

Co-creating collaborative food service opportunities through work context maps

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Abstract

This paper presents a co-design workshop method where the participants use context maps of work activities as tools to visually explore collaborative service opportunities inside a food producer community. As an example the paper describes experiences from using the method together with small local food producers. During the workshop the food producers created and transferred knowledge regarding their work from the individual work maps to co-created future service maps. Although the food producers never had worked in these settings before, they had no problem sharing and co-creating complex work scenarios. The method uses both visual and verbal tools, which enables the participants to create a detailed service story as well as a visual overview. The use of the method encouraged the food producers to create service ideas, but it also started a dialog on how to bring the service concepts out to the real work context. The paper also reflects upon the method's potential in supporting service designers.

KEYWORDS: work context maps, creative communities, design method, visual tools

Introduction

Today, much of service design research and service design practice is closely related to bigger cities with a high density of companies. The focus of service design in these settings is often on the relationship between the company and the customers. On the Swedish countryside, the picture is very often the opposite. Here we have a low presence of service design thinking, and the majority of the companies in these regions are scattered clusters of micro companies with low design awareness. We believe that service design as an approach to innovation has a lot to offer the countryside and its inhabitants. Having participated in a number of local service development projects, we also believe that organizations, researchers and practitioners interested in creating relevant service innovations in the countryside

context need to follow a design approach based on co-design and community thinking. One of the service projects we have participated in was the Digital Service Markets (DSM) project. The aim of the DSM project was to explore and develop distribution and communication services between small food producers and different municipal departments. In this project we started to explore and develop a workshop method for co-designing service innovations inside a community (Sandberg, 2010)

There are many benefits from using co-design in service design projects. (Steen, Manschot, & De Koning, 2011) have analyzed literature and design cases where co-design was present and they identified three categories of benefits. The three categories are: Benefits for the Service Design Project, such as improving the creative process. Benefits for the services customers or users, such as creating a better fit between the service offer and customers or users needs. Benefit for the involved organizations, such as improving creativity and enthusiasm for innovations. They also highlight the importance of selecting appropriate methods and ways of working in order for co-design efforts to be effective. Another important aspect of using co-design is the idea of relevance. It is more likely to create cultural relevant services when you move away from individual creativity to a collective creativity (Sanders 2001).

In the literature there are several descriptions of the importance of involving non-designers in the design process and how different visual tools can support the co-design process. It is not our intention to give an account for all the researchers and concepts in this paper, but we will introduce some concepts that can support and position the idea of the workshop. Context-mapping (Visser, Stappers, van der Lugt and Sanders, 2005) actor network mapping (Morelli and Tollestrup, 2007) and co-design space (Sanders and Westerlund, 2011). This paper describes our experiences from inviting small local food producers from the countryside of Småland to a first real prototype test of the creative customer community workshop method. We begin by describing and positioning the workshop activities. Then we describe our experiences using the method. We conclude by suggesting how others can use the workshop and describing how we hope to use it in the future.

The workshop method

The workshop is an activity where different visual and tangible tools are used in order to support participant's verbal descriptions of new services. The workshop is situated in the first stages of the front end of the design process. The purposes of positioning it here is to involve the end users early on in the design process and to increase the number of ideas for transformational innovations. The process and tools in the workshop are aimed at generating ideas that both can be implemented into cross-functional teams and developed further by consumer communities. The final goal of the workshop activity is to create a collaborative service concept in a local food producing culture.

The workshop can be performed either during a single occasion or as separated shorter activities over a longer time period. Regardless the time frame or the number of the workshop activities it is always important to have a space that supports the process. The space is an information ecology where the right combination of media, room, facilitator and processes supports the interaction between the participants (Nardi & O'Day, 1999).

The workshop follows a clear structure where the researcher or the designer takes the roll of a facilitator that prepares and presents the activities. The participating company owner's

contributes with their work experiences and by creating service ideas that will support or change their business and consumer community.

The Centre for Design & Innovation (C4di) in Aberdeen has done interesting research about how design techniques can be of value when working with small to medium sized enterprises. C4di describes how important visual tools and visual approaches are for creating new perspectives on innovation. In their program they are promoting collaborative design thinking through workshops and exercises that employ a visual approach involving hands-on participation. From innovation models based on standard design process C4di sorted out a set of key steps that the processes includes. The steps are; understanding, observation, ideation, prototyping, synthesis, iteration and implementation (Malins, 2011). Each step uses different visual tools such as; image sorting, mood boards, visualizing the user, extreme user, customer journey maps, brainstorming, business model generation, prototyping, serious play.

If we follow the traditional design innovation process steps that C4di describes. Then the current workshop structure can be divided into terms of; understanding, observation, ideation and prototyping. Each step uses tools and activities that will guide and prepare the participants for the next workshop activity. During the *understanding* step the participants create context maps of their work activities. By doing this they create a deeper understanding of their own core activities and their self-image as a company. The *observation* step is about presenting the work context maps and using the knowledge of the workshop group to identify key problems and new solutions. By doing this the participants create knowledge about the other participants and their service perspective is changing from the individual to the group. *Ideation* is about analyzing the previously created design material. The final step is *prototyping*. Here the participants use the ideas from the previous steps to create a service concept. The prototypes are created with paper and other game artifacts. This makes it possible for the participants to talk about it, try it out and visualize it.

Example: the future local food services workshop

The first time the workshop method was tested was with three small food-producing companies. The workshop activities took place at the Linnaeus University, school of design. In addition to the food producers there were two designers and one researcher participating in the workshop. The participating food producers are working in the same geographic area, but prior to the workshop they had never worked together before. The workshop activities lasted approximately for three hours and the final goal was to co-create knowledge about their different work situations and to identify processes for future collaborative services.

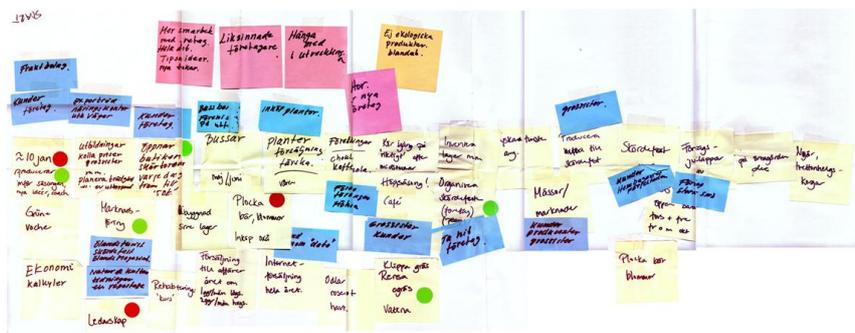


Figure 1 individual context map of work activities from one workshop participant. Yellow sticky note=Activities, Blue sticky note= Actors, Red dot=Problems and green dot=Strengths

The understanding step

The workshop started with each food producer presenting themselves and what a work year means for them. To support this activity each food producer had their own work activity map as a visual reference. During the introduction the maps were placed on an easel in front of the other food producers. This made it possible for the presenting food producer to interact with both the map and the other companies. When the first map was placed on the easel it immediately raised a question among the other food producers: *this map doesn't look like my map, why?* This question then became the starting point for all the presentations and it resulted in phrases like: *my map looks like this, because our company works with two product-lines.*



Figure 2 Participants using their work map to present; work activities, involved stakeholders, problems they have, strengths and dreams for the future.

During the presentations the food producers used the work map in various ways. Some used it only as a support for describing the work structure others followed the map exactly. All food producers managed to create and share a detailed story about; invoice activities, product activities, collaboration partners, employees, location, marketing activities, problematic events and much more. Each presentation took about 15 minutes.

The observation step

By the end of each presentation the workshop facilitator asked the food producer, *which problem on the map would you like the others to create solutions for?* The food producers chose marketing and logistics as problems to work with. When each food producer had chosen the problem, they returned to the table with the other food producers. Then the entire group were handed pens and solution concept papers.

The solution concept paper is an A4 paper with three columns; the first is for the name of the concept, the second is for a short description of the concept and the third is for hand drawings. This supports the idea of making the sharing activity quick and more lasting. The different columns open up the possibility that all the participants can find one way of expressing themselves. When the paper is filled in, it can be used during the entire workshop and finally end up at the problem owners company.

After the three columns were explained, the food producers spontaneously started to explore the selected problem. They asked questions, they created parallels with their own work situations, they involved the work activity map and they described existing solutions. The discussions about the problems were very vivid and it resulted in many relevant discussions. One problem was to steer the solution dialogs down to the solution papers. After a few

reminders they created and explained the solution on the A4 paper. When all the food producers had created a solution, they hold up the paper and gave a short explanation of the concept. Some of the solutions were new to the problem owner, whilst others were already tested and condemned. So both the problem owner and the other food producers learned a lot from listening and creating solutions to the others' problems.

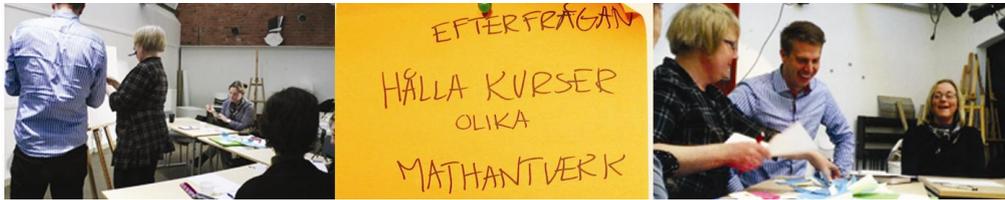


Figure 3 the participants learned from each others trends and problems.

The ideation step

After the vivid discussions about problems and solutions we took a break with coffee and trends. This activity was meant to serve as a bridge between today and the future. Before the coffee break the food producers were asked to think about work related trends. When the workshop participants returned from the coffee break they found a pile of blank trend cards on their desk. The food producers were asked to write down the trends on the cards and place them on the wall in front of them. After placing the cards on the wall each food producer explained their cards to the others. The majority of the trend cards were about food trends such as; craftsmanship, lactic acid, handmade sausages and sourdough bread. The rest of the cards were mostly about; health, environment, control and lack of knowledge. The trend activity ended with the food producers putting up all the work activity maps and the solution concept papers next to the trends. The purpose of putting up all the material was to create an inspiration collage for the next activities.



Figure 4 explaining and creating a community and new collaborative food services

Before the last two workshop activities, the participants were divided into two groups. The groups were given the tasks to first analyze all the material they had put up on the wall and secondly to co-create a future service concept that would help a larger group of local food producers. To support the activity of co-creating service concepts, the groups were placed at small tables where different visual thinking materials were available for them. The visual materials were; paper, sticky-notes, game pieces, pencils and objects in different shapes, colors and sizes. The two groups analyzed the visual materials on the wall. Three topics were particularly interesting for the groups; quality of life, interaction and pushing down expenses. With these topics the groups went back to the tables and started to explore the future contexts and its possible food services.

The prototyping step

Each group used one large sheet of cardboard as a stage for the future service concepts. On the stage, the groups used the game pieces and the sticky notes as tools to explore the future and the involved actors and their actions. During the exploration the groups moved back and forth between describing their own work experiences, framing the future and creating service concepts for collaboration. When the groups were ready with the concepts they were asked to present the concept to the others.



Figure 5 needs and dreams are expressed verbally and visually.

During the final presentation the cardboard sheet was a central part of each presentation. The food producers gathered around the cardboard stages and watched and listen to the different service stories. The combination of talking and moving around the artifacts on the cardboard stage created both a detailed presentation and an overall view. Through the verbal presentation the food producers described the overall ideas and the invisible activities that took place between the different game pieces on the cardboard stage. The food producers used the different game pieces and the other artifacts to show; geographical distances, clusters, flow, touch points and rural and urban areas.

This is a transcription from one of the group's verbal service story:

The future Sweden is a place where the oil prize is so high that people can't afford using their cars as means of transportation anymore. There are no longer any shopping malls or bigger food stores in Sweden. As a way of increasing the life quality of all Swedish citizens, there is a food distribution system supported by small local food producers

Between the food producers and the city there is a distribution centre. The food is gathered and transported from the food producers to the centre. In the centre the food is stored and arranged. From the distribution centre the food is transported in to the city by an environmentally friendly car.



Figure 6 the final design material

Reflections about the future food services workshop

During the first stage of the workshop the food producers' individual work activity maps played a key role. The maps were the first time the food producers were given a visual insight into the other food producers work activities. It became clear how important the visual differences on the maps were. Through the visual differences the food producers could quickly compare and create a basic understanding of the different participating food producers work systems.

During the problem solving activity and the trend activity the food producers showed a great interest in each other's work situations. It was a very open dialog, where they shared knowledge from their own work experiences. When the solution paper was introduced in to the solving activity, it created a disruption in the dialog. The solution paper needed to be explained and the food producers were not used to pin down their thoughts on paper. Although it was good to have their concepts on the papers, the solution activity needs to be redesigned and be more integrated in the dialog flow.

One interesting aspect from the trend activity was that they all chose food courses as a growing trend. When the food producers put up the trend cards on the wall it became visually possible for the food producers to see relationships and clusters. When the group saw that they all had written topics related to food courses, they started a deeper discussion about selling food education. All the participating food producers described how they spend more and more time on educating people about food.

The use of a cardboard stage and game pieces in different colors and shapes worked well. The ability to move around and create new game pieces supported the group dialog and it brought the service stories forward. Even during the final presentation the pieces on the cardboard were moved around to illustrate how the service was working.

The thing that surprised the most was how the food producers created detailed stories about the context and the services. The combination of the verbal story and the different artifacts created a very thoughtful and inspiring design material. During the workshop the food producers managed to create and share much information about their needs and dreams.

Discussion

When we started to develop the workshop, we already knew that the motivation to participate needed to be bigger than the barriers that hinders from participation. Through the invitation process we learned that some barriers such as time and space are easier to overcome than hidden barriers such as individual conflicts between the company owners. We invited ten companies to the workshop, three of them participated. We learned that it is important to find and work with workshop participants that are eager to learn from others. Before the workshop we send back a copy of the work activity map as an invitation to the map owner. This was appreciated by the participating food producers.

We have now tested the workshop with three small food producing companies. Our experience from using the method is that good dialogues emerged because it allowed the food producers to share their own work experiences. We noted that the expressed solutions and the other discussions during the workshop mostly were taken from the food producers own work experiences. Each individual food producer has for many years tested different ideas and products that they think either work or don't work. From our workshop

experience we have learned that visual tools such as maps can greatly support and organize the process of creating and sharing work knowledge.

We also noted that the food producers learned something new about being creative in a group during the workshop. By the end of the workshop the food producers said; now when we have learned about each others needs and dreams we want to continue being creative in a community or collective.

The collective creativity is an idea about creating relevant innovations that are becoming more and more important for companies. Prahalad, (2000) describes it as customer communities. The initial focus in customer communities was for a long time on business to business communities. But the internet has changed the relation between the customer and the company. It is now so easy for people to create online communities with high level of information that the focus has shifted towards consumers having an equal dialog with the service provider. The notion of customer communities can be a little bit confusing in the countryside context. The small food producers in this context are often referred to as multifunctional companies, i.e. they are involved in many different work activities and they are also acting as makers and users at the same time. If we see them as users, they are actually using a lot of different services. And as makers most of them have in one way or another, created communities where customers can share and create new food products. But they don't have the tools or experiences from creating situations where they physically meet as a food producing community and create new collaborative food services. That's why it is so important to explore and prototype visualizing tools for small companies.

Using design games or generative tools in co-creation is well explored in research settings (Sanders and Binder, 2010). But we believe it is important to explore and developed design tools for designers working with very small companies. This workshop is just one minor exploration of the techniques and procedures that is needed in the co-design space of communities.

Conclusion

In this paper we have presented a method including mapping techniques in which participating companies create knowledge about each others needs and dreams through the use of visual work maps. This new way of working allows the participants to change perspectives and act out future service scenarios. The outcome of the workshop is a service story and a service map that is open and flexible enough for designers to be inspired and continue working on the service opportunities. Another part of the outcome was that the participants increased their knowledge about their own work context. Neither the participants nor the researchers have transformed the service concepts into functional services. However, based on the experiences gained during this workshop we propose that the method can be used to increase participants' awareness of creating co-value innovations inside a community and empathy in local service development projects.

Future work

During the workshop we learned several new aspects from food producers about their activities. We learned that the creative community is an important part of developing local service innovations. Without a strong community involvement the risk of failure is high but

at the same time it is very complicated to create and lead a long lasting community. What happens when the facilitator leaves the community? That knowledge must be analyzed and more workshops need to be done. Another important step is to bring the method and workshop outcome to service designers and discuss how it can be used in the daily life of a design practitioner.

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