

“Ideas Sharing LAB”. Co-designing multifunctional services with local food communities.

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Abstract

In recent years design has taken an active role in projects for ‘place’ development (e.g. Dott07, Veil), where a series of local projects aimed to nudge a region in a more sustainable direction (Jegou, 2010; Manzini, 2010b). In this framework service design seeks to foster new relations and create synergies among local actors and services (Mirata & Ristola, 2005). In the case of periurban agriculture it means creating a network of de-mediated services (Renting et al., 2003, Meroni, 2006) to connect small-scale sustainable farmers with the city dwellers. The paper presents the main results of the author’s doctoral research achieved through case studies and a participatory action research carried out within two farmers’ markets. The research firstly detected a new service typology, called *multifunctional service*, pointing out its added value in terms of creating local networks of people and services. Then, from the actions undertaken in the markets it went on to define a new format for service design intervention called *Ideas Sharing LAB* (IS-LAB). This takes the form of a temporary living lab in the farmers’ markets to co-design new collaborative services with a Community Centred Design approach (Meroni, 2011), i.e. designing with and within the local community of farmers and city dwellers. The paper concludes by outlining the methods and tools of *IS-LAB* and the opportunities offered by Community Centred Design in ‘place’ development projects.

KEYWORDS: Community Centred Design, design for services, multifunctional service, co-design, farmers’ markets

1. Design for place development and periurban agriculture: problems and opportunities.

In recent years Design has taken an active role in projects for sustainable ‘place’ development (e.g. Dott07, Veil) where a ‘place’ is defined by Alberto Magnaghi (2000) as the

result of the interactions among the anthropic, environmental and built territorial components. From the service design perspective this means dealing with relations between people and local resources, and fostering the creation of networks among actors and services (Meroni, 2011). This paper presents an applied research project in the field of short food chains between periurban areas and cities, where social and economic problems related to local agriculture activities emerge (Simeone, 2010). Despite this problematic context some opportunities are becoming apparent in switching from intensive agricultural methods to organic ones and creating direct connections between producers and consumers. From the American Community Supported Agriculture (CSA) to the Italian purchasing groups a wide variety of innovative solutions have been activated thanks to dynamic groups of people generating new collaborative solutions (Jegou, Manzini, 2008) where the consumers actively participate to shorten the food chain, becoming co-producers (Petrini, 2005). These relationships between city dwellers and local farmers are the human capital from which a process of deep change in a region can start, asking the former to take active part in its development and the latter to acquire a new role and new competences in the system.

From literature and from European directives it emerges that fostering multifunctionality in agriculture and enhancing the role of the farmers is a major strategy to support these direct and de-mediated connections. The concept of agricultural multifunctionality offers farmers the possibility of varying their sources of income by activating secondary functions and services alongside, and linked to, their primary function of food production. In this way they also contribute to the social and economic viability of many rural areas (OECD, 2001; Renting, Marsden, Banks, 2003). Such functions include food tasting, recreational, cultural or didactic activities, sports and tourism aimed at enhancing the knowledge and enjoyment of the region by the citizen. The idea is considered to be very promising especially for the development of periurban areas (EU, 2000) where these services could be addressed to the city (Meroni, 2006; Holloway et al., 2007).

Thus the main emerging strategy is to take advantage of this proximity between the periurban countryside and the city (Petrini, 2010), by fostering direct connection through a multifunctional system of services. Hence de-mediation becomes the objective in developing sustainable food systems, and multifunctionality the strategy to obtain it.

2. Multifunctional services to foster local networks

From an initial analysis of cases of de-mediated solutions, it emerged that the *multifunctionality* of some services made them *multifunctional systems* per se. This is the case in some farmers' markets where, alongside the producers selling and users buying food, there are other local actors offering many other functions (Cantù, 2012). From this observation and an in depth analysis of two cases, the "Union Square Greenmarket" in New York City and the "Earth Market" in Milan, it became clear that the peculiar structure of these services generated new connections between service providers in the territory and direct relation between the people participating through *co-experiences* (Forlizzi, Battabee, 2004) and that such services were important in fostering local networks of people and services. These services, which I call *multifunctional services*, can be defined as platforms where many functions are offered at the same time and different actors meet and collaborate, producing a wider system of local and interconnected services. Their flexible shape allows the actor configuration to change over time, hosting various organizations in turn and enabling new relations to develop. In this way other synergies could potentially be activated depending on the opportunities and the people involved. This kind of service is like a hub in a network (Halpig, Summer, 2008)

reproducing on a smaller scale the net of relations typical of a lively territorial system. Thus, they become fundamental drivers in the creation of relationships in a local area, steering the development of 'places', where by "place" we mean the result of the interaction between people and their own natural and built environment (Magnaghi, 2000). Moreover, through informal connections, sharing expertise, learning from others and participating in group activities, people taking part in multifunctional services acquire social capital, contributing to the creation of a local food network.

3. Community Centred Design approach: working within the local food community

The theoretical background and the prior findings shaped the research question, that is: how can we take advantage of already existing multifunctional systems to design a local food service network?

Indeed the research had the main objective of exploring, through an applied process, how design intervenes in practice to trigger a systemic change on an urban and periurban scale, defining new forms of collaborative and short food supply chain services and supporting their implementation and replicability. From the previous paragraphs we can see that a *multifunctional service* is a suitable place to study collaborative regional food systems, enabling designers to get in contact with different local communities (from common people interested in buying *good, clean and fair* food (Petrini, 2005) to organized groups such as purchasing groups or producers' associations). Thus the main work hypothesis was to adopt a Community Centred Design approach (CCD) and to become part of a *multifunctional service* working on field and getting in touch with the people directly involved, who would potentially offer and use the services to be developed.

CCD is an approach that pushes designers to go into the community, becoming part of it, learning directly from their experience and developing specific tools to enable them to co-design new collaborative solutions. This requires them to acquire two main abilities: on the one hand to develop an empathy with the community, to understand its real needs and desires, and on the other to design tools supporting non-designers who enter the service design process (Meroni, 2011).

4. Design experiments in farmers' markets

Farmers' markets, read as *multifunctional services*, are the places identified for carrying out design experiments for the purpose of this research. Specifically they are:

- The *Earth Market* in Milan. This is the first farmers' market on public land in the city of Milano and started in December 2009 within the framework of the project *Feeding Milan* (www.nutrire milano.it), promoted by Slow Food jointly with Politecnico di Milano-INDACO department, and the University of Gastronomic Sciences, with the aim of reshaping the Milanese periurban agriculture by developing a network of de-mediated services. In this context the research opportunity arose in synergy with the main purpose of the overall project, with the opportunity to use the space of a stall (the "Ideas Sharing stall") within the market to carry on participatory activities with the communities involved (farmers, citizens, local associations). The actions developed aimed to open a communication channel with the local food communities, with the stall becoming a *window* for the project where new

collaborative service ideas could be co-designed and rough prototypes and enabling tools developed.

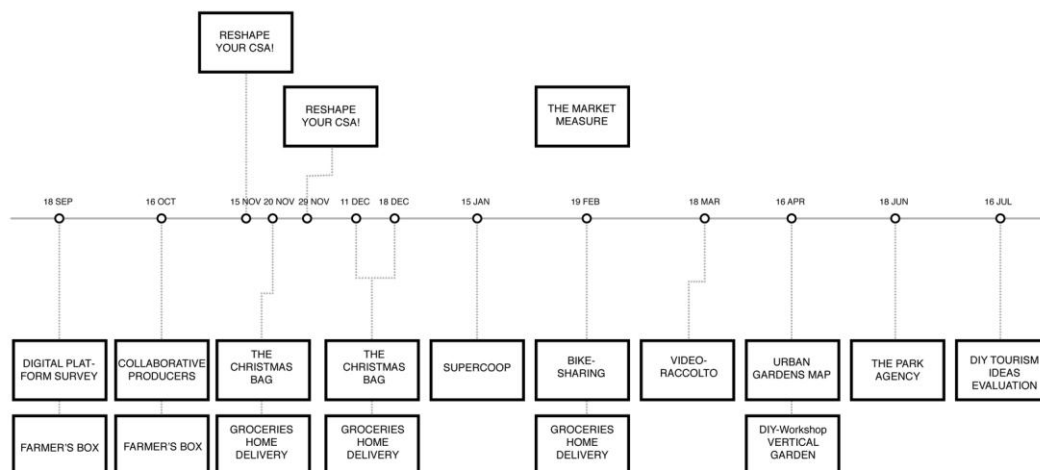
- The *Union Square Greenmarket* in New York City. This is the main market, in terms of frequency, dimension and number of people participating, of the *Greenmarket* network in the city. This network currently includes 53 markets in the five boroughs. In this context I had the opportunity to plan and develop two activities during the period I spent as a researcher in Parsons-The New School for Design from September 2010 to February 2011, directly collaborating with the market manager.

The iterative approach adopted had two main objectives:

- » To assess the desirability and practicality of the service ideas introduced and to reshape them on the basis of the feedbacks received from the community;
- » To understand how CCD could be adopted in an open public space, such as the market one, and as a consequence to define methods and tools supporting the interactions with the communities.

The actions in the farmers' markets analyzed for the purpose of this research were carried out during one year, from September 2010 to July 2011, and had as general objective to test and verify new collaborative service ideas or improve the market offering by involving the local community. The following scheme reports the actions carried out, providing an overview of the on-field co-design activities.

Union Square Greenmarket New York City



Earth Market Milano

Figure 1 – Actions undertaken during one year of applied research in the two farmers' markets

The actions carried out for the applied research were:

Action M.1 - The Farmer's Box: Rapid service prototyping of the "Farmer's Box", a service concept for the delivery of fresh and local produce in the city area of Milano, with the aim of co-designing it with the people attending the *Earth Market*. Tools developed for co-designing: questionnaires, service evidences.

Action M.2 - Digital Platform Survey: Development of two surveys (for the producers and consumers) aimed at measuring the community's rate of collaboration and its habits in using on line platforms. The two were presented at the Sharing Idea stall at the market, promoted

on the *Feeding Milan* website and sent by email to the market's producers. Tools: on-line surveys.

Action M.3 - Collaborative Producers: Visualization and discussion, with the producers attending the Earth Market, of three collaborative service proposals to be developed on the Feeding Milan digital platform. The service ideas are the results of the "Digital platform survey" action. Tools: evidences, face-to-face interviews.

Action M.4 - The Christmas Bag: Co-design and rapid prototyping of a new function in the farmers' market aimed at offering the tools to transform people's groceries into a nice present for Christmas. Tools: storytelling, service evidences.

Action M.5 - Groceries Home Delivery: Rapid service prototyping of a home delivery service by bike in the farmers' market in collaboration with the independent organization UBM-Urban Bike Messenger. Tools: evidences, digital survey.

Action M.6 - Supercoop: Co-design with the producers and consumers of the "Supercoop", a supermarket totally managed by its members. The service idea was divided in 4 topics: logistics, offering, community and communication. Activity carried out by the students of the Master degree in design - Laboratorio di Sintesi Finale (Services) - a.y. 2010/11. Tools: questionnaires and visualizations.

Action M.7 - Bike Sharing: Rapid prototyping of the bike-sharing service in the Agricultural Park South Milan. Activity carried out by the students of the ASP, Alta Scuola Politecnica - a.y. 2010-11. Tools: persona, customer journey pocket book, customer journey map, and evidences.

Action M.8 - Video-collection: Blue-sky research activity carried out interviewing people attending the farmers' market about Feeding Milan video-scenarios. Tools: video-scenarios, questionnaires.

Action M.9 - Urban Gardens MAP: Experience prototyping of the "Orto diffuso" initiative, aimed at diffusing and mapping horticultural activities in the urban environment, in collaboration with the no-profit association *Metropolitan Turnips*. Tools: storytelling evidences.

Action M.10 - DIY Vertical Garden Workshop: Experience prototyping of a workshop activity in the market in collaboration with Viale Campagna. The activity was presented at the Ideas Sharing Stall with specific tools and carried out by the hosted organization in the Convivial Tables area. Tools: storytelling, evidences, on-line registration.

Action M.11 - The Park Agency: Rapid prototyping of a set of 10 service ideas for tourism activities in the Agricultural Park South Milan. The concepts were designed by the students of the Master in Product-Service System at Politecnico di Milano, a.y. 2010-11. Tools: evidences, posters and questionnaires.

Action M.12 - DIY Tourism Ideas Evaluation: Discussion and evaluation of the aforementioned proximity tourism ideas with three of the five farmers involved in the concept development. The services proposed were designed by the students of the Master in Product-Service System a.y. 2010-11 at Politecnico di Milano with the aim of making the *instructables* available on the Feeding Milan website. Tools: service booklets, video-shorts, video-tutorial, face to face interviews.

Action NY.1 - Reshape your CSA!: Co-design of a new CSA model in collaboration with the Amplify Creative Communities research project (<http://amplifyingcreativecommunities.net>) in the space of the Greenmarket in New York City. Tools: questionnaires, pins.

Action NY.2 - The Market Measure: Outline of 3 research activities (modular and flexible) to be carried out in farmers' markets in order to support the managers in evaluating the market's impact from the point of view of the economy, the experience of the customers and the customers' knowledge of the produce. The toolkit was developed in collaboration with David Hughes, manager of Union Square Greenmarket. Tools: guideline, survey, dot posters, video interviews.

5. Co-designing services in an open public space.

An analysis card was developed for each of the actions presented., providing a brief description, an analysis of the tools and the results obtained, with special attention to the lessons learnt about the possibilities of doing CCD in the context of a multifunctional market. In the end a graphic visualization of the activity evaluation is presented, taking into account the effectiveness of the tools for the specific action, the number of people who took part in the activity proposed and the ability of the designers in establishing positive relations with the people involved during the interaction.

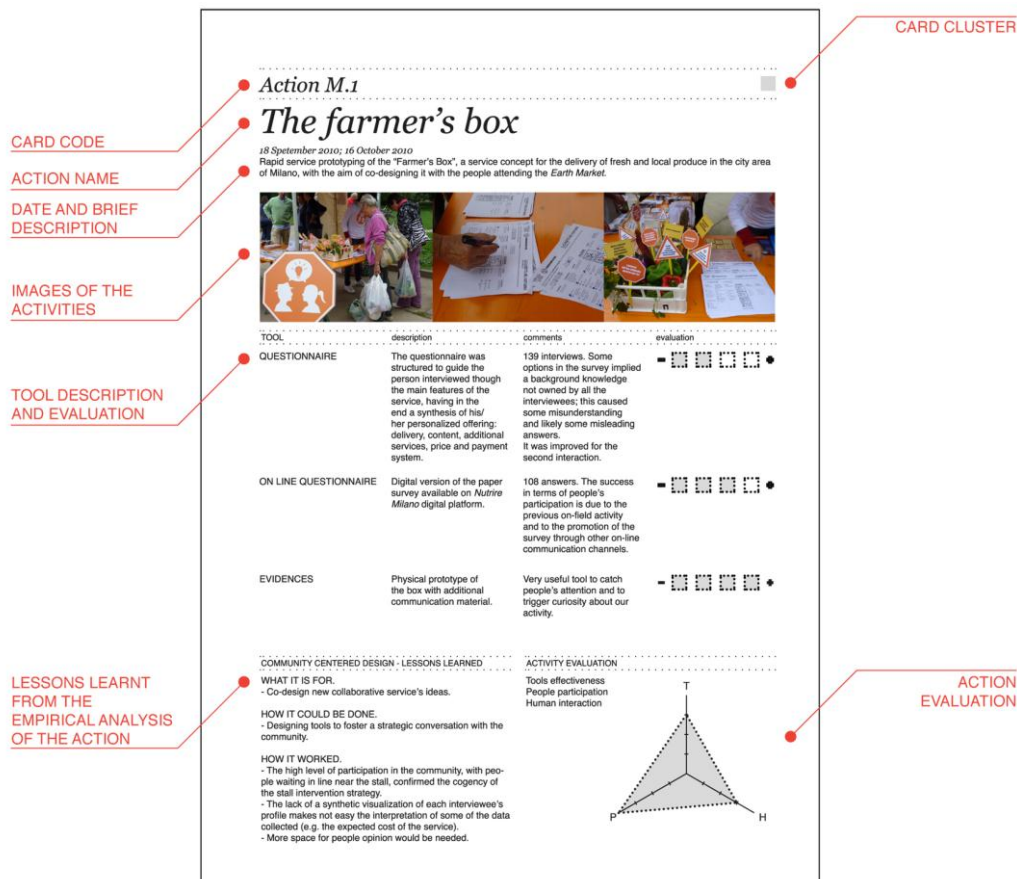


Figure 2 –The structure of the action cards

Thanks to this analysis and the empiric observation on field it was possible to define the methods, the tools and opportunities for designers to work in such contexts to activate collaborative services with people participation.

5.1 What actions

From the analysis of the activities proposed to the people attending the farmers' markets it was possible to outline a framework for design intervention in multifunctional contexts. Indeed designers work in this context to involve the local communities in social discussions by creating rough prototypes of two main things: a “new function” to be offered at the market place or a “new service” to be implemented on a local basis. In the case of M.10 for example, the DIY workshop proposed was a *function* added to the market to create an occasion for the people attending to get and share knowledge on a topic of common interest; on the other hand in the case of M.1, the “Farmer's Box”, the service idea was discussed with its potential users in order to adapt the concept to the local context by co-designing its specific features.

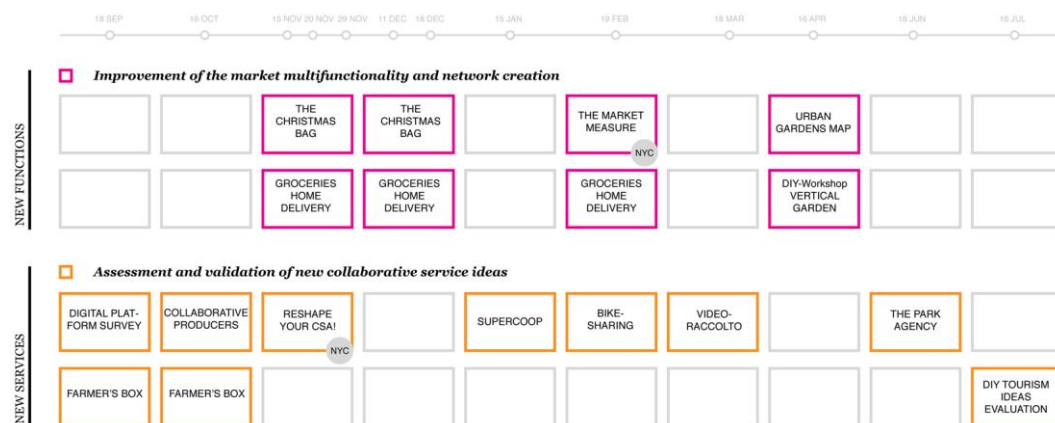


Figure 3 – Actions undertaken in the farmers' markets divided on the basis of the “object” prototyped

5.2 Which tools for CCD

In order to carry out these activities many tools have been developed since the *Ideas Sharing Stall* was opened. They are mainly tools supporting *strategic conversation* between the actors involved, and enabling city dwellers and producers to participate in the design process. They include mock-up communication material, surveys, storytelling and other forms of visualization helping to trigger people's curiosity at the market, share knowledge on the object of discussion and collect feedback from potential users. From the action research carried out, three groups of tools for conversation were identified: *Engaging*, *Enabling* and *Collecting*.

Engaging tools. Due to the nature of the co-design session, in an open public space where everybody can freely decide to participate, the primary need that emerged for the designers was to catch the attention of people passing by the stall and trigger their curiosity. In the case of the “Farmer's box”, for example, designers prepared a rough prototype of the vegetable box as the main evidence of the service; for the “Bike sharing” proposal a real bike was put in front of the stall gaining positive feedback in terms of getting people's attention.

Enabling tools. After creating a connection, designers need tools by which to share knowledge about the object of conversation with the people involved, something allowing non-designers to take part in a co-design process. In general they are communication materials whose nature varies widely case by case. For example, designers used a paper-based visualization of a computer screen integrated with guidelines for face-to-face interviews to discuss a new digital service proposal with the producers. In other cases *video-scenarios* were

adopted to share the project ideas or *personas* and *customer journey maps* to guide interviewees to express their preferences on the different stages of the service.

Collecting tools. These are tools to collect quantitative and qualitative data in order to share, analyze and reflect on them. They could be questionnaires and *dot posters* in the first case, or pictures and notes in the second, aimed at supporting empathic design (Leonard, Rayport, 1997) by gathering important insights from people's behaviour and reactions during the interaction.

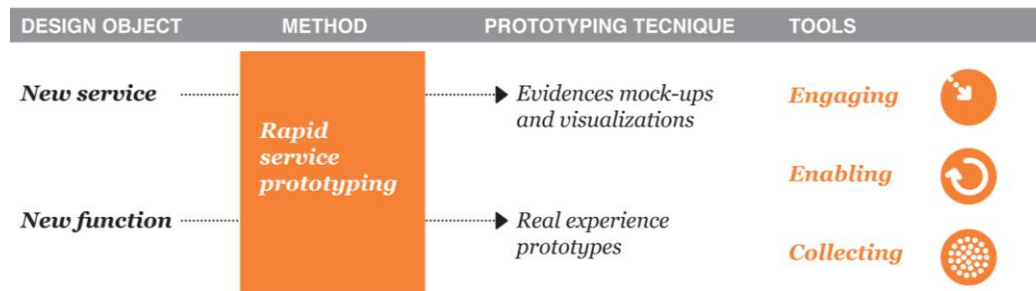


Figure 4 – Strategy for co-designing services in multifunctional contexts

5.3 CCD framework and opportunities

Designing services *with* and *within* a community requires designers to adapt tools and methods of *User-Centred Design* to a community scale, developing specific skills to understand people's behaviour, needs and complex relations. From the applied research it emerged that one of the most important aspects of this approach, is to learn from people's behaviour and **tacit** feedbacks (empathic design), leaving the interactions as “open” as possible and leaving space for further conversation and contributions. At the same time co-design sessions have to be planned and specific tools are needed to engage non-designers and collect and evaluate their **explicit** knowledge (co-design). In this perspective both people's *tacit* and *explicit* knowledge are the basis from which to get insights for new service development, detecting new opportunities and innovative behaviours. Thus, by moving on from the CCD concept and from the on-field experience, it can be defined as an approach where design, focusing on a community of people, simultaneously adopts *empathic* and *co-design* approaches in order to achieve both tacit and explicit knowledge from the people involved, to design with and for them.

From the action analysis it emerges that CCD enables designers not only to get insights from the communities and their habitat but also to have direct influence on their relations and behaviour through a proactive approach. In fact it was possible to:

- » Suggest new collaborative behaviour (M.1);
- » Trigger a change in the producers' behavioural patterns (M.3);
- » Suggest small changes towards more sustainable lifestyles (M.4);
- » Foster knowledge sharing (M.9-M.10);
- » Foster networking opportunities with external actors, such as in the (M.9);
- » Create co-experience opportunities (M.10);
- » Evaluate the impact of the market, as in (NY.2);
- » Communicate the project's development to a broader community, as happened in the June 2011 side activity organized in the Earth Market.

6. The *Ideas Sharing LAB* as a new format for design action

Looking at the overall process of service development that emerged from the *Feeding Milan* project (Cantù, Corubolo, Simeone, 2012), co-design activities in the *Ideas Sharing stall* assumed a central role in fostering ‘place’ development projects. In passing from the initial phase of concept definition to the implementation of the service, the farmers’ market is the place where service ideas are introduced for the first time and discussed with a wider community of potential users. In this perspective the *Ideas Sharing Stall* becomes a “laboratory” in an open public space (Ehn, 2008) where service prototypes are developed and tested and new services concepts are generated. It’s a place that becomes the engine of a *framework project* having a flywheel effect on the local project’s development. It takes the form of a “Temporary Living Lab”, running for the time needed by the overall project, where ideas are discussed and prototyped on a small-scale, opening the discussion to the farmers and city dwellers. It is an open window where solutions can be proposed in support of new models of de-mediated services and where, by sharing knowledge and experiences, a local food community flourishes, which will potentially take an active role in the implementation and adoption of the innovative ideas generated.

I call this format of design intervention “Ideas Sharing LAB” (IS-LAB). It aims at tackling the complex issue of fostering a network of services supporting local agriculture, and a sustainable food provision system, by starting to involve the local food community in *small-scale changes* (Ehn, 2008, Manzini, 2010a, b; Jégou, 2010) in order to achieve a bigger impact.

The IS-LAB can be defined as follows.

Description: this is a physical place in a *multifunctional service* open for community participation in co-designing new collaborative service. It is a temporary *Living Lab* that becomes the engine of a framework project addressed to reshape territorial service relations.

Purpose: to co-design service concepts involving local producers and consumers and to suggest new collaborative and sustainable behaviour while communicating the development of the local projects at the same time.

Context: the IS-LAB gains great advantages in terms of fostering network creation by working within a *multifunctional service*, due to the simultaneous presence of the main actors potentially involved in the local projects discussed, the producers and consumers. Furthermore this context offers a reference point for iterative interactions, allowing designers to become part of the community, creating a relation based on trust and facilitating people’s participation in the actions proposed.

Actors involved: in the IS-LAB activity many actors are involved in different phases. Designers and experts are involved in the concept definition; then designers implement the rough prototype of the service and the tools needed; during the run time of the market producers and consumers are free to participate in the activities, interacting with designers and others professionals (e.g. agronomists). The list of people interacting includes: producers, consumers (or co-producers), researchers, students, professionals, private organizations, public institutions, politicians, etc.

Approach: the approach adopted is *Community Centred Design*, where tools and techniques of User Centred Design are scaled-up to a community level, allowing designers to get tacit and explicit knowledge from people’s participation having at the same time a direct influence through the proposal of new sustainable behaviour.

Objects: from the research experience in the IS-LAB the *object of conversation* with the local community can be a *new service* or *function* within the *multifunctional service*, even if, as the research evolves, new opportunities might emerge.

Method: the method adopted is *rapid service prototyping*, where, in order to support co-design activities, the intangible nature of the service proposal is concretized adopting different techniques. In the case of a *new service* it is typically visualized through *mock-ups* of its main evidences, while in the case of a *new function* a *real experience prototype* is developed.

Tools: In the context of the farmers' market people are generally well-disposed to hearing new ideas but the participation process needs to be supported by tools to get their attention and trigger curiosity (*engaging tools*); tools to enable non-designers to co-design a service proposal (*enabling tools*); and tools to collect the feedback received (*collecting tools*).

Process: 4 main steps form the IS-LAB action development process. Firstly the service concept is defined, outlining its main features and possible options; then specific tools are designed and developed; the day of the market the stall is set up for the interaction; then the co-design session takes place and designers are engaged in leading people's participation, remaining open to unforeseen development. The next step of the process is typically the reshaping of the idea presented and then the development of a prototype in the real context of use, before service implementation.

Exit strategy: the creation of the Ideas Sharing LAB and engaging people in its activities requires the development of an exit strategy when its purpose is fulfilled. It requires designers to feed it with new ideas and energy in running co-design sessions, but this is required for a limited time. Afterwards the IS-LAB may become a new function within the *multifunctional service* hosting it, becoming for example a "window" to be rented to companies who want to test and evaluate innovative service ideas, collaborating with designers and involving city dwellers. Up to now no strategies have been defined and many options are still open, depending on the opportunities available in the near future.

In order to create an IS-LAB and to activate the process of transforming a scenario into real services, designers have to create the conditions to co-design within the local food community, by:

- Building relations with professionals and non-professionals who are already carrying on services aimed at shortening up the food chain on a local basis;
- Identifying a suitable context for co-designing activities involving potential users of the services to be developed (*a multifunctional service*);
- Reaching an agreement with the manager/s of the *multifunctional service* to establish a potential continuous collaboration and to be officially recognized as part of its offering;
- Creating a visual identity for design activity in the farmers' market;
- Proposing new functions within the market, or new collaborative service proposals, and discussing them with the local community, developing specific tools for conversation and learning which ones have a major effect in the specific context;
- Reshaping the services on the basis of the feedback received and providing updates about local project follow-ups.

7. Conclusion

The main result of the research is the definition of the Ideas Sharing LAB as a new way for designers to work on the development of a network of de-mediated services. This has been achieved in a process of learning-by-doing where the practical results achieved in terms of people feedback and participation and local project development (such as The Farmer's Box, which has been prototyped twice involving 5 farmers and about 100 citizens and is now in its implementation phase) showed its potentiality.

Furthermore the applied research generated a deeper understanding of the Community Centred Design (CCD) approach. I achieved new knowledge about how CCD could be done and what the peculiar features are of working with a wide and dynamic group of people that includes many smaller communities:

- The local communities are proactive, taking part in the process and influencing its outcomes through their behaviour and proposals;
- A community can be an open and living entity, thus changing its configuration and potentially growing over time, including different kinds of actors and competences that cannot be determined at the beginning of the project;
- A community exists independently of the project development, having a long-term perspective in what it does, thus CCD is not about pulling people but accompanying them throughout a process of change;

The role for designers in this process is thus to facilitate the building of relationships in a territory by creating new solutions involving the people from the beginning of the process in generating self-sustainable services. Thus they become facilitators and triggers of local change working with the people and fostering their food sovereignty.

The on-field work presented outlined a scenario strictly related to de-mediated food services but it could be applied to further research in other fields, e.g. a system of services for local traditional artisans, or other interesting research could be carried out, connecting the IS-LAB format to digital services and interactions.

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