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Co-Creating Solutions - Combining Service Design and Change Laboratory

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Abstract

This paper is an introduction and reflection of a method integration project in a service development context. In the project, two complementary methods were used to co-create new service offerings and improve the work activity in a ferry line restaurant. The research aim was to test the integration of two different development methods, service design and the Change Laboratory. The assumption behind the work was that new service development requires methods for both creating new concepts and for successfully implementing them in the organization. By combining these methods, the project was able to expand the scope of service design from the creation of service concepts towards implementing them as a part of a process of organizational learning.

1. Introduction

During recent years, service design and design thinking have been pushed to the front line of new business development methods. The methods promise to deliver new ways for innovating through placing the customer needs and practices at the center of development and offering a way for creative ideas to develop into innovations. Service design is based on the expertise developed in the sphere of industrial design and interaction design, and

complemented by methods derived from ethnography, psychology and management sciences among others.

By definition, service designers provide value through the ability of visualizing, formulating and choreographing solutions to problems (Mager 2008). New services are created through the careful observation of the behaviour of customers and interpretation of requirements for the service. The strategical deliverables can be in the form of service blueprints, customer journey maps and service ecology maps. These types of solutions operate on the strategical level of the service provider organization. However, because the quality of a service relies on the people who deliver it, implementing solutions from top-down can be very difficult. Just delivering a vision for the management does not ensure a good customer experience on the ground level. In order to bridge the gap between visions and execution, it has become common to involve service staff members in the design process in co-design sessions (Fullerton 2009). At the basis of co-design lies the assumption that through empowering workers as co-creators, they will be motivated to engage in creating new service solutions.

When working together with service staff, it is important to realise that their motivation for creating and implementing new services is a result of personal, social, cultural and political factors. The activity that guides the service delivery process is formed historically and can resist change attempts. Often the need to sustain the status quo overrides the need for change, especially if the latter requires extra effort from the personnel. In order to address this challenge, a deeper understanding of the social and communicative processes needs to be integrated into the design process (Maffei & Sangiorgi, 2006). If the motivation for development does not intrinsically exist and the designer lacks understanding on how to support change processes, the outcomes of co-design sessions cannot be guaranteed.

In this paper we present a service development case during which service design methods were combined with the Change Laboratory methodology. Through this integration we were not just able to provide the organization with tools for improving existing practices and developing new services, but also guide the staff towards implementation via a process of organizational learning. During the process we were able to combine the expertise of the staff with the insights gained from customers. This created a positively self-reinforcing cycle, during which new ideas were generated and further developed. The staff became motivated to take responsibility of their work environment and customer experience.

2. Context Description

The service provider Viking Line has recently renovated its restaurant services on their ferry vessels operating between Finland and Sweden. The earlier high-end restaurant facilities *À la Carte* and *Barbecue* were remodelled to include three restaurants working side by side: an *à la carte* restaurant, a family restaurant *Ella's* and tapas bar *Tapas&Wine*. This caused a need to change the way services were delivered and increased the amount of customer seats to be served. In addition to the change in concept, a few years earlier the revenue model of the restaurant was changed so that income was increasingly generated through additional sales of wine bottles, side dishes and merchandise. In order to accommodate these developments, the company wanted to generate more flexible work practices by expanding working pairs into larger teams of three to four waiters. These changes have generated a challenge of renewal for the personnel who work according to existing routines based on several years of service experience. They had to adjust to operating three different restaurants, increasing their sales efforts and all the while maintaining consistent service quality.

Before the start of the development project, the service staff had been hesitant to change their behaviour to accommodate the new model. Many wanted to continue work relying on the same practices as before. Before, customers were served through a system of collaborating waiter pairs, many of which had been working together for a number of years, thus working under seamless collaboration. For the waiters working in such way, knowing how their pair worked and behaved helped to forecast actions and adjust their own work accordingly. On the other hand, throughout their collaboration, the pairs had formed routines whose efficiency was not proved. Another problem was that the management culture of the ship was hierarchical and interaction between the service staff situated in different departments was limited. Service development took place in the top management with little contribution from the front-line staff.

Service employees were frustrated by the ongoing redesigns of their workplace and therefore change was not something looked forward to but seen as even intimidating. Through initiating this project the company wanted to address problems created by the changed circumstances. The ship M/S Amorella, sailing between Turku, Finland and Stockholm, Sweden, was chosen as the pilot site. Our challenge was to encourage the personnel to create innovative bottom-up solutions and to transform their work permanently to accommodate the new restaurant concept.



Figure 1. Customer service situation at Tapas&Wine Bar.

3. Methods Used

Parantainen (2008) presents a rather simplified model for the productization of expertise services. According to him, it means the development of existing or attainable competence into service products that serve the needs of customers. Productization is one way of addressing the development of services. What he fails to address, however, is how to critically approach existing services and to transform them into entirely new service concepts. When renewing existing services, the company faces at least the following challenges: 1) How to attain knowledge about the (changed) customer needs, 2) How to gain the motivation for re-envisioning the old, 3) How to encourage the ground service-staff into creating solutions?

Assuming that services are produced through complex organising of activities between the producer and customer, we approach the development of services through a system-theoretical point of view. Based on Sangiorgi (2008), the development was carried out

moving on three different levels: the human interaction level, interface level, and the contextual level. The first level of human interaction is based on the concrete customer service situations, created through the interaction of staff and customers. This level is characterised by personalities, moods, communication, rhythm and other aspects of personal interaction. The next level is formed by the service interface – a platform which consists of tangible objects, the capabilities and roles of the people involved and the information guiding participator interaction (Sangiorgi & Clarke 2004). The third level, namely the contextual, is often unseen to both sides. It is formed by the activity systems (Engeström 1995) guiding the behaviour of both customers and staff. On the other hand the activity system of the provider sets certain preconditions for the service offering. The activities of the employees are guided by their objective, i.e. their perception of the customers and their needs to be served. If a restaurant's concept is redesigned as a reaction to changed customer needs and yet the restaurant employees still serve customers as before, the work community will experience problems and disturbances in their work. The customer's activity system has an impact on how the service is received and can it satisfy their needs or fit into their practices (Korkman 2006).

This third level has been studied in depth within the field of developmental work research and formalized into a development method called the Change Laboratory, which aims at facilitating organizational change through the reinterpretation of the object of activity.

3.1. Change Laboratory and Developmental Work Research Methodology

The Change Laboratory (CL) is a tool for developing work practices through engaging participants (members of a work community) in a dialogue with each other, their management, with their clients and the facilitator. It is based on the assumption that human behaviour is dependent on the surrounding cultural artefacts and the social relationships of her/his community. Change in individual behaviour occurs when these artefacts and relationships, which create the socio-cultural practices, are changed. (Mäkitalo 2005.) In CL the participants are guided through a cycle of expansive learning, which results in establishing a new way of working for the organization as a whole. In this project, the Change Laboratory provided the facilitators with the theoretical understanding of organizational change and methods for incorporating the new service concepts into the daily work activity of the community. This chapter provides a brief description of its background and elaborates on some of the key concepts in the methodology.

The Change Laboratory concepts and methods are based on theories of expansive learning and developmental work research (Engeström 1987; 1995; 2004; Virkkunen, Engeström, Pihlaja & Helle 1999). The theory and methodology of developmental work research was first published in Yrjö Engeström's dissertation "Learning by Expanding" in 1987. The first version of the Change Laboratory method was developed in the 1980's through the collaboration between various researchers and HRD-practitioners who were interested in utilizing the activity theoretical approach in organizational development. Since then many projects have been conducted in various industrial fields. During this time, CL developers have gathered and analyzed empirical data of their interventions and published results of their method development in academic papers and dissertations. Between the years 1997 and 2006 over fifty Change Laboratory projects have been carried out in various companies. (Virkkunen 2007.)

Expansive Learning

The aim of the Change Laboratory method is to support organisational change through creating an environment that enables expansive learning to take place (Engeström, 1987). First the expansive learning cycle (see Fig. 2) is used to clarify the state where the community is at the moment (=development challenge). Secondly, the cycle is used to guide the planning of the individual workshop sessions and discussions. The cycle consist of several learning acts: *questioning* present work practices, *analysing* historically the causes that have created problems in daily work, modelling and *searching* for a new form of activity, *testing* and changing the activity and practices during the experimental phase and finally reflecting on the process and *implementing* and *generalising* the final concept of the activity (Engeström, 1987; 1995). All learning acts are set up during the Change Laboratory process step by step. CL offers no ready-made process, so the concrete tools are always customized to fit the development challenge.

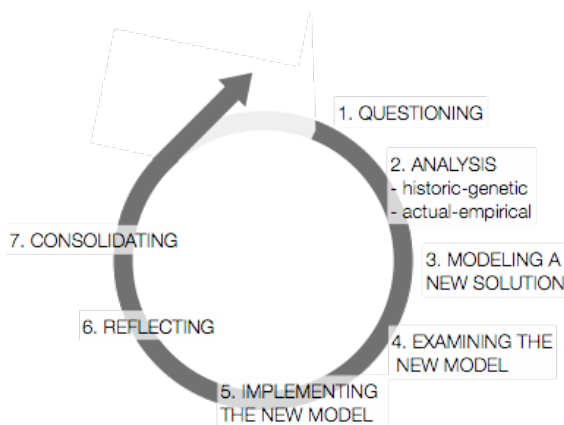


Figure 2. Expansive learning cycle (Engeström 1987; 1995).

Mirror data

The process starts with encountering the problems that are tied to the present activity model and practices. Laboratory sessions are filled with empirical data analysis from actual work and feedback and actions of the customers. The issues are concretized through the gathering of mirror data on work situations, mostly in the form of experienced disturbances and proposed solutions (see Fig. 3). Problems are not analysed as mistakes made by the employees but instead viewed as systematically embedded in the practices of the organisation and historical results of earlier organizational development. (Engeström, 1995.) The gathered data will be analysed in several laboratory sessions held together with the employees. As a result, the work community will be confronted with the challenges and prompted towards creating solutions to problems.

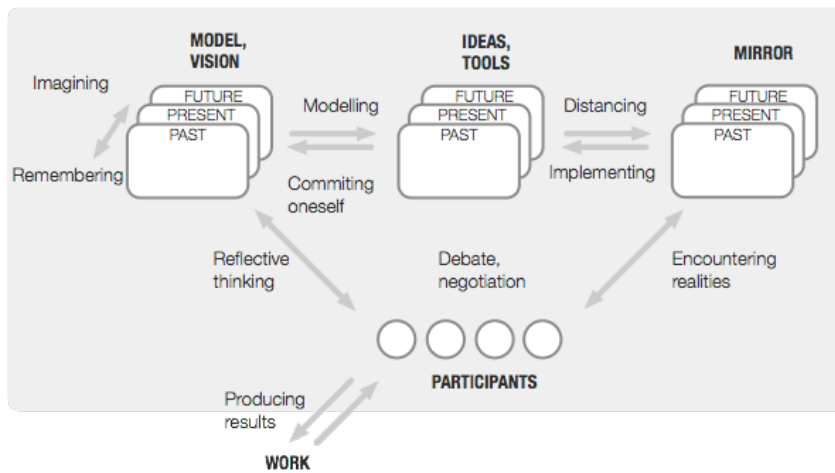


Figure 3. The Change Laboratory setting.

Double bind

The expansive learning theory works as a tool for an interventionist to plan and execute the workshop tasks. Van de Veer and Valsiner (1991, 169) says:

“The actual workshop sessions are planned by using the guideline double bind. The subject is put in a structured situation where a problem exists (...) and the subject is provided with active guidance towards the construction of a new means to the end of a solution to the problem.”

The logic of double bind makes participants to raise questions: “Why are we/am I doing this?” or “What is it that we should in fact do?” (Mäkitalo 2005). By asking these questions and answering to them employees personal sense and collective motives that are bound to historically formed activity starts to externalise and question. Questioning the object of activity can shift the community towards the construction of a new object with a new collective motive. The new constructed object of activity must be tested in real life situations. (Mäkitalo 2005.)

Activity system model In CL projects the unit of analysis and development is called activity, which is seen as collective work practice (see Leontjev, 1978; Engeström, 1995). In the development process, the basic analytical tool is an activity system model, used for illustrating the present activity and the envisioned one (see Fig. 4).

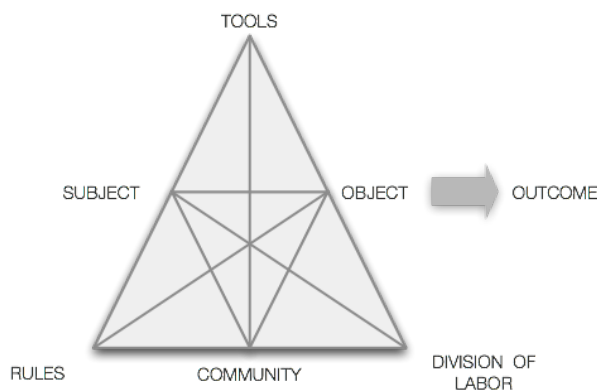


Figure 4. Activity system model (Engeström, 1995).

Collaborative work is mediated by different tools, schemas and theories (Vygotsky, 1978). Activity is always object-oriented, partly given and partly interpreted (Vygotsky, 1978). This means that service producers construct a certain conception of their customers and their needs which they proceed to serve. The actions of customers determine and influence this construction. If the conception is not accurate, it can lead to problems due to the discrepancy between how the employees are behaving and what the customers are expecting them to do. In addition to the object, activity is regulated by rules, a division of labor and the rest of the community who contribute to the working conditions (Engeström 1995). For a service concept to become a properly functioning system, it needs to be embedded within the practices (tools, rules, division of labor) of the providing staff.

The strength of developmental work research is that both service and work are being analysed through a broader perspective than just acts produced by individual workers in distinct situations. Present activity is historically defined and affected by developmental contradictions. If a restaurant's concept and management system is redesigned as a reaction to changed customer needs and yet the restaurant employees still serve customers as before, the work community will experience disturbances in their work, as had happened in this case.

The Change Laboratory method is mainly used for improving work activities. The method has not been applied directly to service development aims, although in many of the executed projects the element of service has been present. In many cases there has been collection of interviews and ethnographical data on customers' activity, but the main aim has not been in creating new service concepts. However, some researchers have applied a customer activity-oriented approach in their academic dissertation (see Hyysalo, 2004). Furthermore, Korkman (2004; 2006) has studied family cruises and made a conclusion that companies often miss out on new markets due to a lack of customer orientation. According to him, in developing services the marketing function focuses too much on the organisation, often leaving aside their customers' practices (Korkman, 2004; 2006). There is an interest within the CL community to develop the method towards applying a more customer-centric point-of-view.

3.2. Integrating Service Design

Service design and Change Laboratory share some common history in earlier methodological research. Activity theory, on which the Change Laboratory method is based on, has been widely researched in the context of interaction design method development (Nardi 1997, Kaptellin&Nardi 2006). In addition, the interaction design community has recently engaged in discussions about alternative paradigms for human-centred design in which activity theory is seen as one approach (see Norman 2005). So far we have found only a few instances where the overlap between the methodological approaches has been explored in the context of service design – most notably research conducted by Daniela Sangiorgi (2004, 2006).

In this project, service design (SD) as a method was positioned according to the approaches of human-centred design and participatory design. The methods used in the process were gathered from the existing service design literature and based on experience gained during service design education organized at the University of Art and Design Helsinki. Additionally, some of the customer interview and data analysis methods were following the method of contextual design (Meyer & Holtzblatt 1998). This chapter outlines some of the guiding principles that were used from the service design methodology.

Service as a Process

In contrast to physical products, services are interactive processes during which the employees and customers are creating value over time (Holmlid 2009). In service design, this process is approached from the customer's point of view by constructing a customer journey which is a chronological representation of the activities of the service participants in a given service situation. Service interfaces are seen as an interaction platform which consists of tangible objects, the capabilities and roles of the people involved and the information guiding participator interaction (Sangiorgi & Clarke, 2004). The success or failure of service is determined by the expectations of the customer and the experience during the process or usefulness of its result. Following these views, the central object of service design is the creation or modification of the customer journey, constituted by its touchpoints. Methods such as customer journey mapping (Saffer 2007), service blueprinting (Shostack 1984) and storyboarding (Vertelney&Curtis 1990) are used to visualise the processes that take place during a service encounter.

Human-Centered Design

In service design, the needs and practices of the people involved take center place in the development. The development commences with finding out latent needs and current practices of the customers through interviews and ethnographic methods. The aim is to understand how customers experience services and how this experience can be improved. Theatre-based methods such as bodystorming or role playing are often used to visualise human interaction during a service encounter. Typical service design methods adopting a human-centered approach include design probes (Mattelmäki 2006), customer personas (Cooper 1998) and storytelling (Erickson 1996).

Participatory Design

Service design is also set apart from product and interaction design by the aspect that they are produced and consumed at the same moment – by people with people. This means that the front-line service employees both retain much information about the current state of the service and play a key role when implementing the final design. Therefore to ensure best possible results, the employees are often included as co-creators in a participatory design process. (Fullerton 2009.) In the sessions the designer takes on the role of a facilitator, and rather than focusing on creating solutions, presents information and frameworks to guide the process. Often participatory workshops are designed to follow the process of first processing and thinking about the data that was produced, then going into a divergent process of ideation and afterwards converging on service concepts and prototypes to be tested and improved.

Generative Methods

Service design is a creative endeavour from its core as it concentrates on thinking how existing services could be made better or how entirely new concepts can be formed. Often the best and most innovative solutions are not found using an analytical-rational thinking process, which is good at solving problems with pre-set solutions, but rather with intuitive-experiential thinking which suits open-ended problems. Various exercises and processes have been developed for training and utilizing creative thinking under the umbrella of lateral

thinking (de Bono 1967), design thinking (Brown 2008) or integrative thinking (Martin 2007). Within the scope of this project, the creative thinking process followed the steps described by Moritz (2005): discovery, generation, synthesis and enterprise.

4. Process of Development

The context of a ferry line provided us with a suitable platform for testing the method integration. The ferry line's customers spend a certain amount of time using the services and facilities of the ship and create their individual experiences and service journeys. Developing the service experiences required in-depth study into the needs and practices of the customers in order to find out how the quality and scale of the offering would have to increase. At the same time, the personnel posed us with the task of assisting them in improving their work practices and challenging them to reflect on their practices from a customer's perspective. We approached this task through combining the two methods, one to provide the customer's perspective and the other for developing work activity. In the project CL was used as a wider frame because of it provided us with a theoretical understanding of organizational change. This frame was paralleled with concepts and methods from service design (see Fig. 5). This chapter provides a short chronological description of the development process. The development work was organised into a background study phase, data analysis and a workshop phase.

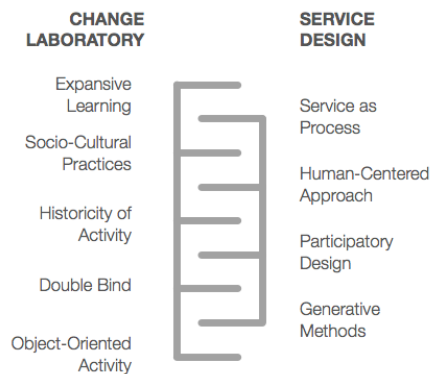


Figure 5. The frame for the development activities.

Background Study

The first step of the development process was to gather data from customers and employees. The phase aimed at providing an in-depth perception on the operations on the ferry, its service offering and customer needs and practices. The methods were inspired by ethnographic techniques and involved observing service interaction situations, interviewing customers and participating in actual service work. The observation was carried out in front and inside of the restaurants and recorded in field notes which described customer and staff behaviour on the ferry. Observations concentrated on customer-employee interaction, the usability of service touchpoints and gathering of cultural practices. Interviews were held for three groups of subjects: customers, service staff and management. The customer interviews (over sixty persons were interviewed in total) concentrated on customer journeys, expectations for restaurants, needs and practices on the cruise and suggested improvements.

The whole staff of the restaurant was also interviewed. In these interviews they were asked among other things sentiments regarding their work, disturbances in work flows and perceptions of their work roles. In addition, three managers were interviewed in order to gain an oversight on the ferry line's service offering.

Data Analysis

The second step was to construct hypotheses about the developmental challenges of the work community, restaurant's practices and services and to create descriptive information artefacts such as customer personas, customer journeys and issue lists to be fed into the workshop co-creation process.

Customer data was analysed to construct the main service challenges and formulated into personas and issue lists. The analysis clarified the development challenge of the restaurant and provided mirror data for the workshops.

The first hypothesis presents the contradiction between the old activity model and a new one (see Fig. 6). Even though the new revenue model, which includes additional sales, had been in place for a while, the personnel viewed working according to it as a challenge. They viewed it as less rewarding because in addition to providing good service their performance is measured increasingly through sales activities. The rules and organisation of the new model had not yet been generalised among the staff. This had led to a situation where the employee's operation and expectations for the management were still guided by the old model, but the rewards and rules of the workplace were already operation according to the newer model. The situation caused continuous disturbances in work situations and dissatisfaction among the staff. The construction of a new model and transition towards it became a central aim for the workshop.

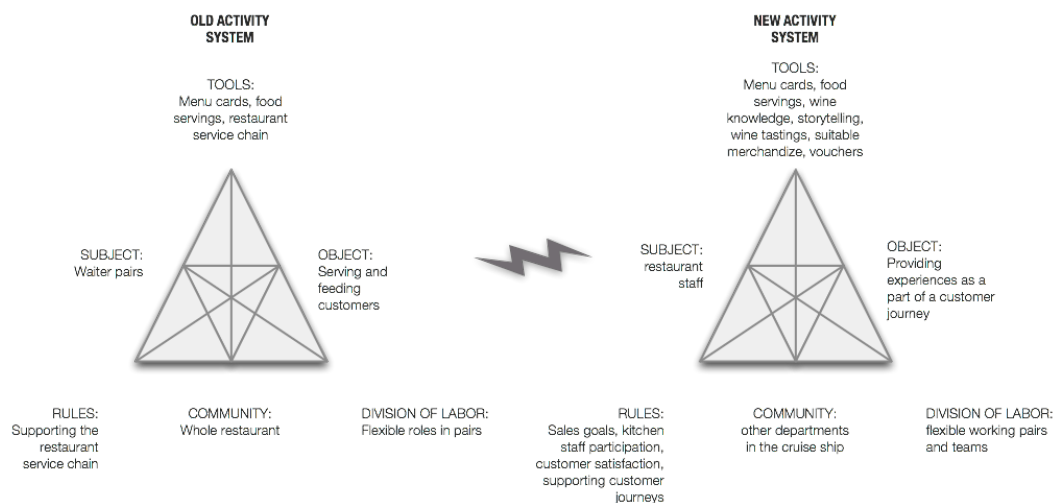


Figure 6. Contradiction between the old activity system and new one.

Secondly, we noticed that the service providers in the different departments lacked a shared object for activity (see Fig. 7). The ship is set up as a functional organisation, which consists of different departments: entertainment, conference, restaurant, tax free shop, hotel and so forth. The objectives of the departments have been set up according to their functions, i.e. restaurants serve food, tax free sells products and entertainment keeps passengers engaged.

This has led to a situation where the service staff are not informed about how the services of their ship interlink. They are not able to guide the customer to the next service or advise them about the services of other departments. Cooperation between different units takes place among function chiefs so the ground-level staff is often unaware of the activities in the other departments. Because of this, the customer experience has become scattered and visitors are often wandering on the corridors looking for the next service or activity. Introducing the customer journey as a mental tool and encouraging inter-department communication would assist in solving this problem.

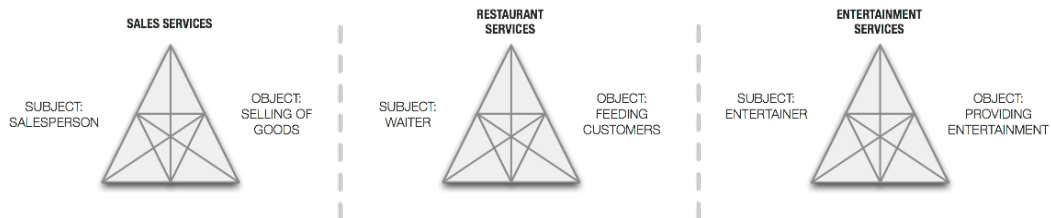


Figure 7. The lack of a shared object makes co-operation between functions difficult.

The third hypothesis considers the need for more engaging services offered to a wider customer base. At present, the service offering of the ship caters for selected customer segments and provides services for elementary needs such as entertainment and shopping. Many customers found their trip somewhat uneventful and desired more engaging and social activities. The ship has many hidden services, such as the lending of board games or whiskey tasting events, which are not actively promoted and thus out of reach for many customers. If these services were communicated more clearly and made easily available to a larger customer base, they could be utilised to create eventful experiences. Furthermore, bundling positive experiences with appropriate merchandise can create more memorable experiences for the customers and lead to increasing sales. In this way, the service offering of the ferry would provide a platform for active customer interaction instead of providing for one-off services.

Workshop Phase

CL provided the framework for the workshops through the concept of expansive learning. The learning acts were used to guide the goals and methods of individual workshops (see Fig. 8). The waiters and waitresses formed the main group participating in the sessions in which information on work and customers was analysed and new ideas were gathered and discussed. The workshops were facilitated as learning processes so that the facilitators guided the activities and fed the discussion. Members from other departments were included in two workshops, which discussed the services of the restaurant department in relation to the whole offering of the cruise ship. All together there were seven two-hour workshop sessions and a day-long concluding seminar, in which the implementation of service concepts was discussed.

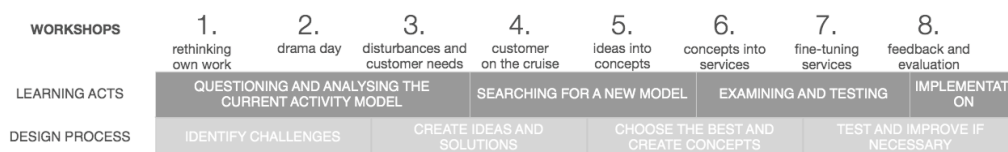


Figure 8. The workshop process.

The workshops started with a session in which the historically formed practices of the restaurant were analysed. During the analysis, we emphasised that problems are not viewed as mistakes made by employees, but as practices that are historical results of the development of the organization. In this way, we guided the participants towards thinking about their work as a set of rules, tools or processes within the restaurant and prevented them from reeling into emotionally charged arguments. After this, the personnel listed positive and negative experiences, which were reflected onto a matrix contrasting the old and emerging ways of working. These represented the choices that were available for the employees to take and the work challenges present in either one. By choosing the preferred one, the employees bound themselves to making an effort towards achieving the change. Theatre-based methods were utilized in the start for questioning present practices of the restaurant staff and to study their conceptions of customers. Questioning current ways of doing things on a systematic level created the motivational groundwork needed to activate thinking on how to do things in a different way.

After the initial motivation was achieved, we introduced categorised data made of disturbances and ideas based on the interviews held with the personnel. The aim was to review the ideas and to create new ones to solve disturbances. Next we introduced customer personas and their needs and practices on the cruise. After that we introduced service design methods to inspire new ideas for services and for creating a new activity model. During this time, the development process was split into two parallel activities: creating solutions to problems within work settings and new service concepts to meet discovered customer needs or practices. The aim of the process was expansion, i.e. the shift towards a new form of activity, consisting of new service concepts. The activities followed standard concept design methods, but were supported with analytical tools from the Change Laboratory. First, we presented the participants with identified disturbances and insights in work activity and customer service. Customer data was modelled into personas describing practices, needs and customer journeys on the cruise. Data was made as visual and concrete as possible to encourage empathy on behalf of the employees. After this, new ideas were created via brainstorming activities. To feed and support ideation, we taught creative thinking techniques (brainstorming, back-casting, role-playing) and held exercises for lateral thinking (e.g. de Bono 1967). Early concepts were created by combining produced ideas using affinity diagramming, which were then evaluated using commonly created criteria.

Two of the workshops were open for invited visitors from other departments. The decision to include outsiders into the process was based on the need to break barriers between the departments in order to support cooperation. During these sessions the participants created ideas for both supporting interaction between departments and service concepts that would span across the organization.

Next, we initiated a prototyping and testing phase. During this phase the employees created service concepts via storyboards, simplified service blueprints and feature descriptions and proceeded to test service prototypes in practice. The employees came up with a new way of offering wine tasting, vouchers for guiding the customer to the next service and storytelling exercises for selling merchandise and wine. In a similar way, new rules, tools and practices were tested out within the organization. The employees formed new discussion forums with the kitchen staff and started to collect improvement ideas into an idea booklet for later refinement. The successes and failures of these experiments were gathered together and discussed as a group. Based on this discussion, the new concepts were embedded into the working practices of the organisation.

5. Discussion

With the project described in this paper, we integrated service design and Change Laboratory methods to produce a change in the work activity of the organization and in customer experience of its services. In the project, the Change Laboratory provided a theoretical background on which service design methods were placed. This allowed for systematical understanding about change processes and how they affect the development of services. This chapter presents the results of the project based on, feedback during the final seminar, interviews with the staff, the reflection of the authors and some statistical information gathered from the restaurant.

- The employees managed to significantly improve existing services from the customer's point of view, such as the redesign of Tapas signs or wine tasting events. This was reflected as a rise in the revenue in the sales statistics and, based on the feedback of the employees, the customers have expressed satisfaction at the new services. Experienced problems are now viewed increasingly through "customers eyes" and the employees understand their role in providing customer experiences.
- New work practices were generated for improving work in the restaurant and between departments, which helped the organization to move towards a new activity system. Work has become easier both by one self and in a group. The working pair system has mostly given way to group work, although some insist on working as pairs.
- The working atmosphere has improved significantly and the employees express a desire to continue developing the work and services of their organization. It was noted that this project was the first one, which included the staff in rethinking issues at the workplace. We as facilitators became trusted partners through a collaborative effort. The assignments given to solve between the workshops were seen as major factors in community building. During development management allowed for more freedom to test new practices and concepts.
- The employees possess the appropriate skills for identifying problems and creating solutions. Instead of contemplating issues on the level of own work, many mentioned that they now consider problems holistically. Solving assignments required constructive discussions and required collaborative problem solving skills. Changes and sales objectives coming from the upper level are now viewed as a challenge which is taken on by the whole community. During the process, over sixty development ideas were created and documented, which serve as a concrete basis for future development work.
- A major challenge was how to keep the restaurant managers informed of the process. During this process the management applied a "hands-off" attitude towards the development. While this allowed for significant freedom within creating and testing new concepts, it left the managers outside the development process. Fortunately, towards the end of the project a new restaurant manager started work and took active interest in the results of the project.

What surprised us was the amount of effort that went into discussing our methods and arguing decisions over what activities to undertake and when. During the project we also had to concentrate on the integration process at the same time as we were learning about each other's methods. As a hindsight, the integration could have been driven further into developing services holistically without the separation between work activity and customer experience. Especially at the start of the process, this separation had a small effect in the motivation of the participants, who felt that developing work was helping them and

developing services was work for the employer. Towards the end of the project the differences had evened out as the employees found activities such as prototyping very motivating. The participatory nature of the project was essential in winning over the trust of the personnel. During the start the employees expressed reserve towards us as developers based on their earlier experiences, but this changed as soon as we expressed true interest in their work.

One issue to consider further is how to further strengthen the customer involvement in the method. By including some customers as workshop participants, we could have been able to break the employees' preconceptions earlier in the process and create a space for more creative service ideas. Often we felt that the most innovative ideas were held back due to the fear of extra effort. Similarly, many ideas seemed guided by incremental improvements to existing practices. Development was also limited by the scope of one restaurant within a cruise service offering. The customer experience could be developed more holistically by including employees from all departments. In this way it would be possible to place the whole cruise customer journey, from entry to exit, as the object of development instead of a single unit's service. Unfortunately the current scale and focus forced us to concentrate more on the producer than on the customer.

The methods and their processes seemed to fit each other relatively well. Service design was initially thought to be used as a method for gathering and analysing data about the customer experience and as a way to provide an operational framework for co-designing new service concepts. However, during the process it provided valuable methods to address questions about work activity raised by the Change Laboratory. At some point when the CL was not creating new ideas, the SD activities gave a needed push. In this way, the exploratory nature of many SD methods complemented the analytical approach employed within the CL framework.

In the light of the aforementioned results, the simultaneous development of service concepts and work activity is seen as possible through the described integrated method base. Relying solely on the Change Laboratory methods, it would not have been possible to create new service concepts and, on the other hand, design service methods do not provide enough basis for the renewal of an activity system. We hope that this integration experimentation can provide a basis for further research into how service design can benefit from concepts and methods developed within the scope of the Change Laboratory and activity theory.

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