Design Management in an Era of Disruption

Proceedings of the 19th DMI: Academic Design Management Conference

Erik Bohemia, Alison Rieple, Jeanne Liedtka, Rachel Cooper

London 2–4 September 2014

dmi:

This conference proceedings version was produced on 7 September 2014

Cover and conference identity design by DMI
Proceedings compiled by Laura Santamaria

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ISBN 978-0-615-99152-8

Published by the Design Management Institute
38 Chauncy Street, Boston, MA
Suite 800
Boston, MA 02111
USA

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Table of Contents

— CHAPTER 2 —

TRANSFORMATIONAL DESIGN MANAGEMENT

Section 2a: User-Centred Design

Section 2b: Exploring Collaboration in Product Development

— CHAPTER 3 —

CONTEXTUALIZED DESIGNING

— CHAPTER 4 —
MANAGEMENT FUTURES

— CHAPTER 6 —
DESIGN MANAGEMENT EDUCATION

— CHAPTER 7 —

WORKSHOP OUTLINES

19th DMI: Academic Design Management Conference
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Design and Organisational Change in the Public Sector

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The demand of a new generation of public services is leading to a systematic exploration of what design can do for public organisations. If the rapid growth of service design practices spread the idea that design is not just focused on tangible artefacts, the effects of their introduction in public organisations are still underestimated. This article explores the ongoing trend of the adoption of design as a practice to deal with the innovation of public services through the discussion of three cases, in the light of the hypothesis that the introduction of design knowledge in public institutions should be reconnected to the management of their organisational changes. In particular in the analysis of the cases the authors discuss evidences in favour of a new interpretative framework in which the design of new artefacts (service, processes and solutions) can be described as a powerful yet implicit agent of change (Deserti and Rizzo, 2014).

***Keywords**: Advanced Participatory Design; Service Design; Public Sector; Organisational Changes.*

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NOTE: This work is the result of the joint effort of the authors. Nevertheless Alessandro Deserti directly edited sections 1, 2, 3 and conclusions; Francesca Rizzo directly edited sections 4, 5 and 6.

Introduction

Many countries still do not show clear and strong signs of recovery from the global economic downturn that started in 2008, which is causing a structural lack of resources, particularly affecting the public sector. The economic, demographic, social and environmental long-term challenges call for deep changes, questioning many of the assumptions that have underpinned public services, posing new challenges for institutions, policy makers, civil servants and communities. While austerity measures were adopted all over the world, societal challenges are intensifying: youth unemployment, elderly healthcare, immigration, social inclusion and other wicked problems press the public institutions with the contradictory request of delivering new services or restructuring the existing ones achieving a higher effectiveness with less resources.

As a few studies have pointed out (Diefenbach, 2009; Ashworth, Boyne and Delbridge, 2009), the main experimented solution – cutting budgets and trying to make the public organisations more efficient by transferring models and practices from the private sector - has shown many limits.

Research on organisational management and social studies has a long tradition of binding the competiveness of an enterprise to its capability to continuously change its culture by overcoming organisational dogmas and pursuing innovation (Hamel and Prahalad, 1994; Drucker, 1995; Drucker, 2002; Hamel and Välikangas, 2003). While organisational change theories recognise the complexity of the phenomenon of change within organisations and therefore display a systematic and holistic attitude, the managerial practice is characterised by a large amount of models and techniques that seem to be derived from a reductionist way of thinking, thereby producing formulas that can be easily synthesised and turned into slogans and procedures applicable to a variety of situations with minimal adaptation. Even if there has been harsh criticism of the fast turnover of these managerial models and techniques that led to describe many of them as fads, the practice still seems to prosper (Miller and Hartwick, 2002; Collins, 2003).

In a more general frame, the very idea that managerial models and practices can be extracted from a context, abstracted and turned into formulas that can be transferred somehow independently from the characteristic of the receiving context has often proved wrong. This did not occur just in the shift from the private to the public sector, but in the first place in the private sector itself (Miller and Hartwick, 2002). This is especially true for public organisations, where too often the transfer of models from the private sector is tried, assuming that what worked there could be simply replicated to reduce

inefficiencies and enhance productivity. Recent studies underline how this assumption is fundamentally wrong, showing how the lack of situatedness of the new processes and the lack of involvement of people play an important role in strengthening the natural resistance to change, often leading to unsuccessful transformations (Lines, 2004; Cunningham, 2009). This phenomenon can be reconnected to many reasons, but we would notice that the entrance in the public sector of the large managerial consultancies, always in need of ready-to-use formulas, is playing a quite relevant role.

Proposition

The adoption of non-situated innovation recipes is quite distant from the mainstream of the design culture: design literature strongly recognizes situatedness, human-centricity and participation as the bases for building successful innovation processes and tools (Schön, 1983; Gero, 1998; Ehn, 2008).

The aim of this article is to build a link between this design perspective and the issue of organisational change in the public sector, highlighting the dynamic relation between the operative and the strategic levels of change, as a way to overcome some of the limits and inefficiencies of the established practices.

Our proposition is that the adoption of participatory design knowledge and tools in the development of public services - an emerging trend responding to a diffused need of building a new generation of more user-centred, efficient and cost-effective services - requires (and implies) the change of the organisations that deliver them, and that the more the design practices are new to the organisations, the more the change should be relevant (Deserti and Rizzo, 2014).

Until today, the only notable investigation of this topic can be found in the work of Sabine Junginger, who connected the introduction of human-centred design practices in public bodies and in private companies and the change of organisations (Junginger, 2006, 2008; Junginger and Sangiorgi, 2009).

Even though we can document a few cases of public bodies that introduced design in their practices - e.g. the introduction of 'experience-based design' in the UK National Health Service, or the cases cited in Junginger's PhD dissertation (2006) - and the experimentations in this field now are flourishing, their focus is primarily on the change of the services, while very little reflection is being produced on the change of the organisations that are supposed to manage them. There seems to be a widespread idea that the introduction of user-centred practices will work per se, without the need of facing the problem of change in the hosting organisations. Most of the changes obtained through

the new practices are thus affecting the superficial level, while at deeper levels the established culture, mindset, habits and practices are still dominant. The redesign of the interface of the public services is a clear example: we may have a number of new websites, applications and touch-points redesigned according to user-centred practices, but the back-office procedures and their underpinned culture often remain untouched. This might be interpreted as a matter of time, since affecting the deeper levels can take a much longer period, but for sure there is also a question of integration and appropriation of the new practices within the organizations.

Here we should underline that, even if starting from Nonaka and Takeuchi (1996) a quite strong line of thinking looks at innovation as a problem of knowledge creation and management, most of the approaches to innovation focus on the change of the offering more than on the change of the organisations. In this respect, participatory design practices display an even stronger bias, since they draw attention on the end-users and see solutions as a result of their context of destination rather than as a result of their context of origin. This bias is opposite to that of the self-referential attitude of public organisations, and per se this could be good, since it can create a positive clash, leading to the change of an established attitude. At the same time, the focus on the exterior (citizens or end-users) and the claim for an outside-in transformation, poses the problem that little reflection is being made on how public organisations can internalize and integrate the new knowledge, and how the change process can be fostered or managed: this omission could easily lead to reject the new practices, or confine them to a cosmetic role.

We would also notice that, even if the body of knowledge on the introduction of design in organisations is quite strong, it was primarily developed with reference to private companies, with a particular emphasis on large multinational corporations that was only recently extended to the SMEs (Acklin, 2011). The interaction between the introduction of design as a new approach in public organisations and the management of their change thus appears as a relevant node that should be investigated. In our perspective, this investigation can lead not just to find ways of combining the already existing change management knowledge and practices with the already existing service design knowledge and practices, but to the construction of a new frame, where both disciplines can influence each other introducing elements of novelty for both.

Design and the ambidextrous organisations

The existence of a constant tension between innovation and preservation within organisations is widely recognized in innovation studies. Literature highlights how established organisations tend to defend their status quo and how innovation must fight its way up to emerge (Ansoff, 1990; Rumelt, 1995). The reasons for this conservative attitude have been explored (Schalk, Campbell and Freese, 1998; Zeffane, 1996; Schein, 2004) and connected to many internal and external factors, that all turn into a general lack of incentive to abandon a certain present for an uncertain future, which generates a quite common situation where business-as-usual tends to overcome innovation. In this frame, innovation and change are often regarded as a last chance that most organisations embrace only when the established practices do not work anymore. Hamel and Välikangas (2003) notice that organisations should develop resilience, or else the capability to "continuously anticipate and adjust to changes that threaten their core earning power, and change before the need becomes desperately obvious" (Hamel and Välikangas, p. 52). In most cases, radical change as a last attempt to survive actually comes too late: the competitors already acquired a dominant position; the resources are too limited; the time is too short etc. In this respect, Treacy (2004) argues that breakthrough innovation should be pursued as the last growth strategy, since in the long run "radical changes usually get beaten by the slow and steady approach of the incremental innovation." (Treacy, p. 29). Building on this, Norman and Verganti (2014) recently reconnected incremental and breakthrough innovation to two different design approaches, questioning some of the traditional assumptions on UCD.

The idea that the capacity of managing the established practices and that of innovating and changing in a reactive or proactive way can be balanced was actually discussed in organisational studies from a long time, with the introduction of the concept of ambidextrous organisation (Duncan, 1976; March, 1991). Ambidexterity can be primarily described as the balance of exploitation and exploration, which makes organisations able of relying on efficient and profitable solutions, while continuously searching for new and better ones. Even if the concept is established, , the ambidextrous organisation faces quite a few structural, cultural and operative problems in shifting from the theoretical model to its implementation.

Ambidexterity can be built by devoting a part of the organisation to innovation while keeping the rest focused on exploitation, or by introducing the attitude of innovating in a pervasive way, involving all the components of the organisation in the exploration activities. The adoption of both the solutions

must be carefully considered: the first may encounter problems of integration, since it may lead to the creation of innovation units or areas operating (or perceived) as a separate bodies; the second may encounter problems of prioritization, since the daily activities may prevail over the ones dedicated to innovation. Another relevant problem is that exploration and exploitation are bound to different thinking modes, very difficult to run simultaneously. Here is where design gets in the picture, since it is used to play in the intermediate ground between exploration, typically represented by its capacity of dealing with the chaotic front-end of innovation, and exploitation, typically represented by its capacity of dealing with new product development and engineering. According to Martin (2009), the use of a complex mix of deductive, inductive and abductive logic is a typical trait of design thinking that makes it useful not just to bring sparks of creativity in staid organisations, but to balance exploration and exploitation, overcoming the typical "bias towards reliability" (Sutton, 2004; Martin, 2009) that characterizes established organisations.

The introduction of design practices in the public sector

The demand of smarter solutions for a new generation of citizen-centred services is leading to an increasingly systematic exploration of what design can do for public organisations. The rapid growth of service and experience design spread the idea that design is not just focused on tangible artefacts, but also on processes and interactions that can be effectively developed by assuming the perspective of the end-users, putting them at the centre of the projects and involving them as actors rather than as clients (Bannon, 1991), opening the way for advanced participatory practices (Ehn, 2008; Manzini and Rizzo, 2011).

In many countries public organizations are introducing design to foster innovation and change, with a particular emphasis on the development of a more user-centred approach.

In the last 10 years quite a few service design consultancies specialized in working for the public sector: Thinkpublic, Live|Work; Design Continuum, Experientia, Engine, Reboot, Snook, just to mention some of them. A big player such as IDEO now features "Public Sector" (but also "Organizational Design") in the range of its expertise. These consultancies are involved in small service projects and in large reforms of the policies, and are helping the public organisations in assuming a new perspective, overcoming the established practices.

Governmental and NGOs such as Nesta and the Design Council in UK, or Mindlab in Denmark are also playing a relevant role in pushing the design

approach to the innovation of public services, brokering the experimentation of design-led projects and de-risking the introduction of new practices in a quite conservative sector. The strategic guidelines of the European Union on "Design for Growth and Prosperity" (Thomson and Koskinen, 2012) enforced this trajectory, underlying the importance of a human-centred perspective in the innovation of public services to build a better society. The report "Restarting Britain 2. Design and the Public Services" (UK Design Commission, 2013) emphases the role of design in the transformation of the public service system, presenting it as a fresh approach to re-thinking policy, professional practice and service delivery.

In our view, the application of design in the public sector is being experimented in two different but complementary directions. The first can be called people-centred services: it stretches from the traditional user-centred design to the co-design methods, relying on the intensive involvement of the end-users in research, prototyping, testing and implementing the services, with the aim of improving the usability, the quality of interaction and the users' experiences. The second can be called people-led services: it stretches from co-design to co-production and aims at developing new Public-Private-People-Partnerships to co-produce solutions with the users/citizens.

Along these two directions we can document the blooming of initiatives, professional structures, projects, programmes and recommendations. At the same time, even if there are some long-term experiences (Junginger, 2006), we have to underline that the introduction of design culture in the public sector is in its initial phases: design methods and tools are still largely unknown by public institutions and design knowledge is still far from having entered the public organisations at a large scale, affecting their daily processes and their underpinned culture. The European Commission's public consultation (2009) pointed out that the most serious barriers to the better use of design in Europe (78% of responses) is the: "lack of awareness and understanding of the potential of design among policy makers" (p. 7). Even if much has been done, recent studies point out the difficulty of legitimating design in the new field:

> *It is important to remember that for the public sector to commission design agencies to address social challenges was, and still is, a big leap in thinking. Design is not typically associated with creating social solutions within the public sector. Without the backing of key organisations like Nesta and the Design Council, and the promotion of innovation (i.e. trying new processes and methods to produce innovative results) by the Government, a design agency proposing to tackle an inadequate public service or improve a health or social inequality would have seemed*

> *absurd. Even with the work of these key organisations and the innovation agenda, for many it still is.* (Cook, 2011 p. 25)

Moreover, we have to remark that the ongoing initiatives and experiments of introduction of design in the public sector are primarily focused on the direct results: there is a wide and documented interest in how design can change the public services, making them more accessible, usable, effective, participated, money-saving etc. Other than introducing generic objectives such as making the public organisations more citizen-centric or more efficient, until now there is almost no concern on how the change of the services and of the practices adopted in their development should be reconnected to that of the public institutions.

The introduction of design methods and tools in the redesign of public services: case studies

In order to deepen these aspects, in the following we examine three cases of redesign of public services, in the perspective of reconnecting the introduction of new design knowledge to the change of the organisations:

- The design of new services for neighbourhood-based communities in the frame of the MyNeighbourhood European research project;
- The design of new services for active ageing, which is being conducted in Helsinki in the frame of the DAA European research project;
- The introduction of Public-Social Partnerships (PSPs) in the development of new public services in Scotland.

The three cases are representative of three different ways and levels of experimenting the introduction of design culture in public contexts through small experiments or projects for a new generation of public services. MyNeighbourhood is piloting public and collaborative services for neighbourhood-based communities experimenting a participatory approach and looking for ways to scale up the solutions. DAA is collecting evidences from already conducted experiments attempting to affect the policy level. The Public-Social Partnership Project of the Scottish Government is experimenting new forms of partnerships to deliver public services, introducing design knowledge in the construction of the networks of actors.

The three cases will be discussed to derive empirical evidences and key findings, which will be reconnected to a theoretical framework to build new knowledge and to stimulate future studies.

Case 1. The design of new services for neighbourhood-based communities in the frame of the My Neighbourhood European project

MyNeighbourhood is a EU-funded research project (www.my-neighbourhood.eu) started in January 2013 with the goal of applying service design methods and tools in four different European neighbourhoods to identify and support the establishment and the upscale of grassroots and community-based initiatives, through the adoption of a web-based service platform. The project is operating in a typical ICT research area, introducing the idea that advanced participatory design methods can foster the innovation of the public services.

At the core of the MyNeighbourhood vision there is the idea of collaborative services (Baek et alii, 2010) as those solutions that may match the need of balancing the technical "smartness" of cities with that of extending the participation through the development of softer solutions based on public-people partnerships (Rizzo and Deserti, 2014).

Through the co-design activities conducted in the four piloting sites, MyNeighbourhood developed innovative partnerships, deeply challenging the public institutions by involving them in unprecedented dialogic and interaction activities.

In Milano the project delivered two collaborative services - Quarto Food Club and Quarto Gardening - currently under experimentation in Quarto Oggiaro, one of the most run-down peripheral districts.

Quarto Food Club matches the need of delivering food to the elderly people who are not in condition to self-prepare it with that of their social inclusion. The service idea is to deliver meals to a group of elders living in the neighbourhood, creating for the occasion a kind of social space in the local hotel and catering management schools, where elderly people can enjoy the meal together, getting in touch with each other and with the students who take part in the experiment within their practical training activities.

Quarto Gardening is based on the same structure, and gives to the Municipality the possibility of exploiting the competences of the students of the local agricultural school to take care of some of the green areas in the neighbourhood. The service is made possible thanks to the agreement between the management of collective green areas (Municipality of Milano and Public Institute for Social Housing of Milano) and the local agricultural high school.

Both services also respond to the second neighbourhood issue of the young people unemployment, exploiting the involvement of the students from the

local schools, who receive credits for the practical training having at the same time the possibility of going through a real work experience.

Fostering new principles of mutual partnership, MyNeighbourhood is experimenting with the idea of providing local services creating partnerships between the public bodies and the local citizenry and operators, introducing a new rationale bound to the Public-Private-People Partnerships as results of complex participatory design processes taking place in the sphere of the public services.

Here we would underline that MyNeighbourhood is experimenting service design not only as a method to design innovative and people-centred services but also as set of competences that may trigger changes in the public organizations involved in the development and the delivery of the new services. The new processes are transferred and interiorized by the employees through a long-term process of engagement in the design experiments. The team working on the implementation of the new services is composed by researchers (the authors of this paper are among them), professional designers and employees from the Milano municipality, who worked together to turn people Wishes, Interests and Needs (WINs) in new collaborative services. The project is thus matching grassroots experimentation with the larger strategic goal of introducing a systemic perspective, where the public actors, the citizens and the local stakeholders work together in envisioning and co-producing new solutions. This perspective gives to the public actors the opportunity of interacting and dialoguing with citizens without loosing contact with the real problems (bottom-up trajectory), while at the same time defining priorities and building solutions around a meaningful long-term vision beyond the acknowledgement of local needs (top-down approach), thus revealing unexplored space for democratic governance.

Case 2. DAA - Design-led Innovation for Active Ageing

DAA is a EU funded research project (http://daaproject.eu) that aims at scaling innovative and yet sustainable solutions for elderly care, combining the expertise of care specialists with that of service designers. The project involves a network of cities acting as pilot sites where to experiment the development of new policies starting from the innovative practices.

The EU 2020 Strategy identifies demographic ageing as one of the main European long-term challenges, requiring innovative solutions and improved policies to enable better social and healthcare services with less money and fewer caretakers. In this frame, the new forms of value networks, directly involving the citizens as co-producers within a Public-Private-People Partnership

(PPPP) scheme, are seen as promising practices that could be up-scaled to obtain a systemic change (Murray, Caulier-Grice and Mulgan, 2010).

The DAA project goes one step beyond the ongoing "hands-on" experiments of designing social innovation, since its goal is not introducing new services, but learning from the already established innovative solutions, improving the innovation capacity of the city administrations and the public sector policies. The expected outputs of the project thus include 8 city implementation plans and a guidebook on the introduction of design practices in the public sector. The case of Helsinki will offer a better understanding of the overall project.

In Helsinki (one of the piloting sites) the target group are people over the age of 65 who are receiving informal care in their own homes, and regular and temporary clients of home care support services. The project aims at diffusing a new, more flexible service provision model, personal budgeting funding and operating model, creating a network of service providers to support them. With the new kind of service planning and budgeting, the elderly can organise their own support and services in a more independent way. The main goal of the project is to identify the leverage points within a complex senior care systems, i.e. policy areas and management practices within the city of Helsinki and service departments of national government, where a shift is needed for sustaining and scaling the new model. The overall objective of the design intervention in Helsinki is to make policy makers and managers on strategic level understand their importance and role in innovation process. To achieve this objective, the project aims at making changes in three different but connected layers:

- Policy and strategy making;
- Service delivery;
- People and Communities.

In the frame of the project, the interaction among actors operating in these three layers is seen as a key factor in aligning different perspectives and ways of perceiving the problems and evaluating the solutions. Since the project just started, results are still to be obtained and evaluated, but this trajectory draws attention on the construction and management of complex networks of public and private operators, which will be focused in the next case.

Case 3. The Public-Social Partnership Project of the Scottish Government

The Scottish Government is committed to ensuring that the third sector is able to play a full role in public service reform through greater involvement in

service design and delivery. To tackle this vision it has put in place the Public-Social Partnership (PSP) project (The Scottish Government, 2011b) aiming at encouraging routine use of co-production in the design of public services, supporting the development of Public-Social Partnerships.

> *The purpose of the PSP Project is to select partnerships to co-plan and pilot the design of services which contribute to the delivery of national and local outcomes. These designs were intended to inform the specification for future services, which the lead public authority was expected to procure at the end of the process.* (The Scottish Government, 2011a, p. 6).

The underlined project assumption is that PSPs can enable the delivery of public services more efficiently and with more person-centred outcomes for the users of services, by putting co-production at the heart of service design.

The project is structured in three main stages:

- Third sector organisations work with public sector purchasers to design a service;
- A consortium of public sector and third sector organisations may conduct a short-term pilot, helping to refine service delivery parameters;
- The service is further developed to maximise community benefit before being competitively tendered.

A period of PSP piloting is thus meant to help experimenting with the new practices before implementing future solutions. The project successfully met its objective of selecting pilot partnerships, where the application of service design methods and tools was experimented. The project was thus turned into a structured programme, led by the Ready for Business consortium, including governmental institutions and private partners, with the aim of bringing on the experimentation to build strategic exemplar PSPs.

Besides the centrality of co-production, PSPs have the added benefit of giving all partners the opportunity to test out new service designs through piloting. This allows operational issues to be addressed and user feedback to be incorporated into the final design of the service.

The results of the experimentation conducted along the project are now being evaluated, to give feedbacks for the adoption of the PSP model in the delivery of the services at a larger scale. The lessons learnt include considerations on the question of managing organisational change in parallel with the adoption of new procedures and the construction of partnerships and

networks (Ready for Business, 2013). This must be seen as a long-term process, going far beyond the single experiments and requiring years to be implemented to the stage of full adoption and internalisation of the new knowledge, as it occurred in the following case.

Discussion

The blooming initiatives concentrated on the introduction of design culture in public contexts seem primarily concentrated in obtaining more user-centred services, or else in changing the offering more than the organisations. The above-presented cases document a different attitude, based on the awareness that the introduction of design culture may not just cause implicit and unforeseen changes in the public organisations, but also require explicit processes of organisational change.

In our perspective, the initiatives and the experimentations described in the cases can be interpreted as ways of building an "ambidextrous frame" around the public organisations, creating parent structures or embedded areas meant to introduce design knowledge for the systematic exploration of new ways of doing things.

With respect to this issue, the cases show different levels of elaboration. MyNeighbourhood is developing small-scale experiments taking the risk of not affecting the overall culture of the involved municipalities due to their size, and is thus looking for ways of scaling up the solutions. DAA starts from recognising the risk described for MyNeighbourhood (and for the similar initiatives) and tries to address it by developing frameworks for interpreting experiments and transferring insights that could affect the vision and the policies of the organisation. The case of the PSPs in the Scottish government shows a strong awareness that the change of the services and that of the organisations cannot be untied, and is thus operating in a reverse way: from the policies to the experiments and back to the policies.

In our empirical experience with the MyNeighbourhood project (and with previous ones), the participated construction and the prototyping of new services at a small-scale appears as a way of triggering a process of change in the public institutions that are about to introduce them. The small-scale experimentation may produce different effects: i) bounding the change to the competences of the organisation, by situating the experiments in its specific context and culture; ii) engaging the employees in the process of change, by involving them in the development of the new solutions; iii) introducing the idea that the change strategies must become dynamic and adaptive, by

constantly informing and assessing them through the results of the on-going experimentation.

The DAA case shows the possibility of building an intermediate playground, where a participated and situated approach can be introduced through the dynamic interaction between the operative and the strategic levels of organisational change. In this frame, organisational change can be described both as a pre-condition and as an effect of the introduction of new ways of doing things.

The case of the PSPs shows the need of shifting the attention from the effectiveness of the single solutions to the possibility of pursuing a wider impact through the introduction of new policies aimed at designing and experimenting new ways of delivering services, and using the experiments to assess the policies and to foster the change of the involved organisations.

The passage from the success of the experimental projects to the review of the policies is far from being simple and automatic. Turning the new solutions in new practices seems to require a different role for design: striving for a massive change of the processes through the dynamic integration of the operative and the governance levels, i.e. informing the policies through the results of the experimentation. Within this frame, we see a major space to revise the processes of change of organisations: integrating bottom-up and top-down trajectories, breaking the borders between inside and outside, and introducing new forms of participated change management (Fig. 1).

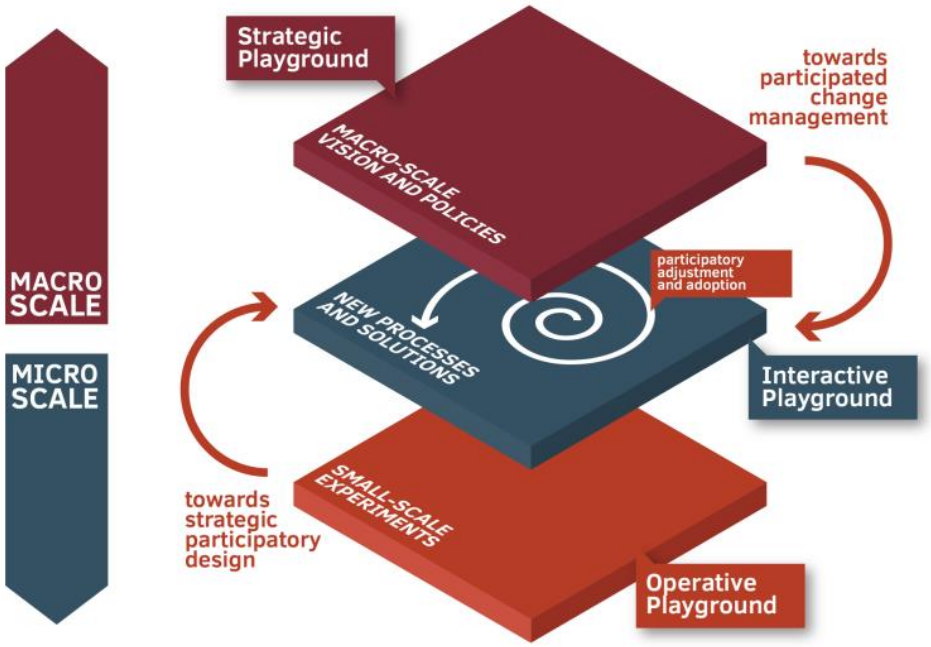

Figure 1. The participated framework of organisational change

The cases show how the conception and delivery of the new services might be bound to the creation of networks and partnerships that in turn require the development of new policies. Some of the service design tools - such as the "actors mapping", the "stakeholders' matrix", the "system mapping" and the "service blueprint" (Fig. 2) - apparently put both feet in the field of organisational change without a sound understanding of its complexity.

Organisational change issues are actually unknown to most of the designers: the above-mentioned tools might guide them in defining conveniences and triggers for all the actors and stakeholders, but they seem to miss the awareness that change is not a mechanical process. Even if you might find good motivations for change, not necessarily it will be welcome by the organisations that are suppose to undertake it.

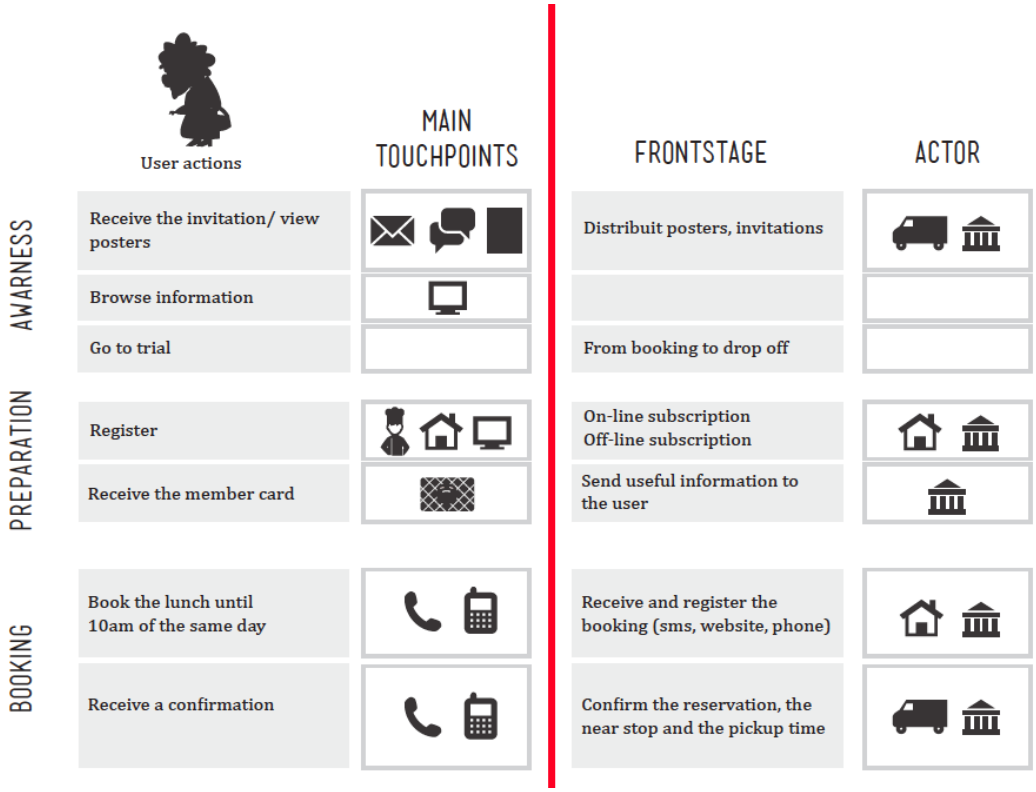

Figure 2. A caption of a service blueprint developed in the MyNeighbourhood project to configure organisational structures and processes

Another relevant point that we can draw from the cases, confirming what we already mentioned, is that the introduction of a user-centred perspective per se does not seem enough to establish adequate new practices. The DAA case clearly shows how the focus on the end-user should be balanced with the understanding that the introduction of new practices requires a continuous mediation with the already established practices. From this, we derive the idea that the very concept of participation should be revised, shifting from the traditional UCD perspective to that of "complex participatory design", where all the actors and stakeholders should be involved as co-designers. Building on this, cases also show that when the innovation is carried on through new forms of networking the process of change should not just affect the leading public institutions. In the case of the Scottish PSPs, the ongoing evaluation (Ready for Business, 2013) highlights that joining the partnership both third sector providers and public sector organisations have to change their existing service models:

> *Whilst the public and social economy sectors appear to take a favourable view of the concept of PSP, in a practice, it is apparent that there is a need for culture change within both sectors. The co-planning approach,*

> *the method recommended by this evaluation, requires participants in both sectors to enter into partnership as equals. There have been times, within all three pilots, where the importance of this, and the time it takes to make this happen, has been underestimated.* (McDonald, Wilson and Jack, 2012, p. 3)

These new forms of partnership also highlight how public and private could be seen as a continuum rather than as opposites: the construction of complex partnerships calls for the capacity of change from both sides, rather than the commonplace that the public can become efficient and cost-effective only imitating the private.

The lesson learnt during the experimentation of PSPs suggests conducting an internal analysis before committing to the change journey. The evaluation of the piloting clearly identifies change management as one of the key issues, explaining that "if there currently is not the capability or capacity to properly drive through this change in your organisation, then a change management plan can be drafted (…)" (Ready for Business, 2013, p. 5). We would say, in a stronger way, that whenever a program of introduction of design knowledge takes place, a change management plan should be drafted.

Conclusions

The cases have shown that embedding the practices of design in public bodies requires the management of their organisational change. If the introduction of design knowledge can trigger positive effects, there are also many issues that should be carefully considered.

The analysis of the cases shows that the trajectory of the small experiments is easier to be implemented, since it does not affect the whole organisation from the very beginning, but it could be at the same time source of major obstacles to the real integration of the new knowledge in the organisation, since it might create a binary system with potential conflicts between the new and the established culture. With respect to this risk the cases show that concurrent strategies can be implemented, like the design of an interactive playground where the results of the design projects can be managed together with the long-term visions and strategies, to be integrated in the organisational practices in the perspective of a long-term cultural change.

With this paper we want to provide a new frame for the investigation of a participated approach to organisational change, introducing an interdisciplinary perspective. Disciplines dealing with innovation should consider the interaction

between the renewal of the offering and the change of the structure and the processes, promoting the interchange of knowledge with the disciplines dealing with organisational change.

Acknowledgements: *Part of the results presented in this paper was developed by the authors within the EU-funded project MyNeighbourhood, Grant agreement N. 325227.*

References

Acklin, C. (2011). *Design management absorption model. A Framework to Describe the Absorption Process of Design Knowledge by SMEs with Little or No Prior Design Experience*. Proceedings of the 1st Cambridge Academic Design Management Conference, University of Cambridge.

Ansoff, I.H. (1990). *Implanting Strategic Management*. London: Prentice Hall.

Ashworth, R., Boyne, G., and Delbridge, R. (2009). Escape from the Iron Cage? Organizational Change and Isomorphic Pressures in the Public Sector. *Journal of Public Administration Research and Theory*, 19 (1), 165-187.

Baek, J., Manzini, E. and Rizzo F. (2010). *Sustainable Collaborative Services on the Digital Platform*. DRS 2010 Proceedings of the Design Research Society Conference, Université de Montréal.

Bannon, L. J. (1991). From Human Factors to Human Actors. In Greenbaum, J. and KyngHillsdale, M. (Eds), *Design at Work: Cooperative Design of Computer Systems* (pp. 25-44). New York: Lawrence Erlbaum Associates.

Buchanan, R. (1992). Wicked Problems in Design Thinking. *Design Issues*, 8 (2), 5-21.

Collins, D. (2003). The Branding of Management Knowledge: Rethinking Management Fads. *Journal of Organizational Change Management*, 16 (2), 186-204.

Cook, M. (2011). *The Emergence and Practice of Co-design as a Method for Social Sustainability under New Labour*, PhD thesis, University of East London, London.

Cunningham, J. B. and Kempling, J. S. (2009). Implementing Change in Public Sector Organizations. *Management Decision* 47, 330–344.

Deserti, A. and Rizzo, F. (2014). Design and the Cultures of Enterprises. *Design Issues* 30 (1), 36-56.

Diefenbach, T. (2009). New Public Management in Public Sector Organizations: the Dark Sides of Managerialistic 'Enlightenment'. *Public Administration* 87 (4), 892-909.

Drucker, P. F. (1995). *Innovation and Entrepreneurship*. New York: HarperCollins.

Drucker, P. F. (2002). *Managing in the Next Society*. New York: Truman Talley Books/St. Martin's Press.

Duncan, R. (1976). The ambidextrous organization: Designing dual structures for innovation. In Killman, R. H., Pondy, L. R. and Sleven D. (Eds.), *The Management of Organization* (pp. 167-188) New York: North Holland.

Ehn, P. (2008) *Participation in Design Things*. Proceedings of PDC 2008, Bloomington, USA.

European Commission (2009). *Design as a driver of user-centred innovation*; European Commission. Retrieved 19 May, 2014, from http://ec.europa.eu/enterprise/policies/innovation/files/results_design_consultation_en.pdf

Gero, John. S. (1998). Towards a Model of Designing Which Includes Its Situatedness. In Grabowski H., Rude S. and Grein G. (Eds), *Universal Design Theory* (pp. 47-56). Aachen: Shaker Verlag.

Hamel, G. and Prahalad, C. K. (1994). *Competing for the Future*. Harvard: Harvard Business School Press.

Hamel, G. and Välikangas L. (2003). The Quest for Resilience. *Harvard Business Review* 81 (9), 52-63.

Junginger, S. (2006). *Change in the Making. Organisational Change through Human-centered Product Development*. PhD thesis, Carnegie-Mellon University, Pittsburgh, PA.

Junginger, S. (2008). Product Development As a Vehicle for Organizational Change. *Design Issues* 24 (1), 26-35.

Junginger, S., Sangiorgi, D. (2009). *Service Design and Organizational Change: Bridging the Gap between Rigour and Relevance*. 3rd IASDR Conference on Design Research, Seoul, Korea.

Lines, R. (2004). Influence of Participation in Strategic Management: Resistance, Organizational Commitment and Change Goal Achievement. *Journal of Change Management* 4 (3), 193-215.

Manzini, E. and Rizzo, F. (2011) Small Projects/Large Changes: Participatory Design as an Open Participated Process. *CoDesign International Journal of CoCreation in Design and the Arts*, 7 (3-4), 199-215.

March, J. G. (1991). Exploration and exploitation in organizational learning. *Organization Science* 2 (1), 71-87.

Martin, R. (2009). *The Design of Business*. Harvard: Harvard Business Press.

McDonald, K., Wilson L. and Jack, A. (2012). *Public Social Partnership in Scotland. Lessons Learned*. Report published by the Scottish Government.

Meroni, A. and Sangiorgi, D. (2011). *Design for Services*. Farnham: Gower Publishing.

Miettinen, S. and Koivisto, M. (Eds) (2009). *Designing Services with Innovative Methods*. Helsinki: Keuruu, Kuopio Academy of Design.

Miller, D. and Hartwick, J. (2002). Spotting Management Fads. *Harvard Business Review* 80 (10), 26-27.

Murray, R., Caulier-Grice, J. and Mulgan, G. (2010). *The Open Book of Social Innovation*. Report published by NESTA and The Young Foundation.

Nonaka, I. and Takeuchi, H. (1996). *The Knowledge Creating Company*. Oxford: Oxford University Press.

Norman, D. A. and Verganti, R. (2014) Incremental and Radical Innovation: Design Research vs. Technology and Meaning Change. *Design Issues* 30 (1), 78-96.

Ready for Business (2013). *Public Social Partnerships: Lessons Learned*. Report published by the Scottish Government.

Rizzo, F. and Deserti, A. (2014). Small Scale Collaborative Services: The Role of Design in the Development of the Human Smart City Paradigm. In Streitz, N. and Markopoulos, P. (Eds.), *Proceedings of DAPI 2014: LNCS 8530* (pp. 583–592). Springer.

Rumelt, R.P. (1995). Inertia and transformation. In Montgomery, C.A. (Ed) *Resource-based and Evolutionary Theories of the Firm* (pp.101-32). Norwell, MA: Kluwer Academic Publishers.

Schalk, R., Campbell, J.W., Freese, C. (1998). Change and Employee Behaviour. *Leadership & Organization Development Journal* 19 (3), 157-63.

Schein, E.H. (2004). *Organisational Culture and Leadership, 3rd edition*. San Francisco: Jossey-Bass.

Schön, D. A. (1983). *The Reflective Practitioner: How Professionals Think in Action*. London: Temple Smith.

Sutton, R. I. (2001). The Weird Rules of Creativity. *Harvard Business Review* 79 (8), 94-103.

The Scottish Government (2011a). *A Practical Guide to Forming and Operating Public Social Partnerships*.

The Scottish Government (2011b). *Opening up Public Sector Markets to the Enterprising Third Sector*. Retrieved 19 May, 2014, from http://www.scotland.gov.uk/Topics/People/15300/enterprising-organisation/Opening-Markets.

Thomson, M. and Koskinen, T. (2012). *Design for Growth and Prosperity*. Report and Recommendations of the European Design Leadership Board, DG Enterprise and Industry of the European Commission.

Treacy, M. (2004). Innovation as a Last Resort. *Harvard Business Review* 82 (7-8), 29-31.

UK Design Commission (2013). *Restarting Britain 2. Design and the Public Services*.

Zeffane, R. (1996). Dynamics of Strategic Change: Critical Issues in Fostering Positive Organizational Change. *Leadership & Organization Development Journal* 17 (7), 36-43.