

# Open Social Innovation local ecosystems: The case of Dolomiti Innovation Valley

**Luca Tricarico**

CNR, Institute on Sustainable Economic Growth & Luiss University

**Maria Isabella Leone**

Luiss Business School

**Luciano De Propris**

Foundation Open Factory

**Arda Lelo**

Open Impact

TEACHING CASES 2023

# Abstract

The teaching case entitled '*Open social innovation local ecosystems: Dolomiti Innovation Valley*' describes how to put in practice open social innovation (OSI) management models, showing how apparently fuzzy aspects (such as openness and social change) become operational through multi-stakeholder governance and place-based approaches to sustain impactful local innovation ecosystems.

# 1. Introduction:

## The current debate on open and social innovation

Initially linked to the economic field and related to new technologies in the last 15 years, innovation has gained prominence owing to the new declinations that the concept acquired in both the public governance and entrepreneurship fields of experimentation. These include social innovation, in which the disruptive re-combination of production factors and social practises is considered capable of meeting pressing societal needs (Phills et al., 2008) and open innovation, where efficiency, effectiveness and competitiveness in business models are gained through collaborative intra/entrepreneurial behaviours and strategies (Chesbrough, 2003).

Learning from what happened during the COVID-19 emergency, a wider number of public institutions, firms and citizens have acknowledged how open social innovation (OSI) processes can have an impact on our everyday 'functioning' (Sen, 1999): platforms collecting donations through civic crowdfunding campaigns, rapid conversion of industrial districts to respond to emerging needs, and collaborative digital acceleration processes can be considered part of the OSI management paradigm, where open relations amongst multi-stakeholder organisations represent a possibility to develop entrepreneurial innovative solutions that can rapidly meet social change objectives (Tricarico & Leone, 2022; Tricarico et al., 2021).

Providing a new understanding of the OSI concept can be considered part of a newly acknowledged framework investigated by several scholars mainly coming from strategic management, economy of innovation and public governance schools (Chalmers, 2013; Chesbrough & Di Minin, 2014; Martins & de Souza Bermejo, 2015; Santoro et al., 2017; Tricarico et al., 2022). In the academic debate, the OSI concept can be placed at the intersection between the theories of social innovation, open innovation and co-production often applied at three levels of analysis – macro level (ecosystems), meso level (enterprise/organisation) and individual level (collaborative behaviours). Studies on social innovation are relevant to the context in which theories on social management, localism, expansion of the public sphere, citizen participation and social movements have emerged through the wider concept of public governance (Schaffers et al., 2011; Mulgan, 2007). Studies on open innovation have accompanied the global demand for efficient methods to generate effective innovations, where the use of purposive inflows and outflows of knowledge in entrepreneurial practises can accelerate internal innovation and expand the markets for external use of innovation (Chesbrough et al., 2006).

Regarding the tensions between the different schools of thought, we must acknowledge that even if the OSI concept is becoming increasingly relevant in the strategic management field, it comprehends some different perspectives between scholars and practitioners of open innovation and those of social innovation.

Scholars of open innovation have traditionally underestimated the capacity of the social innovation culture (and tools) to define collaborative entrepreneurial mechanisms among firms, corporations, non-profit and civil society organisations.

On the other hand, social innovation scholars have considered more traditional social enterprises and ecosystems (*investing for impact*) and fewer entrepreneurial models with social impact as a secondary priority in their management strategies (*investing with impact*) (EVPA, 2019; Boiardi,

2020). Although there is an abundance of studies on social innovation that explicitly or implicitly include the involvement of external stakeholders (Drayton & Budinich, 2010; Ferraris & Grieco, 2015), the focus of these studies mainly remains organisations whose primary purpose is to attain social change without economic return (Chesbrough & Di Minin, 2014). This gap is due to the nature of the social innovation processes and outcomes, often the results of the work of ‘social impact makers’ individuals, as well as groups, institutions and organisations, where boundaries are often blurred and hardly defined.

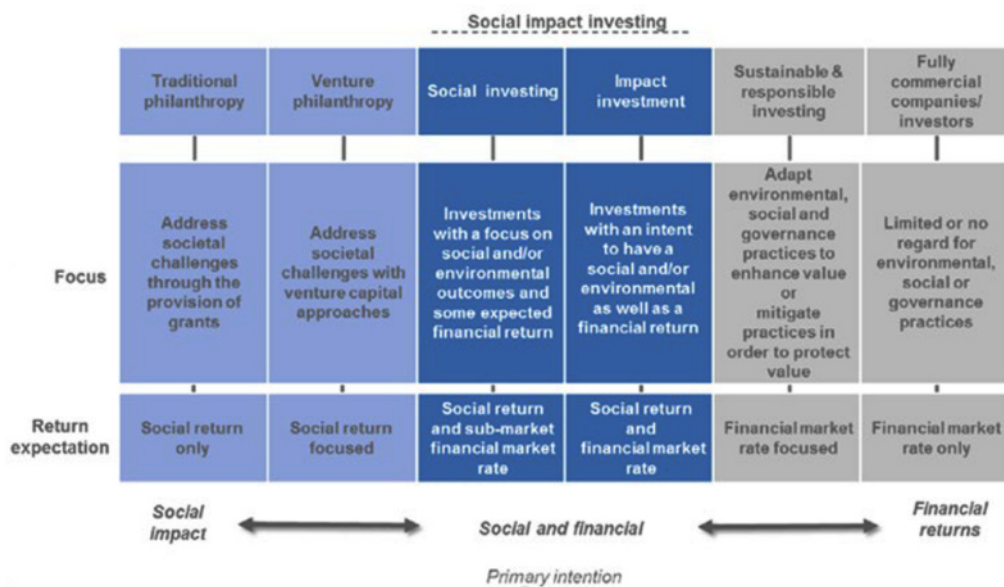


Figure 1. An overview of financial markets through the lens of social innovation and impact economy. Source: OECD (2019)

The opportunity to enrich the comparison and systematisation of these different schools of thought is encouraged by the acknowledgement of a general process of convergence of environmental, social and governance (ESG) values in economic agendas. Thanks to initiatives such as the UN Agenda 2030 and the Global Compact, these values are becoming assimilated in entrepreneurial and intrapreneurial strategies thanks to the stronger attention of investors inside and outside the financial markets (e.g. SIB) (Figure 1). Sustainable and impact finance have recorded general trends of growth<sup>1</sup> in the volume of investments not only in large corporations and public entities but also, quite critically, in the growth of awareness in investors and citizens, with reference to the younger generations (Park, 2018). These issues are attributable to the ESG factors with which large companies and investment funds now must deal (ESG), which are reflected in financial asset allocation decisions.

1. [https://ssir.org/articles/entry/the\\_next\\_10\\_years\\_of\\_impact\\_investment#](https://ssir.org/articles/entry/the_next_10_years_of_impact_investment#)

With respect to this theoretical background, we can introduce the concept of local innovation ecosystems as a crucial analytical standpoint for observing OSI processes (OECD, 2021). Moreover, the increasing adoption of local innovation ecosystems as targets and objectives of innovation policies is attributed to the recognition that innovation cannot be engineered in a linear way, either designed or planned from the top down (Chesbrough, 2003). If an innovation cannot be engineered, it is fundamental to see innovation ecosystems as relational structures that can make innovation permanent and self-generating and increase the multiple factors of endogenous proximity (Adner, 2006; Balland et al., 2015). Local innovation ecosystems are, indeed, locally or regionally specific and locally negotiated between actors and institutions that have strong territorial affiliations (Sgaragli, 2014).

The adoption of a neo-institutional-like (Granovetter & Swedberg, 1992) lens to analyse the Dolomiti Innovation Valley (DIV) ecosystem is particularly relevant to define a context characterised by a variety of actors, resources and environments that are difficult to analyse with the taxonomy of business ecosystems. The study of the DIV case represents an opportunity to reinforce the OSI theoretical perspective through the analysis of specific management practices (Eisenhardt & Graebner, 2007) that overcome the traditional viewpoint of the economics of strategy (Freeman, 1988; Foray, 2009).

To accomplish the discussion of these hypotheses, the objective of the present teaching case is to describe and understand three aspects:

- (1) **Ecosystem governance dynamics:** Describing how organisational profiles have been sorted to set up a common innovation agenda (goals and challenges) through a collective intelligence system among different stakeholders.
  - (2) **Development of experimental open innovation practices** that can sustain and include local actors in the open innovation process; describing the tools and different operations and responsibilities of actors (no-profit, public or private) during the development of an OSI strategy
  - (3) **Impact delivered and its consistency with the mission of the local OSI ecosystem** to sustain endogenous local economic development objectives along with environmental and social impacts.
- Adopting the teaching case reference of Müller and Kupp (2017) and the conceptual framework of Chesbrough and Di Minin (2014), the main goal of the present work is to understand the application of inbound or outbound open innovation strategies to undertake societal challenges through strategic entrepreneurial collaboration among different stakeholders.

## 2. Presenting *Dolomiti Innovation Valley*'s main actors and sources of information

DIV is a 'partnership project' aimed at creating an innovation ecosystem between local, national and international centres of excellence in the topics of innovation, digitisation and applied research. The territorial setting in which the ecosystem is embedded includes the provinces of Belluno, Bolzano, Pordenone, Trento and Udine. To set up an initial governance device, a memorandum of understanding has been signed to formalize the partnership fostering DIV activities, which were inspired by the 2019 'Stati Generali della Montagna'<sup>2</sup>, in the document 'Sustainable Innovation and Businesses in the Mountains' (ISIM).

The key partner of open innovation strategies developed by DIV is the Foundation Open Factory<sup>3</sup>, a multi-stakeholder organisation made up of several foundations (Fondazione Caritro, Fondazione Cariparo and Fondazione Cariverona), together with the ELIS Consortium established with the aim of supporting a territorial ecosystem of innovation, based on the methodology developed by the programme Open Italy.

The foundation is committed to the creation of an experimental path of open and collaborative innovation, bringing together the actors of the territory and the realities of excellence, supporting the importance of SMEs' propensity for innovation and facilitating the creation of new supply chain opportunities in favour of the local system.

Foundation Open Factory is a project developed by the ELIS Consortium. It is a non-profit organisation, also recognised as a non-governmental organisation (NGO), which works in synergy with public institutions and private entities in Italy and developing countries. Founded in 1962 and officially recognized by the Decree of the President of the Republic in 1965, it is the original body of the additional legal entities that, with specific functions, perform the many activities in which ELIS's mission is carried out.

The idea of DIV is in fact based on three societal challenges that are placed at the centre of the OSI strategy – preserving the environment of the Alps, sustaining local entrepreneurship opportunities for the new generation and making technological innovation happen through the engagement of local business ventures.

The general objective is the creation of an environment conducive to innovation and the birth of new businesses capable of attracting talents and investments, thus contributing to solving one of the main problems of the inner Alps' areas – depopulation and the environmental degradation factors that generate this phenomenon.

2. <https://statigeneralimontagna.provincia.tn.it/>

3. <https://foundation4innovation.elis.org/>

The first idea to create the DIV partnership was experimented with during the creation of the ‘Smart Road project’ created by Anas in Veneto on state road 51 ‘di Alemagna’. An initiative of the SME development programme, Foundation Open Factory, in collaboration with Confindustria Belluno Dolomiti, Area Science Park and Industrio Ventures, aimed at supporting open innovation processes in the Dolomites, promoting its attractiveness in terms of investments with a strong focus on sustainability and endogenous development. This idea made it possible to build on a real concept to enhance all mountainous regions in general.

### 3. Governance strategy can define common challenges and interactions among different stakeholders

The territories concerned have proposed a new governance of innovation that affects the Dolomite area of the provinces of Belluno, Bolzano, Pordenone, Trento and Udine.

In each of the geographic areas identified, national and international centres of excellence that carry out their activities in the field of technological innovation, applied research, manufacturing services, skills development and support for start-ups, for example, by way of illustrations – Noi Techpark, Fraunhofer Italia Scarl, Bruno Kessler Foundation, Polo Mechatronics, Progetto Manifattura, Industrio, Lean Experience Factory, Area Science Park, Friuli Innovazione, Zona Industriale Carnia, Luiss Business School.

There are also aggregations of public and private entities in the form of the Digital Innovation Hub (DIH), which was created as part of the national Industry 4.0 programme. In each of the DIH present, the territorial Confindustria plays a role in the direction and coordination of the activities. A master plan of DIV is being planned as a proposal from these operational aggregations, which include the business representation system, the research system, science and technology parks, industrial parks and leading companies in the most advanced sectors. The following are DIHs present in the territories – DIH Belluno Dolomites, DIH IOT of Carnia (UD), DIH of Udine, DIH Pordenone, DIH of Trentino, DIH Alto Adige – NOI Techpark future EDIH Alto Adige / Südtirol. The mission statement of DIV can be further explained using another excerpt from the document ‘Sustainable innovation and businesses in the mountains’.

*‘Building a mountain system of innovation which, in its local articulations, must create innovation ecosystems, hinged on the manufacturing enterprise, which are the driving force for all the economy of the individual territories. With the aim of supporting technology transfer, promoting close integration between the business world and the world of research, training new skills, using and combining human capital, financial resources and natural resources in the best possible way, investing in the green economy and the circular economy, support youth entrepreneurship.’*

DIV does not want to be a ‘new’ organisation or superstructure but rather the synthesis of the projects shared by the partners of the initiative. It is only through the creation of a strategic document, which, for simplicity, can be defined as a master plan, that the methods and types of formalisations of the organisation, which have, in the meantime, been consolidated, can be described with the launch of shared interregional initiatives. The launch of the initiative passes through the establishment of coordination between DIV, already operational, of the different territories as a synthesis of the multiplicity of potential partners. The body that will be able to oversee the launch of the initiative, called the Committee of Promoters of the DIV, will be composed of a representative appointed by each promoter.



## 4. Open innovation activities and collaborative networks: The Foundation Open Factory model

The OSI activities will be guided by a series of thematic workshops aimed at defining a concretely achievable master plan. The identified laboratories are related to themes proposed and shared among the promoters:

1. Skills and management of work transitions (ADAPT observatory and Luiss continuing education)
2. The development of new entrepreneurship through the dissemination of innovative business models in the mountainous region that know how to combine the legacy of previous generations, digital innovation, craftsmanship and the adoption of local finance tools (Industrio and beyond)
3. Widespread technological laboratories or Living Labs can constitute, in a ‘frontier’ territory on the issues of sustainability, mobility, the circular economy and the green economy, a distinctive element capable of encouraging interest in public–private investments (model IP4FVG).
4. The impact of digitization on living and working in the mountains is an extraordinary opportunity to ‘reverse’ the demographic trend and to enhance, in a virtuous way, the metropolis-periphery relationship (Digital First, Smart Land).

The activities of the permanent workshops will be coordinated by the various partners based on their respective skills and available financial resources. In this phase, structures with specialised skills can be identified to support the activities.

An example of carrying out investigation activities is the Northeast Foundation (*Fondazione Nord Est*) and ADAPT for the skills observatory. Some ideas and suggestions that were shared at the first operational coordination meeting between the partners are as follows:

- The mountain as a place for widespread experimentation of technologies (proposal 2 ISIM) for the creation of real LIDs – Demonstration Plant Laboratories / Living Lab starting from a Technology Foresight analysis (<https://bit.ly/2FY39za>), with the direct involvement of companies in the implementation of prototype trials, based on the proof-of-concept model (<https://bit.ly/3iXgm9W>);
- The observatory of skills and work transitions (<https://bit.ly/2ElCyLN>);
- The experiences of the Higher Technical Institutes (ITS) and the dual model (ISIM proposal 6) to enhance existing experiences and consolidate the training offers of higher technical training. For example, see the ITS 4.0 project created in collaboration by the Ca' Foscari University of Venice with MIUR <http://www.its40.it/wp/>;
- The laboratories of the Future (Social Foresight University of Trento), as a participatory method for defining scenarios of social evolution (<https://www.skopia-anticipation.it/#1>).

## 5. Delivering an Impact Framework: Innovation to Impact

While social innovation is a growing phenomenon, social impact measurement has become an important practice in the domain of social innovation (Lee et al., 2019). As social problems feature substantial interdependencies among multiple systems and actors, developing and implementing innovative solutions involves the re-negotiating of settled institutions or the building of new ones (Wijk et al., 2018).

With respect to this standpoint, the experimental work led by Open Impact<sup>4</sup> and ELIS Innovation Hub aims to measure the level of innovation and the impact generated by the new multi-stakeholder innovative ecosystem generated in the ELIS consortium processes, such as the programme ‘Open Italy’ or the startup accelerator programme ‘Zero’.

The methodology chosen for the measurement of the impacts generated by the DIV programme in the ELIS consortium will be the social return on investment (SROI), with the application of the theory of change (ToC) methodology. Each project will be analysed through the SROI lens, a methodology whose purpose is to quantify the social value generated by an intervention, expressing it in monetary value. Moving from the SROI, the joint team will preferably use the BROI methodology (Blended Return on Investment), taking into consideration the social, economic and environmental outcomes from an integrated sustainability perspective. In fact, the blended impact assessment:

- Radically innovates and improves design performance: It includes impact in the initial phase, makes impact intentions visible to stakeholders, and improves the success rate of organizations.
- Creates more and better financial opportunities: greater ability to allocate investments (supply side), greater ability to attract investments (demand side), enables impact finance models / supports stakeholder engagement and management processes, provides engagement tools.
- Innovates the ability to communicate the organisation’s sustainability and facilitates the strategic positioning of the organisation.
- Enables the strengthening of trust with donors and other fundraisings’ techniques.

All the analyses that will be conducted by the joint team are supported by the Open Impact database. By collecting and systematizing internationally validated open-source impact assessments, Open Impact has managed to create the first database in Italy for impact benchmarking. The Open Impact Database is designed to support organizations in identifying the impact they generate, linking it to the 17 UN Sustainable Development Goals (SDGs) and other sustainability taxonomies, such as BES and ESG.

4. Open Impact is an innovative startup and accredited spin-off of the University of Milano-Bicocca that provides services and develops digital products for the measurement, enhancement, and management of impacts in a perspective of integrated sustainability. Open Impact wants to help overcoming the cultural and technical barriers of impact measurability, promoting the development of a society that recognises and rewards social and environmental value (<https://www.openimpact.it>)

To focus on the assessments of the DIV project, the joint team Open Impact and Elis will release a more specific database with impact chains focused on the concept of open social innovation. Some of the dimensions that will be taken into consideration are open and collaborative innovation, shared value, sustainable development, education, work and economic development, business and financial models, technological know-how and networking. Other dimensions can be taken into consideration regarding the different focal points of the financial market. Moving from the standard assessment methodology, the experimental work will drive to an Innovation to Impact Index, released starting from a systematic literature review, going through an operative framework model tested in the ELIS Innovation Hub programmes and fostering a multi-stakeholder participative process in which all the actors will be engaged in the definition of the measurement of the whole innovation system. Following this path, the analysis and the digital tool that will be released will lead to a wiser local data-driven database that can be useful not only as a predictive model but also for impact-driven design development. The experimental process can also be seen as a coral educational activity to raise impact awareness of the whole innovation ecosystem.

Due to all these elements, such as innovation, social impact, different stakeholders involved, social challenges of the territories and respect for the ecosystem, there is a direct connection between the mission of DIV and the mission of the innovation to Impact assessment co-designed by Open Impact and EIH. In fact, thanks to its impact-driven process, this new framework will help all the different stakeholders involved in planning the impact of their projects to attract talents and investments to solve at least two of the main problems of the inner alps area: depopulation and environmental factors linked to climate change. The Innovation to Impact Index will measure the multidimensions of the impact, connecting the social, the environmental and the economic drivers.

Another fundamental aspect is the digitalisation of the tool and the process, which will automatise the evaluation of the impact by realising a multi-stakeholder platform available to the different actors involved in the evaluation process of Dolomiti Innovation Valley. This evaluation process is made for and by the stakeholders; they will be engaged from the beginning until the end of the construction of the value chain to collect multiple data on a territorial basis.

# Bibliographic References

- Adner, R. (2016), "Ecosystem as Structure", *Journal of Management*, Vol. 43/1, pp. 39-58, <http://dx.doi.org/10.1177/0149206316678451>.
- Balland, P. A., Boschma, R., & Frenken, K. (2015). Proximity and innovation: From statics to dynamics. *Regional Studies*, 49(6), 907-920.
- Boiardi, P. (2020). Managing and measuring the impact of sustainable investments – a two-axes mapping. OECD Development Co-operation Working Papers, 74, OECD Publishing, Paris. Available at: [https://www.oecd-ilibrary.org/development/managing-and-measuring-the-impact-of-sustainable-investments\\_2ff2b2f4-en](https://www.oecd-ilibrary.org/development/managing-and-measuring-the-impact-of-sustainable-investments_2ff2b2f4-en).
- Chesbrough, H., Vanhaverbeke, W., & West, J. (Eds.). (2006). *Open innovation: Researching a new paradigm*. Oxford University Press on Demand.
- Drayton, B., & Budinich, V. (2010). Una nueva alianza para el cambio global. *Harvard Business Review*, 88(8), 52-63.
- Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: Opportunities and challenges. *Academy of Management Journal*, 50, 25.
- EVPA (2019). Investing for Impact – EVPA Impact Strategy Paper. Available at: [https://www.evpa.ngo/sites/www.evpa.ngo/files/publications/EVPA\\_impact\\_strategy\\_paper\\_2019.pdf](https://www.evpa.ngo/sites/www.evpa.ngo/files/publications/EVPA_impact_strategy_paper_2019.pdf).
- Ferraris, A., & Grieco, C. (2015). The role of the innovation catalyst in social innovation-an Italian case study. *Sinergie Italian Journal of Management*, 127-144.
- Foray, D. (Ed.). (2009). *The new economics of technology policy*. Edward Elgar Publishing.
- Freeman, R. E., Gilbert, D. R., & Hartman, E. (1988). Values and the foundations of strategic management. *Journal of Business Ethics*, 7(11), 821-834.
- Granovetter, M., Swedberg, R. (1992) *The Sociology of Economic Life*. Boulder, CO: Westview Press.
- Martins, T. C. M., & de Souza Bermejo, P. H. (2015). Open social innovation. In *Economics: Concepts, Methodologies, Tools, and Applications* (pp. 361-380). IGI Global.
- Mulgan, G. (2007), *Social Innovation. What it is, Why it Matters and How it Can Be Accelerated*, London: The Young Foundation.
- Müller, U., & Kupp, M. (2017). Combining Case Teaching and Case Writing Creatively. In *Case Studies as a Teaching Tool in Management Education* (pp. 121-140). IGI Global.
- OECD (2021) "Building Local Ecosystems for Social Innovation: A Methodological Framework". Available at: [https://www.oecd-ilibrary.org/industry-and-services/building-local-ecosystems-for-social-innovation\\_bef867cd-en](https://www.oecd-ilibrary.org/industry-and-services/building-local-ecosystems-for-social-innovation_bef867cd-en).
- OECD (2019) "Social Impact Investment 2019: The Impact Imperative for Sustainable Development" Available at: <https://www.oecd.org/development/social-impact-investment-2019-9789264311299-en.htm>.
- Park, S. K. (2018). Social bonds for sustainable development: a human rights perspective on impact investing. *Business and Human Rights Journal*, 3(2), 233-255.
- Phills, J. A., Deiglmeier, K., & Miller, D. T. (2008). Rediscovering social innovation. *Stanford Social Innovation Review*, 6(4), 34-43.

- Santoro, G., Ferraris, A. and Vrontis, D. (2018), “Open social innovation: towards a refined definition looking to actors and processes”, *Sinergie*, Vol. 36 No. 105, pp. 25-42, doi: 10.7433/s105.2018.02.
- Sen, A. (1999). *Commodities and Capabilities*. Oxford University Press.
- Schaffers, H., Komninos, N., Pallot, M., Trousse, B., Nilsson, M., & Oliveira, A. (2011). Smart cities and the future internet: towards cooperation frameworks for open innovation. In *The future internet* (pp. 431-446). Springer. doi:10.1007/978-3-642-20898-0\_31
- Sgaragli, F. (ed.) (2014), Enabling social innovation ecosystems for community-led territorial development, Fondazione Giacomo Brodolini, [https://www.fondazionebrodolini.it/sites/default/files/pubblicazioni/file/q49\\_0.pdf](https://www.fondazionebrodolini.it/sites/default/files/pubblicazioni/file/q49_0.pdf).
- Tricarico, L., De Vidovich, L., & Billi, A. (2022). Entrepreneurship, inclusion or co-production? An attempt to assess territorial elements in social innovation literature. *Cities*, 130, 103986.
- Tricarico, L. Leone, M.I. (2022). *Can Social Innovation and Proximity Save Our Cities?: Reflections on the “Accelerator for the Local Economy” Case in Milan*. Luiss University Press.
- Tricarico, L.; Bitetti, R.; Leone, M.I. (2021) L'innovazione sociale nelle politiche urbane. Un caso studio nel contesto italiano. *Territorio* 96, 108-115.
- Wijk J., Zietsma C., Dorado S., de Bakker F.G.A., Martì I., (2018), Social Innovation: Integrating Micro, Meso, and Macro Level Insights from Institutional Theory. *Business & Society*, 58(5), 887-918. doi.org/10.1177/0007650318789104.