

# Open social innovation: towards a refined definition looking to actors and processes<sup>1</sup>

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## Abstract

**Purpose of the paper:** *despite the abundance of studies on social innovation, the focus is often on non-profit organizations whose primary purpose is to attain social change, while the involvement of external actors in social innovation development is still neglected in literature. Therefore, this paper seeks to shed light on the open social innovation concept.*

**Methodology:** *the open social innovation idea is studied through a conceptual paper, which involves a literature review of social innovation and open innovation models.*

**Findings:** *the research outlines the open aspect of social innovation, underlining the actors and the processes that are involved in generating and spreading ideas that can address a social change.*

**Limitations:** *the study has focused on a literature review without empirical analyses. Case studies or quantitative approaches could represent interesting avenues for further research.*

**Originality of the paper:** *on one hand, studies on open innovation have traditionally neglected the social sector or social aspects that are investigated in this paper. On the other hand, studies on social innovation do not consider extensively collaborations or open ways to innovate.*

**Key words:** *social innovation; open social innovation; innovation collaboration; open innovation*

## 1. Introduction

Quite recently, it has been proposed that an open collaboration among several stakeholders can improve the impact of social innovations (Murray *et al.*, 2010). This is important in the current global society affected by political, environmental and economic issues. Therefore, an open and collaborative approach may foster sustainable growth through the development of social solutions. There has been exploration among academics of whether open innovation processes are suitable and useful for social innovation in the last few years (Chalmers, 2013; Chesbrough and Di Minin, 2014; Martins and de Souza Bermejo, 2015).

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However, although there is an abundance of works on social innovation which explicitly or implicitly include the involvement of external stakeholders (Drayton and Budinich, 2010; Vrontis *et al.*, 2015), the focus of these studies mainly remains organizations whose primary purpose is to attain social change without an economic return (Chesbrough and Di Minin, 2014). Moreover, the relationship between social innovation and open innovation has recently been analyzed but only by a limited number of scholars. Therefore, very few efforts have been aimed at linking openness to social impact.

Our thesis developed in this work argues that openness in the social sector is already widespread and that social innovations can be developed by several actors of different nature, and through open innovation approaches.

As a consequence, the main purpose of this paper is to understand how open innovation can affect social innovation, following the research question proposed by Chesbrough and Di Minin (2014): how can open innovation contribute to social innovation? To reach this goal, a broad and critical literature review has been carried out.

Thus, this work is a conceptual paper with the purpose of contributing to this still-gaunt topic for a better theoretical and conceptual understanding of the open social innovation phenomenon with a focus on actors and processes. Moreover, it feeds current debates on social innovation, reviewing the extant literature in order to clarify its meaning and analyze its connections with open innovation. First, we reviewed social innovation literature to argue that it is related to collective actions aiming at a social change. Secondly, we employed literature on the innovation ecosystem and open social innovation in order to fill the literature gap in supporting the collective nature of social innovation and to describe how social innovation acts as an engine of change through the interrelationship between different entities and the exploitation of inflows and outflows of knowledge. Thirdly, we discuss the insights from the theoretical background, offering a new framework that interprets open social innovation, and we conclude with a summary that can provide ideas for future research.

## **2. The nature of social innovation**

### *2.1 Social innovation concept*

There are different definitions of social innovation in the literature. In a broad view, it concerns solutions to social pressures related to health, land consumption, wasted resources, environmental dangers, unemployment, unmet needs and marginality.

Many scholars define the social innovation concept by highlighting its differences with business innovation<sup>2</sup> (Dawson and Daniel, 2010; Howaldt and Schwarz, 2010) while others suggest that the two terms usually overlap (Pol and Ville, 2009). Mulgan (2006) defines it as innovative activities and services that are motivated by the goal of meeting social needs.

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<sup>2</sup> Some scholars associate business innovation with technical innovation, often using the two terms as synonyms.

According to the OECD (2010), “Social innovation seeks new answers to social problems by: identifying and delivering new services that improve the quality of life of individuals and communities; identifying and implementing new labour market integration processes, new competencies, new jobs, and new forms of participation, as diverse elements that each contribute to improving the position of individuals in the workforce”. According to this view, every innovation that has allowed the improvement of human life over time can be considered social, and each innovation that is accessible by users creates a change in society (Prahalad, 2012). Therefore, social innovation and business innovation may very often coincide. In fact, many authors stress that some tools and mechanisms typical of business innovation can perfectly fit into the social innovation process (Murray *et al.* 2010; Husted *et al.*, 2015). Similarly, a social problem can be satisfied by both a social innovation and a business innovation (Cajaiba-Santana, 2014). In this way, some scholars use the concept of “social enterprise” to outline the presence of commercial (business) models as a tool to achieve social purposes (Nicholls, 2006; Thompson, 2008), denoting its market perspective and revenues-focused and commercial features (Dart, 2004), as a private organization with a profit-oriented approach which offers products and services, mixing business and social goals (Westley and Antdazze, 2010). Similarly, a *social business* is an organization that uses its revenues to cover its costs and does not distribute profits (Yunus, 2007).

Jankel (2011) advocates that in today’s society, too many organizations use most of the available money to maintain the current status of things by introducing incremental innovations. Such an approach to innovation is also due to the different risk adversity of the public side, which, for political reasons, often prefers solutions that do not involve radical changes (Nicholls and Murdock, 2011). Finally, looking at the actors, Cajaiba-Santana (2014) proposes two perspectives of analysis. On one hand, social innovation is created and sustained by a single actor through an individualistic and behavioral approach, the social entrepreneur proposed by Lettice and Parekh (2010). On the other hand, social innovation is fostered in a broader context and in a structuralist perspective. In this sense, social innovations can emerge not only from public and philanthropic organizations, but also from private organizations and groups of citizens (Mair and Marti, 2006; Dacin *et al.*, 2011).

Other studies indicate that business innovation is motivated by profit and therefore developed by for-profit organizations through a market orientation, while social innovation aims at satisfying new needs that are not provided by the market (NESTA<sup>3</sup>; Mulgan *et al.*, 2007; OECD, 2010). Similarly, Neumeier (2012) rejected the creation and development of innovations through the classic mechanisms of competition that are typical of the business sphere, which tends to exclude the social aspects of innovation.

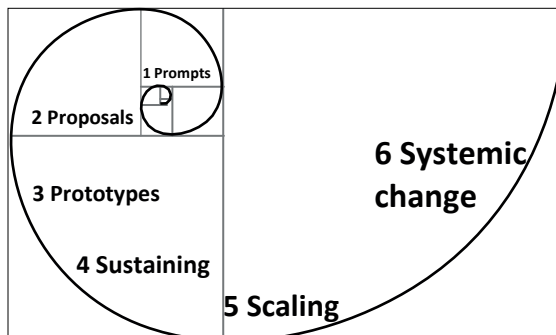
## 2.2 Social innovation development process

As regards the social innovation development process, it still lacks an understanding of how innovation in the social sector is designed, diffused

<sup>3</sup> <http://www.nesta.org.uk>

and supported (The Young Foundation, 2012). Accordingly, after mapping hundreds of methods, Murray *et al.* (2010) identified six distinct phases to developing and disseminating a social solution (Fig. 1).

Fig. 1: Social Innovation phases



Source: Murray *et al.* (2010)

This model emphasizes how social innovation involves iterative stages that are not always sequential, creating relationships between various stakeholders in each phase:

1. Prompts, inspirations and diagnoses: identification of a social problem and the need for innovation;
2. Proposals and ideas: generation of ideas with design or creativity methods;
3. Prototyping and pilots: ideas get tested in practice, with focus on trial and error, iteration;
4. Sustaining: the idea becomes everyday practice ensuring long-term financial sustainability;
5. Scaling and diffusion: growth and spread of the innovation;
6. Systemic change: alteration of the previous status.

Similarly, Brown and Wyatt (2015) propose a social innovation development model based on the concept of design thinking and the inspiration, ideation and implementation phases.

The two models mentioned underline the importance of having different groups of people and stakeholders involved in the social innovation process in order to increase the likelihood of achieving systemic change.

### 3. Openness for social innovation

Recent studies emphasize the importance of multiple alliances in sustaining social changes and systematic relationships between different entities (Murray *et al.*, 2010), also through the creation and exploitation of ecosystems (Ranga and Etzkowitz, 2013; Ferraris and Santoro, 2014; Ferraris and Grieco, 2015). The concept of innovation ecosystems refers to the set of people, institutions, policies, and resources that promote the translation of new ideas into products and processes (Sandulli *et al.*,

2016; Vrontis *et al.*, 2016; Ferraris *et al.*, 2017; Santoro *et al.*, 2017). Several models regarding innovation ecosystems have been proposed. The Triple Helix Model considers the dynamic interplay of firms, universities and the public actor (Etzkowitz and Leydesdorff, 2000).

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Therefore, social innovation can be developed through actions across fields and sectors, i.e., the civil society, public and private actors (Nicholls and Murdock, 2011). Public-private partnerships are hybrid forms of collaboration that merge the public interest with the competencies and capabilities of the private, improving service delivery and saving costs by enhancing both societal and economic outcomes for communities.

Recently, there has been an exploration among academics of whether open innovation processes are suitable and useful to social innovation (Chalmers, 2013; Chesbrough and Di Minin, 2014; Martins and de Souza Bermejo, 2015). Chesbrough and Di Minin (2014) also embedded inbound and outbound activities for NGOs and organizations within the public sector to reach social goals. They theorized that, without an open approach, the surveyed organizations would not have achieved the expected results. Moreover, they ask “how can open innovation contribute to social innovation?” and “how can open innovation strategies be applied by organizations whose final aim is to achieve social change?”. Through these research questions and three case studies, the authors attained the “open social innovation” concept. They define open social innovation *“the application of either inbound or outbound open innovation strategies, along with innovations in the associated business model of the organization, to social challenges”* (Chesbrough and Di Minin, 2014). Arguably, the authors did not consider the coupled process even though the case of Ashoka involved long-term partnerships through joint inbound and outbound activities, and many (for-profit) companies play a decisive role in the network built by Ashoka. Besides this, Chalmers (2013) emphasized how “openness” can overcome common barriers to social innovation and mitigate some of the risks of the innovation process. Following the previous contributions, Martins and de Souza Bermejo (2015) outlined the role of public participation and public engagement, and the exchange of ideas among citizens, governments and private organizations through crowdsourcing platforms.

Within open social innovation, strong emphasis is put on inbound and outbound activities, but little on coupled processes, which certainly deserve more attention. In particular, the links between NGOs and companies, between public and private actors, among social networks, are creating new conditions for the development of effective social solutions under the lens of a new collective dimension. Accordingly, Holmes and Smart (2009) demonstrated the value of dyadic open innovation practices for nonprofit organizations through several case studies.

Finally, among all the practices and external sources that have been widely focused on in the open innovation literature, users play a proactive role in social innovation (Neumeier, 2012; Chalmers, 2013; Del Giudice and Della Peruta, 2013; Mulgan, 2013), because users can transfer specific knowledge about their needs (Ogawa and Piller, 2006; Martins and de Souza Bermejo, 2015; Santoro *et al.*, 2016).

#### 4. Improving the impact: from social to open social innovation

The literature on social innovation shows that it has profoundly changed over time. The following section represents a comprehensive view that helps to better understand the transition from social to open social innovation, emphasizing its concept, final goal, actors and innovation process. Table 1 summarizes the main results.

##### 4.1 Definition and final goal

Social innovation regards “innovative activities and services that are motivated by the goal of meeting social need” (Mulgan, 2006). Thus, social innovation aims at satisfying social needs and improving the life of individuals and communities (OECD, 2010) by achieving social change (Mulgan, 2006).

In turn, based on the literature, we define open social innovation “*all those ideas, activities and processes that support the development of new social solutions (products or services), through the inflows and outflows of knowledge and technologies (inbound and outbound activities) and collaborations between different entities (coupled processes), mobilizing actions across boundaries and exploiting ecosystems*”. Therefore, an open social innovation aims at satisfying both collective social needs and the needs of the involved stakeholders. This approach allows the mitigation of the risk associated with the innovation process (Chalmers, 2013). This is possible by joining social and commercial interests developing an integrated and open business model between social and business-oriented actors (Chesbrough and Crowter, 2006; Pol and Ville, 2009; Westley and Antadze, 2010). This is because, for example, a non-profit organization may be able to increase the benefits it provides to its end clients by cutting the selling price of a good or service, or by providing more of a free service; however, by doing so they would also experience a decrease in revenue. This must be balanced: a loss of revenue would, in turn, result in the reduced ability to offer services and goods in the long run, which would decrease the organization’s ability to achieve its primary goal of creating a substantial impact on society.

##### 4.2 Actors involved

Social innovation usually involves a shift from power directly held by the public, philanthropic and non-profit organizations, and through actions of well-known examples of heroic individuals, such as Bill Drayton, Robert Owen and Muhammad Yunus. On the other hand, open social innovation supports the role that is given to other stakeholders, with emphasis on networks and collaborations between several actors.

Following the open social innovation approach, many actors, such as governments, public institutions, businesses, NGOs, NPOs, and users, can identify a social problem. Alongside these, there are new forms of business such as social businesses and social enterprises. It has been recognized that ideas and projects are often stalled by a lack of ability to transfer

innovations and knowledge among entities, and an inability to mobilize actions across the boundaries and scales that define a social system (Moore and Westley, 2011; Del Giudice and Maggioni, 2014). Thus, the integration of different sources of knowledge is more likely to lead to the emergence of novel ideas. We propose that the more boundaries and levels an innovation crosses, the wider and deeper the impact will be, and the more likely the innovation will result in totalizing and transformative change (Moore and Westley, 2011).

Openness in the social sector helps in promoting this collaboration and exploiting the complementarities of several actors, as well as institutions, sectors and disciplines boundaries, through a mobilizing dynamic (Carayannis and Rakhmatullin, 2014). One possible explanation to this phenomenon is that, due to the lack of resources and expertise of the public entity, as well as the current mix of sovereign debt crises, slow growth and recession, government cutbacks, and reduction of philanthropic donation, investments from other counterparts are required. In fact, more and more governments cannot solve these major social challenges on their own because existing structures and policies lack solutions to some of today's most pressing issues (Murray *et al.*, 2010). This calls for a joint approach on the part of the government, knowledge institutes, the business sector and citizens (Waasdorp and de Ruijter, 2011).

Moreover, the literature underlines a shift in interest that drives social innovation and this is due to the collaborative interaction among different stakeholders who have their own goals (Westley and Antadze, 2010). In fact, in the past, they were mostly developed by non-profit organizations with actions driven by social interest. Recent studies show that social innovation can be developed either by non-profit or for-profit organizations, and that some forms of business model have been successfully applied to find social solutions, ensuring financial sustainability (Chesbrough *et al.*, 2006). In fact, the main problems in social innovation projects are related to difficulties in sustainability and scalability (phases 4 and 5 of the model proposed by Murray *et al.*, 2010).

Thus, we suggest that open social innovation regards both public and private organizations, and both non-profit and for-profit organizations. Public and non-profit organizations are traditionally risk-averse. Because risk-taking is linked to innovation (Covin and Slevin, 1998), these organizations tend to be less innovative compared to for-profit organizations, which means spending less in research and development (Hull and Lio, 2006). This, in turn, increases the cost of product innovation by requiring either external sources of innovation or the acquisition of specialized resources. For these reasons, open innovation is a valuable strategy for non-profit and public organizations. In addition, governmental organizations may play a relevant role in open social innovation since they create a suitable political and legal environment to catalyze innovation through a collaborative approach.

On the other hand, the role of businesses in the social sphere has changed. An ongoing exploration of societal needs can lead companies to discover new opportunities for competing in traditional markets, and to recognize the potential of new markets that they had previously overlooked (Porter

and Kramer, 2011). For example, they can target specific markets that had not been considered so far, finding business opportunities, a way to test new business models (Prahalad, 2012) and new scalable technologies in other fields. In fact, many innovative multinational companies are already serving the world's poor and generating strong revenues, leading to greater efficiencies (Prahalad and Hammond, 2002).

By taking advantage of collaborations, networks and ecosystems, businesses may gain value and make profits from the developed technologies (Bresciani *et al.*, 2013), while the public side and non-profit organizations can offer new radical and more effective solutions and services to citizens. Furthermore, through technological development in the social sphere, private subjects have the possibility to create and exploit new "blue oceans" (Kim and Mauborgne, 2005), and gain competitive advantages from first-mover benefits (Drayton and Budinich, 2010).

Accordingly, there are business opportunities and synergies to be exploited by better integrating social challenges at the core of innovation activities and creating the condition for participatory relationships (Prahalad, 2012). This perfectly explains a win-win situation: new technologies and services are opportunities for the social sector, as the social sector is an opportunity to discover new markets for business. Moreover, international firms can learn locally in order to compete globally by using cities as a lab where to develop and test new businesses and new products and services (Almirall and Wareham, 2008).

Therefore, it has been argued that networks and ecosystems, with their ability to buffer, adapt to, and shape change, may be useful to organize socially to avoid traps and deal with complex problems (Bodin and Crona, 2009). In fact, building an ecosystem can lead to several benefits such as cost-efficiency, scalability, higher knowledge and skills (Prahalad, 2012). From an ecosystem perspective, the topic of Smart Cities falls right into open social innovation borders, since it concerns collaborations between different actors (including public and private), for the implementation of innovations which aim to make the city a better place for citizens. In this view, well-known companies in the ICT sector, such as Microsoft, IBM and Cisco are involved in Smart City projects in close collaboration with local governments providing innovative technology and support in order to ensure new public services. One of the case studies analyzed by Chesbrough and Di Minin (2014) clearly represents an example of a Smart City and, more specifically, the city of Birmingham (England), which adopted inbound and outbound activities in order to find solutions to address social problems associated to child neglect and child abuse. Thus, the Open City is an ecosystem where people and organizations interact to sustain growth through solutions to social problems. In addition, companies could transfer unused technology and IP, and a smart city is an opportunity to sell or reveal such assets.

So far, emphasis was put on the fact that companies may be helpful to NGOs and public organizations to find new ideas to solve social problems. In turn, NGOs can also transfer knowledge to businesses. NGOs possess the knowledge, local infrastructure, and local networks to deploy business models. The collaboration between NGOs and companies may result in a



co-creation process through the development of an integrated and hybrid business model (Brugmann and Prahalad, 2007).

Another key actor in the social innovation development process is the user. User-centred innovation through participatory engagement has proven useful in social innovation development (Murray *et al.*, 2010). A perfect example of user engagement that has led to social change is Wikipedia.

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#### 4.3 Innovation process

Identifying a problem means being aware of a need that is not being met (Mulgan, 2013), and this concerns both social innovation and open social innovation. In recent years, the process of social innovation has shifted from single-entity actions through heroic behavior (Lettice and Parekh, 2010) to collaborative actions through inbound, outbound and coupled processes (Chesbrough and Di Minin, 2014; Martins and de Souza Bermejo, 2015), leveraging the business model to ensure sustainability (Chesbrough *et al.*, 2006). The absence of networks and collaborations is the main reason why social innovation projects fail (Mulgan *et al.* 2007).

Thus, open social innovation assumes a process of identifying and solving a social problem by accessing external knowledge, relying on participatory paths, changing the system and spreading the found solution. Moreover, it concerns the exchange of ideas and values among public, private, and nonprofit sectors; shifting roles and relationships between business government and non-profit organizations; blending of a market-based approach and its mechanisms with public and philanthropic support (Phills *et al.*, 2008). These dissolved boundaries are likely to enhance the impact of the social innovation.

For example, Chesbrough and Di Minin provide evidence of how NGOs and public organizations, such as Emergency, Ashoka and the City of Birmingham, draw on inbound and outbound activities in order to solve social problems. Moreover, the case studies highlight how these activities involve the exchange of knowledge with entities that are different from one another. As Hull and Lio (2006) suggest, non-profit organizations can greatly reduce potential risk by adopting forms of innovation that have already been tested in the market (and therefore by means of inbound activities), or by sharing the risk with another organization in a cooperative manner through coupled processes.

Another example concerns crowdsourcing, namely a tool that incorporates the idea of inbound and outbound. In the cases reported by Martins de Souza and Bermejo (2015), inbound activities consist in the public institution seeking knowledge from an external source (citizens), while outbound activities consist in the knowledge transferred from citizens to public institutions. In this context, many organizations employ crowdsourcing to gather and assess information in order to foster public participation by exploiting citizen knowledge. Challenge.gov, for example, is an online challenge platform promoted by the U.S. federal government. It enables the government to collaborate with citizens by calling for specific challenges, to which people can adhere in the form of

proposals and projects. Accordingly, the Internet has opened an avenue for social networks, which incentivize inflows and outflows of knowledge. Accordingly, InnoCentive has created a Web site that allows people to post solutions to challenges that are defined by InnoCentive members, a mix of non-profit organizations and companies. Scientists, engineers, and designers from around the world have posted solutions, modifying the organization's innovation process.

Although previous studies have mainly focused on inbound and outbound activities, the challenges faced by modern economies urgently call for new forms of coupled processes and collective action among public and private stakeholders in order to face social challenges exploiting research and innovation. The role of science and technology is critical to address these challenges, as is taking a multidisciplinary approach that is dynamic and involves multilateral collaboration among different stakeholders (Moore and Westley, 2011). To do so, the development of a new governance system, as well as participative tools such as connectors, incubators and intermediaries (such as Ashoka), should be strengthened in order to be effective (OECD, 2011; Calza *et al.*, 2014). For example, the Research Institute of Science and Technology for Society (RISTEX), supports R&D activities producing, utilizing and transferring know-how through a cycle of activities that involve the use of open innovation practices (Shigeto, 2011). These practices include collaborations with several local actors such as universities, governments, companies, and NPOs as suggested by the Quintuple Helix model (Carayannis and Rakhmatullin, 2014).

Thus, innovation for social challenges clearly involves a wide set of stakeholders during the processes of idea generation, application and diffusion. In this way, solving complex social problems through knowledge and innovation is no longer the task of governments alone, but more and more a result of cooperation among all actors in society. This stresses the importance of cooperation and networking between stakeholders along with the right incentives (Waasdorp and de Ruijter, 2011). Therefore, the actor who seeks to solve a social problem should enlist partners in order to assemble the right skills and share costs (Porter and Kramer, 2011).

Nevertheless, coupled processes and cooperation should also include NGOs or social entrepreneurs, who are knowledgeable about the local context, so they can understand and perceive the needs of local communities. However, they often do not have the technology and skills to scale up projects. Therefore, NGOs, public entities and companies can complement each other by developing a comprehensive and hybrid social business model (Drayton and Budinich, 2010). Companies may offer scale, expertise in production, technologies, knowledge, skilled human resources (Porter and Kramer, 2011). Social entrepreneurs and public organizations can better address social issues due to their long-term perspective (Chesbrough *et al.*, 2006) and can contribute with lower costs, strong social networks, and deep insights into local communities (Drayton and Budinich, 2010). The alliance among companies and NGOs, with the support of local governments, can reshape industries and solve social challenges in an effective way (Brugmann and Prahalad, 2007). Starting

from the assumption that many social problems cannot be solved by companies or citizen-sector organizations (CSOs) on their own (Drayton and Budinich, 2010).

Solving social problems through coupled processes, often results in the development of strong ecosystems for innovation. This allows the spread of R&D costs through all the organizations within the ecosystem, and to take advantage of the specialization of each actor involved (Pralhad, 2012).

As anticipated, businesses and NGOs can develop a coupled process and an integrated open business model in order to find novel and sustainable solutions. This is well explained by the example of the partnership between Unilever (Lipton business) and Rainforest Alliance<sup>4</sup> (van der Wal, 2011). Rainforest Alliance is an NGO that works with individuals, communities and companies with the main purpose of reducing environmental impact and increasing social and economic benefits. Rainforest Alliance provides knowledge to stop major drivers of deforestation and environmental destruction, teaching farmers how to improve their productivity and reduce costs by cutting down pesticide use, eliminating waste and improving farming techniques. The Rainforest Alliance certification encourages farmers to grow crops and manage ranchlands sustainably, supporting farmers who are working to improve their livelihoods and those of their families while protecting the planet for the future. Unilever does not have an active role as a social problem solver, but rather uses the partnership to increase its CSR. In particular, Unilever implements a way of doing business that is useful for social innovation. In this case, an open and hybrid business model can positively affect social impact. This indicates that companies and NGOs can create business models to generate value in the social sector, pursuing scale, profits, social equity, and empowerment as part of an integrated value chain (Brugmann and Prahalad, 2007).

In this light, the P&G Children's Safe Drinking Water<sup>5</sup> (CSDW) case involves the business model that P&G developed jointly with Population Services International (PSI), a non-profit organization which seeks to increase the availability of health and population control products/services in low-income areas of the world, with the purpose of providing clean drinking water to the people who need it most by using water purification packets invented by P&G. Through this long-term project, P&G and PSI aim at raising awareness of the clean water crisis and provide clean water to people in different countries. In this case, the open and hybrid business model represents the key to ensure the spread of the project in other regions.

The key role of an integrated business model is relevant in Drayton and Budinich's study (2010). In particular, they present the case of E-Health Point, a project developed by Indian businesses, citizen sector, for-profit venture capital and social funds that aims at enabling on-line medical services providers to specific target markets. The project has two main advantages: first, it enables the delivery of a service to people who cannot move easily (due to problems related to the lack of transportation, heavy traffic or lack of time); second, the service provides medical examinations at

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<sup>4</sup> <http://www.rainforest-alliance.org/>

<sup>5</sup> <http://www.csdw.org/csdw/index.shtml>

very low prices (\$1 per consultation), thus ensuring financial sustainability. Grameen Danone is another example of open social innovation through a coupled process. Grameen Foundation was founded to help the world's poor, addressing their unique needs and working with private sector companies, non-governmental organizations, and government agencies to ensure an achievement of lasting impact. Grameen Danone is a joint venture between the Grameen Foundation and the Danone Group that was launched in 2006 and aimed at producing and providing a type of yogurt enriched with crucial nutrients to decrease malnutrition for the children of Bangladesh. In a similar way, Grameen Intel, born as a joint venture between Grameen and the Intel Corporation, sought to provide IT solutions to address specific social problems such as low agriculture outcomes or lack of pre-natal care.

*Tab. 1: From social to open social innovation*

	<i>Social innovation</i>	<i>Open social innovation</i>
<i>Definition</i>	Innovative activities and services that are motivated by the goal of meeting social need (Mulgan, 2006)	The application of either inbound or outbound open innovation strategies, along with innovations in the associated business model of the organization, to social challenges (Chesbrough and Di Minin, 2014)
<i>Final goal</i>	Satisfy social needs, improve life of individuals and communities (OECD, 2010), through the achievement of social change (Mulgan, 2006)	Both satisfying social needs and those of the involved stakeholders, mitigating the risk associated with innovation process (Chalmers, 2013). This is possible by joining social and business interests (Chesbrough <i>et al.</i> , 2006; Pol and Ville, 2009; Westley and Antadze, 2010)
<i>Actors involved</i>	Individuals (Lettice and Parekh, 2010; Cajaiba-Santana 2014), public, philanthropic and non-profit organizations (Murray <i>et al.</i> 2010).	Businesses (Huizingh, 2011; Porter and Kramer, 2011), users (Chalmers, 2013), NGOs (Chesbrough, 2006), ecosystems involving public, private, users, universities and research centers (Nicholls and Murdock, 2011; Mulgan, 2013; Ranga and Etzkowitz, 2013; Carayannis and Rikhmatullin, 2014; Ferraris and Grieco, 2015), governments and communities (Martins and de Souza Bermejo, 2015)
<i>Innovation process</i>	Single-entity actions through heroic behavior (Lettice and Parekh, 2010)	Collaborative actions through inbound, outbound and coupled processes (Chesbrough and Di Minin, 2014; Martins and de Souza Bermejo, 2015), transferring knowledge and mobilizing action across boundaries (Moore and Westley, 2011). Focus on social business models to ensure sustainability (Chesbrough <i>et al.</i> , 2006).

Source: own elaboration

## 5. Discussion and conclusions

This paper analyzed several links between social innovation and open innovation. We promote the concept of open social innovation from a theoretical perspective, arguing that openness in the social sector facilitates the sharing, improvement and efficiency of social solutions. Moreover, the present paper sheds some light on the study of open social innovation by providing at least three suggestions. First, different organizations can act as promoters of social innovation: the public sector and policymakers; civil society; NGOs, social entrepreneurs; social businesses; foundations and philanthropists who can fund and support projects; and private organizations trying to meet social needs more effectively by offering skills

and technologies. Interaction among different actors creates synergies between business innovation and social innovation. Each actor provides different assets and competencies to the social solution in order to generate greater value than an individual effort could generate. Second, combining purely social interests with business interests accelerates the social innovation process. In this way, the business model has a key role in ensuring the sustainability of projects. As a result, a market-orientation approach will help organizations to deliver more social value for the money they spend. Then, by applying successful business practices, organizations can increase their efficiency and thus make a greater impact with a given budget (Hockerts, 2006). Third, in line with the open innovation paradigm, inbound activities, outbound activities and coupled processes increase the effectiveness and impact of social solutions (Chesbrough and Di Minin, 2014), because tapping into the resources of other actors increases the likelihood of innovative development ideas and solutions.

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Moreover, innovation that aims directly at addressing social challenges must cope with specific barriers that cause under-investments and hinder their development and dissemination. In this context, according to Chalmers (2013), social innovation hindrances such as market protectionism, risk aversion and a conservative culture of public organizations, and often of the non-profit organizations, exist. In fact, due to their reduced capacity for risk and lack of perceived need for internal expertise, non-profit organizations are less likely to have an extensive learning capacity (Hull and Lio, 2006). Lower tolerance for risk and a reduced learning capability lead to lower innovativeness through an internal process. Therefore, adopting an open approach both for public and private institutions helps to mitigate these barriers and achieve radical social changes. There is a clear need for a greater involvement of stakeholders who can introduce the necessary abilities and interests in research and innovation to address social changes. This reflects the emerging trend towards more 'open' and 'user-led' innovation in the private sector (Murray *et al.*, 2010).

To enrich this thesis, we quote Bill Drayton, CEO of Ashoka, the largest worldwide network of social entrepreneurs: "Whatever the issue may be, we believe that the most powerful and profitable answer is often a new form of partnership between the business and the citizen sector... The more eyes we have on society's problems - and opportunities - the better our chances of coming up with viable solutions".

The key aspect that emerges and the main obstacle for solutions to social problems concern the interests of those who develop new ideas. On the one hand, there are governments and NGOs that offer few scalable solutions. On the other, there are companies that have set profit maximization as their main goal and whose social intents are limited to CSR programs with minimal impact (Bresciani *et al.*, 2016). While initiatives and projects are developed individually, social problems remain fundamentally unsolved.

The considerations provided in this paper indicated that open social innovation is not a new paradigm in the Kuhnian sense, but rather an important issue that needs further investigation and empirical research. In fact, the connection between social and open innovation is evident. These suggestions have implications for everyone involved in processes or

activities of social innovation and assume that common practices of open innovation are useful for both public and private sectors. On one hand, the public can implement a process of co-creation and co-development of innovative ideas through the public engagement of citizens by acquiring knowledge and technologies from privates or collaborating with them. On the other hand, companies can impact positively on society and communities by applying the principles of open innovation to cut R&D spending, increasing the effectiveness of innovation development and reducing risks.

Finally, this paper aimed at contextualizing the underpinnings of open social innovation to stimulate future research in this field from both the perspective of organizations that seek social change as their primary purpose (Chesbrough and Di Minin, 2014) and the perspective of private organizations that indirectly achieve social change through business innovations (Porter and Kramer, 2011).

The main limitation of this paper is that it does not present empirical evidence but rather theoretical arguments. Accordingly, in the future, case studies of open social innovation projects would help to build a conceptual framework and to better understand the nature of the phenomenon in order to realize how a single actor could create and capture value through collaboration. Open social innovation cases should be analyzed both from the perspective of the value created for the community and from that of the open innovation strategy adopted by organizations.

In addition, although the few existing studies on open social innovation have focused more on inbound and outbound activities, the theoretical foundations of this paper indicate that the coupled process is a common practice with positive results in terms of social impact. Accordingly, future research should specifically consider examples of collaborations between companies and NGOs, the ways in which these organizations create value through collaboration and, perhaps most importantly, the most suitable incentives and tools that allow a safe and convenient collaboration.

## References

- ALMIRALL E., WAREHAM J. (2008), "Living labs and open innovation: roles and applicability", *eJOV: The Electronic Journal for Virtual Organization and Networks*, n. 10, pp. 21-46.
- BODIN Ö., CRONA B.I. (2009), "The role of social networks in natural resource governance: What relational patterns make a difference?", *Global Environmental Change*, vol. 19, n. 3, pp. 366-374.
- BRESCIANI S., THRASSOU A., VRONTIS D. (2013), "Change through innovation in family businesses: evidence from an Italian sample", *World Review of Entrepreneurship, Management and Sustainable Development*, vol. 9, n. 2, pp. 195-215.
- BRESCIANI S., FERRARIS A., SANTORO G., NILSEN H.R. (2016), "Wine Sector: Companies' Performance and Green Economy as a Means of Societal Marketing", *Journal of Promotion Management*, vol. 22, n. 2, pp. 251-267.

- BROWN T., WYATT J. (2015), "Design thinking for social innovation", *Annual Review of Policy Design*, vol. 3, n. 1, pp. 1-10.
- BRUGMANN J., PRAHALAD C.K. (2007), "Cocreating business's new social compact", *Harvard Business Review*, vol. 85, n. 2, pp. 80-90.
- CAJAIBA-SANTANA G. (2014), "Social innovation: Moving the field forward. A conceptual framework", *Technological Forecasting and Social Change*, n. 82, pp. 42-51.
- CALZA F., DEZI L., SCHIAVONE F., SIMONI M. (2014), "The intellectual capital of business incubators", *Journal of Intellectual Capital*, vol. 15, n. 4, pp. 597-610.
- CARAYANNIS E.G., CAMPBELL D.F. (2009), "'Mode 3' and 'Quadruple Helix': toward a 21st century fractal innovation ecosystem", *International Journal of Technology Management*, vol. 46, vol. 3-4, pp. 201-234.
- CARAYANNIS E.G., RAKHMATULLIN R. (2014), "The quadruple/quintuple innovation helixes and smart specialisation strategies for sustainable and inclusive growth in Europe and beyond", *Journal of the Knowledge Economy*, vol. 5, n. 2, pp. 212-239.
- CHALMERS D. (2013), "Social Innovation: An exploration of the barriers faced by innovating organisations in the social economy", *Local Economy*, vol. 28, n. 1, pp. 17-34.
- CHESBROUGH H.W. (2003), *Open innovation: the new imperative for creating and profiting from technology*, Harvard Business School Press, Boston.
- CHESBROUGH H.W., CROWTHER A.K. (2006), "Beyond high tech: early adopters of open innovation in other industries", *R&D Management*, vol. 36, n. 3, pp. 229-236.
- CHESBROUGH H., DI MININ A. (2014), "Open social innovation", in Chesbrough H., Vanhaverbeke W., West J. (eds) *New frontiers in open innovation*, Oxford University Press, Oxford, pp. 169-188.
- COVIN J.G., SLEVIN D.P. (1998), "Adherence to plans, risk taking, and environment as predictors of firm growth", *The Journal of High Technology Management Research*, vol. 9, n. 2, pp. 207-237.
- DACIN M.T., DACIN P.A., TRACEY P. (2011), "Social entrepreneurship: A critique and future directions", *Organization Science*, vol. 22, n. 5, pp. 1203-1213.
- DART R. (2004) "The legitimacy of social enterprise", *Nonprofit Management and Leadership*, vol. 14, n. 4, pp.411-424.
- DAWSON P., DANIEL L. (2010), "Understanding social innovation: a provisional framework", *International Journal of Technology Management*, vol. 51, n. 1, pp. 9-21.
- DEL GIUDICE M., DELLA PERUTA M.R. (2013), *Unpacking open innovation: Highlights from a co-evolutionary inquiry*, Springer, New York.
- DEL GIUDICE M., MAGGIONI V. (2014), "Managerial practices and operative directions of knowledge management within inter-firm networks: a global view", *Journal of Knowledge Management*, vol. 18, n. 5, pp. 841-846.
- DRAYTON B., BUDINICH V. (2010), "A new alliance for global change", *Harvard Business Review*, vol. 88, n. 9, pp. 56-64.
- ENKEL E., GASSMANN O., CHESBROUGH H. (2009), "Open R&D and open innovation: exploring the phenomenon", *R&D Management*, vol. 39, n. 4, pp. 311-316.
- ETZKOWITZ H., LEYDESDORFF L. (2000), "The dynamics of innovation: from National Systems and "Mode 2" to a Triple Helix of university-industry-government relations", *Research Policy*, vol. 29, n. 2, pp. 109-123.

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 Demetris Vrontis  
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 towards a refined definition  
 looking to actors and  
 processes

- FERRARIS A., GRIECO C. (2015), "The role of the innovation catalyst in social innovation-an Italian case study", *Sinergie Italian Journal of Management*, vol. 33, n. 97, pp. 127-144.
- FERRARIS A., SANTORO G. (2014), "Come dovrebbero essere sviluppati i progetti di Social Innovation nelle Smart City? Un'analisi Comparativa", *Impresa Progetto-Electronic Journal of Management*, n. 4, pp. 1-15.
- FERRARIS A., SANTORO G., DEZI L. (2017), "How MNC's subsidiaries may improve their innovative performance? The role of external sources and knowledge management capabilities", *Journal of Knowledge Management*, vol. 21, n. 3.
- GASSMANN O., ENKEL E. (2004), "Towards a theory of open innovation: three core process archetypes", *R&D Management Conference*, Lisbon.
- HOCKERTS K. (2006), "Entrepreneurial opportunity in social purpose business ventures", in *Social entrepreneurship* (pp. 142-154), Palgrave Macmillan UK.
- HOLMES S., SMART P. (2009), "Exploring open innovation practice in firm-nonprofit engagements: a corporate social responsibility perspective", *R&D Management*, vol. 39, n. 4, pp. 394-409.
- HOWALDT J., SCHWARZ M. (2010), SI: "Concepts, research fields and international trends", *Report of ESF, EU*, and Aachen University, Dortmund.
- HUIZINGH E.K. (2011), "Open innovation: State of the art and future perspectives", *Technovation*, vol. 31, n. 1, pp. 2-9.
- HULL C.E., LIO B.H. (2006), "Innovation in non-profit and for-profit organizations: Visionary, strategic, and financial considerations", *Journal of Change Management*, vol. 6, n. 1, pp. 53-65.
- HUSTED B.W., ALLEN D.B., KOCK N. (2015), "Value creation through social strategy", *Business and Society*, vol. 54, n. 2, pp. 147-186.
- JANKEL N. (2011), *Radical (re) invention*, London: white paper, available online.
- KIM W.C., MAUBORGNE R. (2005), *Blue Ocean Strategy: How to Create Uncontested Market Space and Make Competition Irrelevant*, Harvard Business School Press, Boston.
- KUHN T.S. (1962), *The Structure of Scientific Revolutions*, University of Chicago Press., Chicago.
- LETTICE F., PAREKH M. (2010), "The social innovation process: Themes, challenges and implications for practice", *International Journal of Technology Management*, vol. 51, n. 1, pp. 139-158.
- MAIR J., MARTÌ I. (2006), "Social entrepreneurship research: A source of explanation, prediction, and delight", *Journal of World Business*, vol. 41, n. 1, pp. 36-44.
- MARTINS T.C.M., DE SOUZA BERMEJO P.H. (2015), "Open Social Innovation", *Handbook of Research on Democratic Strategies and Citizen-Centered E-Government Services*, pp. 144-163.
- MOORE M.L., WESTLEY F. (2011), "Surmountable chasms: networks and social innovation for resilient systems", *Ecology and Society*, vol. 16, n. 1, pp. 5.
- MULGAN G. (2006), "The process of social innovation", *Innovations*, vol. 1, n. 2, pp. 145-162.
- MULGAN G. (2013), *Social innovation*, Egea spa, Milan.
- MULGAN G., TUCKER S., ALI R. SANDERS B. (2007), "Social innovation: what it is, why it matters and how it can be accelerated", *Skoll Centre for Social Entrepreneurship*, Saïd Business School, University of Oxford.



- MÜLLER-SEITZ G., SYDOW J., (2012), "Open innovation at the interorganizational network level - Collaborative Practices in a Semiconductor Industry Consortium", in *Open Innovation: New Insights and Evidence Conference*, Imperial College London, June 2012, pp. 25.
- MURRAY R., CAULIER-GRICE J., MULGAN G. (2010), *The Open Book of Social Innovation*, The Young Foundation, London.
- NEUMEIER S. (2012), "Why do Social Innovations in Rural Development Matter and Should They be Considered More Seriously in Rural Development Research? - Proposal for a Stronger Focus on Social Innovations in Rural Development Research", *Sociologia Ruralis*, vol. 52, n. 1, pp. 48-69.
- NICHOLLS A. (2006), *Social entrepreneurship: New models of sustainable social change*, Oxford University Press.
- NICHOLLS A., MURDOCK A. (2011), *Social innovation: Blurring boundaries to reconfigure markets*, Palgrave Macmillan, London.
- OECD (2010), *SMEs, Entrepreneurship and Innovation*, [http://www.oecd.org/document/16/0,3746,en\\_2649\\_33956792\\_44938128\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/16/0,3746,en_2649_33956792_44938128_1_1_1_1,00.html).
- OECD (2011), "Fostering Innovation to Address Social Challenges", workshop proceedings.
- OGAWA S., PILLER F.T. (2006), "Reducing the risks of new product development", *MIT Sloan Management Review*, vol. 47, n. 2, pp. 65.
- PHILLS J.A., DEIGLMEIER K., MILLER D.T. (2008), "Rediscovering social innovation", *Stanford Social Innovation Review*, vol. 6, n. 4, pp. 34-43.
- POL E., VILLE S. (2009), "Social innovation: Buzz word or enduring term?", *The Journal of Socio-Economics*, vol. 38, n. 6, pp. 878-885.
- PORTER M.E., KRAMER M.R. (2011), "Creating shared value", *Harvard Business Review*, vol. 89, n. 1-2, pp. 62-77.
- PRAHALAD C.K. (2012), "Bottom of the Pyramid as a Source of Breakthrough Innovations", *Journal of Product Innovation Management*, vol. 29, n. 1, pp. 6-12.
- PRAHALAD C.K., HAMMOND A. (2002), "Serving the world's poor, profitably", *Harvard Business Review*, vol. 80, n. 9, pp. 48-59.
- RANGA M., ETZKOWITZ H. (2013), "Triple Helix systems: an analytical framework for innovation policy and practice in the Knowledge Society", *Industry and Higher Education*, vol. 27, n. 4, pp. 237-262.
- SANDULLI F.D., FERRARIS A., BRESCIANI S. (2016), "How to select the right public partner in smart city projects", *R&D Management*.
- SANTORO G., FERRARIS A., GIACOSA E., GIOVANDO G. (2016), "How SMEs engage in open innovation: A survey", *Journal of the Knowledge Economy*, 1-14.
- SANTORO G., VRONTIS D., THRASSOU A., DEZI L. (2017), "The Internet of Things: Building a knowledge management system for open innovation and knowledge management capacity", *Technological Forecasting and Social Change*.
- SHIGETO S. (2011), "A method that goes beyond "good practices": a case of ristex", in OECD (Ed.), *Fostering innovation to address social challenges* (pp. 45-52), OECD, Paris, France.
- STREECK W., SCHMITTER P. (1995), "Community, market, state - and associations?", in Streeck W., Schmitter P. (Eds.), *Private interest government - Beyond market and state*, CA: Sage, Beverly Hills.

Gabriele Santoro  
Alberto Ferraris  
Demetris Vrontis  
Open social innovation:  
towards a refined definition  
looking to actors and  
processes

- THE YOUNG FOUNDATION (2012), *Social Innovation Overview: A deliverable of the project: "The theoretical, empirical and policy foundations for building social innovation in Europe"* (TEPSIE), European Commission - 7<sup>th</sup> Framework Programme, European Commission, DG Research, Brussels.
- THOMPSON J.L. (2008), "Social enterprise and social entrepreneurship: where have we reached? A summary of issues and discussion points", *Social Enterprise Journal*, vol. 4, n. 2, pp. 149-161.
- VAN DER WAL S. (2011), "Certified Unilever Tea: Small Cup, Big Difference?", *SOMO - Centre for Research on Multinational Corporations*.
- VRONTIS D., VIASSONE M., THRASSOU A. (2015), "The role and potential of social networks sites in tertiary education", *Sinergie Italian Journal of Management*, vol. 33, n. 97, pp. 55-81.
- VRONTIS D., THRASSOU A., SANTORO G., PAPA A. (2016), "Ambidexterity, external knowledge and performance in knowledge-intensive firms", *The Journal of Technology Transfer*, vol. 42, n. 2, pp. 374.
- WAASDORP P., RUIJTER K. (2011), "Countries' approaches & innovation policies to address social challenges: Opportunities and barriers", in *OECD (Ed.), Fostering innovation to address social challenges* (pp. 69-74), OECD, Paris, France.
- WESTLEY F., ANTADZE N. (2010), "Making a difference: strategies for scaling social innovation for greater impact", *The Innovation Journal: The Public Sector Innovation Journal*, vol. 15, n. 2, pp. 1-19.
- YUNUS M. (2007), "Creating a world without poverty: Social business and the future of capitalism", *Global Urban Development Magazine*, vol. 4, n. 2, pp. 16-41.

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