How can Systemic Design path the way to innovation in social cooperative?

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Abstract
Modern societies must face increasing social needs which characterize the world nowadays. Traditional business models propose a hierarchical organization based on a capitalist pattern, which is restrictive for enterprises aiming to put the social dimension at the core of their organization. In opposition to the capitalist model, we are witnessing the development of social organizations. We suggest investigating how functions a special type of social organization, a social cooperative in a real-life context conducting a case study. In the socio-technical structure of a social cooperative there are multiple relationships between different actors. Specifically, the work organisation must interface with many different actors and different ways of carrying out the work. In this complexity, the aim is to reach a detailed understanding of the dynamics that characterize the social cooperative. For doing so, we apply an innovative context framework the Holistic Diagnosis (HD). HD is applying to the management organisation of the cooperative including both aspects of work organisation with related material resources and the social aspects inherent in the cooperative's mission. The results emerging from HD highlight the main critical issues and potentialities within personnel organisation and resource management. HD allows us to have a holistic view of the reference context. In the specific case it allows us to clearly identify the management and organizational aspects that are less functional and not strategic.

Introduction
The increasing of old and new social needs is characterizing modern societies all over the world. Due to the economic crisis and market precariousness job possibilities quickly change and more people leak the opportunity to live a comfortable life. In the dichotomy of business and enterprise, a different perspective starts to rise, a people-centred organization which have at the core of their business respect for people to have a fair job and dignified existence grow. In recent decades, in opposition to the capitalist model, we are witnessing the development of social organizations which commit to creating economic and social opportunities responding to socio-economic emerging needs (Linzalone and Lerro, 2014). The voluntary organizations, non-governmental organisations, foundations, cooperatives, and social enterprises are part of the social organisations. To distinguish different types of social organizations is necessary a deepening focus on Social Enterprise and Social cooperative. The term Social Enterprise means a qualification that can be acquired by any private organisation that produces and/or delivers goods and services to serve a general/social interest. The term Social Cooperative, on the other hand, identifies a form of an organization made up of people who join voluntarily to meet economic, social, and cultural needs. Among all social enterprises, currently, the Social Cooperative is the most widespread form of an organization (European Commission, Directorate-General for Employment, Social Affairs and Inclusion, 2016). Italy was the first European states to create ad hoc legislation to define Social organization as well as cooperatives. In details, the law 381/1991 distinguishes three types of social cooperative, respectively the type A which dealing with social and health services, cultural activities, and education; the type B which have the aim to introduce “disadvantaged individuals” into job market and finally type C represent a category made up of consortia of social cooperative. During the year of recession and in previous economic and employment downturns cooperatives and specifically social cooperatives had shown their true nature as a resilient enterprise more than the typical profitenterprises. Especially in Italy, social cooperatives are not the dominant form of enterprise, however, they
play an important role in the national economy. During the years of the economic crisis, social cooperatives had a positive trend: while hundreds of Italian workers lost their jobs in private sector companies, the number of workers in cooperatives increased (Borzaga, Calzaroni & Lori 2016b). In the principle of their values and social mission, cooperatives in general and specifically social cooperatives put efforts into address government failures and market instability seeking for new services and product in line with emerging social needs to empower people and bring out their talent. For instance, cooperative model stems the flow of unemployment, health care inefficiency, shortage of household’s income (Riva, 2013). Additionally, social cooperatives primarily benefit to the local community throughout the integration of a disadvantaged person in the labour market creating job opportunities and fostering social cohesion between involved stakeholders (Linzalone and Lerro, 2014). Nevertheless, the development path of cooperatives in general and social cooperatives had to face their close dependence on public policies, which have increasingly resorted to bidding process at the lowest possible level, with consequent negative repercussions on the development of these enterprises. This, on the one hand, reduced the possibility of consolidation and growth of social cooperatives and, on the other, spurred the search for new markets and differentiation of supply. Until today the literature review on social cooperatives shifted in different ways, from the determinant’s factors of their rise and growth (Borzaga and Defourny, 2001) to the partnership with governments (Ascoli et al., 2002) until economic performance and their capacity to operate in competitive markets ( Becchetti and Pisani, 2015; Borzaga and Fazzi, 2014). Have been also examined business longevity and survival prospect of these enterprises, results highlight how the capacity to adapt to changing request within societies had contributed to making cooperatives more resilient. (Borzaga et al., 2015; Depedri et al., 2010). Recently, most studies focused on understanding and quantifying the social impact that social organisations can produce (Cordes J., 2017). However, the capability of social cooperatives to meet emerging social needs and to stay active in the evolving market keeping their core values and principles deserve a greater deepening.

Figure 1. Social organization (author’s elaboration)

In this background, the present paper intends to contribute to the literature exploring the organizational strategies and solutions put into practice by social cooperatives that make them able to resist crises and market changes. Moreover, through the application of Systemic Design approach organizational criticalities and development
potentialities are lighted. Specifically, the Holistic Analysis findings will be the starting point to re-design a new organization. It is important to question more deeply the winning links or dynamics which may exist inside the socio-technical system generated by cooperatives. At the same time, it becomes necessary to identify the barriers that social cooperatives must face and overcome to preserve their resilience, despite the sudden changes in the market and in today's working dynamics.

In this framework, attention is paid to two questions:

- What are the strategies implemented so far by social cooperatives to remain active in the market despite the global economic crises?

- How can Systemic Design intervene in the analysis and resolution of the management and organizational problem of a social cooperative?

The remaining part of the paper proceeds as follows. The next section describes the method and data and gives a brief overview of the case study. The third section discusses the results of the HD. Finally, the conclusion is drawn, and findings implications are considered.

**Methods**

This paper adopts a qualitative research method. It focuses on exploratory case study aiming at investigating how to fulfil organizational and management innovation in Agridea, a type B social cooperative through the application of Systemic Design Approach. Nowadays, little is known about management strategies adopted by the social cooperative enterprise. Management practices are well known in for-profit enterprises where organization change to better meet the market logic and demands. Conversely, this aspect is not delving into social cooperative on which literature studies aiming to understand mostly the lifecycle of cooperatives and factors of competitive (Benos, et al 2018), the best strategies to avoid bankrupt, concerning the farm and the worker cooperatives (Basterretxea, et al 2019). Other studies aim to explore how training activities can support job integration of disadvantaged people (Galera, et al 2010). Nonetheless, giving the nature of social cooperatives factors like workforce composition, local environment and social mission cannot be ignored concerning the designing of a new form of organization. On this basis, we study the organizational structure of an Italian work integration social cooperatives type B and the flows that characterize its socio-technical system, considering the organization of work, roles, tools, and technology as interdependent (Jones, 2014). In the socio-technical structure of a social cooperative, there are multiple relationships between different actors. Specifically, the work organisation must interface with many different actors and different ways of carrying out the work. A social cooperative for work integration relates with public bodies, the major suppliers of the bidding process, with private individuals who require services, with other cooperatives thanks to which temporary associations are created to help mutually in winning tenders. Moreover, the social mission of the cooperative provides for the employment of socially disadvantaged people who must be trained for a working autonomy that helps them to feel part of a community. The numerous interconnections and interdependencies involving many factors create complex problems (Capra, F., 2014). Such complexity generates systems that require holistic study and analysis, that is, capable of grasping at the multiple interconnections and interdependencies that characterize them. Among the approaches able to perform this task, Systemic Design proposes itself as an orientation able to develop sustainable solutions for complex scenarios (Battistoni, Nohra & Barbero, 2019).

The aim is to reach a detailed understanding of the dynamics that characterize the social cooperative. For doing so, we apply an innovative context framework the Holistic Diagnosis (HD). HD is applying to the management organisation of the cooperative including both aspects of work organisation with related material resources and the social aspects inherent in the cooperative's mission. HD is performed according to steps that are not consequential but reiterative (Battistoni, Nohra, 2019) to obtain the vision of the state-of-the-art we proceed with the collection of information through formal sources such as literature, databases. Literature provided detailed data on the history of evolution of Italian cooperatives moreover, database, as well as Euricse, allowed a better comprehension of financial and occupational aspects at territorial level. This information must be integrated with direct data collected in the field through interviews with office workers and production workers, data collection
during fieldwork visit. HD allows us to have a holistic view of the reference context. In the specific case, it allows us to clearly identify the management and organizational aspects that are less functional and not strategic. At the same time, virtuous strategies already implemented and resources with the potential to be developed emerge. The HD results are the starting point on which designing innovative work fluxes organisation from a systemic perspective to reach social-economic benefits.

Specifically, the HD applied to our case study is divided into two steps: the first step aims to in-depth analysis of the internal relations and its operational context. In this first phase, the historical evolution of social cooperative is examined to obtain details about its organizational structure and changing over time. For a historical analysis, the interviews were carried out with the president of the cooperative and with the older members. Subsequently, the actual organizational structure is analysed starting from the points of view of worker’s composition, economic dimension, and sectors of intervention. In this phase, data are collected directly at the source thanks to the collaboration with the cooperative under examination and its members.

Data

Most of the Agridea’s workforce is of Italian nationality only 8 of workers are of foreign nationalities (Moroccan and Romanian) (Fig. 2). Besides, on 78 total workers, 61 have a permanent contract which is a positive indicator of the efficacy of work integration of human resources. A relevant influence in the workforce composition is given by the average age of workers, indeed more than half of them are over 50 years old. From this perspective competitively is fundamental to allow both the knowledge transfer both technological innovations as well as digitalization. Therefore, is important to integrate younger workers to avoid the creation of internal barriers to change. Turn to examine gender question, at first glance what Fig.3 shows could seem discriminatory towards female gender since only 9% of workers are female. On the contrary, the low percentage of the female is due to strong physical force that job of cooperative requires and not to discriminatory issues. The female workers are perfectly integrated and perform responsibility roles as for example the president of cooperative, member of CDA, Responsible of the sector, administration. In this context, the most important factor is the type of people the co-operative hires to fulfil its social mission. A 30% of the workers fall into the category of "socially disadvantaged people", which according to Italian law includes: ex-prisoners, ex-alcoholics, people with past drug addictions or in recovery, people with physical and mental disabilities. A peculiarity of the co-operative in question with respect to other cooperatives of the same type is that it chooses among disadvantaged people those who do not have any kind of work experience. In this framework, it is necessary to point out how much the social mission can influence and, in some ways, slow down the development of the organisation.

![Figure 2. Agridea’s workforce composition](image-url)

Often these people are trained with the aim of making them acquire knowledge and skills useful for the job, but very often they cannot sustain career transitions to roles that require responsibility. For the organizational flows,
information was collected through interviews with the department managers (Gardeners, Cemeteries, Recycle) and designer took part in the weekly meetings in which the problems faced during the week were brought out. In this way, immediate feedback on the validity of the gathered data is provided. Afterwards, the evolution and composition analysis of cooperative the second steps of HD focused to examine the organizational structure to identify and map criticalities as well as potentialities and positive characteristic. This is the preliminary step for the redesign of cooperative structure and management assets.

![Figure 3. Agridea’s workforce gender and age](image)

### 2.1 Case Study

The type B social cooperative, Agridea is based in Turin. It was founded in 1992, following the publication of Law 381 of 1991, as a spin-off of another social cooperative called “Stranidea”. The initial sector of activity concerned the management and maintenance of green areas and there were five social workers in total. In 1993 the management of cemetery services was included, and so the second sector of activity was born. However, the first important development was in 1995 when Agridea was entrusted by the city of Turin with the management of urban green areas with a 2-year contract. Thanks to this first contract the cooperative can obtain loans that it will use to buy the necessary equipment and to train its workers. After this first big leap, the intention to create a more structured organization begins to manifest itself. In 2005, in collaboration with a Consortium, Agridea started to test the separated waste collection from the markets. The cooperative has grown significantly, to date it has about 70 workers and dependent members of which 30% are disadvantaged, as required by legal regulations. The governance model adopted by the cooperative is a traditional one, i.e., there is a board of directors, in this case, represented by the president, vice-president and director, and a Board of Statutory Auditors which supervises the work of the administrative body. The organizational structure analysis showed a mixed typology between the functional and hierarchical model. In more detail, the first above-mentioned model is marked out by a predominately vertical develop which require a scarce level of horizontal coordination and its characterized by a hierarchical control resulting in a high degree of decision centralization. The organizational chart in this model is structured in three main levels: Director, intermediate line differentiates by functions and production units. The positive aspects of the functional model are the development of planning and control tools, proximity to market request and needs, furthered capacities and knowledge, rapid decisions. The negative aspects fall on innovation resistance, an overabundance of decisions at the top and strong compartmentalization. Otherwise, the hierarchical model is the simplest model of organization and it is adopted often by small or family enterprises which operate in low complexity environment. This organizational chart has only two levels: the director and the product units. Simplify processes, informal relationships and rapidity decisions are the positive aspects. The negative ones show the difficulty of changes adaptation, scarce specialization possibility and creation of "key roles" performed by
people who become fundamental in the enterprise good growth. Agridea’s Organizational chart includes characteristics of both above-mentioned models (Fig.4)

Moreover, thanks to the HD peculiarities and characteristic of people who compose the organizational chart emerge allowing a deepened comprehension of cooperative environment and management strategies adopted. (Fig.5)

**Results and discussion**

The growth of social and economic problems throughout Europe has path the way for social cooperative to expand and become an important actor to stem problems such as exclusion, loss of family income, poverty, and unemployment. Nevertheless, cooperatives have as core business their social mission but to survive in the market universe they need to understand how disadvantaged people and market requests can be merged in a positive
synergy. With this perspective, a deepened understanding of the dynamics that characterize social cooperatives in term of managerial and operational will open the way a process of co-design aiming to find the cornerstone for growing and innovation of these type of enterprises. The SD approach with HD promote the comprehension of the above dynamics and bring to light all the possibility of how to implement a co-design process. The first step of indepth analysis has shown a strong ability of Agridea to reinvent and develop itself following its social aims. Even during economic crises, Agridea has always absorbed the losses in a maximum of two years maintaining all sectors and activities and avoid the layoff of people. In this extraordinary occasion, the management sector together with the board of director has been able to manage economic loss and moreover to recover it without loss workers. This factor set a strong link between workers and cooperative which resulting in strengthening the resilience of itself. Agridea's willingness to develop an efficacious organizational strategy emerged in the last few years when a restructuring of the managerial sector was activated. The office staff has been set up in a more hierarchical way and with more defined roles. While on the one hand, the hierarchical approach allowed better management of tasks and work, on the other hand, it contributed to a centralisation of responsibilities especially, in the sector heads. At this specific point, the "key figures" starts to form in the figure of sector manager. The heads of sectors are old members of cooperative with a pre-existing experience in the production units. Their peculiarities distinguish from other workers especially in leadership recognition and propensity to changes. Initially, what appeared to be an already consolidated organisation, HD brought to light the most hidden criticalities (Fig.3). When looking in detail at the organisation of a single sector, critical points emerged in the various areas. For example, the sector leaders must deal with the management system and the preparation of the daily programme according to the work to be carried out. The management system requires digital skills which the managers have acquired through training. This training has not been extended to other workers who could potentially replace the current sector managers, so the co-operative does not currently have people capable of replacing the current manager’s in-office tasks. This leads to two other closely related problems, a managerial culture which is not encouraged and unilateral substitutability. The information of interviews with the department managers come to light some criticalities in workflows. Beyond the organizational chart evidence, there are functions between the intermediate line which require specific competencies and coordination. The head sector must interface with the administrative unit regarding customers and supplier’s payment and workers cost these are additional task which require added time. The criticality is not the added tasks, but the time needed to accomplish them in front of the most time required to coordinate the operational unit. Furthermore, the analysis of the production area and therefore, of the management of the workers, highlighting a strong operational-strategic dependence between the teams of workers and the sector manager. In this framework, a necessity to create intermediate responsibility roles emerged. Furthermore, among the critical aspects that emerged between the first and second phases of the analysis, there are difficulties in communicating changes and their acceptance. Communications between the sector managers and the workers are quite efficient but there is resistance for some subjects, especially in monitoring the proposed changes at the organisation and management level. According to HD, the positive aspects reflect itself in excellent capacity to react in emergency situations and efficient timing in making decisions. For a social cooperative which operates in various municipalities and with multiple team’s workers operating simultaneously is not a foregone question. These positives aspects are supported by good internal communication between intermediary lines and productive units as well as within sectors teams. Observing the internal workflows, the solving problems is a very good quality within all organization, probably thanks to the consolidated experience of 30 years of work. Unfortunately, the high dependence from public bidding entails obstacles to a resolution of long perspective problems because of variable durations of tenders and the uncertainly to find it others. On this assumption, HD results bring us to deal with the implementation of organisational changes starting from the transmission of knowledge and the creation of the intermediate role. Given its social nature, cooperatives changes must take into consideration not only the intermediary lines but all the workers of cooperative. That means to involve the workers in an active awareness process towards the cooperative development and stimulate managerial culture at whole organization levels. In this way, it is possible to track down and training new figures who can assume responsibilities.

According to the CDA of cooperative, we have started a period of an active training course which is started in December 2020 and it is still in progress until March/April 2021. The active training is divided following the three sectors of the cooperative, a first group of 30 people joint to it. Successively will following the workers from another sector. The main goals of these training activities are to identify among the workers those who have a
leadership recognition and who are capable to understand management dynamics to succeed in performing responsibilities roles. Moreover, through a co-design process with worker changes in workflows will be implementing.

Conclusion

The paper applied the Holistic Diagnosis to analyse the case study of the type B social cooperative, Agidea mapping the management and organizational problems to provide solutions in terms of new organizational model and workflows enhancement. Throughout the comprehension of criticalities and potentialities of the social cooperative can help to frame typical obstacles as well as good practices which social organizations had to face to remain active in the market and to accomplish their social mission. In the Agridea case study emerged a strong willingness to better organize their resources most of all the human one, as primary elements of the enterprise. Nevertheless, barriers to this implementation are the characteristics of workers, 30% of the workforce fall in the "disadvantaged people" category. These require both a good capability to propose services in the labour market in line with client requests both with workers possibilities. Moreover, the instability of public biddings which are the major source of job commissions, threatens the long-term perspective of growth, in addition very often public administration for the bidding processes do not centre assignment on the qualification of workers and quality of services rather the lower economic offer wins the bidding process at the expense of workers. In details, the presented analysis is focused on a social type B cooperative with the aim to redesign the organizational model to foster its growth and resilience. The HD is the first steps in this direction because allow mapping every single aspect within Agridea systems, not in terms of business strategy and scalability planning as often occurs in for-profit enterprises but especially the human factors. In summary, the main strategies implemented by social cooperatives are the aggregation in consortium or ATI i.e., Temporal Association, these associations allow an increasing the winning possibilities in tenders. Moreover, the worker's adhesion to cooperative philosophy enhances the consciousness of the social mission of an organization that is the job insertion of disadvantaged people. As consequence, even in hard times (i.e., Economic crises), it is uncommon that workers give up the organization to search better job conditions contrarywise, workers with good economic conditions leave more possibilities to work to people in difficulty. The above dynamics guarantee to cooperative the retention of workers and the continuity of business despite external factors. Therefore, the people-centred philosophy often repays cooperative enterprises with a strong resistance to environmental, social, and economic problems. The Systemic Design Approach contribution to the resolution of management and organizational problem translates into a deeper understanding of workers dynamics and capabilities. The main problems related to growth's difficulties are linked both to the absence of managerial culture in the middle line of the cooperative, both to a request of more specific workers competences in tenders’ notices. In this framework, the SD approach contributes to highlighting every single aspect both positive and negative of workflows. After that, specific actions are implemented to enhance strength aspects and to change negative ones resulting in a new organizational strategy fitting on a specific enterprise model. We feel that our study enhances the knowledge of social cooperative needs and can be a good contribute to designing new strategies of organization in a sustainable cooperative economy environment.

References (APA style)


