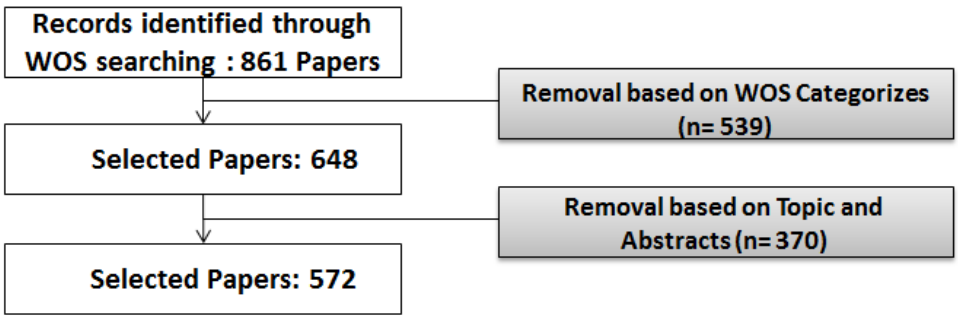
2013). Of course, the concept of ethics and some other related issues in science, technology, research and innovation is not a new topic in general, but the concept of RRI has recently been introduced to include responsibility in research and innovation policies and methods (Flick, 2016; Stilgoe et al., 2013; von Schomberg, 2011). Stahl (2013) focused his research on the practical implementation of the dimensions that arise for actors, norms, and activities. Stilgoe et al, proposed a broader definition of RRI 'taking care of the future through collective stewardship of science and innovation in the present' in 2013 (Stilgoe et al., 2013:1517). Various authors have referred to previous dimensions that were not originally associated with RRI (Stahl, 2013). Stilgoe et al. (2013) mentioned four dimensions that were raised during the general debates: anticipation, inclusion, reflexivity, and responsiveness. This framework for RRI focuses on four integrated dimensions (Stilgoe et al., 2013) This classification was adapted and adopted by the UK Engineering and Physical Sciences Research Council to form the AREA (anticipation, reflection, engagement and action) framework (Owen, 2014).

3. Methodology

In this paper, a comprehensive scientometric study in the field of responsible research and responsible innovation has been conducted. In the first step, ISI papers in related fields were extracted from the WOS database. In the next step, after initial screening and identification of related articles in terms of title, abstract and content, the final articles were analyzed based on an analytical-process package called "Bibliometrix" in R software. This analytical-process package is a tool for quantitative research in the field of scientometrics that is used for statistical analysis of articles extracted from citation databases. These statistical analyzes that have been used in this study have been in the fields of analysis of scientific collaborations of researchers, co-citation and synergies between scientific activities. These statistical analyzes have been performed on scientific collaborations of researchers, co-citations and synergies between scientific activities (Aria & Cuccurullo, 2017).

In the first search on the Web of Science citation database, the keywords "Responsible Research" and "Responsible Innovation" were searched. 861 articles were identified in English between 1990 and 2021. Then, in the first screening step, 648 articles were selected based on the subject area and journals. Also, in the next screening, from the perspective of reviewing the title and abstract, 572 articles were finally selected for scientometric analysis in the field of responsible research and responsible innovation.

Figure 1. Flow diagram of article selection.



Source: Author's elaboration.

Scientometrics is a tool for quantitative analysis and statistical evaluation of documents such as journal papers and the number of citations. Today, these analytical methods are used to assess the growth rate of concepts, leading authors, and the mind and concept maps of research. These tools can also be used to identify the evolution of scientific societies and evaluate research performance in various fields. The existence of effective statistical algorithms, access to quality

numerical routines as well as integrated information imaging tools are the most important qualitative features that make researchers prefer R programming language to other languages for scientific computing (Aria & Cuccurullo, 2017).

3.1. Descriptive statistics of selected articles

Based on the results of scientific search and screenings, the descriptive statistical information of the selected papers is presented in Table1:

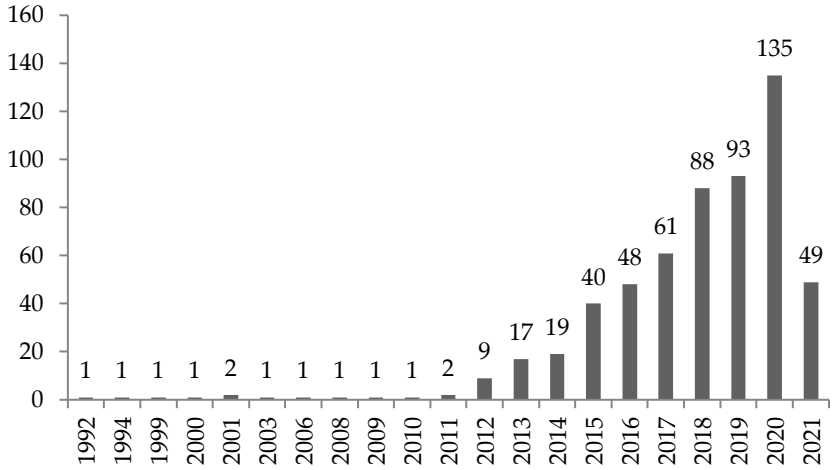
Table 1. The descriptive statistical information of the selected papers.

Description	
Articles	**572**
Period	**1990:2021**
Average citations per documents	**11.22**
Authors	**2037**
Author Appearances	**2411**
Authors of single authored documents	**121**
Authors of multi authored documents	**1916**
Documents per Author	**0.284**
Authors per Document	**3.52**
Co-Authors per Documents	**4.17**
Collaboration Index	**4.3**

Source: Author's elaboration.

As shown in Table 1, based on scientometric analysis, 572 selected articles of this research were analyzed. Indicators of mean citation and co-authorship are also expressed. Figure 2 shows the annual production trend of articles over a period of time. As can be seen in the figure, the upward trend in science production in the field of responsible innovation and research is very evident.

Figure 2. The WOS selected publications on the analysis of responsible research and responsible innovation from 1990 to 2021.



Source: Author's elaboration.

In Table 2, the 10 most referenced articles are ranked. Also, their average annual citation for each article is stated.

Table 2. Descriptive analysis: Top 10–Most cited papers.

Paper	Total Citations	TC per Year
STILGOE J, 2013, RES POLICY	718	79.7778
OWEN R, 2012, SCI PUBL POLICY	492	49.2
YANG GZ, 2018, SCI ROBOT	177	44.25
SOM C, 2010, TOXICOLOGY	139	11.5833
DONDORP W, 2015, EUR J HUM GENET	131	18.7143
FLEMING AJ, 2007, LARYNGOSCOPE	107	7.1333
GERGEN KJ, 2015, AM PSYCHOL	98	14
HALME M, 2014, BUS STRATEG ENVIRON	93	11.625
BOGOUSSLAVSKY J, 2003, STROKE	89	4.6842
PIDGEON N, 2013, NAT CLIM CHANGE	76	8.4444

Source: Author's elaboration.

Out of 572 selected articles, 94 are related to the journal entitled: "JOURNAL OF RESPONSIBLE INNOVATION". The 10 journals with the most selected articles in the field of social innovation and social responsibility are listed in Table 3 along with the number of articles included.

Table 3. The 10 journals with the most selected articles in the field of social innovation and social responsibility.

Sources	Articles
JOURNAL OF RESPONSIBLE INNOVATION	94
SCIENCE AND ENGINEERING ETHICS	38
SUSTAINABILITY	33
NANOETHICS	29
SCIENCE AND PUBLIC POLICY	12
TECHNOLOGICAL FORECASTING AND SOCIAL CHANGE	10
RESEARCH POLICY	9
ETHICS AND INFORMATION TECHNOLOGY	8
JOURNAL OF AGRICULTURAL & ENVIRONMENTAL ETHICS	8
SCIENCE TECHNOLOGY AND SOCIETY	8

Source: Author's elaboration.

The results of reviewing the references of 572 selected articles showed that 724 referenced articles were from the journal entitled: "JOURNAL OF RESPONSIBLE INNOVATION". There are also 619 articles cited in the journal entitled: "Research Policy". Table 4 shows the journals with the most citations.

Table 4. The 10 journals with the most selected articles in the field of social innovation and social responsibility.

Sources	Articles
J RESPONSIBLE INNOV	724
RESPONSIBLE INNOVATI	640
RES POLICY	619
SCI ENG ETHICS	450
SCI PUBL POLICY	409
NATURE	313
SCI TECHNOL HUM VAL	312
SUSTAINABILITY-BASEL	264
PUBLIC UNDERST SCI	262
TECHNOL FORECAST SOC	256

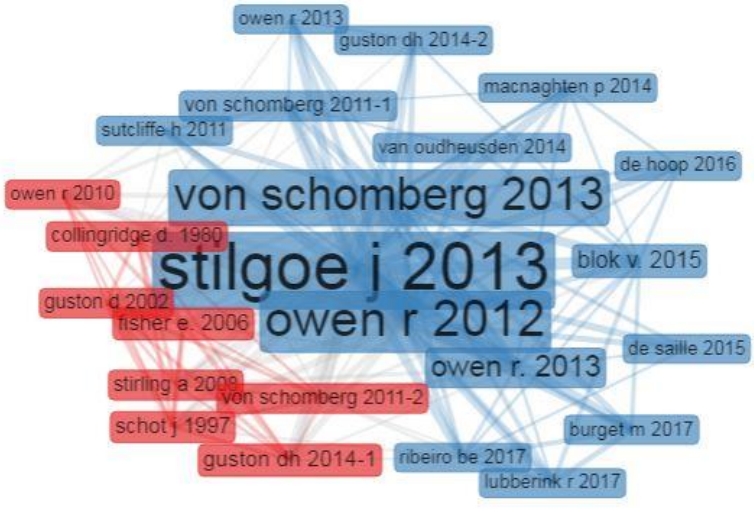
Source: Author's elaboration.

There are various software tools that help researchers analyze scientometrics, but some of them are much more widely used. Among them can be software tools are Biblioshiny (Runs in R, 2019) (Moral Muñoz et al., 2020), BiblioMaps (Runs in Python, 2018) (Moral Muñoz et al., 2020), CitNetExplorer (Van Eck & Waltman, 2014), VOSviewer (Van Eck & Waltman, 2010), SciMAT (Cobo et al., 2012), BibExcel (Persson, Danell & Schneider, 2009), Science of Science (Sci2) Tool (Team, 2009) and CiteSpace (Chen, 2006).

4. Findings

Based on the Co-Citation Network, researchers' citation network can be observed in the field of scientific production of responsible innovation and responsible research. Scientific articles of researchers such as Stilgoe (2013), Owen (2012) and Von schomberg (2013) have the highest density in the rate of co-citation in the network. These articles promote strong networks around themselves by presenting the basis of scientific discussions on innovation and responsible research.

Figure 3. Co-Citation Network.



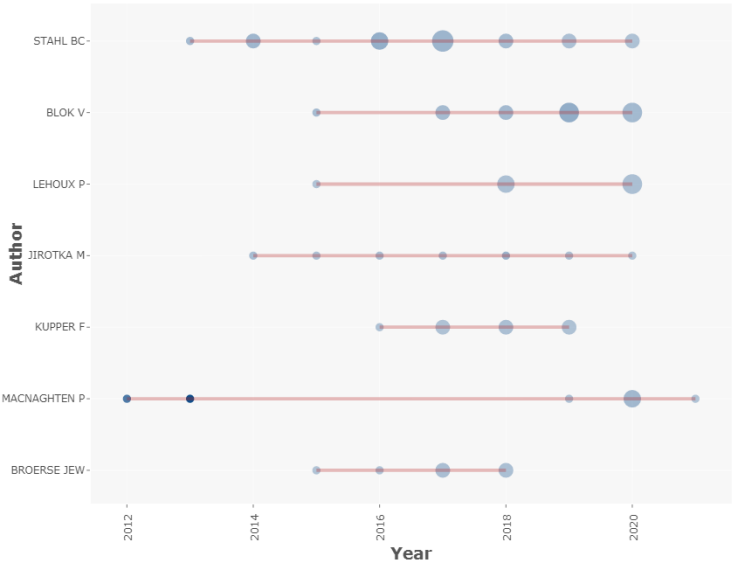
Source: Author's elaboration.

Figure 4. Researcher's Collaboration Network.

Source: Author's elaboration.

Figure 3 shows the network of collaboration between the authors of the articles by analyzing 572 selected articles. As can be seen in the figure, Stahl bc was able to create the largest network of scientific production cooperation in this scientific field. In this regard, Blok v and Yaghmaei, who are also known as Stahl co-authors in articles, have been able to feed other scientific networks as scientific mediators. Based on Figure 4, in the last decade, Stahl bc has been able to present the most cited scientific papers in the field of responsible innovation and responsible research. Next to him are Blok v and Lehoux P.

Figure 5. Top-Authors Production over the Time.

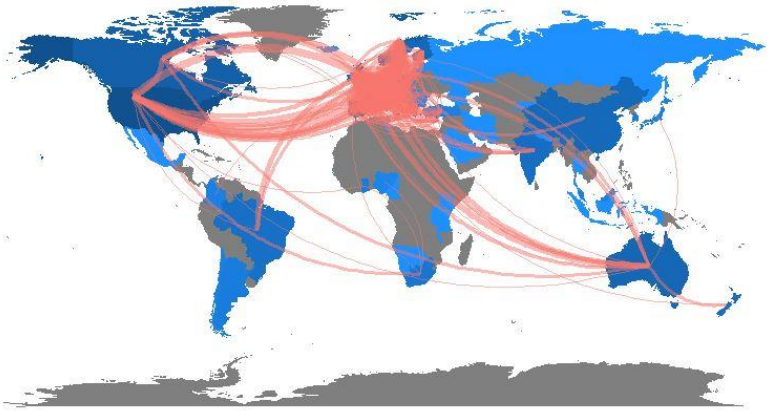


Source: Author's elaboration.

Figure 6 shows the countries that have the most citations in scientific products in the field of responsible innovation and responsible research. As we can see from the results of the figure, the beginning and evolution of this concept started with considerable intensity from the European Union and strong cooperation has been formed between European researchers and other

researchers in the United States, Australia and Canada. It is expected that in the near future, this concept will be given more attention in developing countries, especially Asian countries.

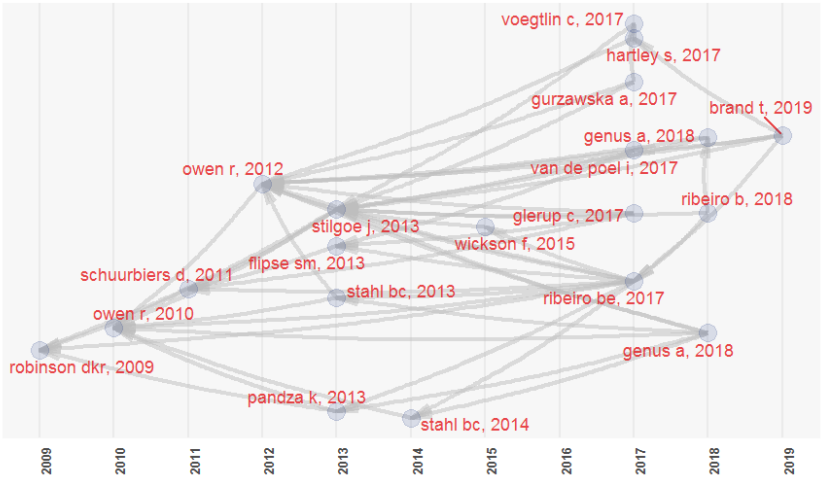
Figure 6. Collaboration Worldmap.



Source: Author's elaboration.

Figure 7 shows the path of science development by various researchers in the field of innovation research and responsible research based on the Historical Direct Citation Network. Based on what we see in the figure, Owen (2010) and Robinson (2009) are known as the basis of the historical chain of production of the relevant sciences. A historiographic map is a graph provided by E. Garfield to represent a chronological network map when it relates to the most direct citations from a bibliographic collection.

Figure 7. Historical Direct Citation Network.



Source: Author's elaboration.

Based on the keyword analysis of 572 selected articles, the results in terms of words occurrence are shown in Table5. The new concept of "Responsible research and innovation" ranks first with 160 repetitions in articles. The keyword "Responsible innovation" has since been repeated 120 times. The keywords "Ethics" and "Governance" are also in the next categories.

Table 5. Words Occurrence in Selected Papers.

Words	Occurrences
Responsible Research and Innovation	160
Responsible Innovation	120
Ethics	44
Governance	37
Nanotechnology	26

Source: Author's elaboration.

5. Implications

One of the most important aspects of responsible research and innovation is to create a new model for the Science and technology governance. The main question of the present article is: What are the new scientific concepts and paths for the realization of responsible research and innovation? What are the practical and managerial conditions for the rule of science in the framework of responsible research and innovation? And with what changes can these conditions be met in the governing system of universities? Our research on responsible innovation and responsible research outlines their overall approach to how science's responsibilities take precedence over social, moral, and environmental values. The ultimate goal of the development of this field of literature is to create a common responsible paradigm between science, policy-making and society in all elements of society so that all people can enjoy the benefits of science and technology in a balanced way (European Commission, 2020). One of the most important issues that researchers and policy makers now face is the development of theoretical and creative ideas of responsible research and innovation into practice and the responsibility implementation in the field of research and innovation. This study is also designed to help these researchers and policy makers in clarifying the path of operationalization of ideas to operationalize the responsibility of science and technology. Achieving this goal has been done by reviewing the results presented in recent years in this regard based on scientometric analyzes. Therefore, in order to research and policy in the field of research and responsible innovations, emerging scientific paths have been identified and introduced based on paper analysis. Understanding emerging concepts in the literature can design different and new paths for researchers and policy makers to design patterns and processes for research responsibility. The European Commission has also emphasized the need for new structural, executive and operational perspectives in this regard by introducing the concept of new patterns of scientific governance based on RRI. Accountability of educational and research centers, including universities and research institutes, along with the need for the participation of different sections of society, are general principles that emphasize the creation of new models of governance in responsible research and innovation.

This study has generally been done on the emergence of new concepts and evolution of concepts related to responsible research and innovation. In this article, we have also stated the managerial implications for implementing these concepts in scientific institutions. Examining the challenges of implementing innovation models and responsible research in educational and research institutions and policy making related to them can be considered as complementary axes in future studies. Identifying the mechanisms and processes of implementing RRI and designing appropriate managerial functions is also suggested as future research in this field.

6. Conclusion

In the first step of this study, based on the SLR method, identified scientific articles in the field of responsible innovation and responsible research from the WOS database. Then, with screenings and selection of 572 articles, the second step was performed based on the steps of

analysis using scientometric tools. With the introduction of the above concepts from the European Union in recent years, today, the field of responsible research and innovation has expanded rapidly in developing Asian countries as a growing necessity. This issue should be considered at the academic level as well as the relevant executive levels in different countries. Responsible research and innovation is one of the newest areas that is now widely discussed by researchers in the field of science, technology and innovation studies. Some researchers have introduced this concept as a new paradigm shift in the field of science, technology and innovation studies (De saille, 2015). Our research on responsible innovation and responsible research outlines their overall approach to how science's responsibilities take precedence over social, moral, and environmental values. The ultimate goal of the development of this field of literature is to create a common responsible paradigm between science, policy-making and society in all elements of society so that all people can enjoy the benefits of science and technology in a balanced way (European Commission, 2020).

Responsible Research and Innovation (RRI) refers to a holistic approach that provides the following to the various stakeholders in the early stages of research and innovation processes: A) First, it allows stakeholders to identify relevant knowledge about the consequences of their actions and to consider it in later stages of the investigation. B) Second, it helps stakeholders to effectively evaluate results and options in terms of social needs and ethical values. C) and finally uses the above considerations as functional requirements for the design and development of new research, products and services (Burget et al., 2017).

One of the most important issues in different societies is to determine the appropriate way of governing science and technology to realize the concept of responsible research and innovation. Accountability of universities and research institutes in developing countries, which are mostly government-oriented structures, is one of the challenges. The integration of this concept in the science and technology policy structures of these countries can lead to appropriate paths of development and reduction of society and industry issues. To internalize the values of the concept of responsible research and innovation in universities and research centers, the following policy strategies are proposed:

1) Creating a culture and raising awareness in the field of responsible research and innovation with the help of extension activities.
2) Creating transparency in internal processes and functions in the path of accountability and responsibility.
3) Designing and implementing a system of scientific governance based on accountability and transparency.
4) Appreciation of top researchers and influential scientists in solving the problems of society and industry.
5) Develop a sense of social responsibility in researchers.
6) Supporting activities in the field of Citizen Science.

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Research Article

Gobernanza Colaborativa para la Innovación Pública y Social: El caso de Gipuzkoa, País Vasco

Collaborative Governance for Public and Social Innovation: The case of Gipuzkoa, Basque Country

Xabier Barandiaran

Departamento de Ciencias Sociales y Humanas, Universidad de Deusto, San Sebastián.
Correspondencia: xabier.barandiaran@deusto.es

Resumen: La globalización y sus condiciones de desarrollo han puesto encima de la mesa una nueva agenda política caracterizada por la necesidad de abordar desafiantes retos sociales. Asimismo, la crisis de la democracia liberal ha evidenciado la necesidad de nuevos modelos para la gestión del espacio público y de las políticas públicas. Este artículo aborda el concepto de la Gobernanza Colaborativa como un mecanismo para estimular los procesos colectivos de deliberación a través del establecimiento de decisiones formales orientadas al consenso para identificar prioridades y generar líneas de actuación en los territorios. En este marco, el artículo presenta la experiencia práctica de Gobernanza Colaborativa "Etorkizuna Eraikiz", programa diseñado e implementado por la Diputación Foral de Gipuzkoa, explicitando los elementos estructurales que componen el programa y analizando el funcionamiento del modelo en el que se enmarca.

Palabras clave: gobernanza colaborativa; innovación pública; innovación social; capital social; Gipuzkoa; País Vasco.

Abstract: Globalization and its conditions of development have brought about a new political agenda characterized by the need to address social challenges. Similarly, the crisis of liberal democracy has highlighted the need for new models for the management of public space and public policies. This article addresses the concept of collaborative governance as a mechanism to stimulate collective processes of deliberation through the establishment of formal, consensus-oriented decisions to identify priorities and generate lines of action in the territories. Within this framework, the article presents the practical experience of collaborative governance, 'Etorkizuna Eraikiz', a program designed and implemented by the Provincial Council of Gipuzkoa, and explains the structural elements that comprise the program and analyzes the functioning of the model in which it is framed.

Keywords: collaborative governance; public innovation; social innovation; social capital; Gipuzkoa; Basque Country.

1. Introducción

Este artículo tiene como objetivo fundamental exponer los principios fundamentales en los que se basa el programa de Gobernanza Colaborativa "Etorkizuna Eraikiz" (Construyendo el

futuro) de la Diputación Foral de Gipuzkoa, además de explicitar los elementos estructurales más relevantes que componen el programa y analizar el funcionamiento del modelo en el que se enmarca.

De esta manera, el desarrollo de este trabajo se divide en tres apartados. En primer lugar, profundiza en el contexto de la crisis de la democracia liberal; una crisis que se manifiesta en el debilitamiento de las estructuras políticas para dar respuesta a los retos económicos, sociales y políticos planteados y en la desafección de la ciudadanía respecto al sistema, las instituciones y los actores.

En segundo lugar, aborda la conceptualización de la gobernanza colaborativa como mecanismo para institucionalizar la construcción de la realidad política incorporando a la sociedad organizada y a la sociedad civil al sistema de deliberación pública; un mecanismo de gobernanza pública para hacer frente a la desafección política y responder, desde una visión sistémica, a las necesidades de los diversos ecosistemas que integran el diseño y la implementación de las políticas públicas.

En tercer lugar, presenta el programa Etorkizuna Eraikiz, una estrategia de Gobernanza Colaborativa puesta en marcha por la Diputación Foral de Gipuzkoa a través de la cual se ha institucionalizado un modelo integrado por procesos de deliberación compartida (Gipuzkoa Taldean), un laboratorio de anticipación y experimentación activa de políticas públicas (Gipuzkoa Lab) y un conjunto de Centros de Referencia que impulsan el desarrollo de la nueva agenda política en ámbitos estratégicos para el futuro del territorio.

2. La globalización y la crisis de la democracia liberal

En todo el mundo y también, en las sociedades occidentales, se están produciendo cambios económicos, sociales y políticos a una enorme velocidad. La razón fundamental que opera en esta transformación tiene que ver con dos grandes cuestiones. En primer lugar, con el desarrollo científico y tecnológico y su aplicación a los sistemas de generación de conocimiento y de producción. En segundo lugar, con el "modelo" de desarrollo del sistema capitalista de libre mercado que está, a su vez, íntimamente ligado al sistema de las democracias liberales.

El crecimiento económico impulsado por aquellos países con mayor capacidad para producir conocimiento, procesos y productos ha generado nuevas formas de pensar, sentir y actuar, alimentando un modelo de globalización. En este contexto, Ulrich Beck (1998) define la globalización como aquellos "procesos en virtud de los cuales los Estados nacionales soberanos se entremezclan e imbrican mediante actores transnacionales y sus respectivas probabilidades de poder, orientaciones, identidades y entramados varios" (Beck, 1998: 29). De acuerdo con Giddens (2007), la globalización es un concepto multidimensional que integra elementos políticos, tecnológicos, culturales y económicos que se ha visto fuertemente influenciado por los sistemas de comunicación (Giddens, 2007: 7). Implica necesariamente la integración de procesos que se producen a una escala mundial superando las escalas de vida que se originan en el contexto de los estados-nación o a escalas inferiores en otros períodos históricos configurando, por tanto, un nuevo espacio.

La configuración de este nuevo espacio involucra inevitablemente la apertura de un nuevo mundo (con sus condiciones de relación) y la modificación de los espacios de vida anteriores debido al influjo que ejerce el proceso de globalización. En este sentido, Ulrich Beck (1998) señala que la actual sociedad mundial está condicionada por un conjunto de relaciones sociales y de poder organizadas en un contexto no nacional-estatal, característica que posibilita la actuación por encima de las fronteras y que diluye la unidad del Estado, sociedad e individuo (Beck, 1998: 146). En esta misma línea, Simone (2016), en un interesante análisis sobre la frustración generada por las falsas expectativas de la democracia, subraya la evaporización del concepto frontera que ha producido la globalización (Simone, 2016: 163).

El proceso de globalización económica arrastra y condiciona al sistema político, provoca la generación de unas condiciones sociales determinadas en muchos países y, sobre todo, genera

una cultura transnacional con contenidos de aquellos países que lideran los procesos globales y que influyen en el resto. Desde una posición crítica Beck (1998) habla de "globalismo", en el sentido de que el mercado mundial suplanta al quehacer político, imponiendo una ideología de mercado o del liberalismo, reduciendo el proceso de globalización fundamentalmente a una dimensión económica que aborda de manera lineal las dimensiones relacionadas con la ecológica, la cultura, la política y lo social (Beck, 1998: 27). En esta misma línea, Augusto de Venanzi (2002) concibe el término globalización como "el proceso de expansión desregulada del sistema de la gran corporación privada" (De Venanzi, 2002: 46). Este enfoque vincula no solo la dimensión económica a los procesos de globalización, sino que añade otras dimensiones que están fuertemente influenciadas por el marco en el que opera el sistema de la gran corporación privada. Estas dimensiones se relacionan con lo social, desde la perspectiva de la reconfiguración de la división social del trabajo; lo cultural, a través de la universalización de los valores occidentales; la política, a partir de la integración de un sistema normativo de orden supranacional; y la ecológica, a través de la apropiación de la naturaleza y el deterioro del medio ambiente (De Venanzi, 2002: 51).

Thomas Piketty (2021) advierte sobre las diferencias estructurales entre países que tienen capacidad para acceder al área global y los que no tienen esa capacidad. Otros autores subrayan también las diferencias estructurales que se están produciendo entre las grandes metrópolis y las pequeñas ciudades y regiones del interior de los países occidentales. A este respecto, Guilluy (2019) señala, por ejemplo, la desaparición de la clase media y el abandono de las clases altas respecto a los más desfavorecidos. El autor expone que la sociedad abierta y globalizada en la que vivimos hoy, se ha alejado de las necesidades del pueblo en general y, como consecuencia, aquellos con mayor capacidad han replegado a sus fortalezas, sus empleos y sus riquezas (Guilluy, 2019: 96). Por tanto, la desigualdad y las condiciones sociales, políticas y económicas en las que se desarrolla el modelo actual de globalización constituyen el principal factor de la crisis de las democracias liberales.

En este contexto, hay que destacar tres cuestiones centrales a tener en cuenta a la hora de analizar la crisis de la democracia liberal. Primero, las consecuencias de la superación del marco del estado-nación. Segundo, la emergencia de las sociedades individualistas y de consumo que transforman la construcción social de la realidad política. Tercero, las nuevas formas de producción social de la realidad a través de las nuevas tecnologías de la información y la comunicación.

La transformación de la realidad social y la generación de condiciones públicas democráticas dependen en gran medida de actores económicos, políticos y sociales que no interactúan bajo las condiciones del estado-nación; esta realidad implica una menor capacidad de transformación de las estructuras políticas estatales pero también muestra la emergencia de escenarios políticos, sociales y económicos desequilibrados propios de un contexto desregulado donde priman las condiciones de desarrollo impuestas por aquellos actores que tienen más capacidad de influencia.

Por su parte, la atomización de las estructuras de socialización política junto a una sociedad individualista orientada al consumo genera interacciones sociales fragmentadas que dificultan la construcción de narrativas sociales compartidas. Hoy, en las sociedades occidentales, la ciudadanía tiende cada vez más a comprender el hecho político como un fenómeno ajeno que es consumido, en muchos casos, como producto mediático en respuesta a los estímulos marcados por la agenda electoral. En cierta medida los estados tienen menos capacidad de influir y la ciudadanía actúa, cada vez más, como un cliente que espera su servicio y no como un ciudadano sujeto a una comunidad política con derechos y obligaciones. El cambio de posición y el rol de los actores en el sistema político (ciudadanía, partidos e instituciones) es motivado por un cambio económico y social generador de una realidad política distinta.

En los países occidentales, por ejemplo, las encuestas de opinión pública nos muestran una ciudadanía con poco interés por la política y un conocimiento escaso de la realidad política, de la comunidad política, del espacio de opinión pública, de los elementos que configuran el sistema

político e institucional. Los actores políticos compiten por la adhesión política y los contenidos de esta competencia están muy condicionados por dos grandes elementos. En primer lugar, por la forma en la que los ciudadanos consumen el hecho político (escenarios de producción y consumo audiovisuales) y, en segundo lugar, por la relación estructural que la ciudadanía mantiene con la política (enorme distancia, relación superficial, etc.). El debate y la relación política entre los actores políticos está centrado en la disputa de titulares que puedan ser objeto de consumo. Esta lógica de relación condiciona de manera significativa a los actores políticos también en la gestión política de la administración y de las políticas públicas. Así, la transformación de las condiciones de legitimación de la ciudadanía respecto a los actores políticos está transformando la función y el sentido político de su actividad pública en el sistema institucional (el tiempo dedicado a la comunicación política y a la construcción de escenarios de comunicación es un buen ejemplo de esta realidad).

En el despliegue de este contexto, cabe señalar una última cuestión. La globalización y sus condiciones de desarrollo han puesto encima de la mesa una nueva agenda política caracterizada por la necesidad de abordar retos sociales como el cambio climático, la gestión de la diversidad, la lucha contra las desigualdades, la seguridad de los espacios públicos, las nuevas condiciones individuales y colectivas de vida producidas por la digitalización, etc. Nos enfrentamos a una nueva agenda política y, además, a condiciones de desarrollo condicionadas por la incertidumbre, la disrupción y la falta de estabilidad. La pandemia ha sido una sorpresa para todas las sociedades; responsables públicos, diversos sectores económicos y sociales y, en general, el conjunto de la ciudadanía se ha visto incorporado de forma violenta a un nuevo escenario caracterizado por el miedo, la inseguridad y la incertidumbre. El virus está siendo un factor de aceleración de las tendencias económicas, sociales y políticas que se venían produciendo en el contexto de la globalización y, sobre todo, debido a su fuerte impacto se ha constituido en una fuerza resocializadora de primer orden. La pandemia está afectando nuestra condición como seres humanos y perturbando las diversas realidades de la acción colectiva.

Por tanto, una de las grandes cuestiones que se ha puesto encima de la mesa es cómo hacer frente a esta nueva situación y, en este sentido, la Gobernanza Colaborativa puede contribuir a un cierto restablecimiento de las condiciones públicas para la construcción de la democracia en el actual contexto global.

3. La Gobernanza Colaborativa como respuesta a la crisis de la democracia

La crisis de la democracia liberal remite a la búsqueda de nuevos modelos para la gestión del espacio público y de las políticas públicas. Formas de acción y modelos que reestablezcan la democracia y que incorporen a la sociedad en el espacio deliberativo.

El concepto de Gobernanza emerge en los países occidentales en los años 90 como un paradigma que da cuenta del cambio de rol del Estado y su forma de gobernar la relación con los actores de la sociedad organizada, la sociedad civil y el mercado. Partiendo de la reflexión de que los gobiernos dependen en gran medida de la cooperación y de los recursos de la sociedad en general para dar respuesta a los asuntos públicos (Kenis & Schneider, 1991: 36), el concepto de Gobernanza transita de un modelo burocrático y jerarquizado a un modelo más cooperativo en el que se establece una complementariedad entre el sector público, el sector privado, los grupos y ciudadanos que constituyen la sociedad civil (Conejero, 2016). El concepto ha tenido diversas aproximaciones condicionadas por la disciplina desde la que se ha utilizado el termino y el rol que se atribuye al Estado; esto da lugar a definiciones centradas en el Estado o en actores que interactúan en el sistema (Whittingham, 2010).

Tal y como señala Antonio Natera (2005), el valor de la gobernanza reside fundamentalmente en la capacidad de establecer un marco para entender el análisis de la relación del Estado con la sociedad. La Gobernanza alude a una nueva forma de establecer la dirección política y la gestión de las políticas públicas. Una nueva forma de comunicación entre los responsables políticos y los actores organizados o individuales de la sociedad civil. Y aunque se

utilicen distintas denominaciones para incorporar a la sociedad a la deliberación pública, como "Ciudadanía Colaborativa" (Smith, 2010), "Compromiso Comunitario" (Head, 2008), "Gestión Pública enfocada al Ciudadano" (Cooper, 2005); de manera particular, la Gobernanza Colaborativa está orientada a compartir decisiones públicas con la sociedad.

Desde esta visión, el trabajo aquí presentado, no pretende desplegar el estado del arte de la conceptualización teórica sobre la Gobernanza Colaborativa, pero intenta exponer las referencias fundamentales en las que se enmarca la edificación de la visión de gobernanza en el contexto del programa estratégico Etorkizuna Eraikiz, el cual será presentado posteriormente.

En este contexto, vale la pena destacar que hablar de la Gobernanza Colaborativa es hablar del establecimiento de las condiciones estructurales y culturales que garantizan la calidad democrática para la deliberación y para la acción de los actores públicos, privados y sociales que interactúan en un contexto dado de políticas públicas.

De manera concreta, Sirianni (2010) define la Gobernanza Colaborativa como el contexto en el cual los administradores públicos interactúan con el conjunto de la sociedad para estimular procesos colectivos de deliberación que permiten identificar prioridades y generar líneas de actuación, frente a diversas situaciones, que tengan como base las fortalezas existentes en las comunidades y en los individuos.

La perspectiva polícéntrica en la que se asienta la Gobernanza Colaborativa, aborda la propia gobernanza como un proceso que vincula al Estado o a las estructuras públicas, a la sociedad civil (en sus diversas formas de manifestación en cuanto al interés público) y a actores privados (Whittingham, 2010). En este sentido, es importante resaltar que la razón por la cual interesa esta perspectiva es porque, tal y como lo expone Aguilar (2020), en el contexto de los cambios que se han producido en la política a raíz de la globalización, el debate se encuentra focalizado en la insuficiencia de los gobiernos democráticos para dirigir e influir a través de las políticas públicas en sus respectivas sociedades. De ahí, la plena identificación con la afirmación que hace Aguilar (2020), en el sentido de que hoy más que nunca se demanda una nueva forma de gobernar, de orientar y coordinar a la sociedad. El gobierno por sí solo no puede definir y desarrollar la agenda de la sociedad y mucho menos dar respuesta a los numerosos asuntos públicos que inquietan a la sociedad contemporánea (Aguilar, 2020: 72). Además, en la actual realidad global, las situaciones y los asuntos de interés colectivo no pueden ser conocidos, abordados o dirigidos por un solo actor o una sola estructura de acción (Aguilar, 2008: 24). De manera semejante, Sonia Ospina (2006) advierte que lo público ya no es responsabilidad exclusiva del Estado y pasa a ser más bien un espacio de interacción entre diversos actores.

El actual modelo de desarrollo provocado por la globalización ha limitado significativamente la capacidad de transformación de las estructuras políticas. La construcción de una comunidad política está condicionada por múltiples factores y a esta complejidad se añade el hecho de que la lógica de la actual sociedad está inmersa bajo los patrones de consumo e individualismo. En las sociedades actuales, el nivel de solidez y cohesión de la comunidad ha disminuido y las condiciones para el desarrollo y la legitimación del espacio público plantea enormes retos desde el punto de vista democrático y de eficacia. De manera que, si proliferan los factores, estructuras y actores de la transformación de la comunidad política, el entramado de políticas públicas que requiere el ejercicio de la gobernanza del espacio público debe ser inevitablemente redefinido y empoderado para ganar legitimación democrática y poder de transformación. En este aspecto, existe un consenso bastante generalizado sobre la idea de la insuficiencia en la acción de gobierno de las administraciones públicas, particularmente, en autores relevantes que han trabajado la Gobernanza Colaborativa desde el punto de vista de redes (Kooiman, 2000; Sorensen & Torfing, 2009; López & Lavié, 2010).

En tal sentido, el enfoque de este trabajo se desarrolla desde la perspectiva de redes y desde una visión en la que la administración pública tiene un papel de liderazgo fundamental (Peters & Pierre, 2005). Desde esta perspectiva, es necesario destacar que Rhodes (2007) define la gobernanza como el proceso de gobernar con y a través de redes. Asimismo, este enfoque

fundamento en el impulso de dinámicas de interacción y trabajo en red ha sido subrayado por otros autores como Ilyin (2013) y Atkinson y Coleman (1992).

La perspectiva introducida por Rhodes (1999), plantea la interdependencia entre las organizaciones, la interacción para el intercambio de recursos y la negociación para compartir objetivos y construir interacciones de confianza a partir de unas reglas de juego pactadas entre los actores vinculados. Por tanto, es desde este enfoque de la gobernanza en red que emerge también el concepto de la Gobernanza Colaborativa.

Ansell y Gash (2008), al referirse al concepto de Gobernanza Colaborativa, subrayan la importancia de la interacción entre actores públicos y actores no estatales a través del establecimiento de un proceso colectivo de decisiones formales, orientado al consenso y la deliberación con el objetivo de implementar las políticas públicas o desarrollar programas públicos. Este modelo de gobernanza vincula a múltiples actores con organismos públicos a través de espacios comunes que potencian la participación y el consenso en la toma de decisiones (Ansell & Gash, 2008). Tal y como señalan estos autores, este proceso implica un impulso de las instituciones públicas, la inclusión en el proceso de actores no estatales y que el proceso no sea exclusivamente consultivo sino decisorio, que sea un proceso deliberativo formalmente establecido, en el que se logren consensos y el foco de la deliberación esté centrado en las políticas públicas.

De otro lado, en la medida en que la definición de Ansell y Gash (2008) incorpora procesos formalmente instituidos, Emerson, Nabatchi y Balogh (2011) amplían el concepto de Gobernanza Colaborativa definiéndolo como "aquellos procesos y estructuras de decisión y gestión política y pública que conectan constructivamente a personas entre los diferentes ámbitos y departamentos de las agencias públicas, niveles de gobierno, y/o esferas públicas, privadas o cívicas para llevar a cabo o dar respuesta a una solución difícilmente alcanzable por otros cauces" (Emerson, Nabatchi & Balogh, 2011: 2). De la misma forma, Arellano, Sánchez y Retana (2014) vienen a definir el concepto de Gobernanza Democrática destacándola como "un proceso en el que el gobierno, las organizaciones privadas y la sociedad civil interactúan para decidir, coordinar y llevar a cabo la dirección y gobierno de su comunidad" (Arellano, Sánchez & Retana, 2014: 121). Calame y Talmant (1997) añaden, además, la capacidad de la Gobernanza Colaborativa para conceptualizar nuevos sistemas de representación y de instituir nuevas formas de acción en un proceso de adaptación.

En ese marco, la Gobernanza Colaborativa se ha convertido en un término común en la literatura sobre la administración pública (Ansell & Gash, 2008; O'Leary & Bingham, 2009; Cooper, Bryer & Meek, 2006; Fung, 2006), siendo un concepto destacado por incrementar la capacidad de la administración pública a raíz del debilitamiento derivado de las transformaciones económicas, políticas y sociales del mundo actual. Como contribución a los marcos teóricos desarrollados, este trabajo define la Gobernanza Colaborativa cómo el proceso de deliberación y acción compartida que vincula a las instituciones públicas, la sociedad organizada y la sociedad civil en orden a fortalecer, a través de la generación de Capital Social, una nueva cultura política en el ecosistema de las políticas públicas (en su diseño y procesos de ejecución) en el contexto de un espacio público compartido.

Retomando el planteamiento realizado por Aguilar (2020), vale la pena destacar las características distintivas de la Gobernanza en red que este autor presenta. En primer lugar, destaca la naturaleza plural de los actores participantes en el ecosistema de la red, como segundo elemento, la interdependencia de los actores, el establecimiento de las formas de colaboración y la corresponsabilidad que esto implica. En tercer lugar, se enfatiza en el compromiso de compartir recursos y riesgos para el logro de los fines propuestos y las normas que establecerán las condiciones de relación en el proceso de deliberación y de ejecución.

De modo similar, Subirats (2010) señala también algunas premisas básicas que permiten identificar el concepto de Gobernanza, haciendo énfasis en el reconocimiento e incorporación de la complejidad como un elemento consustancial al hecho político, la participación de los actores

en el marco de redes plurales y, sobre todo, la aceptación de una nueva posición en los procesos de gobierno. Esta línea es seguida también por Cantó (2012) quien reflexiona sobre la pérdida de poder de las administraciones, en la medida en que no solamente el gobierno administra y ejecuta sino también lo hacen las redes auto-organizadas y el mercado. Insiste, asimismo, en la importancia de la participación de la sociedad civil y el sector privado en la toma de decisiones, la co-creación, la corresponsabilidad y el incremento del nivel de eficacia y de la legitimidad democrática en los procesos de Gobernanza Colaborativa.

Por todo lo anterior, partiendo del marco general de lo que se entiende por Gobernanza Colaborativa es necesario destacar tres implicaciones fundamentales que derivan de este concepto. La primera implicación está relacionada con la redefinición del espacio deliberativo a través de la incorporación de nuevos actores y la transformación de la lógica del poder en un poder compartido. La segunda, tiene que ver con la necesidad de generar capital social para activar una nueva cultura política que permita dar respuesta a una estructuración institucional en términos de Gobernanza Colaborativa. Finalmente, la tercera implicación corresponde a la generación de condiciones para la innovación social desde el punto de vista de la co-creación y la experimentación activa con el objeto de dar respuesta a las múltiples necesidades que se plantean en un contexto de complejidad e incertidumbre.

3.1. Redefinición del espacio deliberativo y la distribución del poder

La incorporación de diversos actores en la deliberación pública nos lleva de manera inevitable a reflexionar sobre cómo se configura ese nuevo espacio en términos democráticos. ¿A quién representan los distintos stakeholders que participan en el proceso de deliberación? En este sentido, Aguilar (2020) señala que el rol directivo del gobierno no desaparece en la medida en que es la autoridad legítima de la asociación política y garante de preservar la naturaleza pública del proceso respetando los valores y principios democráticos fundamentales. Ahora bien, el rol político se ejerce a través de la coordinación y no a través de la imposición jerárquica. La visión presentada por Aguilar (2020), mantiene la preeminencia de la estructura pública, pero introduce el concepto post-gubernamental de la gobernanza pública para redefinir el nuevo espacio de las políticas. De manera que, la incorporación de los diversos actores sociales, económicos, políticos de diversa naturaleza implica un factor de redefinición del espacio público, en cuanto que suma al espacio público, derivado de la estructura pública, otros espacios que no derivan de la estructura pública pero que responden al interés general y desarrollan una función social clara. El Estado y la administración pública no absolutizan ni agotan toda la realidad construida en el espacio público. Esta cuestión plantea evidentes problemas que es necesario abordar a través del diálogo y la negociación. Dichas problemáticas se enmarcan en cuestiones como la diversidad y los frecuentes antagonismos en la conceptualización y significación de los objetos políticos, las visiones contrapuestas, los desequilibrios en las capacidades, las habilidades y las oportunidades, las desiguales condiciones de poder y la autoridad como punto de partida, la dificultad de desarrollo de una deliberación compartida pero también de los procesos de ejecución, etc. Sin embargo, como afirma Aguilar (2020), estos problemas no pueden llevarnos a aceptar la tesis de que la incorporación de actores privados y sociales distorsiona el objetivo público de gobernar.

En torno a la redefinición del espacio deliberativo que configura la Gobernanza Colaborativa se ha planteado un importante debate académico sobre la significación del poder, sobre su distribución y sobre cómo afectan las asimetrías de poder o los desequilibrios de este al nivel de efectividad del desarrollo de la Gobernanza Colaborativa. Ansell y Gash (2008) advierten sobre el riesgo de manipulación del proceso deliberativo por parte de los actores más poderosos.

Por tanto, ¿Es suficiente la institucionalización de una interacción formal y estable entre actores públicos, sociales y privados para poder hablar de Gobernanza Colaborativa?; ¿Es suficiente seguir formalmente un proceso de Gobernanza Colaborativa, por ejemplo, a través de un proceso de co-creación y acción compartida entre los stakeholders, para hablar de Gobernanza Colaborativa? La Gobernanza Colaborativa exige tener en cuenta la articulación de las

condiciones de la distribución del poder y una cultura política colaborativa interiorizada por parte de los actores que participan en los procesos para lograr establecer un mecanismo efectivo de gobernanza basado en la colaboración. En consecuencia, Run, Huiting y Oszlak (2018) consideran necesario el establecimiento de un marco que posibilite el entendimiento de las relaciones de poder que se producen en un marco de Gobernanza Colaborativa. De igual forma, Hardy y Philips (1998) apuntan a tres elementos clave: la autoridad formal, el control de los recursos críticos y la legitimidad discursiva. Lo cierto es que además de estos factores, existen otros como el contexto social e institucional que condicionan esas relaciones de poder.

Run, Huiting y Oszlak (2018) consideran fundamental evaluar el nivel de efectividad de los procesos de Gobernanza Colaborativa a través de distintas formas de medición como el grado de colaboración, los resultados de la acción o la medición de la satisfacción de los stakeholders. Diversos autores apuntan a los beneficios de compartir el poder, pero Run, Huiting y Oszlak (2018) consideran que todavía falta un marco contingente adecuado para analizar la relación entre compartir el poder y la afectividad en la colaboración. Esta es una cuestión central en la Gobernanza Colaborativa, y para la que estos autores plantean seis elementos que permiten trabajar en dicha relación (Run, Huiting & Oszlak, 2018: 61-74):

1) Cuanto más fuerte es el contexto institucional en cultivar la colaboración más beneficioso resulta compartir poder para una Gobernanza Colaborativa efectiva.
2) Cuanto menos exigente es la misión cumplida por la Gobernanza Colaborativa, más beneficioso resulta compartir poder para la efectividad de la Gobernanza Colaborativa.
3) Cuanto más voluntaria es el tipo de Gobernanza Colaborativa, más beneficioso resulta compartir poder para una mayor efectividad de la gobernanza.
4) Cuanto menor es la experiencia de compartir poder de los participantes, menos beneficioso será compartir poder a efectos de la efectividad de la Gobernanza Colaborativa.
5) Cuando más ampliamente difundidas las fuentes de poder, mayor será el beneficio de compartir poder para la efectividad de la Gobernanza Colaborativa.
6) Cuanto más aceptable es el cálculo de costo-beneficio para los participantes, más beneficioso será compartir poder para la efectividad de la gobernanza.

3.2. La generación de Capital Social

El Capital Social está íntimamente ligado a los procesos de Gobernanza Colaborativa en la medida en que la incorporación de actores privados, sociales o de cualquier otro tipo al sistema deliberativo supone la creación de nuevas redes y también la posibilidad de generar normas y valores que redefinen nuevas interacciones sociales de calidad que posibilitan sistemas de co-creación y de acción de las políticas públicas. Para Robert Putnam (1993) el Capital Social se define como un conjunto de interacciones sociales institucionalizadas o formalizadas en distinto grado (que incluyen valores y normas sociales de reciprocidad y confianza) que influyen en el desarrollo comunitario. Putnam (1993) presta especial atención a la sociedad civil diferenciando al mercado y al Estado. El Capital Social favorece la cooperación y la interacción se constituye en un recurso porque la estructura de esa interacción obliga a la reciprocidad.

El Capital Social hace referencia a las conexiones entre personas, redes sociales, normas de reciprocidad y la confianza que se construye en esas relaciones (Putnam, 2000). En la medida en que determinados contextos interiorizan actitudes y valores que provocan la coordinación y cooperación de los actores sociales, aumenta la capacidad de generar redes o procesos de institucionalización formal e informal que desemboca en la capacidad de un entorno para dar respuesta a las necesidades que se plantean. Al mismo tiempo, en la medida de la existencia de un entorno articulado en redes se va generando un proceso de socialización de los valores cooperativos en un entorno. Es una espiral que se va autoalimentando en una dirección positiva o negativa.

Desde otra aproximación, para Coleman (1988) el Capital Social puede tomar muchas formas, entre las que están las obligaciones que hay dentro de un grupo, las normas y las sanciones. En el caso de Bourdieu (1983), el concepto de Capital Social subraya las relaciones sociales que incrementan la capacidad de un actor para promover sus intereses. De nuevo aparece la idea de que el Capital Social permite al individuo específico ir más allá de sí mismo/a en la medida en que le facilita la colaboración y el compromiso, así como el flujo de información; mediante un sentido de pertenencia y obligación social, puede ejercer influencia sobre los demás (Saffer, 2016). La aceptación de la noción del Capital Social como concepto implica entender que las relaciones son fuente de desarrollo.

Bourdieu (1983), Coleman (1988, 1990), Fukuyama (1995), Putnam (2000) y otros científicos sociales subrayan que el nivel de confianza interpersonal, el compromiso cívico y la capacidad organizativa en una comunidad son factores de desarrollo. Estableciendo una vinculación clara entre Capital Social y Gobernanza. En el mismo sentido, Whittingham (2010) considera que un grupo o comunidad con una alta capacidad para actuar como un sistema coherente y cohesionado favorecerá las relaciones de gobernanza.

3.3. Gobernanza e Innovación Social

El tercer concepto clave que es necesario vincular a los sistemas de Gobernanza Colaborativa es el de la Innovación Social. Planteamos la necesidad de una Gobernanza Colaborativa como una alternativa a la crisis de la democracia liberal, para incorporar a la sociedad a la deliberación, para desarrollar nuevos espacios de creación, deliberación y acción; es decir, necesitamos una nueva gobernanza para formular nuevas preguntas, buscar nuevas respuestas para dar satisfacción a las nuevas demandas. Gobernanza Colaborativa para la Innovación Social. Es necesario superar la visión jerarquizada y funcionalista de la administración pública para dar paso a un modo de gobernanza en el que fluya la colaboración, la creatividad y la innovación social en red para buscar nuevas respuestas a las necesidades planteadas.

Tal y como señala Conejero (2016), la interacción entre actores involucrados en los procesos de Innovación Social exige repensar el modelo de gobernanza "los valores de autoridad y jerarquía que tradicionalmente han presidido las relaciones del gobierno con la sociedad deben dar paso, en un modelo de innovación social, a los principios de colaboración y cooperación horizontal entre actores" (Conejero, 2016: 17). Siguiendo esta misma dirección, y en línea con la tesis central de este artículo, Conejero (2016) considera que la crisis de legitimidad sólo puede ser superada con nuevos mecanismos de participación y de deliberación. Anshell y Gash (2008) afirman que el modelo de gobernanza, entendido como organización de la acción colectiva por medio de la institucionalización formal e informal, es uno de los elementos nucleares de los procesos de Innovación Social, porque afecta a las relaciones sociales y a la satisfacción de las necesidades básicas que se quedan al descubierto.

De otro lado, en un interesante trabajo Francisco Longo (2020) defiende que la administración pública tiene dos grandes retos: progresar (mejorar las políticas públicas, atender las exigencias de la ciudadanía cada vez más acostumbrada a funcionar en interacciones de mercado, tratar de ganar enormes ganancias de eficiencia y la activación del crecimiento económico y la prosperidad) y proteger (de la capacidad de opacidad del sistema financiero internacional, de las consecuencias de fuertes concentraciones empresariales a nivel global, del desempleo provocado por el avance tecnológico, de la vulnerabilidad tecnológica, de las desigualdades que se están generando en la sociedad). Sin embargo, el paradigma burocrático tradicional de la administración pública no puede abordar esos retos porque supone la existencia de contextos estables y desarrollos lineales, la existencia de un conocimiento de la materia a regular y se basa en el alejamiento de los supervisados como requisito de la aplicación impersonal de la norma (Longo, 2020).

Según Longo (2020), el Estado está obligado a superar su visión tradicional e innovar a través de la exploración y de la experimentación. El autor apuesta por la gobernanza exploratoria para

afrontar la agenda de innovación que debe abordar la administración pública en un contexto de complejidad e incertidumbre. Longo (2020) señala que está gobernanza exploratoria debería de incorporar algunas características como poner el foco en la estrategia para liderar el cambio, estimular la inteligencia concentrando el mejor talento de la sociedad siendo la administración una red de núcleos de conocimiento más que un proceso vertical, promover la heterogeneidad y la descentralización para conciliar una diversidad creciente, garantizar el rigor en la evaluación de los procesos de cambio, fomentar la apertura y la conectividad.

4. El caso Etorkizuna Eraikiz: Un modelo de Gobernanza Colaborativa

Etorkizuna Eraikiz es una estrategia de la Diputación Foral de Gipuzkoa para afrontar la nueva agenda política y los retos estratégicos más relevantes del territorio a través de la Gobernanza Colaborativa.

Desde una visión abierta y participativa el objetivo es desarrollar las políticas públicas de manera compartida con la sociedad. Etorkizuna Eraikiz es también una forma de implicar a los ciudadanos. Una invitación a diseñar conjuntamente el futuro partiendo de la premisa de que mañana empieza hoy. Esta estrategia obliga a los políticos a reaprender y a abandonar la teoría y la burocracia para aplicar soluciones reales en escenarios reales. Obliga a gestionar de otra manera, con un nuevo modelo de gobernanza abierta y colaborativa que implique a organizaciones, empresas, asociaciones, universidades a trabajar juntos en pro de un futuro más igualitario para todos y todas. Se trata de la configuración de un modelo que escucha la voz de cada ciudadano y que despliega las estructuras necesarias para interactuar con él. En definitiva, un modelo que trabaja para encontrar nuevas respuestas, partiendo de los valores guipuzcoanos de cooperación y trabajo en equipo que identifican al territorio y le han permitido llegar a lo que es hoy. La Diputación Foral de Gipuzkoa define esta estrategia de la siguiente manera:

"Etorkizuna Eraikiz es un modelo, una forma peculiar y específica de entender, aplicar y representar la gobernanza abierta y colaborativa, una forma de "hacer política". El propósito de Etorkizuna Eraikiz es detectar colectivamente los retos futuros del territorio de Gipuzkoa, diseñar la manera de afrontarlos, experimentar posibles respuestas en entornos reales con la colaboración de distintos agentes y aplicar los resultados al ecosistema de las políticas públicas de la Diputación Foral de Gipuzkoa" (Diputación Foral de Gipuzkoa, 2019).

Etorkizuna Eraikiz nace de la idea de que el modo con el que se haga frente a la magnitud de los retos demográficos, económicos, sociales y medioambientales que la sociedad tiene que afrontar en el futuro es el que sentará las bases del modelo social y económico a medio y largo plazo de Gipuzkoa.

4.1. Los Principios de Etorkizuna Eraikiz

Etorkizuna Eraikiz se asienta sobre cuatro principios que dan sentido a todo su desarrollo posterior:

1) *El liderazgo institucional:* El programa es promovido y liderado por la Diputación Foral de Gipuzkoa que actúa como el agente que lo propone y lo financia, además de participar activamente en su desarrollo. La Diputación Foral de Gipuzkoa manifiesta su compromiso con el programa no solamente facilitando la articulación e interacción entre los distintos agentes, sino comprometiéndose a que los diversos procesos deliberativos estén vinculados al desarrollo de las políticas públicas de la institución. El compromiso institucional se expresa, no solo en la vocación y el ejercicio de liderazgo, sino también en la creencia en la capacidad transformacional del programa y en la apuesta por su sostenibilidad a medio y largo plazo. Así los emprendedores institucionales (políticos) deben favorecer el cambio sistémico para lo cual es necesario crear las estructuras y las plataformas que permitan redefinir las relaciones entre las instituciones y la sociedad. Es decir, impulsar la transformación del sistema institucional hacia nuevos modelos de gobernanza.

2) *Coherencia con el Modelo Gipuzkoa:* El programa se apoya en aquellas características del territorio que contribuyen a favorecer su desarrollo. Gipuzkoa es un territorio compuesto por comarcas muy dinámicas y avanzadas en lo que se refiere a sus recursos e infraestructuras socioeconómicas, con un tejido asociativo denso. Es una muestra de la capacidad y la cultura de la participación y el intercambio presente en el territorio. De igual forma, es un territorio con mucha iniciativa social. Está muy desarrollada en el territorio y una de sus manifestaciones históricas más relevantes es el movimiento cooperativo. La iniciativa social sigue hoy día expresándose en los ámbitos culturales, sociales o económicos; un territorio en el que se reconocen actitudes y experiencias bastantes extendidas de colaboración e interacción ciudadana, de capacidad de afrontar, resolver retos de manera compartida y elevado nivel de Capital Social.
3) *Contextos abiertos de aprendizaje y experimentación:* La idea de contexto abierto sugiere la intervención de un conjunto amplio de agentes y agencias que dan sentido a los procesos de cooperación y dan también forma a los resultados que puedan obtenerse. Esta concepción abierta requiere aprendizaje y capacidad de orientar, distribuir y expandir las experiencias colectivas. Por su propia naturaleza la colaboración público-privada implica interacción entre distintas culturas y experiencias organizativas y deviene, por tanto, en un proceso de aprendizaje que debe superar barreras y convertir en rutina la cooperación entre diferentes.
4) *Generación de democracia, confianza y valor público:* El Programa Etorkizuna Eraikiz, en tanto generador de democracia, confianza y valor público debe necesariamente situarse por encima del partidismo político. Debe plantear un modelo de gestión administrativa y gobernanza política capaz no solo de estimular sino de estabilizar una nueva relación de cooperación y cercanía entre la ciudadanía, las agencias sociales intermedias y las instituciones públicas que fortalezca la democracia y la confianza pública; la producción de resultados capaces de generar bienes públicos (tangibles e intangibles) y, en tal sentido, valor público y, finalmente, generar la capacidad para transformar las políticas públicas tanto en su concepción, como en su gestación y desarrollo.

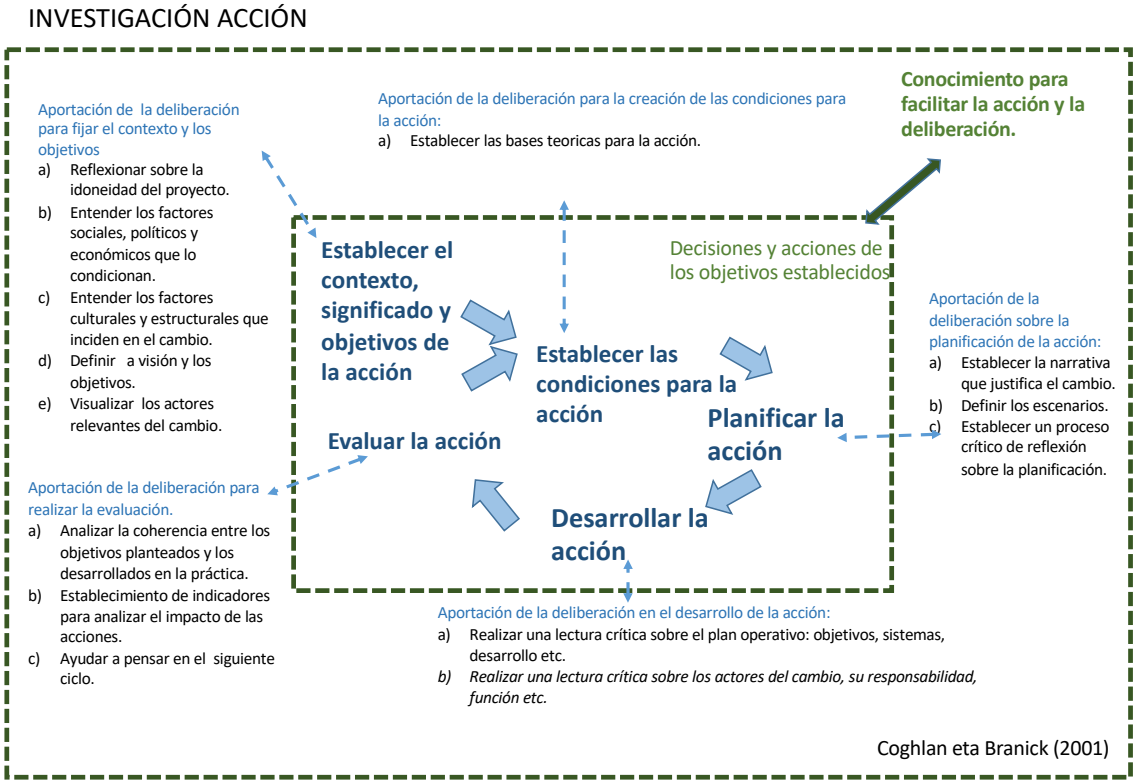
4.2. La estructura de Etorkizuna Eraikiz

Etorkizuna Eraikiz está edificado sobre tres espacios fundamentales: Gipuzkoa Taldean, Gipuzkoa Lab y los Centros de Referencia.

1) *Gipuzkoa Taldean:* Gipuzkoa Taldean es el espacio para la escucha activa, para la deliberación a través de la metodología de investigación-acción con el objetivo de incidir en el ecosistema de las políticas públicas, tanto desde el punto de vista de los contenidos como desde el punto de vista de las formas y metodologías del desarrollo de la acción. Está configurado por varios programas, pero uno de los más significativos es Etorkizuna Eraikiz Think Tank. La misión de este programa es la de co-generar, a través de la Gobernanza Colaborativa, conocimiento transferible y aplicable que incida en una nueva agenda y cultura política que modernicen el ecosistema (actores, contenidos y procesos) de las políticas públicas de la Diputación Foral de Gipuzkoa. La metodología utilizada para el desarrollo co-generativo basado en la Gobernanza Colaborativa es el de la investigación-acción. La investigación-acción es una investigación orientada a la resolución de algún problema o reto acordado entre los participantes en un proceso. En este proceso confluyen el conocimiento metodológico, el conocimiento basado en la experiencia y el conocimiento teórico. El Instituto Vasco de Competitividad-Orkestra es la organización encargada de liderar la labor de facilitación y desarrollo metodológico de este Think Tank, representado en la Figura 1. En este marco, Etorkizuna Eraikiz Think Tank opera bajo el esquema metodológico referencial que proponen Coghlan y Branick (2001).

El Think Tank se articula a través de cuatro grupos de reflexión-acción en el que participan, junto a responsables políticos y técnicos de la Diputación Foral de Gipuzkoa, actores de la sociedad organizada en diversas materias: El Trabajo del futuro, la Recuperación verde, Los futuros del estado del bienestar y la Nueva cultura política.

Figura 1. Esquema metodológico-referencial Think Tank.



Fuente: Instituto Vasco de Competitividad-Orkestra a partir de Coghlan y Branick (2001).

El Think Tank completa su actividad con diversas actividades orientadas a la difusión, como la investigación en materias que tienen que ver con la agenda política.

De otro lado, el espacio de trabajo de Gipuzkoa Taldean desarrolla otras actividades que vienen a fortalecer el proceso de escucha, deliberación y acción compartida con la sociedad:

- El programa Ekinez Ikasi que a través del proceso metodológico de Action Learning desarrolla diversos proyectos de escucha activa a la sociedad y también a colectivos internos de la Diputación Foral de Gipuzkoa.
- El proyecto de Presupuestos Participativos donde la ciudadanía plantea sus prioridades a la hora de configurar el presupuesto de la institución.
- La convocatoria de Proyectos de Ciudadanía en el que la ciudadanía plantea y desarrolla proyectos de innovación social.
- El programa Udal Etorkizuna Eraikiz en el que 12 ayuntamientos del territorio de Gipuzkoa están desarrollando en su municipio proyectos de Gobernanza Colaborativa tomando como referencia Etorkizuna Eraikiz.
- La Mesa de Partidos Políticos en el que participan todos los partidos que tienen representación en el parlamento territorial para deliberar sobre la agenda política del futuro y adoptar decisiones de manera compartida.

Todos estos programas muestran una importante estructura de deliberación compartida entre la Diputación Foral de Gipuzkoa, los actores institucionales, políticos y sociales del territorio.

2) *Gipuzkoa Lab:* Es el espacio donde se desarrollan proyectos de experimentación activa con el objetivo de incorporar una nueva agenda política al desarrollo de las políticas públicas de la Diputación Foral de Gipuzkoa. Más de 40 proyectos experimentales están permitiendo experimentar sobre inteligencia artificial, participación de los/as trabajadores/as en la empresa, conciliación, exclusión social, diversidad, implicación comunitaria en el sistema de cuidados, etc. La agenda 2030, las misiones establecidas por parte de la Unión Europea o la estrategia RIS III de especialización inteligente del Gobierno Vasco materializado en el Plan de Ciencia y Tecnología constituyen los marcos de referencia para el establecimiento de la nueva agenda política y de los proyectos planteados.

   Cada proyecto vincula a cuatro actores fundamentales: la sociedad civil (actores representativos en los respectivos sectores), la universidad (o actores vinculados a los ámbitos de generación de conocimiento), la administración pública (la Diputación Foral de Gipuzkoa, ayuntamientos, Gobierno Vasco, etc.) y actores con capacidad de producción o generación de conocimiento a nivel internacional (OCDE, Climate Kic, etc.).

   El proceso de experimentación se lleva a cabo a través del método de investigación-acción en el que destacan cuatro pasos fundamentales: el diseño compartido de los objetivos, el acuerdo sobre los contenidos y la metodología a desarrollar en el proceso de experimentación, el desarrollo de la investigación y la evaluación del proceso y los resultados. El objetivo de los proyectos de experimentación es aprender y extraer conclusiones en orden a incorporar mejoras en las políticas públicas.

   Algunos de los proyectos desarrollados en el marco de este espacio son: Adinkide, Bizilagun Sarea, Centro de apoyo al talento deportivo, Chatbot, Compromiso Ciudadano por el clima, Conciliación e igualdad, ELKAR-EKIN lanean, La participación de los trabajadores en las empresas, Educación afectivo sexual, Emakumeen etxeak, Etxean Bizi, Gazteon Sarelan, Gipuzkoa CITYGML, Impulso de las mujeres en los Consejos de Administración de las empresas, entre otros.

   El desarrollo de estos proyectos muestra que Gipuzkoa Lab se ha configurado como un espacio importante para construir relaciones de confianza entre diversos actores, un factor de aceleración y experimentación de contenidos avanzados y una fuente de aprendizaje para vincular los resultados de la experimentación con las políticas públicas.

3) *Los Centros de Referencia de Etorkizuna Eraikiz:* Los Centros de Referencia son espacios de trabajo público-privado-sociales para fortalecer determinados sectores de naturaleza estratégica para el futuro del territorio. La forma jurídica que adoptan estos espacios es la de una fundación, pero también la de un consorcio u otro tipo de institucionalización que se inserta en otras organizaciones más amplías a través de la fórmula de un convenio. Con independencia de la fórmula jurídica, los Centros de Referencia son formas de institucionalizar la Gobernanza Colaborativa.

   El punto de partida de los Centros de Referencia se sitúa en la fortaleza de la sociedad gipuzkoana a la hora de abordar los retos estratégicos del territorio. El Gobierno Vasco a través de la estrategia de especialización inteligente RIS III, establece las líneas fundamentales por las que es necesario apostar para construir el futuro de Euskadi y de Gipuzkoa. La Diputación Foral de Gipuzkoa decide apostar, en coherencia con la estrategia RIS III, por el fortalecimiento de determinados sectores teniendo en cuenta las condiciones y potencialidades ya existentes en el territorio. En esta línea de trabajo se han creado los siguientes Centros de Referencia:

   - *MUBIL:* El objetivo es que el territorio se convierta en un referente en cuanto a la nueva movilidad y la electrificación. Además de estar técnicamente preparados

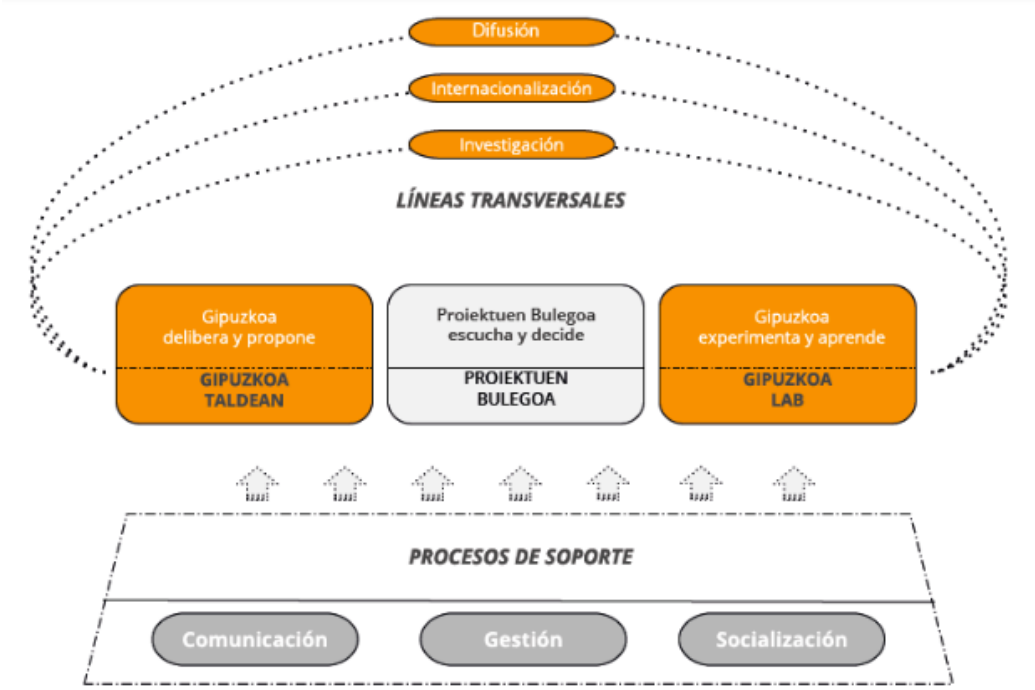
para ello, es necesario que a través del modelo Living Lab se consiga ser un territorio de demostración de nuevas investigaciones y desarrollos del sector. En este sentido, el territorio pretende estar preparado para aprovechar las nuevas actividades económicas que puedan surgir en torno a esta transformación, ofreciendo nuevas oportunidades de diversificación a diversas empresas que actualmente se dedican a la fabricación de piezas para el sector de la automoción.

- *2deo:* El objetivo es incrementar la producción y consumo de los productos audiovisuales en euskera, promoviendo nuevos contextos de creatividad, experimentando en los modelos de producción y nuevos formatos, y multiplicando los canales de difusión. Todo ello, en colaboración con los agentes del sector audiovisual y la ciudadanía.
- *Adinberri:* El Centro de Referencia AdinBerri aspira a que las personas mayores tengan hábitos de vida saludables para prevenir y prolongar su autonomía, así como, disponer del apoyo preciso para mantener el control sobre su vida cotidiana y seguir viviendo una vida con sentido acorde a sus valores y preferencias en el marco de una sociedad para todas las generaciones, inclusiva y cohesionada. Adinberri tiene como objetivo desarrollar e impulsar una economía en torno al envejecimiento que dé respuesta al colectivo senior.
- *Arantzazulab:* Es un laboratorio de innovación social que tiene como objetivo ser un espacio de reflexión y experimentación innovadora sobre los retos del futuro de Gipuzkoa y de la sociedad vasca. El objetivo es ser un centro de innovación social referencial y un punto de encuentro de la ciudadanía para lograr una sociedad más justa, cohesionada, competitiva y humana.
- *Elkar-Ekin Lanean:* Es una estrategia para la mejora de la empleabilidad y la lucha contra la exclusión social. El objetivo es lograr una mejor orientación de las personas en la consecución de un empleo mejor. Y, al mismo tiempo, se persigue el fomento de políticas que acerquen un empleo digno a personas que se encuentren en riesgo de padecer exclusión social.
- *LABE:* Desde la perspectiva profesional, el objetivo es desarrollar una aceleradora de negocios de gastronomía digital, además de experimentar y ensayar la idea del restaurante 4.0. Desde la perspectiva ciudadana, el objetivo es impulsar nuevos sistemas de elaboración de alimentos y la gestión inteligente de productos y existencias.
- *Naturklima:* Está configurado como un centro multidisciplinario de carácter público para la generación de capacidad institucional, técnica y social. La misión del Centro de Referencia es hacer frente a los impactos del cambio climático, aportando conocimiento, valor y riqueza a la sociedad y al sector empresarial, convirtiéndose en acelerador de la transición socio-ecológica. Naturklima centralizará las políticas para combatir el calentamiento global y promoverá la economía circular, al tiempo que ayudará a Gipuzkoa a alinear su estrategia con el resto de centros de excelencia europeos.
- *Ziur:* Gipuzkoa es un territorio en el que se ubican un gran número de empresas especializadas y punteras en ciberseguridad, centros tecnológicos destacados, y universidades que ofrecen una importante cobertura académica en esta materia. El objetivo es impulsar un proyecto sólido, donde conocimiento y tecnología se pondrán al servicio de la competitividad industrial.
- *Badalab*: Es un consorcio público-social constituido por la Diputación Foral de Gipuzkoa, el Ayuntamiento de Rentería y organismos e instituciones sociales del euskera con la finalidad de impulsar el uso social del euskera.

4.3. El funcionamiento del modelo Etorkizuna Eraikiz

La Figura 2 muestra con claridad el funcionamiento de Etorkizuna Eraikiz. Proiektuen Bulegoa es el órgano encargado de garantizar la conectividad y la lógica relacional entre Gipuzkoa Taldean (espacio de deliberación y proposición) y Gipuzkoa Lab (espacio de experimentación y aprendizaje). Analiza las propuestas de Proyectos Experimentales y decide, en su caso, su aprobación y puesta en marcha.

Figura 2. Funcionamiento del Modelo Etorkizuna Eraikiz.



Fuente: Diputación Foral de Gipuzkoa (2019).

El funcionamiento de la estrategia integra un núcleo estable de personas que son nombradas a propuesta del Diputado General de Gipuzkoa. Sus funciones e importancia radican en garantizar la conectividad entre Gipuzkoa Taldean y Gipuzkoa Lab. Hacer el seguimiento de la actividad desarrollada en ambos espacios. Valorar las propuestas y aprobar, en su caso, la puesta en marcha de los Think Tanks y de los proyectos experimentales. Elaborar la Memoria Anual de actividad de Etorkizuna Eraikiz e implementar y elaborar el Informe Bianual de Evaluación de este.

La aplicación de Etorkizuna Eraikiz se apoya en tres líneas transversales: Investigación, Internacionalización y Socialización que deben estar presentes de una manera activa como marcos de referencia y perspectivas compartidas de las prácticas de deliberación y experimentación que se desarrollan en los espacios existentes. Son fundamentales para producir información, conocimiento y aprendizaje que ayuden a construir enfoques y soluciones concretas a los retos presentes y futuros del territorio.

De otro lado, existen tres procesos de soporte: Gestión, Socialización, Comunicación que deben aportar permanentemente el servicio y el complemento que garanticen a las actividades desarrolladas en Gipuzkoa Taldean y Gipuzkoa Lab herramientas de apoyo (gestión), marcos para interactuar y compartir con personas y grupos (socialización) y un alcance y difusión más amplios (comunicación).

5. Conclusiones

El modelo de Gobernanza Colaborativa en Gipuzkoa es producto de un proceso de reflexión y planificación estratégica llevado a cabo por la Diputación Foral de Gipuzkoa para la reorientación de las políticas públicas y la innovación del sistema de gobernanza institucional. La razón de ser de esta estrategia responde al reto que se ha autoimpuesto la Diputación Foral de Gipuzkoa de construir y desarrollar la agenda política de forma colaborativa, sumando conocimientos y experiencias que ayuden a construir el futuro de forma conjunta.

Con esta iniciativa la Diputación Foral de Gipuzkoa pretende buscar un nuevo equilibrio entre la política institucionalizada y la ciudadanía, entre la administración y la sociedad civil. Se trata de propiciar nuevas formas de relación, comunicación y cooperación con la ciudadanía.

El Programa Etorkizuna Eraikiz es, por lo tanto, una iniciativa promovida, guiada y financiada por los responsables políticos del gobierno de la Diputación Foral de Gipuzkoa y no de una agencia pública o una red intermedia. Etorkizuna Eraikiz es, de hecho, un ensayo para tratar de estabilizar un nuevo modelo de gobernanza en Gipuzkoa, estableciendo mecanismos ordinarios de escucha, deliberación y participación en los que agentes y agencias sociales del territorio participan para definir primero y desarrollar después la agenda pública.

El modelo de innovación política en Gipuzkoa propuesto por Etorkizuna Eraikiz no atiende solo al proceso sino también al resultado. Así, en términos de proceso, la intención explícita es la de implicar a un número cada vez mayor y más diverso de actores sociales en la deliberación y en la toma de decisiones políticas. Pero, en términos de resultados, el modelo persigue generar resultados políticos relevantes, efectivos y aplicables.

Un programa de escucha (deliberación) y práctica (experimentación), como es el caso de Etorkizuna Eraikiz, tiene necesariamente la vocación de crear espacios que promuevan el aprendizaje, el intercambio, la comunicación y la transferencia entre actores diferentes. Estos espacios deben ser propicios para promover dinámicas innovadoras para el abordaje y la resolución de los problemas públicos. Su papel es igualmente relevante en la canalización de la información, la comunicación y la facilitación de la relación entre los actores políticos e institucionales y la ciudadanía.

El desarrollo de un Programa de Gobernanza Colaborativa como Etorkizuna Eraikiz podrá ser más fructífero cuanto mayor sea el capital social que facilite la disposición y el comportamiento colaborativo de la ciudadanía. En este sentido, Gipuzkoa posee atributos favorecedores de las dinámicas colaborativas debido al capital social y a las estructuras comunitaristas presentes en el territorio.

Finalmente, vale la pena destacar que la capacidad de la política y de los gobiernos para alcanzar objetivos beneficiosos para la sociedad se apoya cada vez menos en sus propios recursos y fortalezas propias, y depende cada vez más de su capacidad para liderar colaboraciones y coaliciones con otros agentes sociales. Etorkizuna Eraikiz parte de la constatación anterior y promueve fórmulas de escucha y experimentación que necesitan el concurso y la cooperación de distintos agentes sociales.

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