• IJKEM, INT. J. KNOWL. ENG. MANAGE., v.4, n.10 • FLORIANÓPOLIS, SC • NOV. 2015/FEV. 2016 • ISSN 2316-6517 • Submissão: 20 out. 2015. Aceitação: 20 out. 2015. Sistema de avaliação: às cegas dupla (double blind review).

UNIVERSIDADE FEDERAL DE SANTA CATARINA (UFSC)

João Artur de Souza e Gertrudes Aparecida Dandolini (Ed.), p. 53-68.

DESIGN WORKSHOPS FOR SOCIAL INNOVATION*

TERESA CLÁUDIA MAGALHÃES FRANQUEIRA BAPTISTA

Doutora em Design pelo Politécnico de Milano — Polimi Professora da Universidade de Aveiro — UA teresa.franqueira@ua.pt

JOÃO NUNES SAMPAIO

Mestre pela School of Engineering da University of Porto – U.Porto Doutorando na Universidade de Aveiro – UA joao.sampaio@ua.pt

Este artigo pode ser copiado, distribuído, exibido, transmitido ou adaptado desde que citados, de forma clara e explícita, o nome da revista, a edição, o ano, e as páginas nas quais o artigo foi publicado originalmente, mas sem sugerir que a IJKEM endosse a reutilização do artigo. Esse termo de licenciamento deve ser explicitado para os casos de reutilização ou distribuição para terceiros. Não é permitido o uso para fins comerciais.

^{*} Artigo publicado nos anais do IV International Conference on Design, Engineering, Management for innovation - IDEMi 2015.

BAPTISTA E SAMPAIO

ABSTRACT

Objective: This article describes a set of workshops design-driven methodology that has explored the social entrepreneurship and social innovation dimensions to empower local communities.

Value: The workshops were organized by a multidisciplinary team from University of Aveiro (Design, Social Sciences and Governance, Management and Economics, among others), and were requested by 11 municipalities of the Aveiro Region in order to promote services based in sustainable lifestyles, active citizenship, social inclusion, cultural diversity and new economic models. The workshops intended to develop services based on social entrepreneurship between local communities and alumni from the University of Aveiro.

Design/Methodology: The workshops included a number of phases dedicated to the explanation of concepts, examples and current opportunities for entrepreneurship and social innovation, Design exercises on which participants went through several phases, generating possible solutions in the framework of a service concept for their communities, and also a session with a Management and Economic team, in order to build a sustainable financial scenario. The workshops were organized in 4 themes according to the opportunities previously mapped in the region: Health & Care; Agriculture & Food; Tourism & Sustainable Development; Cultural Heritage Preservation.

Results: Each workshop has resulted in 2 or 3 service ideas.

Keywords: design for social innovation. service design. social entrepreneurship. co-design

WORKSHOPS DE DESIGN PARA A INOVAÇÃO SOCIAL

RESUMO

Objetivo: Este artigo descreve um conjunto de workshops de metodologia orientada a design que têm explorado as dimensões do empreendedorismo social e da inovação social para capacitar as comunidades locais.

Utilidade: Os workshops foram organizados por uma equipe multidisciplinar da Universidade de Aveiro (Design, Ciências Sociais e Governança, Gestão e Economia, entre outros), e foram voluntariamente requisitados por 11 municípios da Região de Aveiro, a fim de promover serviços baseados em estilos de vida sustentáveis, cidadania ativa, inclusão social, diversidade cultural e os novos modelos econômicos. Os workshops destinam-se a desenvolver serviços baseados em empreendedorismo social entre as comunidades locais e alunos da Universidade de Aveiro.

Projeto / Metodologia: Os workshops incluem uma série de fases dedicadas à explicação de conceitos, exemplos e oportunidades atuais para o empreendedorismo e inovação social, estruturado em exercícios ao qual os participantes passam por diversas fases, gerando possíveis soluções no contexto de um conceito de serviço para as suas comunidades, e também uma sessão com uma equipe de Gestão e Economia, a fim de construir um cenário financeiro sustentável. Os workshops foram organizados em 4 temas de acordo com as oportunidades previamente mapeadas na região: Saúde e cuidados; Agricultura e Alimentação; Turismo e Desenvolvimento Sustentável; Preservação do Patrimônio Cultural.

Resultados: Cada workshop tem resultado em 2 ou 3 ideias de serviço.

Palavras-chave: design para a inovação social, design de serviço, empreendedorismo social, co-design.

I INTRODUCTION

The workshops' methodology presented in this paper is part of a wider project that aims to define the strategies for social innovation development in the Aveiro region. The project has 4 phases: mapping opportunities; set of workshops with local communities; follow-up of the workshop results and setting the strategies for the region.

The project involves a several number of people from the 11 municipalities (most of them technicians from the city hall), professionals with different backgrounds from the IERA Entrepreneurship Hub, teachers and researchers, the Alumni Association and students from the University of Aveiro. The articulation of all the people involved was one of the main challenges as they have different roles, timetables and working methodologies. Also, the setting of a common language was a challenging task.

2 BACKGROUND

The world has changed in the last decade whether we consider environmental, technological or economic transformations, or, even more significantly, whether we look at the social ones. The lack of policies adjusted to tackle those transformations and the need to adapt and develop systems able to structure the social, economic, and cultural fabric towards the transition to a more sustainable development model have given birth to a diffuse phenomenon of collaborative communities in which individuals collaborate between them to produce the outcomes that the traditional welfare state does not seem able to deliver.

Considering that design has played an instrumental role in the creation of the current system of consumption, shouldn't it be promoting its re-invention, departing from more sustainable principles? That re-invention could be done namely through the empowerment of social innovations and the services created at grassroots level, or by the redesign of top-down initiatives that in its original form have failed to deliver the results needed.

As far as Design is concerned, at the University of Aveiro there have been several initiatives: a subject "Design for Social Innovation" at the Master level and a DESIS Lab. A group of researchers and designers are working with these issues and have developed a workshop methodology.

We have been working in the field of strategies for sustainable innovation in product-service systems, managing and developing innovation projects through methodologies such as field analysis, ethnography, concept generation, scenario building and co-design, following an approach that is orientated worldwide towards social, economic and environmental sustainability.

The need to include other scientific areas to contribute to the workshops has pushed us to invite other colleagues and we have designed the workshop presented in this paper.

3 WORKSHOP APPROACH

Regardless of the theme, the workshops strategy highlight the aims and the results expected and the tools needed to implement it. In these workshops, we adopt a "learning by doing" approach that allows the collaboration among different actors. This is to let every participant to be creative and give his/her professional, personal and active contribution to the final result.

The workshop is divided into four phases (Context, Exploring, Defining & deciding and Closing). The outcomes of each phase concern both the approach and the involvement of the participants, and the concrete results expected from the session.

3.1 BUILDING UP THE CONCEPTUAL FRAMEWORK

The topics and the agenda of the workshop are introduced in this phase. Some case studies about the topics are shown to guide and inspire the participants, and to point out some key concepts and values to build in the scenario. This showcase aims to:

- help the audience in becoming aware of what kind of solutions can be developed;
- point out some criteria and keywords, as participation/cooperation among different actors, bottom-up initiatives (promoted by private citizens) with top-down support (from Public Authorities) and vice-versa, use of local resources, etc., in order to feed the brainstorming session.

Objectives: understanding and synthesize information obtained from a certain number of cases presented.

Expected outcomes:

Synthetize a conceptual framework for understanding the issues within their contexts, the criteria and the mood of the scenario;

Stimulate the brainstorming session;

A series of criteria and guidelines, which will be used during the scenario-building phase.

It is interesting to notice that the majority of participants show a lot of interest and curiosity about the cases presented.

Because the target/recipients of these workshops are diverse in terms of age, professional and academic training, the presented cases and their contextualization are always communicated in a simple and objective way.

It is also in this session that we perceive the motivation and enthusiasm of the participants.

3.1.1 Context

Through a brief exercise, the participants are organized into 4-6 people working groups where all the members have different skills and backgrounds.

Involving all members in the ideas' generation process, each group has to generate about 5 ideas with which all participants are in agreement. These ideas are expected to be very simple and rough, then they will be refined in the next task. The use of post-its as a support to write the ideas can be very helpful to organize them during the scenario-building session (Figure 1).

Figure 1 - Brainstorming with Post-its



Source: Authors (2015).

We have designed a tool "Ballons" which are thinking and talking balloons that are used to give the opportunity to the more quiet participants to made themselves heard. Some participants can speak can speak and lead the debate and introduce topics that they want to discuss, and others only writing their thoughts (Figure 2).

Figure 2 - Using the Thing and Talking Baloons



Objectives: focusing on a context and its issues to be pro-active in generating proposals for possible solutions.

Expected outcomes:

Involvement of all members in ideas' generation;

A series of features and stimuli which will be used during the scenario-building phase;

A list of rough ideas to be used in the scenario-building phase.

3.1.2 Exploring

The aim of this phase is to give to each group a structured concept of a scenario to be developed. This phase works through the clusterization of all the post-its, according to the three topics assigned; for each of these clusters, a main and more complex concept is singled out in a phrase, which puts together all the grouped ideas.

This phase links together the previous two. A matrix will be built crossing the "criteria" (values) coming from the case studies' session (1) and the "solution features", coming from brainstorming (2), in order to generate a series of possible scenarios. In this phase, the promising ideas are collectively chosen and reworked according to the workshop's general strategy.

Another tool designed for these workshops is the "OX" (opportunity exam tool) which is a plastic template divided in four areas where the participants need to answer to the follow questions: What? (in the centre), What for? How?, With whom? and For Who? (Figure 3).



Figure 3 - Opportunity Exam Tool

Source: Authors (2015).

Objectives: defining specific frameworks to be tackled and choose, with a strategic peespective, the most relevant scenarios to be developed.

Expected outcomes:

The wide agreement among all the participant on the built scenarios;

A series of scenarios: visions of possible guidelines for concept generation;

A series of solution concepts to be developed in the next task.

3.1.3 Defining & Deciding

This phase aims to develop a number of solutions according to the scenarios taken in consideration. For each scenario, a service (solution) idea will be developed, alongside with the system of actors involved, the infrastructure and all physical elements needed. Starting from the concept it is possible to contextualize the service idea, to build a system of actors (private and public) to be engaged in, and to think about the touch points and all the elements, which define the service. In the solution development task each group will work one service idea moving from the scenario building outcomes, and will generate a solution to develop and to strengthen it. The most relevant feature of this phase is that a role-play game can be used to define the actors' involvement according to their skills; these actors will then be asked to design a collaborative network. In this phase we used two approaches according to the type of participants. In some workshops we used props for a typical role-play game. In other workshops with more shy participants we used the 1st scenario as a way to role-play with the playmobil figures.

We designed a "Questions' Cards" – which is set of 16 cards with four questions per area (Social, Economics, Environmental, Cultural) focus on the How, With whom, the local resources and regional threats and opportunities. This tool was used as a turning point between phases, from text to visual 3D communication (Figure 4).



Figure 4 - Question Cards

In these workshops, participants were asked to bring someone from their communities or a stakeholder in order to obtain a more accurate feedback.

Objectives: thinking about a specific issue and developing a problem-solving attitude.

Expected outcomes:

The multidisciplinary participation in the solution-finding process;

One concept for each scenario taken in consideration.

3.1.4 Closing

To make the solution easy to understand, visual aids are useful. To help the participants in this task, a "scenario building box" has to be given to each group, made of pre-selected pictures, elements such as playmobil figures, physical elements (houses, cars, buses, trees, etc) (Figure 5) and drawing tools, according to the general strategy of the workshop. Each group is asked to envision a scenario with specific solutions and a chart of its actors. The output expected is an evocative visual representation of how the solution could be: a mood board with its actors and its elements.



Figure 5 - 3D pictures

Source: Authors (2015).

This task allowed for the identification of the players each group would consider in order to develop their ideas of solutions and services in the real world, as well as to uncover new opportunities for action.

Objectives: envisioning a complex situation and make it intelligible to everyone

Expected outcomes:

One moodboard/scenariofor each group;

Coherent and realistic proposals.

4 MAPPING THE OPPORTUNITIES

A group of technicians from the 11 municipalities and researchers from the University have identified opportunities in the region: Human resources, Cultural heritage, Natural landscape, etc. and build an Opportunity Portfolio. Those people and the ones responsible for the places were invited to participate in the 4 workshops that we organized.

According to the professional background of the participants and based on the opportunities identified previously, we divided the workshops in these themes:

- Health & Care
- Cultural Heritage & Preservation
- Agriculture & Food
- Tourism & Sustainable Development

There were some difficulties in setting the criteria for the cases to be mapped, as most of the technicians from the municipalities are not familiar with the social innovation or social entrepreneurship vocabulary.

There was a 2-month period of fieldwork, interviewing, photo shooting, etc the local communities before the workshops organization. The region is very large and it was needed 3 researchers from the University to map the opportunities and the human resources. All the visits were done with the local technicians.

(We are not showing the results of the Mapping phase as it resulted in a website with a collection of cases, and in order to maintain the anonymous submission, we will introduce later the website address and more information).

Table 1 - Workshop session's layout

Sessions	Time	Program
Social innovation	30 min	Presentation
concepts and principles		Showcasing of Social Innovation concepts and principles
Ice Breaker	10 min	Individual presentation of the participants with a "secret
		word". This exercise promotes an unusual way of
		individual presentation.
Grouping	10 min	Setting the working group
Opportunities	45 min	Concept rain
Identification,		Thematic grouping
Brainstorming and Ideas		

BAPTISTA E SAMPAIO			
Generation		Idea generation	
		 Idea selection, discussion and next tasks 	
OX tool	40 min	Identifying the idea structure	
Speed dating of ideas	30 min	Idea analysis	
		 Feedback discussion 	
		 Voting for the best 	
1st Scenario Building	60 min	Preliminary structures	
		 Information and relations flow 	
Management and	3 h	Financial and Economic feasibility	
Economic Team			
Role-Play	30 min		
Final Scenario	60 min	Information gathering through external resource	
		Idea development	
		 Proposal structuring and first communication 	
		supports	
		Role playing	
		Proposal restructuring, debate and organizing tasks	
		to development	
Conclusion	45 min	Scenario Building and visualizing tools	
		Conclusion, critiques and solution refinement	
		• Final Presentation	

4.1 WORKSHOP I. HEALTH & CARE

All the workshops have duration of 2 days (10 -13 and 14.30 - 17.30).

The first workshop had the theme Health & Care and aimed to address questions related to health, relationships among neighbours, institutions and the local community. The services to develop were related to seniors and active aging, intergenerational relationships trying to achieve an active citizenship by young people, combating isolation and loneliness, developing services for people with dementia, handicapped, young people with special needs or minorities, etc.

This initiative gathered a total of 9 participants plus the workshop leading team.

Some of the participants worked with in health sector (elderly) and were unemployed at the moment. There were also some participants that arrived to the workshop with a predefined business idea, but soon discard their own idea and collaborate with the group.

The first hour played an important role in motivating the creativity of each participant and preparing them for creative processes, including concepts' clarification and principles, building teams and identifying opportunities, targeting the following phases of design development.

We noticed that the tools we provided were very useful, particularly the 3D ones.

The participation of 2 seniors from a local institution was very helpful as well as the roleplay.

4.2 WORKSHOP 2. CULTURAL HERITAGE & PRESERVATION

The second workshop had the theme Cultural Heritage & Preservation and intended to work issues related to the preservation of collective memory, crossing knowledge and crafts, stories, tales, legends, traditional songs, customs, etc. The areas to work were related to the participation and collaboration of the local communities to build a collection of knowledge and ancestral techniques, tourist and cultural valorization of the local heritage, etc.

This initiative gathered a total of 14 participants plus the workshop leading team.

There were a good diversity of professional backgrounds, from archeologists to craftsmen and craftswomen, designers and economists.

In this workshop the role-play had an important role in defining the ideas and improving them.

The Mayor has appear in the workshop and local people were very motivated after the visit.

4.3 WORKSHOP 3. AGRICULTURE & FOOD

The third workshop had the theme Agriculture & Food and aimed to work ideas related to food / cooking and local products, sustainable food production, preservation of local knowledge. The areas to work ranged from the establishment of partnerships between cooking schools and local producers to the creation of school and community gardens, etc.

This initiative gathered a total of 8 participants plus the workshop leading team.

This workshop was the most problematic as it was placed in a municipality with few public transportation and some participants quit on day before the workshop. Also the professional background of the participants were not very diverse (most of them were designers).

In this workshop the Mayor has also appear and motivate the participants to establish the service ideas in the municipality. It was interesting to notice that the 3D tools were very useful also for the designers.

4.4 WORKSHOP 4. TOURISM & SUSTAINABLE DEVELOPMENT

The forth and last workshop had the theme Tourism & Sustainable Development and aimed to develop ideas related to the natural heritage of the region, valuing and preserving the natural resources. The areas to work could relate to trails and hiking, exploration of glamping, rural tourism, awareness-raising for the fishing activities, etc.

This initiative gathered a total of 15 participants plus the workshop leading team.

There were a good diversity of professional backgrounds, from craftswomen to chemical engineer, designers and public administration staff, teacher and cultural technician.

This workshop was the only one where the participants clearly worked the financial aspect of the entrepreneurial services. On the other ones, there was a tendency for the volunteer work even if the workshop leaders have almost forbidden the use of the word "volunteer" in order to promote the social entrepreneurship value of the workshops.

Common procedures in all the workshops:

The participants were photographed when arrived (Figure 6) and put their pictures on a map designed by the team (we are not showing the map to maintain the anonymous submission).



Figure 6 - participants of the 4 workshops

This map will be reproduced in a bigger scale for the final exhibition (preview by the 27th May 2015).

Alongside with this, will be reproduced all the scenarios developed by the teamwork on each workshop (Figure 7) totalizing 12 service ideas based on social innovation and social entrepreneurship.



Figure 7 – scenario building

Source: Authors (2015).



Figure 8 – team work during idea generation

Source: Authors (2015).



Figure 9 – using the Opportunity Exam Tool

Figure 10 – Sequence of co-creative workshop methodology and process of scenario building through a set of Playful Triggers (artefacts like images, playmobil figures, drawing tools, etc).



Source: Authors (2015).

5 CONCLUSIONS

We have been using this approach with different communities and it has lead to good solutions based on social innovation, social entrepreneurship and sustainable development. With these experiments we are gathering and creating our personal guide and toolkit sessions that is adapting, optimizing or adding some new tools in order to enhance the results of this initiative according to the people and context that we work with. These workshops enabled participants to develop specific skills to collaborate and participate on an interinstitutional basis team.

Through these sessions, participants become aware of the potential of Social Innovation and how collaboration and collective effort through co-creation can act on complex scenarios and tackle social challenges. The design approach to sessions, by defining the tools and strategies, allowed for a systemic analysis through the process.

These initiatives have proven to be key in developing techniques and approaches that involve the participants/trainees, supporting them in creatively improving their ideas amidst a collaborative and experince-

-sharing environment. But they also made it possible for the participants to set more realistic objectives and solve problems that otherwise would remain unsolved, due to the lack of collaborative and systemic perspective.

BAPTISTA E SAMPAIO

Hence, we believe that these initiatives and approaches of co-creation and co-design can be replicated, scalable and implemented in different geographies and different contexts.

REFERENCES

Arnstein, S. R. (2007). A Ladder Of Citizen Participation. Dx.Doi.org, 35(4), 216–224. doi:10.1080/01944366908977225

Botero, A., & Hyysalo, S. (2013). Ageing together: Steps towards evolutionary co-design in everyday practices. CoDesign, 9(1), 37–54. doi:10.1080/15710882.2012.760608

Brown, T. (2009). Change by design - How design thinking transforms organizations and inspires innovation. NY - USA: Harper business.

Brown, T. & Wyatt, J. (2010). Design Thinking for Social Innovation. Stanford Social Innovation Review Winter

Burns, C., Cottam, H., Vanstone, C. & Winhall, J. (2006) Transformation Design. Red Paper 02 Design Council, UK.

Fuad-Luke, A. (2009) Design Activism: beautiful strangeness for a sustainable world. London: Earthscan.

Gray, D., Brown, S., & Macanufo, J. (2010). Gamestorming. USA: O'Reilly.

IDEO. (2009) "Human-Centered Design." Toolkit

Krippendorff, K., (2006) The Semantic Turn: A New Foundation For Design. 1aed. New York: Taylor and Francis, CRC Press

Kumar, V. (2012). 101 Design Methods: A Structured Approach for Driving Innovation in Your Organization . New Jersey: John Wiley & Sons.

Martin, B., & Hanington, B. (n.d.). Universal Methods of Design. Beverly, USA: Rockport.

Mendel, J. (2013). A taxonomy of design methods process models. Interactions, 2(3). doi:10.1145/2065327.2065343

Mulgan, G., & Leadbeater, C. (2013) Systems innovation. Discussion Paper, London: NESTA

Murray, R., Caulier-Grice, J. & Mulgan, G. (2010) The Open Book of Social Innovation. London: The Young Foundation

Ostrower, F. (2010). Criatividade e processos de criação (25 ed.). Rio de Janeiro: Editora Vozes Ltda.

Sanders, E., & Stappers, P. J. (2013). Convivial toolbox. Amsterdam: BIS Publishers.

Sanders, E., & Stappers, P. (2008) "Co-creation and the new landscapes of design." CoDesign

Stickdorn, M., & Schneider, J. (2011). This is Service Design Thinking. New Jersey: John Willey & Sons.

Thackara, J. (2006). In the bubble: designing in a complex world. USA: MIT Press.