

From designing in protected environment to designing in real contexts

Piloting digital services for elderly independent living.

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Abstract: In the last decade the role of designers is moving from designing a product or service to facilitating and leading participatory processes due to the changing social and economic conditions and the emerging of new social needs. This is true for example in projects that aims to boost a kind of societal change that affects people behaviours in their everyday life. On this assumption relies Life 2.0, a European Project whose aim is to prototype and pilot a digital social network service dedicated to 65+ years old people to improve their social relationships, their independent living and their role in the society as agents and sources for new social services. The paper discusses how design methods and competences are applied in the development of this project, eliciting the lessons learnt especially from the piloting phase, where the Participatory Design approach played a major role. The paper starts by introducing the topic and discussing the role of Design and Participatory Design in leading these projects typologies; then the Life 2.0 project and its development process are described; finally the project experience is discussed providing guidelines for piloting digital services in a real context of use. The paper concludes reflecting on the designers' role and competences applied.

Key words: *Participatory Design, Services Prototyping, Piloting*

1. Introduction

In the traditional product design context the designers' task has been clear: creating aesthetic and functional solutions that can be manufactured and that have novel and innovative ideas in them. The design practitioners as well as the new growing group of design academics have largely built their competences in this kind of creative problem solution seeking processes in which visual and tangible means are applied.

The design mindset emphasizes a particular kind of re-thinking and re-configuring of the starting points, the elements and constraints, questioning what is really meaningful. It includes a holistic understanding of elements that compose the often so ill-defined problems with components that cannot be solved individually but their solutions are tightly related to each other. Moreover, the designer is working in close relationship with other professionals, such as mechanical experts, engineers and marketing and thus often becomes as a moderator trying to bring various constraints and perspectives together. However, what we are particularly interested in is the phenomena that many designers today are involved with, namely the new kinds of design tasks in which the word

¹ This paper is the result of a collective work, but for the purposes of this publication D. Cantù has written paragraphs 3, 3.1, 3.2; F. Rizzo has written the paragraphs 1, 2, 4 and 5.

change has a wider context than in product development environment described below. Even though many causes can be related to this new phenomenon we believe that it mainly depends on the fact that complex problems are taking the stage in the current society. Thus, the correspondent need to find new solutions to deal with them is emerging in different fields. They vary from the small-scale of everyday life changes to the large scale where the systems to be transformed are whole cities, regions, huge public institutions and complex organizations.

In this scenario design is re-orienting its theories and practices towards transformational projects: co-creation, social innovation, design for services and design thinking have become the buzz words that address designers and the application of design competence to prototype, pilot and help people and society to embrace new ways of living, new ways of relating and building communities, new ways of consumption just to mention some macro area on which a new wave of design projects is operating. But what is this design re-orientation about?

In the last five years Design has progressively shifted from creating prototypes of single parts of a service to be tested with single users to developing prototypes aimed at evaluating an entire project and its possible implementation in a specific context of use (e.g. Dott07, Dott Cornwall, Living Labs at Medea Lab, Nutrire Milano). This happens due to a change in the Design object, designers are in fact dealing more and more with the development of complex systems of products and services, where a multidisciplinary approach including different competences is needed and where the positive effects of co-designing and testing a solution during its development with its stakeholders taking into account the emerging opportunities are more and more evident [7].

The paper presents the European research project Life 2.0 whose aim is to improve elderly social relationships and their access to service provisions on a local base. Specifically it works on the development of geographical positioning services to support independent living and social interaction of people 65+ years old. By discussing the case study authors describe the process of piloting digital services for the elderly to enhance their social interactions in real life and make elderly community active agent for societal transformation, trying to understand what are the designers' methods and competences needed in passing from the design of scenarios and the definition of the platform requirements to the implementation and testing of a prototype in a real context of use. In the project design worked in partnership with stakeholders from the public administration, third sector organizations and final users taking the leadership firstly by developing scenarios, meant as the definition and visualization of the directions the project will follow, and then by aligning the needs and interests of all the actors in a Participatory Design process.

In the next paragraphs we introduce the concept of smart cities as the umbrella under which a new class of services is emerging inspired by the idea of sustainable growth, well-being and the opportunities this perspective offers in order to conduct transformational projects lead by a complex Participatory Design approach [7] [8]. Then we describe the design process applied in Life 2.0; and finally we discuss the piloting process and the implication that the development of full scale service prototypes has on Design practice.

2. Human Smart Cities, Service Design and Participatory Design

Society is facing today big epochal challenges that are calling for a transformation in the way we all work, live, play, and build our future, which in turn places a special burden on those of us holding the responsibility to govern such processes with an optimum usage of the public resources available. To respond these challenges services are more and more considering opportunities offered by the "smart city" idea towards a sustainable growth and well-being; smart cities envisioned as contexts where whatever interaction is mediated by technologies. Many solutions,

even integrating different perspectives in order to consider the complexity of the urban environments, are being proposed to cities mainly based on heavy infrastructuring and driven by the technology market. Most of these solutions keep technologies out of the urban environments, far from being considered components of the urban functioning and, furthermore, even farer from people and their urban spaces.

Another perspective, the Human Smart Cities [6], differently recognize these trends as inspiring for a citizen driven smartness. Human Smart Cities recognize that cities are the best environments for experimental dialogues on urban future taking into account citizens and their powerful connectedness made possible by future internet technologies. The Human Smart City (HSC) concept is built on emergent, sustainable models for urban living, working and governance enabled by Future Internet infrastructures and services. At the core of the vision is the human perspective, as gained through the application of citizen-centric and participatory approaches to the co-design, development, and production of Smart City services that balance the technical “smartness” of sensors, meters, and infrastructures with softer features such as clarity of vision, citizen empowerment, social interaction in physical urban settings, and public-citizens partnership. This vision focuses on people and their well-being rather than just ICT infrastructures and dashboards alone.

With the above trends in mind, the peculiar design approach feeding Life 2.0 activities is mainly rooted on the idea that smart is a city where people, citizens, stakeholders are the main actors of ICT driven urban development. In such a vision users do not simply adopt the technologies chosen and acquired off-the-shelf by their municipal governments; instead, the appropriation by citizens of even the simplest, most frugal innovations is strongly consequent to people first manifesting their Wishes-Interests-Needs and then developing the ability to provide adequate solutions through interactive, dialogic, collaborative processes with the public sector and the ICT solution providers.

Within these trends, Life 2.0 considers Participatory Design able to create conditions to set up and generate innovation ecosystems (like living lab, design lab, urban living lab) where people in places can develop peer-to-peer dialogues with all of the stakeholders involved in designing and delivering services which are considered enablers of new private-public people partnerships where governments are reconceiving their roles: they are becoming able to engage citizens by being open to be engaged by citizens, supporting the co-design of technical and social innovation processes through a peer-to-peer relationship based on reciprocal trust and collaboration. In this framework the notion of Participatory Design we mainly refer is that proposed by Pelle Ehn and his colleagues [2] [3]. Both papers are very thorough but, for the sake of the arguments dealt with in this context, only some of their passages will be considered, i.e. those refreshing the notion of participatory design and introducing the concepts of ‘design games’ and ‘design devices’. Both articles make a radical contribution to the debate on participatory design since they propose a radical shift in its conceptualisation: from the traditional view that considers the object to be designed as a well-defined product or service and where potential participants (a part of professional designers) are equally well-defined final users that become co-designers [12] to a new definition that means participation process as design process for the realisation of a ‘socio-material assembly’. Ehn calls these hybrid assemblies Thing: an ancient Anglo-Saxon term indicating ‘a collective of humans and non-humans’ that takes place ‘in open public spaces rather than within an organization’ [3]. On the basis of this new notion we adopt what Manzini and Rizzo wrote [8] that Participatory Design became a highly dynamic process. Therefore, participatory design can be something that also includes linear co-design processes and consensus building methodologies (i.e. the most traditional view on participatory design), but goes far beyond them, becoming a complex, articulated and often contradictory process where designer’s role also includes the role of mediator (among different interests) and facilitator (of other participants’ ideas and initiatives), but involves more

competences and, most importantly, it includes the designer's specificity in terms of design competence and knowledge.

3. Life 2.0

The project Life 2.0 aims to study and test digital services dedicated to 65+ years old people to improve their social relationships and promote exchange and meeting opportunities. The project partners, who are working on the pilots in their own countries, are universities, third sector organizations, Municipalities and IT firms located in Italy, Denmark, Finland and Spain. The three year project consists of four main phases: a first period of ethnographic research and analysis involving potential users of the services to be developed in order to start orienting the group about the needs and desires of the project target users. A second phase aimed at narrowing the options and defining the project scenario with a participatory approach, bringing together the contributions from all the regions involved. Then a third period to design the prototype of the digital service, moving from the requirements emerged from the scenario-building phase to the design of the platform screens and the architecture. And in the end the testing phase to proceed with the platform customization depending on the feedbacks received from the users and the emerging opportunities for stakeholders' involvement.

The Life 2.0 project will propose an open platform that will utilise Web 2.0 concepts through support of strong collaboration and co-creation between elderly people, local service providers and public institutions. With this platform the consortium is making an effort to reverse the existing value chain proposed for public services to elderly people and propose instead a networked structure in which elderly people will, at the same time, be final users and content providers. By supporting such a networked value co-production system the platform will provide:

- direct social benefit to elderly people, who will be able to live independently and give value to their capabilities and knowledge,
- direct economic benefit to local and regional actors, who will be able to use the platform as a direct touch point to reach the market of senior people; and
- indirect (and partially direct) economic benefits to local administrations, who will be able to use the platform to face the economic challenges of providing high quality services to an ageing population.

Life 2.0 clearly states, in its methodology description, how designing innovative services for elderly independent living is a goal that has to be perused and evaluated against at least:

- the capability of the services implemented to answer to unmet end users needs;
- the capability of the designed services to be sustainable in the real contexts and to rely on robust business framework that should be individualised and assessed for the delivery.

3.1 Phase 1: UCD method for designing Life 2.0 use case and requirements

The first innovation dimension has been perused, in the Life 2.0 project, through a rigorous and effective application of a UCD method (D1.1, D2.1 and D 2.2 of the project) to elicit unknown users needs and to build, on them, users' requirements for innovative services [9] [10]. The Life2.0 partners involved in the ethnographic work have carried out a number activities in direct or indirect contact with older people (mainly) but also with other people involved: carers, social services. The activities have been quite varied in length, and in people involvement; on the whole they have involved a quite large number of people, and have been connected with

previous activities, which provided a larger context and background to this field work. The following table summarises the involvement of participants in the different sites:

Place	Participants	Average age	Female %	Male %
Barcelona	75	68	69	31
Joensuu	8	71	62.5	37.5
Aalborg	13	67	62	38
Milano	30	69	57	43

Table 1. Participants in the different pilots

Examples of activities carried in the pilots are different and they all come from ethnographic and context analysis:

- questionnaires have been distributed at people in group during a common session afterwards each of them have been completed by users;
- diaries have been filled by users describing their main everyday activities including pictures of the context and of the tools/instrument used;
- life stories have been collected through contextual (Figure 1) interviews to establish a dialog between designers and researchers, and participants. Stories have been synthetized reporting name and a short narrative, and then, the situated, subjective, hedonic and dynamic components of each story have been described.

Data from ethnographic and context analysis have represented the basis on which to build personas and scenarios. More specifically personas represented the synthesis of the data collected from the ethnographic analysis about elderly people and their habits and experiences; envisioning scenarios represented suggestions for service ideas and functionalities on which to build up the Life 2.0 platform. Both personas and scenarios have been used as an inspiration and starting point for the next project phase dedicated to include the point of view of other actors and stakeholders that may have a role in the system and generate insights to support the construction of the platform business model. Results of this second phase have conducted to the elaboration of the 3 service ideas (obtained by grouping and selecting the envisioning scenarios: 1) Activities and Events; 2) Mutual Help; 3) Market Place to develop in each living lab (thinking about the characteristics of every city and related living elderly people) and to the co-design of the general business framework for the Life 2.0 platform.

3.2 Phase 2: pilot implementation with the users

In the second phase of the Life 2.0 project development the pilot activities were planned on three main phases, starting by introducing few people to the platform concept and interface up to building a small community to test the prototype in a real life context. The phases defined for the evaluation were: *demoroom*, *small scale* and *full scale* use, where the users' community is formed and use the digital services frequently. With the aim of co-designing the platform during the testing period the Life 2.0 consortium members set up a system for the continuous evaluation adopting a quantitative and qualitative reporting system based on the digital platform back office management system, on questionnaires done to the users and stakeholders and on weekly Skype meetings with the other pilots to compare the experiences and discuss the consequent design of the platform.

As a first step the partners in the four regions began to create the basis for the pilots activities implementation, starting with the community-building process. Each partner carried out this work depending on the local opportunities: in some case they worked with elderly centers, involving an already existing community, while in others, as in Milano, we collaborated with third sector associations, creating the group of users specifically for the

project pilot. Indeed in Italy we worked in close collaboration with a local third sector association called Meglio Milano, who supported the process of involvement of elderly users and the management of the direct relation with them throughout the piloting period.

The specific objective of this phase was to have a group of 20 elderly in all the regions. We started by involving three elderly, who participated in the ethnographic research during the first year of the Life 2.0 project, in order to have them as experts supporting us in the training of other members later on. We had the first meetings in the university building but it emerged soon the need to have a place where other activities and services targeting our users were offered, a *multifunctional place* [5] in the district where to set up the project *Living Lab*. For this purpose we got in contact with the local Dergano-Bovisa public library that agreed to become the place where to hold regular meetings with the elderly and eventually proved to be a setting fostering networking opportunities and providing a real connection with the local context and potential stakeholders for our digital service.

In order to involve more people our group of researchers, formed by designers, 3rd sector representatives and the Life 2.0 I-Pad app developer, organized an event in the library to present the project to a group of about 35 elderly and at the same time we got in contact with local associations to taste their interest in taking part to the project. In this phase we decided to provide each user with an I-Pad for the duration of the project for two main reasons: on one hand the services to be developed were based on a geo-localization system thus a mobile device would be better suited and on the other it worked as an incentive for elderly people who had not so much confidence with the use of ICT, opening up new opportunities in their everyday use of technology.

With a first group of 10 users, and involving in few circumstances other local stakeholders, we started a set of activities during two months such as: usability testing regarding the first functions implemented on the digital platform; co-design workshops to evaluate the mock-ups of new functions to be implemented; discussion about the service idea and the first draft of the business model with representatives both from the public and private sector; meetings especially dedicated to community building to make people know each other and facilitate then the on-line interaction.



Figure 1. Pilot activities with the users: usability tests, co-design workshops, Living Lab meetings

During the first 6 months of the pilot implementation phase, even if there were delays in the platform development, we were able to set up a group of 20 users provided with the tools and knowledge needed to start the *full scale* use. In September 2012 in fact we defined the local team formed by 4 people respectively from Politecnico di Milano Department of Design, Social Housing Foundation, Meglio Milano association and Telecom Italia, taking part to the periodical meetings in the local *Living Lab* and providing off-line and on-line assistance to the users. For the next four months the team set a calendar of meetings open to the elderly group where the topics

were defined time by time depending on factors such as: the stage of the platform development, the users needs and requirements and the opportunities and the interests emerging from the local context.

We began by carrying out 2 co-design workshops supported by the creation of a set of cards enabling the discussion on the third service to be developed on Life 2.0, the Market Place. The aim of the first workshop was to define with the users the most interesting services and information to be conveyed by the platform. Then in the second one we followed up by detecting what were the actors already active in the city area offering similar services in order to try to include them in the experiment later on. In the following meetings we reframed the project timeline, depending on the changes done by the European project consortium, and we focused on improving the iPad use by the elderly due to a persistent delay in the web platform design that made the elderly interest and motivation decreasing significantly. Offering some ICT and iPad classes appeared to be a good strategy to create a common interest in the group providing the contents to post suggestion and help request on the Life 2.0 platform. The team strongly pushes the use of the platform in this phase by finding the way to keep the people engaged in the process and suggesting “homework” to be done by the testing users in the short period in between one meeting and the other, such as posting at least 2 announcements or comments a week, introducing at least one friend to the platform or using Life 2.0 *Announcements* section to suggest one app they find interest or useful and comment to the others.

At the same time we worked on the Event section trying to make the platform more lively by introducing new associations and the Dergano-Bovisa library to the service and asking them to post events they were already planning to do and we did the same by posting the project meeting as new events, asking the elderly to confirm on the Life 2.0 platform. Another attempt to trigger participation was to ask the elderly to post requests regarding technical issues on Life 2.0 instead of asking us in person and to wait for answers by other users or the Life 2.0 team members.

While working on the elderly and local associations side as “users” of the digital platform we worked in parallel on the evaluation of the *business model* developed for the Life 2.0 project by contacting possible stakeholders having elderly as a relevant part of their users. This process of *infrastructuring*, by aligning interests of different actors, proceeded during the all pilot implementation but from November 2012 it was more systematic and implied the use of brief presentations of the project and interviews to the representatives of the associations already involved, the public library and possible owners of the platform to understand their willingness to join the service and the applicability of the model in the local context.

From January 2013 the platform design on the base of the pilots feedback has almost stopped for external causes, depending on the responsible technical partner, and the evaluation process of the latest functions to be implemented was delayed. Due to this reason we had to work hard to keep the interest of the people participating in the testing phase high, resulting in two main line of action: firstly we proceeded in enhancing their use of the iPad in order to give back something in exchange of their time and contribution and to improve in general their confidence with the system and, as a consequence, with the Life 2.0 app as well; secondly we made the group more aware of the European project dimension to make them understanding the work done in parallel to our regular meetings and to give their activities a new “sense” getting in touch with the other pilots elderly group. To achieve the latter we invite 2 of the more proactive users to the annual project review in Barcelona, organizing an informal visit to one of the other pilot group in the city. Their enthusiastic reaction and the report done to the rest of the group in Milano brought us to organize a Skype meeting between the pilot communities in the 2 countries

and to exchange information and ideas. They asked for the direct contacts of the people participating and then we will see if some new opportunities will emerge.

Currently we are in the phase where we should open the use of the prototype by involving other users and local stakeholders to add more contents and test the system on a bigger scale to verify the hypothesis to have Life 2.0 as a self-sustainable service. At the same time we are organizing two workshops respectively with the private and public sector to evaluate the business model and to develop a local business case by discussing possible ownerships with the local Municipality and other private organizations.

4. Discussion

The Life 2.0 pilots are open ended processes, where it is not possible to know in advance the way the service will be implemented [11] in the different locations and if it will end up to be a self-sustainable system in all the pilot countries involved. This in fact depends on the stories of each pilot towards the definition of an open environment that is able to integrate, within a design thinking approach, creative citizens and communities, with collaborative enterprises and participative institutions in the production of collaborative services.

As general consideration we observed that life 2.0 pilots are taking the shape of these open environments, living labs or design labs [1], whose some of the main characteristics seem to be:

- highly dynamic processes: they include linear co-design processes and consensus building methodologies (i.e. the most traditional view on participatory design), but they can go far beyond them, becoming complex, interconnected but, often, contradictory processes.
- Creative and proactive activities, where the designers' role includes the role of mediator (between different interests) and facilitator (of other participants' ideas and initiatives), but involves more skills and, most importantly, it includes the designers' specificity in terms of creativity and design knowledge (to conceive and realize design initiatives and their correspondent design devices).
- Complex co-design activities that, to be promoted, sustained and oriented, call for prototypes, mock-ups, design games, models, sketches and other materials: a set of dedicated and designed artifacts.

Specifically for what we observed in Milano during the three years of the project development we distinguished 3 main phases of the pilot that will be taken as a reference for the analysis of the local experience: (1) Community building; (2) Pushing the use; (3) Expanding and adapting.

During these phases we worked on the design of both the front office, with the users community, and the development of the business model supporting the service, the back office, carrying out interviews and workshops with local stakeholders in order to test the feasibility and in case adapt the first ideas developed by the Life 2.0 consortium. This dual work has been done including relevant stakeholders in a set of different activities to design the digital services on the base of their needs, and trying to align their interests to create new partnerships and new form of collaboration as the project evolved.

Activities with:	Community Building	Pushing The Use	Expanding and Adapting
ELDERLY	<ul style="list-style-type: none"> - evaluating the interface (usability tests) - enabling the use of the Life 2.0 platform (classes, off line support) - co-design of the platform basic functions & services - solving technical issues (translation, user management, app releases, ...) 	<ul style="list-style-type: none"> - co-design of the platform new functions & services - planning the regular meeting on the base of the platform development and the feedback received - enabling the use of the Life 2.0 platform and ICT (iPad classes, off line and on line support) - solving technical issues 	<ul style="list-style-type: none"> - implementing and adapting minor platform functionalities - design of manuals and communication material to promote the service - get across the European dimension of the project by connecting users in the different pilot - solving technical issues
OTHER STAKEHOLDERS	<ul style="list-style-type: none"> - setting up the Living Lab in the local public library - workshops to evaluate the BM with local associations 	<ul style="list-style-type: none"> - interviews with local small businesses, associations and public sector - involvement of new associations in the use of the platform 	<ul style="list-style-type: none"> - workshops to co-design a local business case with potential stakeholders - ... involvement of local businesses

Table 2 - The activities carried out during the pilot.

By analyzing the activities carried out both in the first part of the European project and in the pilot development (table 2), it appears evident the shift from the initial user-centred methods applied in the first stages towards a more participative one during the course of the pilot. UCD in fact shown to be a good strategy to test single elements of the digital platform, as the ease of use of specific sections of the interface or the perceived quality of the graphics, while piloting needed a more holistic approach. From the analysis of the main activities developed during the pilot we see that the ones aimed at involving and enabling the users and other potential stakeholders in the co-design of the digital services grown progressively as the pilot proceeded.

During the project different strategies have been applied to activate the participatory design process to piloting the service, supporting the researchers in keeping together the actors needed to develop the platform prototype and have it used in order to address the service design progression:

- in order to establish long last strategies of adoption of Life 2.0 platform and services the Milan pilot proceeded by involving users, stakeholders and public and private administration by working on their motivation to be part of the service. Moving from the initial motivation of the users participating to the pilot, there is a progressively lose of interest when the discrepancy between the peace of the co-design activities and the digital platform development increases. In this condition the researchers have to apply some strategies to keep the motivation up by finding a way to pay the participants back providing new useful knowledge, for example by dedicating some meetings to specific needs previously detected. In the case of Life 2.0 we decided in fact to enhance the use of the iPad by teaching how to use other useful apps, this way we answered to a community request (with a consequent growth in the motivation) but at the same time we trained hem in the use of ICT and we found a new topic to be discussed using Life 2. Within Life 2.0 the development of sustainable collaborative processes among local citizens, institutions, private stakeholders and the communities of developers was based on the idea of “co-production”. What emerged in fact is that in the context of transformational projects, the added value to stakeholders to

participate in “co-production” is that they have a real incentive to become more involved as “co-producers” through having access to creative communities, acquiring new skills, employment opportunities, and service choices that address their real needs and wishes, potentially leading to a better quality of life and better places to live in. In Life 2.0 some of the stakeholders showed a constant interest in the initiative and process and are sort of leaders, heroes of the whole story. Some others are in a sort of “availability” condition: these are following the process but doing only what is required without showing any proactive attitude. Some others are only curios, they are in a sort of “standby condition”, waiting to be more active and producing much larger and wider impact.

- Creating a smart community with smart citizens, smart local government, smart developers and smart service owners is identified as the most effective instrument for achieving the goals of creating new, sustainable, dynamic and viable service. The strategy of infrastructuring with a network of stakeholders the project context with a robust network of stakeholders is applied since the beginning of the pilot, even if the need to align the interests of local stakeholders appears to be more relevant starting from the second phase, when the pilot community starts to use it almost in real life conditions. In this phase in fact it is more evident what kind of local actors can be interested in the service and in some case they are suggested directly by the people participating. While looking for possible alignments it is important to think about the different profiles defined in the first draft of the business model, especially in regards to the future owner of the service. This role is in fact covered by the research group during the piloting phases but in order to have a self-sustainable service this will become the fundamental element to be detected. To reach this objective Life 2.0 thus adopts a new model of service co-development, generating services where those who have traditionally been individual end-users tend to become collaborative co-producers; where people who have traditionally been considered only as parts of the problem become agents of the solution. In this general framework the services that these social innovations generate are co-designed and co-delivered, involving also the final users: user knowledge and creativity in their conception, and user time, energy and expertise in their delivery. A bridge between bottom-up social innovation and top-down public services can be built through an appropriate use of design knowledge and skills, adopting a participatory and community-centred approach, focusing on and activating different actors, and helping clarify their motivations and promote their alignment towards a shared goal. In this frame, community-centred design supports the consolidation of emerging ideas, making them more effective, accessible and replicable.

These strategies have been used throughout all the pilot project development with a variable emphasis and frequency depending on the stage of its development and from the experience they result to be the basis to manage the PD of a digital service. In particular, from a PD perspective it is interesting to notice that the co-design and the stakeholders alignment are mainly used respectively in the second phase, where there is still space for co-designing the main features of the services, and in the third, where the stronger effort for the researchers go in the direction of creating a self-sustainable solution, thus involving stakeholders willing to take in charge the solution.

5. Conclusion

In addition to their traditional task of creating solutions to specific problems, designers today are using their competences for supporting others to create solutions. This is clearly one part of the story. Life 2.0 shows a case in which design is having the leadership by making it possible in the reality rather than only by aligning the different resources needed to. This role seems to correspond to a series of design activities oriented towards implementing a full scale prototype that correspond to the action of delivering the service in the experimentation context. In these cases design and designers practically lead the initiatives by:

(1) individualizing project opportunities, elaborating ideas and visions, looking for funds, engaging various stakeholders; (2) bringing the overall approach (design thinking) to design the project vision, manage and develop it, to design self-standing proposals to implement a framework for change; (3) implementing a prototypical series of process that simulate those real organization processes that would be required to a company in order to deliver the experimented service in the real context.

Implementing full scale prototypes corresponds to a series of design initiative that include the required service interfaces; publicise and set up effective communication for the entire process; design the delivery process; implement these process as process owners [4].

Life 2.0 shows how, in the practice of projects that aim to develop full services, prototypes tend to encompass the classical role of prototyping in design, that is that of addressing the ways in which designers reflect and make sense of complicated and often yet non-existing things, by giving shape, sketching, visualizing etc. in various ways. This reflective practice in service design projects seems to need of “full scale” prototypes where often designers play the role of the service deliver on behalf of a future owner.

Using the potential of new bottom-up approaches and Living Labs methodologies, Participatory Design approach has been re-elaborated as complex open and participated design processes to create Life 2.0 community and underpinned potential sustainable network of actors to make Life services and platform available in the real context of use.

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