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Organising For Social Innovation: Open Innovation Practices in Social Enterprises

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ORGANISING FOR SOCIAL INNOVATION: OPEN INNOVATION PRACTICES IN SOCIAL ENTERPRISES

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ABSTRACT

This paper aims to provide new insights into possible managerial choices and practices for successful implementation of social innovation, building on mechanisms identified in open innovation literature.

While validity of openness in the management of innovations addressing social challenges have been proved in few works, effective modes for meeting social needs by leveraging on external sources of knowledge still need an in-depth investigation and empirical evidence. Aiming at a comprehensive understanding of how companies adopt open innovation practices for social aims and the context characteristics affecting related choices, the research design is qualitative and compares two case studies from for-profit and not-for-profit sectors. Results show that practices such as external networking and joint co-creation can be applied for different social challenges where engaging stakeholders (especially end users) and scout and transform opportunities for innovation. A for-profit company tends to use also dedicated practices such as specialised services from intermediaries for recognising opportunities, while companies from not-for-profit sector rely on internal sources and established collaborations. The analysis of practical modes for effective management of social innovation provides a valuable perspective for innovation managers and researchers focusing on managerial issues requiring openness to achieve systemic social change.

INTRODUCTION

Social Innovation (SI) refers to the development of innovative ideas, products, services or models to address social needs and create new social relationships or collaborations (Altuna et al., 2015; European Commission, 2013; Murray et al., 2010) among actors that collectively engage in purposeful actions (Cajaiba-Santana, 2014) to achieve positive, systemic social change (Dawson and Daniel, 2010; Lettice and Parekh, 2010; Murray et al., 2010). Given the wide range of social problems worldwide and the increasing interest of various organisations to develop and implement solutions to these problems, SI has been recognised as one of the main issues gaining momentum (Altuna et al., 2015; Cajaiba-Santana, 2014; Choi and Majumdar, 2015) and deserving further in-depth investigation (Barczak, 2012; Păunescu, 2014).

Another main topic in innovation field is Open Innovation (OI), which assumes that organisations use both inflows and outflows of knowledge to create and capture new value in obtaining, integrating, commercialising or interacting for internal and external market innovations (Chesbrough, 2006; West and Bogers, 2014). OI has proved to be a valuable perspective in different organisations and contexts (Huizingh, 2011), especially the ones where the design and innovation approaches have yet to be determined and the customer needs are highly varied or not yet fully understood (Boudreau and Lakhani, 2009). This is true also for SI context, where the approaches are complex and contingent on context, culture and politics (Dawson and Daniel, 2010) social problems are often characterised by missing information and multiple interconnected causes and effects (Lettice and Parekh, 2010) and originate from social needs that are unmet or inadequately met (European Commission, 2013).

Recently scholars (e.g. Chalmers, 2013; Chesbrough and Di Minin, 2014; Martins and de Souza Bermejo, 2015; Shin, 2016) studied the application of OI strategies to social challenges in the so-called Open Social Innovation, revealing the importance of partnerships in implementing social missions. In this kind of innovation, actions taken by specific individuals or organisations are extended to communities participating and exchanging knowledge to generate useful solutions to social problems. When opening up of the innovation process to external stakeholders, organisations are proved to develop a superior ability in SI activities (Altuna et al., 2015) and in mitigating some of the risk associated (Chalmers, 2013).

Nevertheless, managerial choices for meeting social needs by leveraging on external sources of knowledge in an effective and efficient way still need an in-depth investigation and empirical evidence (Martins and de Souza Bermejo, 2015). The complexity of SI is indeed due to the wide network of diverse stakeholders and interconnections among them (Lettice and Parekh, 2010). Also from OI literature point of view, further research is required to determine the applicability and effectiveness of OI model in different contexts (Huizingh, 2011) and the ways to integrate it (West and Bogers, 2014) – e.g. when innovation is driven by the need to address social issues (Holmes and Smart, 2009).

This paper aims to take a further step in identifying good and best practices for successful development and implementation of SI (Barczak, 2012) and then defining "what is the best way to capture value" (Huizingh, 2011) in opening up the SI process to external sources. It focuses on the managerial choices that are required for the effective and long-term impact of SI implementation through "openness" and the context characteristics (i.e. for-profit and non-for-profit sectors) that influence these choices.

The main research questions are formulated as follows:

RQ1. How can OI practices be applied for SI?

RQ2. What are the main differences between for-profit and not-for-profit enterprises implementing OI practices to achieve social aims?

THEORETICAL BACKGROUND

Managing Social Innovation and openness

The social dimension of innovation is gaining momentum both from research and practice points of view (Cajaiba-Santana, 2014; Păunescu, 2014). The growing interest on this topic has also led to the publication of literature reviews and conceptual frameworks, addressing main streams of discussion on:

- definitions of SI (Choi and Majumdar, 2015; Dawson and Daniel, 2010; Păunescu, 2014);
- intersection between SI and other innovation domains (Dawson and Daniel, 2010; Fulgencio and Le Fever, 2016; Păunescu, 2014);
- types of SI (Cajaiba-Santana, 2014; Choi and Majumdar, 2015);
- diverse actors involved in SI (Dawson and Daniel, 2010; Fulgencio and Le Fever, 2016; Mulgan, 2006; Murray et al., 2010);
- process of SI (Cajaiba-Santana, 2014; Mulgan, 2006; Murray et al., 2010).

Beyond theoretical issues, further research on adequate mechanisms for effective management of SI to promote, develop and then scale it up - e.g. involving choices of managerial practices – is required (Altuna et al., 2015; Dawson and Daniel, 2010; Mulgan, 2006). Among possible mechanisms, OI has been demonstrated as particularly relevant in sustaining innovative efforts and scale-up activities (Chesbrough and Di Minin, 2014). OI paradigm requires organisations to identify and involve various sources of knowledge for innovating products, processes and services as "useful knowledge is generally believed to be widely distributed, and of generally high quality" (Chesbrough, 2006:9). Building on the concept of absorptive capacity of knowledge (Cohen and Levinthal, 1990), social enterprises can leverage the multi-organisation domain of the diverse stakeholders (Holmes and Smart, 2009) to interpret a social problem, assimilate external ideas and finally exploit acquired knowledge into new offerings in terms of social impact. Altuna et al. (2015) identify openness of the SI process through systematic engagement with external stakeholders as one of the managerial antecedents that allow to improve a firm's ability to create and develop SI. Embracing the open paradigm both within the internal organisational structure and in the socially innovative activities with stakeholders enables organisations "to fully realise the potential of socially innovative behaviour, and to effectively leverage the value created" (Chalmers, 2013:18). Moreover, Unceta et al. (2017) argue that SI always requires OI at governance level as SI projects always involve some level of participation of target population and connection mechanisms with other types organisations to apply creative ideas and knowledge aiming to obtain new products, processes or services with social purposes.

Basing on an analysis of SI literature, Table 1 outlines the main managerial issues that require openness and then use of external sources of knowledge for effective SI.

| MANAGERIAL ISSUES IN SI | REFERENCES |
|--|---|
| Ability to recognise, select and transform opportunities | Achieving durability and scale requires emergence of opportunity (Westley and Antadze, 2010) Innovative ideas with high social potential should be taken into account even if they do not ensure high marginality; need of constant collaboration to increase to ability to scout and identify unsolved social needs (Altuna et al., 2015) New strategies, concepts or tools are required to clarify and prioritise challenges when they are ambiguous (Dawson and Daniel, 2010) Need to use techniques to improve the ability to scan for threats and opportunities, detect weak signals and have the right awareness of the issues (Lettice and Parekh, 2010) |
| Collaboration / co- | SI can be conceptualised as a collective creation of new legitimated social |
| creation | practices (Cajaiba-Santana, 2014) |

| | Different significance of the role of SI beneficiaries as co-creators of value basing on formalisation of SI process (Choi and Majumdar, 2015) Need to put "emphasis on collaboration and on repeated interactions, care and maintenance rather than one-off consumption" and making "borders more fluid"; emergence of new forms of collaboration and co-operation (Murray et al., 2010) |
|--|--|
| Complexity in finding funding sources | Lack of accessible channels for finance is one the main gaps in the SI infrastructure (Lettice and Parekh, 2010) Lack of knowledge on common patterns makes harder to evaluate current provision of funding, advice and support (Mulgan, 2006) |
| Role of institutions (e.g. policy makers, universities and intermediary organisations) | Need to bring attention to the role of social structures and institutions in this process (Cajaiba-Santana, 2014) Request for designed spaces in public services and incubators that focus on experimentation of social ideas (Mulgan, 2006) Absence of institutions devoted to SI that allow mobilising and connecting resources (Murray et al., 2010) Level of involvement of governmental and nongovernmental institutions in creating incentives for companies implementing SI affects the social benefit (Păunescu, 2014) |
| Stakeholders engagement | "Partners are chosen on the basis of the specific competencies they can contribute to the project"; need of strategic integration to solve critical situations and joint definition of strategies (Altuna et al., 2015) Need to encourage the creation of social capital that facilitates knowledge search and sharing to contribute to successful value creation (Păunescu, 2014) Need to meet various stakeholder requirements (Dawson and Daniel, 2010) Challenge of stakeholder management while keeping the alignment to mission and values of organisation promoting SI (Murray et al., 2010) Lack of access to the right kind of support can be overcome by forming and joining networks with peers and related others (Lettice and Parekh, 2010) |

Table 1 – Main issues requiring openness for effective SI management

Open and Social Innovation practices

The integration of the two concepts of OI and SI originates both promising research opportunities and practical implications to help organisations in improving their innovation capabilities (Barczak, 2012). Building OI mechanisms in SI process offers a potential perspective to align strategies of involved organisations towards economically- and socially-sustainable models (Chesbrough and Di Minin, 2014) and overcome obstacles and risks associated with SI introduction (Chalmers, 2013). Moreover, Martins and de Souza Bermejo (2015) show that the two concepts of OI and SI converge in the characteristics of 1) involving various actors motivated by the same issues and 2) making them interacting and actively participating in collaborative partnerships and networks to pursue innovative ideas to solve problems.

Successful development and integration of OI and then collaboration in SI process requires identifying possible ways to do it – i.e. good and best practices. Implications of the application of the OI model to the SI process can be identified at society (in terms of involvement of citizens, governments and public institutions), enterprise and project level. Among them, the use of *crowdsourcing* enables social enterprises to access a wider base of knowledge to solve an innovation problem and to leverage other emergent opportunities. The work by Martins and de Souza Bermejo (2015) shows how the use of crowdsourcing

platforms by public institutions and governments to launch challenges aiming to solve social problems allowed to create better solutions and contributed to the replication of innovations in other social contexts by emerging communities. Moreover, the use of open calls is a key opportunity for making new types of connections and raising funds from potential stakeholders (Murray et al., 2010).

The *joint co-creation* in the SI process represents a possible form of collaboration and co-operation (Murray et al., 2010) with external innovation sources that can be involved in distinct phases and at a different level. For example, Chesbrough and Di Minin (2014) show that relying on co-creation with suppliers and partners enable to scale-up operations. Shin (2016) highlights the need for collaborative entrepreneurship at the local level among the local community, the firms and the public sector to achieve better market and welfare provision. Holmes and Smart (2009) study that *dyadic* partnerships between corporate and non-profit organisations to address social issues broaden a firm's search activities.

Activities addressed to acquire and maintain connections with other organisations, individuals or communities are demonstrated valid in improving the firm's ability to scout, analyse and explore the external environment for successful SI (Altuna et al., 2015). Moreover, performing systematic *networking* in the SI process drives to better meeting social needs since it creates the conditions for constant engagement with external stakeholders (Altuna et al., 2015) and transferring and broadening knowledge in larger networks (Chesbrough and Di Minin, 2014) towards emergence and recognition of new social opportunities.

Unsolved social needs are also identified by *scouting information*, especially from third sector and non-profit organisations that have a depth knowledge of the local environment and achieving social change as primary mission (Altuna et al., 2015; Chesbrough and Di Minin, 2014). Building on trust and alignment to mission and values of the SI project, these organisations can act also as *OI intermediaries* to consult and share interests with citizens, local cooperatives and institutions operating in related challenges (Chesbrough and Di Minin, 2014; Murray et al., 2010). The OI intermediation practice includes also the adoption of platforms where participants can gather to publish petitions, discuss issues, exchange and spread ideas and challenges also towards new potential projects (Martins and de Souza Bermejo, 2015; Murray et al., 2010).

Beyond drawing upon intermediaries, user innovation by engaging them in product/service design or in ethnographic research is a valuable practice to better identify their own needs and come up with new ideas about how to meet them (Murray et al., 2010).

Finally, *venturing* can represent a possible strategy to scaling out and up SI to reach resilience and greater impact, building on market dynamics and social, political and resources mobilisation skills (Westley and Antadze, 2010)

Building on these contributions, Table 2 outlines the relationship between practices from OI literature and the main themes from SI literature identified the previous section. OI practices were collected from the works by Chesbrough and Brunswicker (2014), van de Vrande et al. (2009) and Mina et al. (2014). Practices specifically relating to particular technological contexts and intellectual property issues (e.g. contracting with R&D service providers and in- and out-licensing) were excluded as not relevant for addressing social needs (Chalmers, 2013). Moreover, practices such as mass customisation were excluded as SI needs to be tailored to a particular social group or local community (European Commission, 2013; Unceta et al., 2017).

| | | | OPENNESS II | N SI MAN | AGEMENT | |
|--|---|------------------------------------|-----------------------------|-----------------|----------------------|----------------------------|
| OI PRACTICES | DEFINITION | Ability to recognise opportunities | Collaboration / co-creation | Funding sources | Role of institutions | Stakeholders engagement |
| Crowdsourcing | Outsourcing a task for solving a problem via an open call to an undefined crowd, with the aim of obtaining new o reviewed ideas | X | | X | | X |
| Donations to non-profits | Donations to commons or non-profits communities, in order to support external R&D | | | X | | X |
| Dyadic / joint co-creation / co- development | Involvement / Integration of one or multiple external innovation sources in the innovation process | X | X | | | X |
| External networking | Formal and informal activities used to acquire and maintain connections with external sources (individuals or organisations) of new knowledge | X | X | X | X | X |
| Innovation awards and competitions | Invitation to participate in an OI context where submitting innovative ideas | X | | X | | |
| R&D consortia / collaboration / alliances | Cooperation with other public or private organisations with the aim of pursuing a common innovative objective (can be fully or partly funded by governmental organisations) | X | X | X | X | X |
| Scouting information from external | Searching for information (e.g. new trends or technologies) in internet, technical magazines or from other organisations | X | | | | |
| Specialised services from OI intermediaries | Intermediary organisations or platforms specialised in OI act as intermediaries between a "seeker" – an organisation with an OI problem – and "solvers" | X | | | | X |
| User innovation | Co-development or redefinition of new products and services with the end user | X | X | | | X |
| Venturing (Spin-offs and Spin-outs) | Starting up new ventures founded by employees outside organisational boundaries, drawing on internal knowledge and allowing the exploration of new businesses | X | | X | | |

 $Table\ 2-OI\ practices\ addressing\ main\ SI\ managerial\ issues$

RESEARCH METHODOLOGY

Basing on the relevance and the need for further research on ways for SI successful implementation, this work wants to investigate the practices implemented to achieve social aims with a focus on collaborative innovation processes. With the aim of conducting a holistic and contextualised investigation, the research design is a multiple case study (Eisenhardt, 1989; Yin, 2009).

We selected SI enterprises distinguished with awards/prizes for social challenges, present in social platforms, e.g. One Billion Minds, and/or social programmes in the Enterprise Europe Network (European Commission). Enterprises were chosen according to the criteria of being innovative, i.e. having developed a new or improved product, process or service to solve a social problem.

Aiming to deepen the analysis on how the context characteristics of social challenges relates to the application of particular OI practices (Huizingh, 2011), we selected two companies differing in terms of business (for- or non-profit), size (i.e. number of employees), industry, global or local reach and type of social challenge. Table 3 shows evidence of the variation of criteria among the cases.

| | MAIN BUSINESS | SIZE (employees) | INDUSTRY | SCOPE | SOCIAL CHALLENGE |
|--------|--------------------|---------------------|-----------|---------------|---|
| Case A | for-profit | Large (≥ 250) | High-tech | Local | Eco-sustainability |
| Case B | not-for- profit | Medium (< 250) | Fashion | International | Employment reintegration of disadvantage people |

Table 3 – Context characteristics of the case studies

In the phase of data collection, we used both primary sources (semi-structured interviews) and secondary sources (publicly available and private data from press reviews, websites and official company documents such as website and archival documents provided by informants). The interviews were conducted with the company founder for case B, the CEO for case A and at least one other staff member directly involved in the SI process implementation, for a total of 7 interviews and 8,5 hours of material collected. To assure coherence and consistency, a standard interview protocol was developed basing on the literature review and prior to the data gathering to guide and check it. The interview included both semi-structured and open-ended questions and organised in the following sections:

- General description: vision and values of the company towards SI, opportunities and motivations, main funding sources, target users
- Main stakeholders, role of institutions and ways to involve them
- Focus on OI practices from literature and their effective adoption

In the following section, the two cases are presented with evidence of their main strategies and activities for innovation described in terms of openness. The cross-case analysis allows then identifying and comparing motivations, roles of stakeholders, OI practices, methods for engaging and then retaining both external and internal sources of knowledge for effective SI management and implementation.

RESULTS

This section explores in detail how the two case studies actually implemented SI process. After a brief presentation of the contextual features that characterise their background and operational activities, the analysis highlights main motivations and values driving strategy towards sustainability and social aims, ways of leveraging and engaging sources of knowledge, role of stakeholders and institutions. All the elements are discussed according to OI practices identified from literature analysis.

Case A

The company was officially established in 2006, but its history is longer. The first company of the group was founded in 1968 and in the following years a generation of new business units were established. Today the Group has five main business units: Energy, Environment, Home, Humancare and Mobility, which generate revenues of 65 million euros, employing more than 350 people, operating in more than 40 countries.

Company A tests solutions to improve the quality of products and processes for the manufacturing and service industry. Its mission is: "We integrate ideas, people, and technologies to transform data into values". Data are the core activity of the Group that studies systems to manage, create, measure and transfer data.

Company A addresses social challenges with an adhesion to social codes, adopts processes of social and environmental certification, regularly publishes social and environmental reports, has obtained recognitions/awards for its robust activities of social responsibility both on the national and international level. These aspects refer to the following declinations: presence of a framework of ethically-connoted values, shared by the entrepreneur and his family and diffuse throughout the organisation; realisation and promotion of CSR actions and strategies as well as sustainability; development of systems of accountability. These aspects have been identified in specific practices described as follows:

- Crowdsourcing: The Group pays attention to all categories of stakeholders, such as clients, providers, general partners, public authorities, local communities and future generations. It has an outstanding capacity for communicating and for maintaining relationships, as well as the centrality of the individual person, themes at the base of an organisational network model and of a peculiar model of stakeholder management that characterises the firm, which is concretised in the creation of sustainability-oriented networks and partnerships. Examples are the two platforms Nexus (a contact network and interconnection between entrepreneurs of the Marche region. The goal is the development of the area in order to maximise potential synergies) and Crossworlds (a network of large international groups to stimulate technology transfer between different sectors).
- Donations to non-profits: Company A involves and collaborates with the institutions of the territory. The strong sense of community membership and the love for its own regional "land", which it perceives as a stakeholder, as well as a true desire to "attract" and to "permeate" the territory, promoting sustainability, beginning with the general environment at the local level. In this context, company's Lov Land of Values project is implicated. Another example is the Leaf community, the first eco-sustainable community.

- External networking: Regarding the key partners, company A is connected to networks of top firms and local players. Silverzone is the network of experiences and knowledge, people "beautiful" sixty and retired met along the way, "as collaborators, as customers, as suppliers, as partners and now feel the taste of transferring their experience to young people, with renewed enthusiasm, with passion and fun".
- R&D consortia / collaboration / alliances: Regarding R&D, Company A plays a "hub role" within the network of schools and universities, the network of research centres, the network of top firms and local institutions. Examples are u_Net (networks with universities and research centres for scientific research) and the Business marketing lab.
- Specialised services from OI intermediaries: One company of the Group is an internal services company that does not provide for the provision of services outside. Its mission is "to think and plan" business development of the group in the medium to long term, projecting and forecasting social challenges in a temporal dimension of 5-10 years ahead. Company A follows the principle "new environment, people known", that seems to be paying off. Its intention is that the commitment in a different area of business or, as in this case, the grouping and the strengthening of support activities in the operational ones, require a new context, a physical separation with respect to the places where carry on the business already underway or other activities.
- User innovation: Networks constitute the key strategy of managing customer relationship: BlueZone, U_Net, Nexusm Crossworld, etc. are all networks. These represent a new way of dialoguing, caring, revealing and integrating. As example, Silverzone is a network of experiences and knowledge of "beautiful minded", over-65 retired people, such as company's collaborators, clients, suppliers, partners who now feel like transferring their experience to young people, with a renovated enthusiasm and passion, enjoying them. Another example is Bluzone, open network to schools and local universities for their hospitality and the education of students.
- Venturing (Spin-offs and Spin-outs): Company A supports the spin-offs creation. There is a network which is the "spin-off" network: ex-collaborators, leaving the Group and becoming entrepreneurs (82 companies in 43 years employing about 300 people on the territory), who will continue to collaborate with the company enriching the territory of work and knowledge.

Case B

The second case is a social cooperative born in 2012 that has as main challenge providing work for disadvantaged people. It produces unique and limited edition pieces of clothing from discarded materials, destined to be wasted and destroyed. This material is provided free of charge by some fashion companies. The idea behind the project is simple: take the material thrown away by the big textile producers of Northern Italy, turn them into collections and sell them.

The company is sustainable in three ways: socially because it helps people with difficulties; environmentally because it is able to recover old or discarded clothes that would otherwise be destined for disposal; and economically because it is a success business. Since its founding in 2012, it has reached a turnover of half a million euro. "We have stores in Italy

and we were able to create partnerships with major companies that commissioned us ethical product lines even in large quantities. In this way, we can ensure continuity of work for female workers."

As regards OI and SI, we can report the following practices and advantages in terms of addressing social change:

- Donations to non-profits: The first steps of company B were moved through a small loan from a local foundation, which aims to support economic and social development through study, training and work, and the contribution of Calzedonia, an international fashion company that has always been very sensitive to questions of social responsibility and business ethics. This one was the first giving the possibility to access to its remaining tissues/clothes.
- Dyadic/joint co-creation/co-development: Company B involves other big fashion companies to jointly co-develop the brand. It practises co-branding with major brands to get to the distribution network. It offers itself to fashion companies of the Made in Italy already established in the market as their ethical area being able in this way to leverage their distribution network (for now the project already has several collaborations of this type with companies such as Calzedonia, Den Store, Altromercato and Carrera Jeans). "Our product is a limited edition and has had a positive result on the market. Separately, we've set up partnerships with known brands in Italy, who have joined our project" (from interview to founder). The intention is to develop these partnerships and create ready-to-wear products for the Italian and wider European markets.
- External networking: Company B involves creative and designers in the SI process. The creative people draw clothing and accessories that are suitable for available fabrics. Human resources are graduated in fashion and work full time within the company, but they are also volunteers and professionals who, when necessary, give their contribution to the project.
 - Company B involves also the so-called "Low Income Community" as an "inclusive-business" concept. It is a business model aimed at creating social and economic value providing for the development of business activities within the Low Income Community, with a view to incorporate them into their value chain. With the use of the term "inclusive" is intended to indicate the process by which the disadvantaged classes are actively involved as producers and/or consumers. Another important element is represented by the agreements that have been made with social cooperatives based in Verona, the city where the manufacturing facility is based. In the search of workers as people with social difficulties, the company faced difficulties because it was necessary that they were also able to sew and work in tailoring. For this reason, company B initially collaborated with other cooperatives and associations for the realisation of the clothes; today, however, it produces everything in-house, and all people are regularly employed and paid by the same company. This gap has been bridged through a strong collaboration with other social organisations of the territory (signalling people that meet both the necessary features) and the prison of Verona (where an employee goes every week to follow the training held that soon will be released).
- Innovation awards and competitions: Company B won in 2014, the European prize for social innovation. "The motivation? We make social innovation focusing on the

- interaction between for-profit and non-profit, which is a key requirement for both staying on the market and keeping growing."
- Scouting information from external sources: The company acts a broker of clothes/tissues. An employee deals exclusively with this activity, going in search of local companies that might have tissues or other materials that could no longer be used and, thanks to company activity, can continue to perform their function and give life to high fashion. The "tissue Hunter" involves companies by sharing information on the project, explaining its mission and philosophy. In most cases, companies embrace the cause of the project and donate their tissues inventories no longer usable. It should be emphasised that the donation, despite happen to a sensitivity to the causes of the company, also generates a benefit in fiscal terms. Large Made in Italy textile and fashion enterprises produce annually about 600 km of fabric scraps, with a disposal cost of around 0.22 € / kg: in its small, company B alone will be able to recover 10% of this material each year.
- User innovation: Company B tries to involve customers with specific stores. For example, temporary stores are used for customer engagement. The clothing and accessories made in this way have been put on sale in the first temporary stores opened in 2014 in Forte dei Marmi and Verona. Their products are now sold in the firm's two shops under its name and in several big stores in Italy.

Cross-case analysis results

The two cases revealed adopting inflows and outflows of knowledge with both internal and external sources to pursue their innovative ideas for solving social problems. The findings on the different ways adopted by the two companies to effectively implement OI practices are compared and shown in the table below. The implications of choices of practices in addressing specific SI managerial issues identified in the previous literature review are then discussed in the following section.

| OI PRACTICES | CASE A | CASE B |
|---|--|--|
| Crowdsourcing | Stakeholder management (Nexus and Crossworlds) (SI: Ability to recognise opportunities, Stakeholders engagement) | |
| Donations to non-profits | Lov - Land of Values project (SI: Stakeholders engagement) Leaf community (SI: Stakeholders engagement) | Receives donations (SI: Funding sources) |
| Dyadic / joint co- creation / co- development | | • Co-branding (SI: Ability to recognise opportunities, Collaboration / co-creation) |
| External networking | Silverzone (SI: Ability to recognise opportunities, Stakeholders engagement) | Involvement of creative people and designers (SI: Collaboration / cocreation) Involvement of "Low Income Community" (SI: Collaboration / co-creation, Stakeholders engagement) |
| Innovation awards and competitions | | Social innovation prize (SI: Funding sources) |

| R&D consortia / collaboration / alliances | Networks with universities and research centres (SI: Ability to recognise opportunities, Role of institutions) | |
|---|--|---|
| Scouting information from external | | "Clothes hunting" (SI: Ability to recognise opportunities) |
| Specialised services from OI intermediaries | Company of the Group for business development (SI: Ability to recognise opportunities) | |
| User innovation | Networks with customers (BlueZone, U_Net, Nexusm Crossworld) (SI: Collaboration / co-creation, Stakeholders engagement) | Temporary stores for customers' involvement (SI: Stakeholders engagement) |
| Venturing (Spin-offs and Spin-outs) | Spin-off network (SI: Collaboration / co-creation) | |

Table 4 – Synthesis of case studies results from OI practices and SI managerial issues perspectives

DISCUSSION AND CONCLUSIONS

The need to meet a wide range of social problems worldwide and the increasing interest of various organisations to develop and implement solutions to these problems has driven a growing investigation on effective and efficient implementation of innovation processes with social aims. Among possible mechanisms for managing SI, openness and involvement of different sources of knowledge in the innovation process – towards the so-called OI – has been demonstrated as particularly relevant to pursuit innovative ideas addressing systemic social change.

The potential implications of leveraging on stakeholders and other innovation sources have been explored also by the two companies analysed in the case studies. The cross-case analysis allowed to compare and highlight different practices adopted to meet main managerial issues while opening up SI process.

Case A developed two platforms created new types of connections among stakeholders of SI (Murray et al., 2010), i.e. local entrepreneurs for Nexus and organisations of different sectors in Crossworlds. The two networks allowing *crowdsourcing* improved the ability to scan for threats and opportunities and detect weak signals (Lettice and Parekh, 2010) through the launch of open challenges enabling transfer of new ideas and technologies in the search for new solutions for environmental and social sustainability.

The two cases show a different use of *donations to non-profits*. In particular, company A invested in dedicated projects and initiatives to properly engage the local community in facilitating knowledge search and sharing to contribute to successful value creation (Păunescu, 2014) towards systematic promotion of sustainability in the whole territory. Company B leveraged at the beginning on donations provided by other organisations sharing common patterns (Mulgan, 2006) on business ethics. The success in finding accessible channels for finance (Lettice and Parekh, 2010) was favoured by the search of a wider impact from donators side in supporting economic and social development. This was evident also in the participation and then winning of an important *innovation award*, i.e. the social innovation prize. Case B was then able to leverage these first initiatives as an

opportunity to scale-up operations (Chesbrough and Di Minin, 2014) in the *joint co-creation* with major brands to get to the distribution network.

Both cases demonstrated being successful in acquiring and maintaining connections with other organisations, individuals or communities by performing systematic networking in the SI process. Silverzone network of company A is aimed to create the conditions for constant engagement with past collaborators, customers, suppliers and partners willing to share their experience and expertise and then transferring it in larger networks (Chesbrough and Di Minin, 2014) towards emergence and recognition of new sustainability opportunities. Another important network is the one created with spin-offs of company's previous employees through venturing, allowing co-creation with the company towards enriching the territory of work and knowledge. Case B leveraged on expertise of creative people and designers and collaborated through agreements with social organisations of the territory to overcome initial barriers (Chalmers, 2013) of retaining human resources and specialised knowledge- Case A was then able to consolidate and build new networks also through R&D consortia, involving especially universities, research centres and other local institutions that were then able to mobilise and connect resources (Murray et al., 2010) in the pursuit of a common social challenge. The ability to recognise and then transform opportunities for successful implementation and spread of innovation in case A can be recognised also in the use of a company of the same Group to perform as an OI intermediary in scouting and forecasting new social challenges to be faced for business development. In the case B, the choice is leveraging on internal employees rather other intermediaries for scouting information from external sources that have a depth knowledge of the sector and provide also materials to be manufactured by the company.

Finally, both cases successfully addressed the specific competencies and requirements of customers by strategically integrating their contributions to SI process (Altuna et al., 2015) in the *user innovation*. In particular, case A created different kinds of networks of customers with different requirements and case B created dedicated stores while keeping the alignment to mission and values of their organisation (Murray et al., 2010)

Basing on comparison among cases, we can argue that organisations innovating for social challenges are accustomed to open up innovation process to a wider knowledge base (i.e. crowd or a network of other companies) rather than single organisations especially in the search and recognition of opportunities, such as Nexus in Case A. SI enterprises are implementing practices such as crowdsourcing, in order to engage stakeholders and be able to recognise faster opportunities. Another important point is establishing networks (especially with other companies of the supply chain and customers), and adhering to networks where they can co-develop with stakeholders and society-representative users. Direct stakeholders' engagement and provision of funding, e.g. through joint co-development of SI and provision of R&D services, requires instead dedicated initiatives, such as the Leaf community in case A and the use of a "tissue hunter" in case B. These activities are directed to inform and then share with stakeholders, especially end users, the company's values and potential impact towards social challenges.

Other OI practices are connected to donations to non-profits projects, also inside the for-profit case. These practices have the aim to fund sources in case B and to engage stakeholders in case A.

As regards differences between for-profit and not-for-profit enterprises implementing OI practices to achieve social aims, the not-for-profit case needs to involve more sources of

funding, while both the cases heavily rely on stakeholders' engagement, in different forms. The for-profit company used mostly practices that require external investments for collaboration, e.g. donations for non-profit and venturing, while the company operating in non-profit sector succeed in scouting information and funds from external by leveraging on recognition of benefit in fiscal terms beyond the social one. We do not notice differences as regards customers' involvement: in both the cases the customers are very important and they are active also in the co-development of the product. Also, the companies are very attentive to current and old employees, involving them in recognising opportunities and in collaborating. Case A presents typical traits and practices oriented to connect with other companies, services and organisations which are clearly business oriented. These are: networks with universities and research centres; company of the Group for business development; spin-off network. Finally, it seems that recognising opportunities is more relevant for for-profit companies which implement different OI practices towards this aim, e.g. the use of intermediaries. Companies from not-for-profit sector rely mainly on internal sources and established collaborations to transform opportunities.

Implications and limitations

This work contributes both to advancing knowledge on linkages between OI and SI literature and supporting practitioners on managerial choices for effective SI implementation in companies. Results from literature review and empirical investigation allow providing a comparison on effective adoption of mechanisms for retaining sources of innovation. While previous studies have mostly highlighted strategies and implications of adoption of OI mechanisms, this work has focused mostly on defining "what is the best way to capture value" (Huizingh, 2011) in opening up the SI process to external sources. In this sense, innovation managers can obtain a reference on potential practices to be applied in SI implementation in their companies, aiming to achieve systemic social change. Along this line, the results from the two case studies provide suggestions for social enterprises aiming to innovate their products, services or even business models by leveraging on their network of stakeholders. This is true also for companies and firms that are willing to introduce innovations focused on social problems that can have an impact beyond the economic profit. The choice of practices should consider managerial issues to be addressed, stakeholders to be engaged and type of business – i.e. for-profit and nonprofit sector.

This work has also limitations that can be a reference for future contributions to both SI and OI literature. The case studies are limited to two companies that demonstrate variation on selection criteria (i.e. business, size, industry, global or local reach and type of social challenge) but cannot be generalised to business – i.e. for- and non-profit – and sector. Along this line, multiple case studies involving a higher number of companies and explorative surveys can further develop and validate results obtained in this study. Moreover, effectiveness and efficiency of practices could be investigated according to the stage of SI process under analysis, distinguishing their applicability in phases of 1) prompts, inspirations and diagnoses, 2) proposals and ideas, 3) accessing prototyping and pilots, 4) sustaining innovative efforts, 5) scaling and diffusion (Murray et al., 2010). In each phase, indeed, innovations involve different actors and stakeholders (Chesbrough and Di Minin, 2014) and then could require the adoption of different combinations of practices.

Finally, further research should discuss implications in terms of leveraging on specific types of stakeholders and OI strategies – i.e. inbound and outbound.

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