

## **THE DESIGN AND DIMENSIONS OF SOCIAL INNOVATION: THE BRAZILIAN CASE OF THE "ECOLOGICAL NETWORK"**

**Xavier, Amanda Fernandes (1); Naveiro, Ricardo Manfredi (1); Aoussat, Améziame (2)**

1: Federal University of Rio de Janeiro, Brazil; 2: École Nationale Supérieure d'Arts et Métier, France

### **Abstract**

The design has been receiving a increasing importance due to the market complexity and environmental unsustainability concerns, being it a strategic tool for positioning of sustainable products and development of welfare concepts. This approach brings systemic alternatives, with the discontinuation of present consumption system to a process of social learning. This process refers to the changes of a behavioral nature, the so-called social innovations. In this context, in order to understand the organization and management model of such social innovations, a single-case research was performed on a Brazilian social entity, renowned by its innovative, supportive and ecological character. This case was analyzed and compared with the dimensions and social innovation indicators proposed by literature, in order to verify its correspondence with a social innovation model. The main aspects perceived were the partnership and transparence among producers and associated members, compromise and auto-coordinated participation in the operation of the network and environmental and social preservation as a principle.

**Keywords:** Sustainability, Social responsibility, Innovation, Design of Social Innovation

### **Contact:**

Amanda Fernandes Xavier  
Federal University of Rio de Janeiro  
COPPE  
Brazil  
amandaxavier86@gmail.com

Please cite this paper as:

Surnames, Initials: *Title of paper*. In: Proceedings of the 20th International Conference on Engineering Design (ICED15), Vol. nn: Title of Volume, Milan, Italy, 27.-30.07.2015

## 1 INTRODUCTION

The competitive scenario has been evolving to an increasingly fierce competition in the markets and increase in the offer of products and services. Companies are seeking for new methods and procedures to add value to their business models, becoming more differentiated and attractive to their clients (Teixeira, 2012). In this scenario, which passed from static to unpredictable, dynamic and complex, it is necessary to stimulate innovation and design as forms of differentiation (de Moraes, 2010). The design assumes a leading role within companies, becoming a strategic activity to the positioning of products and services, and in the increase of competition in industry (Bernardes, 2008).

Moreover, due to the current situation, in which admittedly the exploration of natural resources has surpassed the reasonability, and in which the development paradigm and life quality depends on the need to increase the exploration of environmental resources, the sustainability became a basic assumption to design (Langenbach, 2008). The designers, being in charge of the creation and interaction between persons, tools and their environment, have a fundamental importance in this change process, not only due to the possibility of implementing a new style of more sustainable products, but also due to the formation of new welfare concepts (Silveira, *et al.*, 2009).

Therefore, it is necessary to proceed with a general rethinking of the systems (Dziobczenski *et al.*, 2012). For the environmental unsustainability problems, Manzini (2005) discusses the need of a systemic discontinuity: from a consumer society to a society capable of developing based on the reduction of production and consumption levels, with increase in the social and physical environment quality. This discontinuity may happen through a social learning process. Therefore, it is necessary to have innovations on the manner on how individuals and communities act to resolve their problems and create new opportunities. Such innovations are guided by more behavioral changes rather than by market or technological changes, the so-called social innovations. The design discipline can help to distill indications about organizational structures, products, and services that can be used in different contexts to solve similar patterns of needs (Morelli, 2007). If well comprehended, this change in the role of designers in the society does not imply in a reduction, but rather a valorization. It is necessary to rethink the term Design, its definitions and the role of a designer in the current society in order to improve quality life and achieve a sustainable system (Langenbach, 2008).

This work proposes a discussion about the concepts and challenges of design, specifically in the model of social innovation as an alternative, given the unsustainability of current management models. In this purpose, a single case research was performed in a Brazilian social entity of collective purchases, which is renowned by its innovative, supportive and ecological character. In order to evaluate if the case corresponds to a social innovation model, the dimensions and indicators of social innovation proposed by the literature were confronted and analyzed as a whole. It is expected that the results may contribute to a reflection of the subject under a new social perspective and as an incentive to long-term alternative and sustainable management and production models.

## 2 DESIGN: CONCEPTS AND CHALLENGES

The Design is one of the most powerful tools to create benefit to industry, having a crucial role in innovation as a form for development of new solutions and competitive advantage to companies (Dziobczenski *et al.*, 2012). According to Langenbach (2008), a designer is responsible for the link between technique and art, and directly interferes in the culture, either by renewing it or adding new elements. According to the International Council of Societies of Industrial Design (ICSID, 2013), design concerns products, services and systems conceived from tools, organizations and logics introduced by industrialization, and not only when produced by mass productions processes. Together, these activities should enlarge even more – in an integrated manner with other related careers – the value of life. Therefore, the design aims to identify and evaluate the structural, organizational, functional, expressive and economical relations, with the following goals (ICSID, 2013):

- Increase global sustainability and environment protection (global ethics);
- Offer benefits and freedom to human community as a whole, final and collective users, main players of industry and commerce (social ethics);
- Support cultural diversity, despite of globalization (cultural ethics);
- Confer to products, services and systems forms that express (semiotics) and are coherent with (esthetics) its own complexity.

Therefore, the design is a central factor in the innovative humanization of technologies and a crucial factor to the economical and cultural exchange. The management of innovation, on its turn, is directly related with design because these subjects tend to converge to achieve strategic goals with increase of competitive advantage, comprehension of users needs and synergy between innovation with the technological strengths of the company (Dziobczenski *et al.*, 2012). Conceptions about the tight link between innovation and strategic design became evident, with significant results (Manzini, 2008). With an constantly increasing competition, forecasting solutions that adopt a systemic vision have a greater chance to achieve success among users and the environment (Dziobczenski *et al.*, 2012). Additionally, the base of industry economy of western nations has considerably changed in the last three decades (Mager, 2007). This is because the promise of a welfare based on the continuity of current development model, with increase in the consumption of goods, cannot be sustained. The continuity if this model extrapolates the ecosystems recovering capacity and is rapidly consuming the natural capital (Manzini, 2005). Sen (2010) highlights that with the introduction of sustainability in the Design agenda and its inherent complexity, makes necessary the appearance of models and tools to support the projects development process.

Consequently, designers are being invited to seek inspiration within the existing services, to develop solutions capable of reproducing their values and benefits under distinct contexts (Miettinen and Koivisto, 2009). The design assumes a social and collective function, shaping the human aspirations; it reflects and reinforce the social values and may contribute to modify prejudices in human relations. This contribution of design is integrated to the social construction and in the process for representation is strategy representation (de Mozota *et al.*, 2011). When shifting the perspective in this sense, new opportunities emerge which also are supported by existing methodological contributions from research projects and academic activities that may help designers play a central role in innovation processes with relevant social implications (Morelli, 2007). Furthermore, it is based on a different interpretation of the relationship between industry and customers, according to which the customer is no longer a passive receiver (a consumer) of the output of industrial production, but rather an active co-producer of his/her own values. Thereby, competitive advantages for companies consist of generating innovation for individual people and also at the local level (Ramirez, 1999; Richard, 2001). While trends towards globalization seem to reduce the distinctiveness of local and regional contexts, the local capability of generating context-related solutions is the source of differentiation for socio-economic contexts and competitive advantages for companies (Becattini, 2004).

According to Morelli (2007), this contextual condition would address the design agenda towards a different role for the designer: the new clients the designers will work for include local networks of small companies, local institutions, associations, cooperative groups, and individual customers. For these people, designers will no longer be required to produce finite solutions but rather scenarios, platforms, and operative strategies to enable them to co-produce their own solutions. The revision of the link between designers and their clients therefore is based on two main instances: 1) the industries to which designers are talking have a different social role, which is not limited to the production of products, but is extended to the definition of solutions; 2) designers should consider new referents for their activities including local institutions, service providers, associations, local groups, and even individuals. In this manner, the fields of design have expanded beyond the esthetical and functional characteristics of products and reach the observation and interference in the socio-environmental and economical phenomena in order to propose new scenario, compatible with the required needs (Morelli, 2003). Several new concepts and terms are surging in the field of Design: services design; sustainability design; strategic design; social innovation design; product-service design (PPS); among others. The next topic, therefore, will deal with sustainability, comprising new business and developments forms, where design contribute to construction of environmentally viable solutions, well accepted by the actors involved in the project.

### **3 DESIGN TO SUSTAINABILITY**

Since the subject of sustainability emerged in the international debates, it is possible to observe the appearance of concepts and theories associated to the design processes and to the need to recognize the environmental limits in the projects of products, services and systems, aiming a greater contribution to environmental and society (Sherwin, 2004). According to Manzini (2005) the term Design to

Sustainability means a design activity whose goal is to encourage the radical innovation oriented by sustainability, that is, to promote the development of socio-technical systems in the direction of less usage of materials and energy, and a high regenerative potential. Therefore, an approach of strategic design is necessary. This means to develop new and sustainable solutions and, to implement them, to collaborate in the constructions of necessary partnerships. According to Santos (2008), the design may develop a crucial role, making possible the proposition of new scenario and systems based on sustainability requirements. This transition requires a broad and integrated approach from the designer, making possible to pass from a project exclusively focused on the product to systemic projects based on the environmental and socio-ethical requirements, in addition to the economical.

In the last century, the prevailing thought was profoundly oriented to products, while services were seen as mere extensions of products and/or additional resources. During the last decades the focus progressively passed to services, while products are becoming increasingly considered as “evidences of services”, that is, physical elements that make the services possible. This new economy demands a profound change in the traditional ideas about production and consumption and, consequently, in design (Manzini, 2009). The movement of services outsourcing, according to the same author, may present certain advantages. By selling final results instead of material products it is possible to increase the system efficiency, extending the lifecycle of products, components and materials, and optimize their utilization. On the other hand, it may reduce efforts and involvement of users, making them to reduce their responsibility and capacity to care for environment. And that is exactly what cannot happen in the sustainability transition process.

Manzini (2005) brings the concept of “Way of Life”, related to the idea of welfare. The current welfare idea was born with the industrial revolution and is associated to an increasing availability of products and services. This welfare leads to an unsustainable consumption of natural resources, and therefore must change in the next years. Therefore, Manzini (2005) proposes a welfare based on the experience and access. The access to services and experiences that satisfy the intangible needs appears to be a promising concept, an idea on which it is possible to construct a sustainable life style. In this context, a new concept appears: the social innovation.

#### **4 SOCIAL INNOVATION**

According to Lévy (2007), the first step for social growth is in the valorization of man as an intelligent being and his search for collective interaction. The author defends that the current salary-based regime, where individuals sale their workforce in a quantitative and easily measurable manner, may be replaced by small teams or independent producers through the qualitative and differentiated valorization of activities. In this manner, with a smaller amount of work and greater human valorization, it would be possible to obtain increases in social and, possibly, environmental conditions based on more elaborated projects to higher quality, more durable and eco-efficient products.

The new economical paradigm to be formed depends on the capacity to expand the critical mass of human resources and the knowledge and information domain, allied to the collective desire and political viability. These factors favor the processes for capturing local societies, increasing their innovation possibilities and answering the contemporary challenges, using their own strengths and talents, in a permanent learning process. Therefore, through the valorization of specific characteristics and superior local qualities, these communities may achieve competitive advantages and fix a place in the social and economical framework (Buarque, 2006).

Based on this premise, it is possible to affirm that the social innovation is a process for construction of new relational forms and results in the implementation (that may also be either the strengthening or restoration) of “new” relational patterns, which are inserted in the reality of each context, that is, are located in the location where they originated from, but with a relational pattern that is strong in the human aspect (Langenbach, 2008). The social innovation, according to Manzini (2005), refers to changes in the manner on how individuals or communities act to resolve their problems or create new opportunities. Such innovations are guided by behavioral changes rather than by market or technological changes. Vezzoli (2007) also presents the use of the concept of “satisfaction system” as one of the key aspects for the systemic acting of design, which results in developing solutions oriented to welfare of people and not merely material goods. The design in this case goes beyond merely ensure that the form follows the function, with emphasis in ensuring that the system provides satisfaction. The design may contribute in a considerable manner to implementation of innovative ideas and

creative communities, using its repertory directed to proposition of alternative solutions. The participation of final users (in case of products) or involved members (in case of communities) is a viable and simple alternative capable of resulting in different levels of perception. Designers, with help of technology, may also help in the development of communication structures and networks dedicated to sustainable development (Silveira *et al.*, 2009).

Despite of the long way, some initiatives are already showing results, as is the case of creative communities and eco-villages worldwide. These are groups of people united in the search of alternatives for social and ecological development and, through the interaction and analysis of several standpoints, achieve innovative and efficient solutions. In this manner, new and sustainable solutions must be conceived and developed. It is necessary to consider the steps to be taken in design of a new solution that, according to Manzini (2005), are:

- To change perspective: change the center of interest from goods (e.g. refrigerator, stove) to the results (e.g. conserve food, prepare food);
- To imagine alternative solutions: to plan different combinations of products, services and knowledge, etc;
- To evaluate and compare several alternative solutions: use of criteria to evaluate the effective economical, social and environmental convenience of alternatives;
- To develop more appropriate solutions: to promote convergence and connect them to products, services and knowledge that will compose the solution.

Social innovation designates this group of socio-economic initiatives that promote a greater welfare to individuals in face of the social problems, and are based on the idea of a new link between social and economical (Polanyi, 1983). Therefore, the social economy organizations innovate because they reunite the diverse productive factors, are focused on local associative and cooperative initiatives, include their own service users in the work processes and establish social relations devoted to a higher life quality in the work (Lévesque, 2002).

Therefore, social innovation may comprise from research and technologic development until the introduction of new methods for management of labor force, whose purpose is the introduction by an industrial facility of a new good or service to the society. This concept comprises as from the development of a machine until a data processing or institutions management system (Dagnino, 2004; Silva, 2004). Designers are in a privileged position to work within this context because of their attitude towards planning interactions (objects, services, or events) and finding a balance between the technologically possible (an engineering approach) and the socially desirable (a user-oriented approach) (Morelli, 2007). The role of designer is strategic for reaching a systemic change of such innovations. It is the role of creating bridges between the internal and external conditions of a change to create local experiences that demonstrate knowledge and innovative conditions (Manzini, 2006). Creating of that bridge may be facilitated by the implementation of a co-design process, by the formulation of integrated structures, developed within a dialogic perspective, to establish a relation between interlocutors (Manzini and Vezzoli, 2002; Monteiro and Bartholo, 2007).

The new contextual conditions require a new methodological approach on the basis of which a new toolbox for designers is defined for designers to operate in the new context (Morelli, 2007). In this sense, to comprehend and systematize social innovation in a more effective manner, Tardif (2005) developed a work that produced a synthesis of social innovation in thematic axis. The main proposed elements, related to the definition of a social innovation and its economy, were: context, emergency conditions; forms; processes; organizations; institutions; structures; actors; relations; and rules. The work of such authors has been widely used as reference for social innovation discussions. In a similar way, although more concise, the author Rodrigues (2007) grouped the main references on the intellectual production about social innovation and respective works in three levels of analysis: social innovations centered in individuals, in organizations and institutions. The table below (Table 1) was inspired in the proposal of Touraine (1985) of analysis of levels of social system. The three levels are interdependent, since the social innovation centered in individuals, for instance, certainly has repercussions in organizations and institutions. This classification thus is not a limitation of levels. It serves only to indicate the main orientation of the social innovation (Rodrigues, 2007). The dimension models of social innovation was tested in ICED15 multiple case studies in third sector organizations in Brazil and Canada and published as a doctorate thesis of Rodrigues (2004). The main results of the research were also published in a magazine indexed in the SciELO database (Rodrigues, 2007). The

model was also used in a research Ferreira (2012), which analyzed two models of socially innovative businesses.

Table 1. Summary of Social Innovation. Source: Rodrigues (2007)

Dimensions of Innovation	Social Innovation Indicators	Authors
<b>Social Actors (individuals or groups)</b> <ul style="list-style-type: none"> <li>• Increase/favor autonomy and emancipation</li> <li>• Promote life quality</li> <li>• Sense for work</li> </ul>	<ul style="list-style-type: none"> <li>• New forms of division and coordination of work (cooperation and creation of learning);</li> <li>• New social actors, previously excluded or marginalized;</li> <li>• New social roles (and/or rearrangements of social roles).</li> </ul> Changes in reciprocal expectative in social relations involving excluded persons; <ul style="list-style-type: none"> <li>• Level of inclusion of users or beneficiaries in the decision processes, conception, development and delivery of goods and social services;</li> <li>• Level of autonomy and decision processes;</li> <li>• New relations between work and family.</li> </ul>	<ul style="list-style-type: none"> <li>• Auclair Lampron (1987)</li> <li>• Taylor (1970)</li> <li>• Cloutier (2003)</li> </ul>
<b>Organizations</b> <ul style="list-style-type: none"> <li>• Organizational forms</li> <li>• Governance forms</li> <li>• Legal aspects and economic aspects</li> </ul>	<ul style="list-style-type: none"> <li>• New forms of division and coordination of work;</li> <li>• New organizational configurations: network structures, by projects or matrix;</li> <li>• Mixture of available resources (mercantile, non mercantile and reciprocity);</li> <li>• New governance forms (interactions with public policies, collective entrepreneurship);</li> <li>• Level of participation of different stakeholders in the decision processes;</li> <li>• New possibilities for Access of markets (public and private);</li> <li>• Purposes of the organization and individual benefits (monetary or not) and collective (to society), in general, achieved by mediation of such organizations.</li> </ul>	<ul style="list-style-type: none"> <li>• Cornforth (2003)</li> <li>• Gordon (1989)</li> <li>• Cloutier (2003)</li> <li>• Taylor, M (1996)</li> </ul>
<b>Institutions</b> <ul style="list-style-type: none"> <li>• Changes in the legal, political and economical environments</li> </ul>	<ul style="list-style-type: none"> <li>• Universalization of rights;</li> <li>• Legislation on social inclusion and defense of minorities.</li> </ul>	<ul style="list-style-type: none"> <li>• Lévesque (2002)</li> <li>• Cloutier (2003)</li> </ul>

According to Rodrigues (2007), the management manner and the promotion of social innovation in literature appear as related concepts, as the innovation is recognized to the extent it changes the individual in its way of life, work organization and participation and influence over the decisions that will affect its own destiny. However, the social innovation does not only happen due to questions related to organizational management models, but also as a result of an entrepreneurial action, related to the perception of an unsatisfactory social situation that may be changed by a new work method. Therefore, it is important to know the experiences that will permit to mature the ideas concerning the management models and generation of impacts via social innovation.

## 5 RESEARCH METHOD

This work has a qualitative approach and exploratory character. A bibliographic research was performed in order to identify the state-of-the-art and perform analysis, to identify gaps in the field of knowledge for future researches (Rowley and Slack, 2004). In the sequence, a single case research was performed, in order to identify the critical factors involved, investigating the contemporaneous phenomenon within a context of real life (Yin, 2014). The case studied refers to the Ecological Network (*Rede Ecológica*), a social movement focused on fomenting ethical, cooperative and ecological consumption. The network is formed by groups of consumers that make collective purchases in a direct interaction with producers, with the supply of organic products. The collect of data was made through secondary sources, with information available in researches and works in the field of knowledge, websites of the organization itself, interviews and articles in specialized magazines. The case was analyzed and compared with the table proposed by Rodrigues (2007), in order to identify the social innovation indicators in the dimensions presented by the *Rede Ecológica*. In this manner, it is possible to evaluate the correspondence if this case to a model of social innovation.

## 6 CASE STUDY: REDE ECOLÓGICA

Created in 2001, based on the initiative of certain citizens of the city of Rio de Janeiro, the *Rede Ecológica* is a Brazilian social movement dedicated to fomenting the ethical, cooperative and ecological consumption. It is formed by groups of more than a hundred consumers that make their collective purchases in a direct interaction with producers, allowing the supply of agro-ecological/organic products at accessible prices and, at the same time, support initiatives of small producers that follow the same ideology. The *Rede Ecológica* has currently nine groups in Brazil, six of them in neighborhoods in the city of Rio de Janeiro, two in the city of Niterói and one in the city of Seropédica.

In addition to collective purchases, the *Rede Ecológica* develops a series of external activities related to reuse of packing, agro-tourism, representation in campaigns, work groups and organizations involved with themes of food security, urban agriculture, agro-ecology and solidarity economy, making it a real social movement. To participate in the collective purchases of the *Rede Ecológica*, it is required association. Members shall sign a commitment term (available in their website) and starts to receive a weekly letter with open calls to online orders, in addition to information about the performed activities. Campaigns, consumption advices, service and product offers, etc. By making the orders, the consumer becomes committed to the order and helps the producer, that will crop certain of the sale and payment of its product. Each weekly group shall count with a minimum of 15 members, and all groups are committed to the organization and financial support of the *Rede Ecológica*. The association requires payment of a monthly fee, which ensures the remunerated infrastructure related to transportation and personnel (deliveries, orders, financial and logistics). In exchange, the members have access to products at the prices received by the producers, without any distribution margin.

The *Rede Ecológica* adopts the self-management, which requires the responsibility of members by the distinct activities in which it is involved (association between voluntary work and remunerated work). Certain specific cases are also subject to remuneration. The main forms of participation are the following:

- Task Force: once per month the products of all groups arrive from producers to a place where they will be separated to delivery at each group at the following day. At each month, 2 or 3 members of a distinct group will organize a task force. In addition to those responsible for the organization, each group must appoint a number of voluntaries to the task force each month.
- Commissions: work groups formed by members responsible for certain internal or external activities. There are a total of 15 commissions, including the management commission and the representative of the Food Security Council (CSA). The mandate at each commission will vary according to the type of activity and interest of the person to continue.

A highlight of the Project is the fact that there are similar initiatives in several places around the world (Europe, China and India). In Brazil, the project has a distinct nature of most of the social innovation projects, due to the fact that it directly involves the middle and high classes, which in general have a certain degree of awareness of the environmental concern and, therefore, are willing to consume healthy food (Langenbach, 2008).

The *Rede Ecológica* makes use of new technologies, more specifically the Internet, to facilitate the logistics of services. The lists of products are submitted via email to consumers, which return them fulfilled also by email. The *Rede Ecológica* provides in its internet website ([www.redeecologica.org](http://www.redeecologica.org)) clarifications about how to make the collective purchases, the location of groups, information about producers, task forces, forms for enrollment in the task forces, information about the network commissions, documents such as the commitment term and delivery schedule, videos about the network, links to association and answers to frequent asked questions. Moreover, there are blogs with recipes, stories and advices to the cooperative purchase group.

However, according to the research of Langenbach (2008), one of the main problems is that its organization, with a structure that largely depends on the voluntary work of consumers, making the purchase rather difficult, quite different from the conventional system. There is a lack of flexibility to make the purchases. Members must prepare and submit their list of orders and collect them at a specific day and time (Saturday morning). Other problem of the network relates to the internal conflicts, since it depends entirely on the collaboration of all participants, most of which are voluntary. The network depends on the loyalty of consumers (members) and ethical commitment. This is even

harder with the increase of the network, evidencing the need to develop the awareness of responsibility in the project and construction of a better society.

## 7 CASE ANALYSIS

In order to confirm if the presented case corresponds to a model of social innovation, a comparative table was prepared with the social innovation indicators proposed by Rodrigues (2007) with the characteristics presented by the *Rede Ecológica*. The characteristics were analyzed in a detailed manner, confronting the case with the aspects presented by the literature (topic 4).

Table 2. Dimensions of Social Innovation in the Rede Ecológica.

Dimensions of Innovation	Social Innovation Indicators	Rede Ecológica
<b>Social Actors (individuals or groups)</b> <ul style="list-style-type: none"> <li>• Increase/favor autonomy and emancipation</li> <li>• Promote life quality</li> <li>• Sense for work</li> </ul>	<ul style="list-style-type: none"> <li>• New forms of division and coordination of work (cooperation and creation of learning);</li> <li>• New social actors, previously excluded or marginalized;</li> <li>• New social roles (and/or rearrangements of social roles). Changes in reciprocal expectative in social relations involving excluded persons;</li> <li>• Level of inclusion of users or beneficiaries in the decision processes, conception, development and delivery of goods and social services;</li> <li>• Level of autonomy and decision processes;</li> <li>• New relations between work and family.</li> </ul>	<ul style="list-style-type: none"> <li>• Self-management; responsibility of members for the involved activities; committed to the organizational and financial sustainability;</li> <li>• Direct interaction and support to small producers;</li> <li>• Members committed to small producers; sale of products without distribution margins;</li> <li>• Participation through weekly groups for delivery and pick-up of products; commissions responsible for organizational activities;</li> <li>• Social movement self-managed</li> <li>• Ethical, cooperative and ecological movement.</li> </ul>
<b>Organizations</b> <ul style="list-style-type: none"> <li>• Organizational forms</li> <li>• Governance forms</li> <li>• Legal aspects and economic aspects</li> </ul>	<ul style="list-style-type: none"> <li>• New forms of division and coordination of work;</li> <li>• New organizational configurations: network structures, by projects or matrix;</li> <li>• Mixture of available resources (mercantile, non mercantile and reciprocity);</li> <li>• New governance forms (interactions with public policies, collective entrepreneurship);</li> <li>• Level of participation of different stakeholders in the decision processes;</li> <li>• New possibilities for Access of markets (public and private);</li> <li>• Purposes of the organization and individual benefits (monetary or not) and collective (to society), in general, achieved by mediation of such organizations.</li> </ul>	<ul style="list-style-type: none"> <li>• Self-management; all activities are under the responsibility of members;</li> <li>• Participation of members through weekly groups and organization commissions of internal and external activities;</li> <li>• The network receives a fee from all members, which on their turn are responsible for the activities and make their orders to producers without margin of distribution.;</li> <li>• In addition to the collective purchase, the network develops external activities and campaigns in favor of sustainability and increase of life quality;</li> <li>• The participation and commitment of all members must be permanent, to keep the functionality of the network and support to associated producers;</li> <li>• Collective purchases devoted to ethical, cooperative and ecological consumption; The members are voluntary and work in partnership with small producers, having the benefit to purchase agro-ecological/organic products at accessible prices and, at the same time, supporting ecological campaigns.</li> </ul>
<b>Institutions</b> <ul style="list-style-type: none"> <li>• Changes in the legal, political and economical environments</li> </ul>	<ul style="list-style-type: none"> <li>• Universalization of rights;</li> <li>• Legislation on social inclusion and defense of minorities.</li> </ul>	<ul style="list-style-type: none"> <li>• The network is open to any member interested in voluntary work under a committed and responsible manner; social movement to support initiatives of small producers and agro-ecological campaigns and solidarity campaigns.</li> </ul>

The *Rede Ecológica* may be considered as a case of Social Innovation. The initiative started with the idea of reuniting people towards solutions for organic and healthy food. The motivation has an ideological character, requiring collaborative work from members and commitment to the proposal and principles of the network. The social actors work on a voluntary manner through self-management, and members are committed to internal and external activities, mainly with the financial and organizational supporting. The ideology of the network for collection purchases is the direct

interaction and support to small producers. In this manner, the purchase of organic products support and promote small producers and permit the sale of products for a just price, without the need of traders and distributors. This contact and relation between consumers and producers reinforce the idea of a new standard of relation and cultural exchanges. It is not only a relation of sale and purchase, but also a commitment (Langenbach, 2008). The work acquires a new meaning, with members developing new social roles – not employees and not subordinates, they are voluntary members and agents of change.

According to Lévy (2007), the first step for the social growth resides on the valorization of the man as an intelligent being in search for collective interaction. Therefore, the current salary-based regime must be replaced by small teams or independent producers through the qualitative and differentiated valorization of activities. To make this reality possible in the *Rede Ecológica*, it is necessary to ensure loyalty of members and awareness on the responsibility for the project for the constant participation in the weekly activities, commissions and external campaigns. This is even more important due to the self-managed work of the network, in which the members have autonomy and participation in the decision processes. The relations pass from a conventional nature, of subordination and competition, to a relation of ethical, cooperative and sustainable character.

The dimension of the organization also has a high degree of compatibility. The network presents a new form of division and coordination of work and the available resources are devoted to sustainability of the network, where members and producers have mutual benefits. Moreover, it proposes new governance models, with interaction with public policies and solidarity campaigns. All involved parts participate to maintain the functionality of the network and support the associated producers with a similar ideology. This management model corroborates the affirmation of Langenbach (2008), according to which the social innovation is a process for construction of new relational forms and has as a result the implementation (that may also be either the strengthening or restoration) of “new” relational patterns, which are inserted within the reality of each context, that is, are located in the location where they originated from, but with a relational pattern that is strong in the human aspect.

The biggest goal of the network is in the collective purchases for the ethical, cooperative and ecological consumption, through a win-win relation with local producers: the producer has the warranty for production and sale; the member has the benefit to purchase agro-ecological/organic products at accessible prices. Therefore, through the valorization of specific characteristics and superior local qualities, these communities may achieve competitive advantages and fix a place in the social and economical framework (Buarque, 2006). Although it is not an institution, by promoting changes in the legal, politician and economical environments, the network praises for the social inclusion and solidarity economy. This social movement for support to small producers and several campaigns on behalf of environmental sustainability and increase of life quality. For such, it is open to any interested member to participate with voluntary work in a committed and responsible manner.

It is possible to perceive evidences of a systemic change in local dimension, through a shared design process, with new forms of innovation and relation connections between actors (Manzini and Vezzoli, 2002; Monteiro and Bartholo, 2007). The social value of design arises collectively, shaping the human aspirations and reinforcing the social values. This contribution of design is evidenced in the social construction or the strategic formation process. Instead of following a rational strategic planning model, its management explores the strategic design model as a social consensus process (de Mozota *et al.*, 2011).

## **8 FINAL CONSIDERATIONS**

The challenges faced by the unsustainability of current production and consumption system, reinforce the pertinence of new management and development forms, and thus the importance of design in this change process. The transforming role of design gains relevance as an strategic activity for the positioning of new sustainable products and the differentiated conception of different welfare concepts. This new approach brings systemic alternatives, through the discontinuation of current consumption system to a social learning system. This process relates to changes of a behavioral character, called social innovations.

In this context, in order to understand the form of organization and the management model of such social innovations, a single-case research was performed on a Brazilian social entity, renowned by its

innovative, supportive and ecological character. The *Rede Ecológica* is formed by groups of consumers that make collective purchases in a direct interaction with producers, allowing the supply of organic products. The cases was analyzed and compared to the dimensions and indicators of social innovation proposed by literature, in order to verify its correspondence to a model of social innovation. The analyzed dimensions were the individuals, organizations and institutions. The main considerations of the analysis were:

- The social actors work in a voluntary manner through self-management and ideological motivation. The relations have a ethical, cooperative and sustainable character. The work acquires a new meaning, through the commitment with the organization and financial sustainability;
- Division and coordination of the work with a high autonomy degree; the resources are on behalf of the network sustainability, where associates and producers have mutual benefits. Adoption of new governance forms and interactions with public policies and solidarity campaigns;
- Devotion to social inclusion and cooperative economy, through the support to local producers and campaigns in favor of environmental sustainability and improvement of life quality. It is open to any person committed to these principles.

Through a local systemic change, a shared strategic design model is evidenced under social consensus and new forms of organization, reflecting and reinforcing the relations between distinct actors involved and their social values. Therefore, the *Rede Ecológica* may be considered as a case of social innovation, through partnership and transparency with producers and members, the commitment and self-coordinated participation in the operation of the network and the environment and social preservation as a principle. However, for the growth of the network it is still necessary to achieve a greater maturity in the collective awareness and ethical commitment of members, in order to improve its organization and promote greater positive changes in distinct social contexts. The network stimulates a reflection on the life styles and need to exercise sustainability by means of reducing consumption and wastes, reuse of materials and recycling of products and discharges.

It is expected that the results may contribute with a greater amplitude to the field of knowledge and a reflection about a new social perspective, serving as an incentive to long-term alternative and sustainable management and production models. Other researches are of fundamental importance with respect to cases of social innovation and their organization models.

## REFERENCES

- Becattini, G. (2004). *Industrial districts: a new approach to industrial change*. Edward Elgar Publishing.
- Bernardes, M. M. S. (2008) *Diretrizes para aumentar a competitividade de micro e pequenas empresas brasileiras desenvolvedoras de produtos e prestadoras de serviço através da gestão do design*. Projeto de Pesquisa. Porto Alegre.
- Buarque, S. C. (2006) *Construindo o desenvolvimento local sustentável: Metodologia de planejamento*. 3.ed. Rio de Janeiro: Garamond.
- Dagnino, R. (2004). *A tecnologia social e seus desafios*. In: *Tecnologia social. Uma estratégia para o desenvolvimento – Rio de Janeiro: Fundação Banco do Brasil*.
- De Moraes, D. (2010) *Metaprojeto: o design do design*. São Paulo: Blucher
- De Mozota, B. B., Klöpsch, C., & da Costa, F. C. X. (2011). *Gestão do design: usando o design para construir valor de marca e inovação corporativa*. Bookman.
- Dziobczanski, P. R. N., Lacerda, A. P., Porto, R. G., Seferin, M. T. and Batista, V. J. (2012) *Inovação Através do Design: Princípios Sistêmicos do Pensamento Projetual*. *Design & Tecnologia*, v. 2, n. 3, p. 54-63.
- Ferreira, G. M. F. (2012) *Aplicação do modelo de Osterwalder em situações de inovação social*. Departamento de Economia Gestão e Engenharia Industrial, Universidade de Aveiro, Aveiro, Portugal, 154 p.
- ICSID - International Council of Societies of Industrial Design. (2013) Available from: <[www.icsid.org/about/articles31.htm](http://www.icsid.org/about/articles31.htm)> accessed on jun 2013.
- Langenbach, M. L. (2008) *Além do apenas funcional inovação social e design de serviços na realidade brasileira*. 123 f. Dissertação (Mestrado em Engenharia de Produção) - COPPE, UFRJ, Rio de Janeiro.
- Lévesque, B. (2002) *Les entreprises d'économie sociale, plus porteuses d'innovations sociales que les autres?* In: *COLLOQUE DU CQRS AU CONGRES DE L'ACFAS, 2001, Montreal, Cahiers du CRISES*, v. 0205.
- Lévy, P. (2007) *A Inteligência Coletiva: por uma antropologia do ciberespaço*. 5. ed. São Paulo: Edições Loyola.
- Mager, B. (2013) *Design Dictionary: Perspectives on Design Terminology, 2007*. Basel: Birkhäuser. Available from: <[http://www.service-design-network.org/system/files/Mager\\_Service%20Design\\_1.pdf](http://www.service-design-network.org/system/files/Mager_Service%20Design_1.pdf)> accessed on may 2013.

- Manzini, E. and Vezzoli, C. (2002) *O Desenvolvimento de Produtos Sustentáveis*. São Paulo: USP.
- Manzini, E. (2005) *Design para a inovação social e sustentabilidade: Comunidades criativas, organizações colaborativas e novas redes projetuais*. São Paulo: Edusp.
- Manzini, E. (2006) *Design, ethics and sustainability Guidelines for a transition phase*. DISIndaco, Politecnico di Milano. Available from: < <http://www.designmattersartcenter.org/wp-content/content/pdf/NantesWorkingPaper.pdf#page=9> > accessed on march 2015.
- Manzini, E. (2008). *Design para a inovação social e sustentabilidade*. Cadernos do Grupo de Altos Estudos, Programa de Engenharia de Produção da Coppe/UFRJ, Rio de Janeiro, 1.
- Manzini, E. (2009) *Service design in the age of networks and sustainability*. In: MIETTINEN S.; KOIVISTO M. (Eds.), *Designing Services with Innovative Methods*, Keuruu: Publication series of the University of Art and Design Helsinki and Savonia University of Applied Sciences, p. 44-57.
- Miettinen, S.; Koivisto, M. (Eds). (2009) *Designing Services with Innovative Methods*. Keuruu, Finland: Kuopio Academy of Design.
- Monteiro, B. and Bartholo, R. (2007) *Design and Production Engineering. Some moving frontiers of the engineering education in Brazil*. Proceedings: International Conference on Engineering Education – ICEE 2007. 3 - 7 september 2007. Coimbra.
- Morelli, N. (2003) *Product-service system, a perspective shift for designers: a case study in a design of a telecentre*. *Design Studies*, v. 24, n. 1, p. 73-99.
- Morelli, N. (2007). *Social Innovation and New Industrial Contexts: Can Designers" Industrialize" Socially Responsible Solutions?*. *Design issues*,23(4).
- Polanyi, K. (1983) *La grande transformation: aux origines politiques et économiques de notre temps*. Paris: Gallimard.
- Ramirez, R. (1999). *Value co-production: intellectual origins and implications for practice and research*. *Strategic Management Journal*, 20(1), 49-65.
- Richard, N. (2001). *Reframing Business: When the Map Changes the Landscape*. West Sussex, England: John Wiley.
- Rodrigues, A. L. (2004) *Modelos de gestão e inovação social em organizações sem fins lucrativos: um estudo comparativo de casos no Brasil e no Québec*. (Thesis) Escola de Administração de Empresas de São Paulo, Fundação Getúlio Vargas, São Paulo, 295 p.
- Rodrigues, A. L. (2007) *Modelos de gestão e inovação social em organizações sem fins lucrativos: divergências e convergências entre nonprofit sector e economia social*. *Organizações & Sociedade*, v. 14, n. 43, p. 111-128. Available from:< <http://www.scielo.br/pdf/osoc/v14n43/06.pdf>> accessed on jan 2015.
- Rowley, J., Slack, F. (2004) *Conducting a literature review*. *Management Research News*, v. 27, n. 6, p. 31-39.
- Santos, A. (2008) *Equity through Design: a Critical Literature Review*.
- Sen, A. (2010) *Metaprojeto hoje: guia para uma fase de transição*. *Metaprojeto: o design do design*. p.228. São Paulo: Blucher.
- Sherwin, C. (2004) *Design and sustainability: a discussion paper based on personal experience and observations*. *The Journal of Sustainable Product Design* 4:21–31. Kluwer Academic Publishers. Holanda.
- Silva, V. P. and Egler, C. (2004) *A inovação em tempos de globalização: uma aproximação*. *Scripta Nova. Revista electrónica de geografía y ciencias sociales*. Barcelona: Universidad de Barcelona, vol. VIII, núm. 170 (33). [ISSN: 1138-9788]
- Silveira, C. G., Pinheiro, O. J. and Rossi, D. C. (2009) *Design sustentável e desenvolvimento social*. In: IX CONGRESSO BRASILEIRO DE PESQUISA EM DESIGN P&D, São Paulo, SP, 2009..
- Tardif, C. (2005). *Complémentarité, convergence et transversalité: la conceptualisation de l'innovation sociale au CRISES* (No. 513). CRISES.
- Teixeira, E. L. S. (2012) *Investigando a interação entre prognóstico e gerenciamento da saúde e sistema produto serviço para o suporte de decisões operacionais*. (Thesis) Departamento de Engenharia Mecânica, Universidade de Brasília, Brasília, 157 p.
- Touraine, A. (1985) *Social movements and social change*, In BORDA, O. F. (Org.) *The challenge of social change*. London, Sage, p. 77-92.
- Vezzoli, C. (2007) *System design for sustainability: theory, methods and tools for a sustainable “satisfaction-system” design*. Milano, Italy: Maggioli Editore.
- Yin, R. K. (2014) *Case study research: Design and methods*. Sage publications.

## ACKNOWLEDGMENTS

The authors would like to thank CAPES (process BEX 4873/14-9) and CNPq (process 142249/2013-0) for their support and funding provided to this research.

