

Creativity, value cocreation and reflexivity: how functional and cooperative economy's approach enhances service design performance

Clayton Costa¹, Amanda Xavier¹

claytoncosta@pep.ufrj.br, amandaxavier@pep.ufrj.br

¹Production Engineering Program – COPPE/UFRJ, Brazil

Abstract

Service design is a pivotal component of innovation, which intersects resources, people, and processes in its practices. It has provided valuable improvement to companies' business but has also delivered some divergences because some business models are only sometimes aligned with the company's service. Functional and Cooperative Economy (FCE) is an economic model in which its approach can offer service design a new frame for action-oriented activity, promoting spaces to explore creativity, value cocreation and reflexivity. Creativity helps people materialize ideas to create new goods or services. Value cocreation is a dialogic process to create shared value, reinforcing collective resources. Moreover, reflexivity allows people to modify their thoughts, feelings and actions based on their experiences. In the spirit of the innovation service, we address these three dimensions by linking an economic benchmark and promoting an enhanced service design through personal and professional development in the face of work experiences.

Keywords: service design, functional and cooperative economy, innovation service, reflexivity

Introduction

The growth of activities arising from the hegemonic economic model has confronted the progress and well-being of society (OECD, 2021), and it has become a significant concern for the objective of sustainable development on the planet. In fact, the industrial economic system, which has characteristics with modes of production and mass consumption, demonstrates that it is unsuitable for developing economic,

environmental and social dimensions. In this scenario, Manzini (2017) points out that the solution to the problems of the social dimension cannot be found in traditional economic models. The author suggests constructing a new perspective with a premise of building new ideas associated with generating new forms or social relations oriented to action that challenge existing paradigms in the political and socioeconomic scope. Regarding service design, Irwin (2015) states that it is a mature discipline in which design unfolds within existing political and socioeconomic paradigms, promoting benefits for the service provider through desirable services for the consumer.

Lately, there has been a discussion about the orientation of alternative economic models in the face of social inequalities and the degradation of material resources due to consumption and mass production to satisfy user needs. Since this is a new economic trajectory, Du Tertre, Vuidel & Pasquelin (2019) proposed, through the Functional and Cooperative Economy (FCE) approach, that innovation can be promoted from the societal aspect through investment in intangible resources and the service aspect, which must consider the needs and the convergence of interests of people and the territory in which these people are inserted. Indeed, the relationship between the societal service aspects is centred on the individual and his ability to engage in new forms of innovation.

Although the FCE approach has a participatory nature, its practices relate to the skills that all the involved people have, as well as their diverse knowledge, experiences, and background. Given the context presented above, it is necessary to understand how a company can improve its innovation processes, considering the employee's experience with the service design. By identifying and understanding some organizational gaps, such as logistics and time, many constructive activities are neglected, which makes it difficult for the company to create collaborative and functional solutions. To deal with this complexity and contribute with integrated actions, the main objective of this study is to analyse the FCE approach and three key properties (creativity, value co-creation and reflexivity) in order to understand how these three elements complement each other and significantly increase the potential of service design dynamics in a company or ecosystem. These elements have an integrating function at the individual and collective level and in mediating their relationships, allowing an explicit representation to be obtained for the process of innovation and improvement in services. This study presents the set of these three characteristics and their conceptual foundations in understanding their main characteristics, practical applications, and contributions to service design. As a result, it is expected, therefore, that it will become more practical and more relevant in our current and future research.



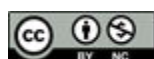
The remainder of this paper is structured as follows. The next section consists of the research method used for this work. The following four sections describe a literature review about Functional and Cooperative Economy (FCE), creativity, value cocreation and reflexivity. The following section shows the relationship between the FCE's theoretical framework and the essential properties to improve service design proceedings. Finally, the last section presents the concluding remarks.

Research Method

This investigation is a qualitative research work, of an applied nature, with an exploratory character, whose objective is to investigate phenomena that are little or barely understood, exploring the main problems of the subject to provide its understanding (Malhotra & Grover, 1998). As for data collection, the research consists of bibliographical research (Gil, 2017) of articles and other relevant materials to build a theoretical framework of the elements presented in the text for analysis in the field of service design as a contribution to the area of knowledge, aiming at articulating their practice.

Functional and Cooperative Economy: a performance service design model

The Functional and Cooperative Economy model began in 2002 in an intervention and research laboratory located in France, ATEMIS (Analyse du Travail et des Mutations dans l'industrie et les Services), which is made up of researchers, local organizations and consultants who seek to produce knowledge (technical and scientific) with an impact on the emergence of new economic models and business models as new alternatives for companies and territories. This economic model has as its primary objective to provide solutions in an integrated way for goods and services, detaching itself from the issue of sale and supporting the service relationship that the use of intangible resources can promote through this relationship. With this, this approach re-examines the current business model in an ecosystem in order to transform it into a more sustainable model and contribute to the development of a territory. In their research, Xavier *et al.* (2021) state that the territory becomes the materialization space of these transactions, and the recognition of the work is based on the service relationship. In addition, concerning the economic aspect, the FCE framework helps an ecosystem to change its dynamics from mass volume production to dynamics of value in use and cooperation, as well as the



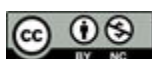
development of intangible resources such as trust, competence, pertinence and health. (Benque, Du Tertre & Viudel, 2014).

Considering its service dynamics, Pinet (2017) points out that an offer is seen as a basis for valuing intangible resources and their relationship with beneficiaries. Cooperation and servitization, which can be defined as the transition from selling goods to providing solutions through services (Vandermerwe & Rada, 1988), are essential factors for developing this dynamic. The development strategy and service activities need to be mobilized regarding intangible resources, which are closely linked to an ad hoc commitment to sustainability and the preservation of the environment to create value (Hubault, 2009).

Assertively, the research by Costa & Xavier (2022) shows that this economic model is anchored in five main dimensions, which are articulated with each other:

- 1) The use value: Separation of the sale of a good and the construction of integrated solutions based on the performance of the use of the good or service (Sempels, 2017);
- 2) The immaterial: Mobilizing the use of intangible resources through a service economy (Du Tertre, 2016);
- 3) The territory: The place or space where the social and work achievements of the actors involved are materialized, where the proposal and practice of co-creation of value in close relationships takes place (Du Tertre, 2013; Maillefert & Robert, 2017);
- 4) The meaning of work: New ways of monitoring work practices as well as the effects on workers' mental health and the social consequences they induce, with an emphasis on the quality of life and well-being of individuals (De Gasparo, 2021);
- 5) The Governance: An ecosystem whose premise is based on building collective solutions through shared and expanded management. It contains the main engaged actors, their strategic decisions, their responsibilities, and the limit of the effects managed by the company's productive practices (Du Tertre, Viudel & Pasquelin, 2019; Xavier, 2021).

Nowadays, the FCE dynamic is disseminated to companies through EFC Clubs. The FCE Club's main objective is to promote research, debate and intervention in spaces for discussion on the FCE approach. With this, the EFC Club proposes diversified collective activities associated with actors in the context of the topic addressed and with all actors involved, such as universities, research institutes, companies from various sectors, entrepreneurs, students, and other interested people. The FCE Clubs are associated with the ATEMIS laboratory and put the dominant capitalist and



globalized economic model up for debate based on the experiences of the actors involved. Thus, they are based on participatory design and a search for new paths for renewing economic models and transforming companies' business models under the demands of production and the territory and the limits due to the challenges of the current industrial model. Through the FCE Clubs, FCE forums take place, which are open events that present thematic editions with emerging issues and actual or potential cases of transformation of the economic model from the perspective of the FCE in favour of innovation and sustainability and the monitoring of companies and project territorial projects, which helps company directors and various initiatives in the transition of their economic models, based on an understanding of the FCE approach and cooperative work among the participants. This monitoring of companies occurs through three types of dynamics: (i) collective training, (ii) individual interaction with each manager and (iii) interaction between pairs of managers.

Creativity

Designers often face opportunities or problems they must overcome through creative ideas (Crilly & Cardoso, 2017). The concept of creativity is related to the ability to generate a new and original perspective that is effective in its context (Runco & Jaeger, 2012). It can be expressed in practically all sectors of activity, being central to entrepreneurship, putting economic actors and company managers together to create and add value to their businesses through new products or services (Lubart, 2016). Ko, Lin & Lin (2009) point out that companies are increasingly focused on combining new resources to create value and experiences for consumers to satisfy their personal needs. When dealing with service design, the creative process allows us to consider functional and subjective aspects that allow people to enjoy a product or service that is important in their lives (Gemser & Leenders, 2001; Voss & Zomerdijk, 2007).

Creativity is closely linked to design (Hu *et al.*, 2021) as it can be considered a creative problem-solving process customized to achieve a specific purpose (Dorst & Royakkers, 2006; Simon, 1973). Considering that service design is seen as a human-centred approach, with cocreative and inclusive content, Karpen *et al.* (2017) point out that service design "provides a space for participation and cooperation between multiple actors, being inclusive in its methods in order to identify value in the future context of use". In this way, service design must understand human experiences, as well as their interactions and practices, as a leading source of inspiration to build new services (Meroni & Sangiorgi, 2011).



Dealing with the reality of most companies and their processes, creativity is generally not conceived in a holistic way in service design – on the contrary, creativity remains in an ad-hoc or isolated way for problem-solving. The production of services in an inclusive, coherent and interactive way is necessary to generate effective and cooperative creativity, which allows a long-term result through joint participation in open discussion spaces for people. According to Steen (2013), creativity must, therefore, “become a social process, a process that occurs in-between people, in the middle between others and self.”

Value Cocreation

According to Haase (2021), cocreation is related to the idea of actors involved directly or indirectly cooperating "to integrate resources, bring combinations of resources that they consider fundamental and relevant for their own performance or change they want to achieve". Its concept rests on the dominant service logic, whose proposal is applied in competencies in favour of the benefit of the other, based on exchanging tangible and intangible resources to create value (Vargo & Akaka, 2012). This implies that value is built with consumers and suppliers through interactions between these actors uniquely in consumers' lives and influenced by the experiences of relational, sociocultural and emotional functionalities (Vargo & Lusch, 2008; Grönroos & Voima, 2013). For Grönroos & Gummerus (2014), value creation is articulated between three dimensions: the provider dimension, in which the company produces goods and services, serving as a creator of value in use; the joint dimension, where beneficiaries cocreate value with service providers while participating in the production of goods and services and the customer dimension, in which customers determine the value creation processes, integrating their resources such as knowledge, skills and motivations in the company's value proposition (Edvardsson *et al.*, 2014; Grönroos, & Voima; 2013, Witell *et al.*, 2011). Based on user-centred methods (Curedale, 2013), service design is reflected in collaborative ways to innovate, having to codesign as one of its principles (Sanders & Stappers, 2008). This approach is centred on users' personal experiences to be used as a basis for better products or services (Lin *et al.*, 2011). Therefore, from the value cocreation perspective, a company can cocreate value by interacting with beneficiaries through dialogic methods, combining processes in mutual and joint learning (Grönroos & Voima, 2013; Grönroos & Gummerus, 2014).

Considering the existing studies on the contributions of value co-creation to service design and its strategy as a set of tactical and functional activities (Yu & Sangiorgi, 2018), there is a gap related to the creation of a renewed structure and concrete



guidelines guided by new actions and methods to incorporate the innovation logic of service design. There is, therefore, a need to rethink the company's strategy in terms of its development and production of value model.

Reflexivity

Reflexivity can be understood as a “learning process that promotes the change of habits and routines, through a critical questioning of the objectives and methods in use, to improve the company's performance” (Farnese & Livi, 2015). It is based on the action of professional practice (Schon, 1983; Wenger, 1998), understood as a self-reflective cognitive process at an individual level, in which it determines the ability to reflect in action related to practical, relational and learning experiences (Lee & Sukoco, 2011). Indeed, reflexivity reframes the actors' relationship according to their cultural, professional and social contexts (Farnese & Livi, 2015). Tjosvold, Tang & West (2004) showed in their work that reflexivity could be promoted through cooperation, as this practice emphasizes the ability of actors to discuss divergent issues to make them constructive. Reflexivity allows actors to criticize their social context and recognize its mutability (Voronov & Yorks, 2015). However, it requires continuous monitoring and a guided debate to plan the company's short and medium-term objectives in order to decode the complexities of their actions for their readaptation (Farnese & Livi, 2015).

In terms of service design, according to Vink & Koskela-Huotari (2022), it has a transformative potential that reinforces the ability to amplify the reflexivity of individuals, although it is not yet clear how the applications of service design methods can contribute to reflexivity (Vink & Koskela-Huotari, 2022). Sangiorgi (2011) suggests that designers need to become more reflective concerning their work and interventions, which can help designers become aware of how elements such as cooperation and creativity play out in a specific situation and their involvement in the situation (Steen, 2013). Without reflexivity, aspects that are not seen in service design are hidden, and with that, its proposal runs the risk of pushing for incongruous changes that are not supported by the practical context (Vink & Koskela-Huotari, 2022). Therefore, promoting reflexivity provokes thought rather than giving answers, generates possibilities rather than creating prescriptions, and seeks openings rather than creating closures (Rhodes, 2009).

Given the above and considering the rapid changes in the market due to competition for profit, the learning process, despite being quite relevant and helpful for service design, is a factor that is usually not valued, mainly due to time. that people dedicate

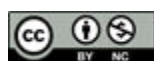


themselves more to their work activities than to learning new things, either due to their own experience or the experience of co-workers, which influences the company's ability to promote a greater degree of innovation in its processes (Farnese & Livi, 2015). Reflective practice enables structuring knowledge and know-how, improving performance when performing a task and learning (Falzon, Sauvagnac & Chatigny, 1996). Therefore, designers need to become increasingly reflective actors in the work environment in the face of their design activities (Sangiorgi, 2011), just as it is essential that there is a change in the way of thinking of company managers, whose core orientation is dedicated to reflexivity on work activity, active listening and the return of experience, also acting to change their practices (Demissy & De Gasparo, 2021) through a support mechanism that articulates these structural disturbances of contemporary society in reflective confrontations in favour of lasting solutions.

The need for a renewed economic approach to a continuous service design innovation

From the FCE perspective, according to De Gasparo *et al.* (2019), creativity occupies a place centred on service activity through communicating with beneficiaries and finding original solutions to the needs that arise. For the authors, creativity is constituted by the service relationship (between the skills of the collaborator and the needs of the beneficiary). It establishes a "lever for the creation of value, offering an alternative approach to the economic development of an organization" (De Gasparo *et al.*, 2019), recognizing intangible resources mobilized in the work activity and considering the expectations of users. For Du Tertre, Vuidel & Pasquelin (2019), these intangible resources are the skills of individuals, their knowledge, as well as trust in the product or service, its relevance, creativity and the quality of the relationship with users to produce the value of service. However, developing these resources by associating creativity and value creation in a cooperative way "is not automatic and requires a transformation of the organization of work and the company's performance policy" (De Gasparo *et al.*, 2019). Dematerialization constitutes an essential performance element for creating value, introducing sustainable development as a new dimension to the economic model (Merlin-Brogniart, 2020). Du Tertre (2013) states that an economic model that is based on the performance of services is articulated between five registers:

- The service quality;
- The service productivity;
- Positive or negative externalities (unintended effects) in the territory;



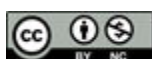
- Profitability and;
- The reflexivity (and immaterial resources) effects in the production process.

The relationship between reflexivity and immaterial resources is because they can develop through their use, unlike material resources that deteriorate or are reduced with their use (De Gasparo, 2021). The concept of servitization deals with the changes in the value creation process between relational and immaterial aspects of service activities (Demissy & Le Dilosquer, 2017). Therefore, reflexivity applied to servitization promotes an increase in the value of goods, in the dynamics of exchange, in the construction of relationships and in the visibility of actual work.

Concluding Remarks

This paper contributes to the practice of service design, providing theoretically grounded insights into how creativity, value cocreation, and reflexivity can best be cultivated through the contribution of the FCE action framework. To encourage the convergence of these three factors, EFC can offer creative and integrated solutions based on tools that expand the scope of service design to consider the issue of work, organizational design, and the current economic model in the company. It is also based on an intellectual or ethical foundation based on society and its subjectivity rather than purely mass production. A service-based economy detaches itself from the volume and price of a good and emphasizes the use value, which is cocreated through the performance of the use of intangible resources. By encouraging service design explicitly focused on reflexivity, it reinforces the proposal of action-oriented experience design, which can promote alternative service design formats, being able to strategically leverage new design processes that consider and encourage cooperative engagement in its design context.

Overall, this work indicates that creativity, co-creation of value and reflexivity favour the service design proposal, also considering the experience of employees, more significant organizational commitment and a supportive environment favourable to innovation, pointing out that these three factors constitute important and concrete organizational levers to drive innovation. These results lead us to some considerations on the proposal of the EFC Clubs, innovation-oriented organizational support vehicles based on a cooperative issue, of contextualized relational practice, and that demonstrate, according to their purpose, to be cohesive tools that generate a practical innovation. The proximity of actors in forums and project follow-ups also suggests a greater sense of belonging, encouraging the generation of ideas, transversal relationships and more affective commitment.



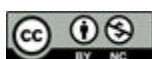
There are limitations to this research, which should be noted: there was no practical application considering the three elements in companies already guided by the EFC approach in their service design processes. With the interviewees' reports, it would be possible to show more in-depth research on the subject, bringing a more effective contribution to the innovation of services in other companies. Although our study is applied in a theoretical perception in a macro analysis of the researchers, future research could bring a richer approach with objective indicators depending on the results. In addition, it would be interesting, in other future research, to carry out a study on the maturity of the company regarding creativity, co-creation of value and reflexivity and to verify in more mature companies if these three elements promote a more outstanding contribution to service design.

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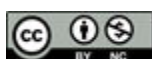
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