

ENHANCING SERVICE INNOVATIONS AND THE WELL-BEING OF EMPLOYEES IN HEALTHCARE SUPPORT SERVICES

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Abstract

Our paper focuses on efforts to create innovations in healthcare support services, which has so far been of marginal interest in the context of healthcare innovation research. Public organizations tend to organize support services as public business enterprises. The management and employees of these service centres need a new attitude and work routines in order to offer high quality, efficient, and innovative services. We describe a process for initiating service innovations in a service centre which employs nearly 1000 people and offers administrative services such as documentation, customer services, payroll, human resource management, finance and accounting. In the service innovation process we combined methods, tools and resources from developmental work research, innovation management and customer-orientated service design. We learned that service employees were eager to act as innovators of their own services, when they were given the permission, time, space and tools to create them. The process also facilitated discussions within and among teams, as well as work engagement and the development of the overall picture of service processes and how they interact with the customer's world.



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1 INTRODUCTION

The literature on innovation in healthcare has traditionally concentrated on medical innovations, hospitals as production functions, or hospitals as data-processing machines. However, an emerging line of research now sees hospitals as providers of complex services and as healthcare system hubs. This approach reflects a shift in perspective away from the technician approach towards an approach based on service and the service relationship (Djellah & Gallouj 2005.) Our paper focuses on service activities and efforts to create innovations in support services, which have so far been of marginal interest in the context of health care innovation research.

The Shared Service Centre (SSC) concept is widely applied internationally in both the private and public sectors. The drive for service improvements, new technology applications, and cost-effectiveness are making companies rethink the potential benefits of centralized services. SSC are often provided by organizationally distinct, business-like enterprises. This new way is different from the traditional way of organizing corporate centre service functions, with a much more dedicated, customer-responsive and performance-driven approach (Goold et al 2001). Nowadays, due to the economic depression affecting the public sector, and the popularity of new public management thinking, public organizations in Finland tend to organize their support services as public business enterprises: service centers which run their services across geographically scattered organizations and offer standard professional service processes. The outsourced service center business concept itself may also be considered an organizational innovation. However, this raises a new challenge: traditionally administrative work must become a customer-orientated service business. The management and employees of these centers need a new attitude and work routines in order to be able to offer high quality, efficient, customer-friendly and innovative services. However, the motivation and well-being of the outsourced employees may decrease due to changes in their work and organizational affiliation.

The challenge of customer-driven operations, discussed intensively in private services since the 1980s, is only gradually being discovered as a topical matter in public administration. The way in which Jan Carlzon (1987) led the renewal of Scandinavian Airlines (SAS) already in the late 1980s, by addressing the significance of front-line service workers in leading the "moments of truth", by highlighting the thousands of interactions which build customer satisfaction and thereby a company's success, is a case in point. According to Carlzon, a customer-driven company is decentralized, with responsibility delegated to those who have formerly comprised the order-obeying bottom level of the pyramid. In other words, the hierarchical corporate structure gives way to a flattened, more horizontal and informal structure (p. 5). Carlzon suggests that extensive changes will be required on the part of frontline employees, yet the initiative for these changes must originate from the management. A top executive's role is to become a visionary, a strategist, an informer, a teacher, and an inspirer.

The core question here is how do traditional public administrators become team-players who are interested in service innovations which help clinicians' work? How do they identify themselves as responsible for service production and development, and where do they find the energizing powers for the change? Which is the more important factor — the form of organizing or the leadership style? What is the role of worker involvement and how can it be achieved?

In this paper, we describe a process that was developed for initiating service innovations in a recently established service center in the health care organization context. The process and the facilitation team combined expertise from innovation, organisational development and user centred design research. Inspired by the findings on positive associations between job resources, work engagement and work-unit innovativeness (Hakanen & al. 2008), we investigated if it is possible to simultaneously enhance the innovative skills and well-being of employees in terms of worker involvement.

1.1 From work ability towards employee empowerment and well-being

Global work life, communication technologies, and the service-based economy challenge the competences and learning skills of the workforce. In addition to basic physical condition, the mental health of workers is becoming a critical factor in the competition for new markets. Traditional shop-floor workers in industry and front-line service employees face the demands of a high performance work system that has traditionally been associated with white-collar expert work. Presence and obedience (doing what you are told and nothing else) at the workplace is not enough: employers expect extended responsibility over work results and quality, strong engagement to work and intrinsic work motivation from each individual worker. Hence, due to today's multicultural workforce and social security systems, peoples' expectations of work life are becoming more and more heterogeneous and unforeseeable.

New concepts are currently being sought in order to understand the new landscapes of worker well-being and competences. The work ability of an individual worker in terms of sickness absences and a high rate of presence at the workplace no longer qualifies as a theoretical concept or as a starting point for personnel development and occupational health service operations. Employers seek means to create not only healthy work environments but also energizing powers for personnel, labeled as creativity, innovativeness, work engagement, will-power, or social capital. However, objective indicators for these complex behaviors are difficult to find, and their direct consequences are perhaps even more difficult to prove.

Today, an integrative concept of well-being at work, comprising the physical/environmental, psychological and social/participative dimensions of both individual and group work, is being increasingly utilized by researchers and practitioners. Empowerment, an increase in the responsibilities and competences of front-line workers through enlarged participation in work design and decision-making, is argued to increase job satisfaction, primarily through increasing the intrinsic rewards of work (for instance Adler 1995, MacDuffie 1995, also Leppänen & Lindström 2009). Yet, as Vidal (2007) points out, there is surprisingly little qualitative research addressing the relationship between participatory work arrangements and job satisfaction, and the quantitative evidence is much less clear than is often presented. Increasing employee involvement does not necessarily increase satisfaction, and what is considered intrinsically rewarding varies according to individual work orientations (Vidal 2007).

Because the very fact that high-performance employee involvement is increasingly being utilized in organizations, and simultaneously, the effect of involvement on well-being is controversial, we consider worker participation an integral part of well-being at work, which deserves to be acknowledged by company management and HRD function

as well as by researchers. A much more nuanced view is needed on the prerequisites, forms and consequences of worker involvement.

1.2 Participation for employee-driven innovation

The participation of employees in the improvement of work and worker well-being has long traditions, especially in Scandinavia. The democratization of the work movement emerged as a reaction to rationalized or Tayloristic work processes in the 1960s. Worker participation has traditionally been organized into development projects, and the project objectives have been initiated in close collaboration with worker unions. Evaluation of the participative applications used in Scandinavia and in Finland in particular show that only a few projects are "research-assisted" in the sense that the outcomes and effectiveness of the development project are analyzed (Leppänen & Lindström 2009). The long-term consequences of development projects have only been studied in a very few instances (e.g. Elo & al. 2008). The decision of an organizations' management not to invest in a project's evaluation suggests that, from the very beginning, they have not consider these projects as strategic. Interestingly enough, the democratization tradition of work development and innovation management have not merged. In our view however, the anticipated consequences of worker participation have recently reached strategic level. This necessitates a strategic management view of the participative projects and research designs that address the long-term consequences.

The involvement of employees in the renewing of products and services is a topical matter in organizations. Employers increasingly expect their shop-floor personnel to involve themselves in innovation, that is, to participate in improving the current products and services (incremental innovation) or in renewing the business by designing new products and services which the organization provides to the market (radical innovation). Currently, besides user-driven innovation (UDI; for instance von Hippel's research lineage), the conception of employee-driven innovation, EDI (Kesting & Ulhoi 2010) is gaining significance in the literature. Especially in services, user innovation today means innovation with and by the users of services, which includes front-line workers as well as, for instance, patients and the public, rather than innovation done for or to them (e.g. Bunt & Harris 2009). Carlzon actually suggested EDI already in the 1980s without using the concept's name. In a way, EDI can be seen as an expansion into the democratization movement of work. On the other hand, however, it has a strategic focus of its own. Responsibility for innovation is the key concept.

Responsibility for innovation can be considered high-performance employee involvement which has traditionally associated with executive positions and white-collar expert work in special research institutions and design departments. Participation of front-line employees in innovation has traditionally been carefully controlled by management: workers' initiatives and ideas have been collected, or employees have been invited to evaluate new products designed by the product designers. The entity of the design process and its connections to business renewal has remained a black box to employees. The EDI in principal expands worker involvement and responsibility into the very initiative ideation phase of design and even into the strategic decision-making of new products and services. However, front-line workers have neither the education nor prior experience for considering the operations from the helicopter-perspective (Kesting & Ulhoi 2010). This represents a learning challenge and also a significant well-being challenge to workers who participate in the innovation process.

The individual and group experience, and the development of participation in innovation are, in our view, neglected by innovation researchers. Participation in innovation, and taking responsibility for it, may be interpreted as a creative endeavor, or creative collaboration (John-Steiner 2000). How do people who have no prior experience in, for instance, new service development and related tools, experience their participation in an innovation programme, and integrate it into their prior experiences? The core question is, how do individuals reach beyond their known capabilities in order to create? According to Vera John-Steiner (2000), they form dyads or groups in order to build on comparative competences, give social support to each other, and often, to interact with an advanced partner in order to learn. We follow John-Steiner's thinking, originating from Vygotsky's cultural-historical ideas, that creative activities are social, that thinking is not confined to the individual brain/mind, and that construction of knowledge is embedded in the cultural and historical milieu in which it arises. In our view, an individual learns, creates, and experiences well-being, and achieves mastery of innovative activity in and through his/her relationship with other individuals. Ideas, tools, and processes that emerge from joint activity are appropriated, or internalized by the individual and become the basis of the individual's subsequent development (John-Steiner 2000, 5).

1.3 Climbing out of the box

Recently design thinking has achieved a great deal of attention as a creative and successful practice for tackling complex challenges and for innovating (Martin 2009, Lockwood 2010). The concept of design thinking is somewhat fuzzy, but useful for accelerating an explorative mindset in organizations. Lockwood (2010) describes design thinking as “a human-centered innovation process that emphasizes observation, collaboration, fast learning, visualization of ideas, rapid concept prototyping, and concurrent business analysis which ultimately influences innovation and business strategy.” It is a tool for imagining potential futures and realizing them. Roger Martin (2009, 88) sees that design thinking in a business context starts with deep and holistic user understanding, that is achieved through a curious state of mind and marveling with open eyes. The second element is the visualization of new possibilities, prototyping, and refining, and the third is about creating a system that allows ideas to develop into profitable operations.

Such explorative practices in organizations require a new mindset. Fraser (2010) points out that in order for design thinking to grow in an organization, individual mindsets need to be geared to open-minded collaboration, to build on each others' ideas; abductive, imaginative thinking, and the possibility for exploration and failure. What seems to be crucial for a creative mindset is confidential atmosphere and enough moving space for the imagination.

The examples of companies seeking an innovative mindset show that new structures and programs need to be created. John Winsor (2006) gives examples of elements of co-creative practices such as visual triggers, the cross-pollination of ideas, and inspiring spaces for sharing and discussing in offices. He also points out the importance of creating new kinds of dialogues with customers. As an example of a company aiming at improving its innovation rate Martin (2009) describes how P&G first piloted innovative practices by encouraging “people to go to observe and stare into mysteries and not to utilize the same old heuristics.” The insights were then taken into a session in which they were shared, further developed together, and prototyped. The pilot led to a program

covering the whole company, including a number of trained facilitators that led innovation sessions every day. These examples point out that innovation often needs visionary management, experts to accelerate the process, and resources and structures in the organizations to empower the employees to co-create.

Service design is also described as a human-centered approach that focuses on customer experience through an iterative, multidisciplinary process (e.g. Mager). This means making sense of the service process by identifying the customer journey and its elements from the perspective of the customer and the value it creates for the customer. Service design also emphasizes visualizing and concretizing service processes and service elements that are often networked, intangible, complex and dynamic. The concretising process aims at collaboratively making sense of larger processes and understanding how the elements in it are connected and influence the customer's service experience.

2 CASE

The service center, here referred to as 'SC', provides internal support services for the largest hospital district in Finland, the Uusimaa (the capital city and its neighboring cities) area. The SC started operating at the beginning of 2009 and today employs nearly 1000 people, offering formerly called administrative services such as documentation, customer services (for instance customer guidance and transfer of patients), payroll, support for human resource management, and finance and accounting for hospitals in its area. Its customer interface covers both medical staff and patients, depending on the service.

The characteristics of work vary among the different services provided by the SC. They are partly high volume standard administrative services based on information systems. These include for instance payroll and accounting services, and personnel administration services. Customers are mainly medical staff such as chief nurses or chief physicians. A few services have a close interface with patient care, for instance customer information and patient transfer services. These are often combinations of standard processes and tailored service, according to customers' needs.

The SC employees formerly worked directly as part of the clinical department's own administration. On the individual level, the work tasks were varied, multiple and heterogeneous. As the SC was established, the work tasks of many employees changed. Instead of one employee accomplishing ten different types of tasks each working day, a group of employees now only did a few of the same tasks each day in big volumes. This was especially the case in personnel administration services. Team work, or participative work development in general had not previously existed among the administrative personnel, and thus presented new demands and challenges.

3 AIM AND METHODS

The aim of SC's development process was to co-create a sustainable model of producing service improvements and innovations together with customers, and to empower employees as developers of their own services. We conducted a pilot process, which included five workshops, from the fall of 2009 to early 2010. A total of 35 workers and middle managers participated in the process.

Participants came from four major service processes of SC: finance and accounting services, personnel administration services, patient-information documentation services, and customer information and patient transfer services. We also carried out a survey before and after the development process which measured, for instance, development orientation among employees, the experienced organizational prerequisites for development, and work engagement².

In the service innovation process, we combined methods, tools and resources from developmental work research, innovation management and customer-orientated service design. Episodes from daily work, which highlighted disturbances and failures, were brought in to the workshops with the help of sociodrama. These were considered opportunities to learn about and initiate changes in routinized work processes. Customers, managers and other stakeholders were all involved in the process.

We organized a collective learning process for the employees, based on developmental work research and the theory of expansive learning. Different perspectives of the upper management, the customers, and other stakeholders were provided in order to be able to understand the purpose of service work on a wider horizon than previously. According to Yrjö Engeström (2001), expansive transformation is accomplished when the object and motive of the activity are reconceptualized to embrace a radically wider horizon of possibilities than in the previous mode of activity. The basic method for creating learning in each workshop was the principle of double stimulation (Vygostky 1978). This refers to a situation in which we offered the participants a conceptual tool for analyzing and making sense of data collected from their own work. Using a tool for learning in this way helps to generalize and understand the concrete case on a more abstract level. Our aim was also to offer tools which the participants could continue using while innovating their services in the future.

Service design approach focuses on user/customer experience. With the help of this human centered perspective, the organization's processes and structural silos need to be reconsidered: who are the customers, what do they value, how does the customer see the service now, are there problems to be solved, are there potential spots that could be identified as seeds for service innovations? One of the main points in service design, similar to the design thinking discussed above, is challenging the existing practices, 'thinking outside of the box', creatively seeking improvements and novel approaches and practices. In the case described here, we encouraged early experimentation in order to learn, communicate and demonstrate how the elements of service experience are connected. The experimentation process was planned with an intensive agenda that partly aimed at breaking critical thinking, providing room for intuitive creating, forgetting the fear of 'stupid questions' and 'bad ideas', and for "getting rid the old heuristics", to use Martin's words. Such a learning process is about the activation of innovation potential and employee-driven innovation. It is not an easy transformation, particularly for employees who in many ways were more skilled in looking for faults than seeking opportunities for improvement.

² The survey results are not presented here since the analysis was not finished at the time this paper was submitted.

4 WORKSHOP PROCESS FOR INITIATING SERVICE INNOVATIONS

The development for initiating service innovations and the construction of the continuous employee-driven innovation model was organized into a process of five workshops, with 'homework' preceding each of them. The workshops' main principle was to empower employees to innovate their own services. This required creating a safe, positive, and creative atmosphere in order to enhance space for learning and innovating for those who are not normally expected to develop their own work.

Typical for all the workshops was that they involved management, employees and customers and promoted dialogue between them. The entire development process was reported in a web-blog by one of the participants after each workshop in the intranet of SC in order to keep the process transparent and visible. All the workshops were planned together with the internal developer, who also belonged to the top management team, and partly with the service process leaders. In each workshop data from everyday service work was analyzed with a conceptual tool offered by the facilitators. This principle of double stimulation (Vygotsky 1978) enables organizational learning and insights of the individuals.

The aim of the process as a whole was to create first embryonic service innovations and ponder what kinds of elements of the process could be implemented to the organization as a basis for continuous way of innovating. The following cycle depicts the development cycle.

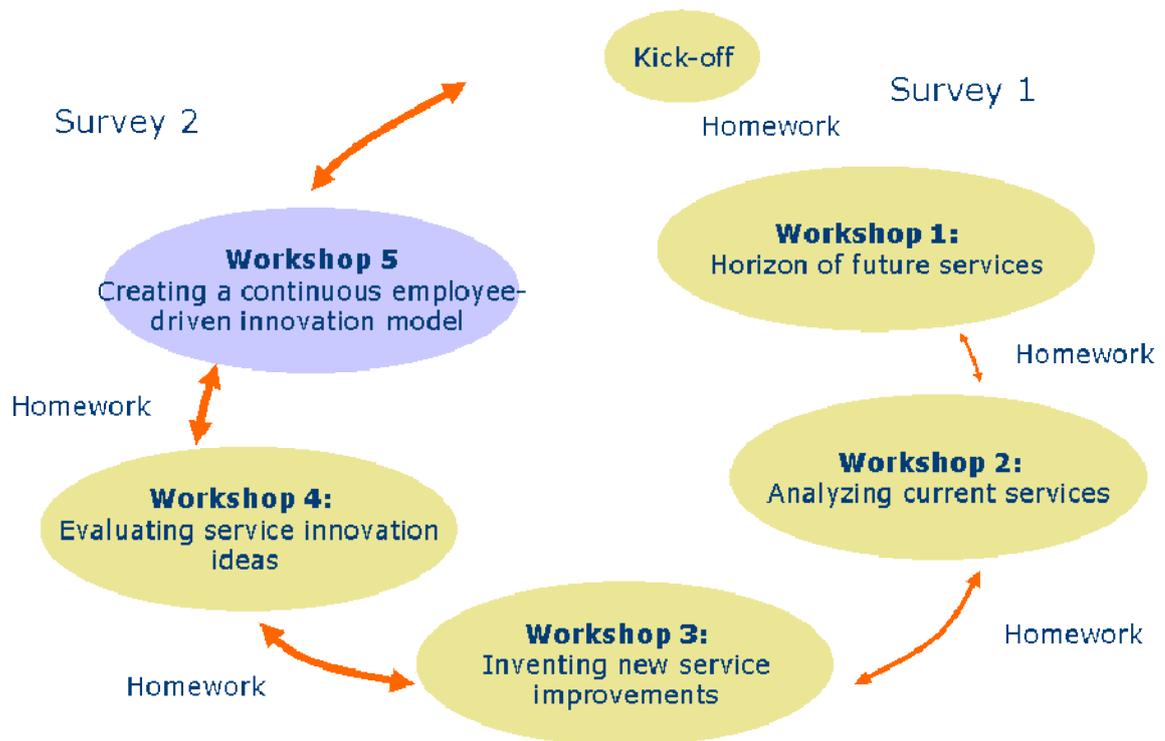


Figure 1. Workshop process for initiating service innovations as a development cycle

The kick-off meeting presented the main idea and plot of the development process to the participants. The CEO of SC encouraged the staff to innovate and create new services, so that the health care personnel could concentrate to its main task. She encouraged the participants to become partners of the clinical staff, patient well-being and good

experience being their common goal. An example of a successful employee-driven innovation in another similar service organization was also described.

4.1 Workshop 1: Future horizon of services

The purpose of the first workshop was to create future horizons of the different service processes. The CEO was asked to explain her thoughts about SC's future services. Two customer representatives were invited to recount their experiences of how the services had supported the health care processes along their career. The narratives were genuine and rich in detail, and worked as sources for reflecting on the change from craft work and personalized service towards computer-assisted mass services. The participants were advised to observe the narratives of the management and the customers, and to write down their remarks on post-it notes. Later on in the workshop, the participants formed groups according to their own service's processes and analyzed its change from past to future with the help of the post-it notes.

Another way to make a statement about the future vision of the service was to ponder: What is the current state of the service in terms of how it appears to the customers? Is the customer satisfied with current service provision, or does he/she expect something which is not provided yet? Should the service be provided as mass-volume service or customized service? As an outcome, each service group created a personal vision of its future and the direction of development. The atmosphere of the workshop was both intensive and enthusiastic. It seemed that employees could easily reflect on their work. However, the visions of the different service processes were quite heterogeneous. A few participants openly voiced their concerns about how the change caused their work to be "routine" and "faceless". The task for the next workshop was to relate episodes which contained disturbances, and collect small scale feedback from the customers.

4.2 Workshop 2: Analyzing current services

The purpose of the second workshop was to analyze the processes more deeply. The tasks were designed for participants to observe negative feedback from the customers and disturbances in the service process as opportunities for development; not as individual mistakes, but systemic problems. A customer from the hospital district was a middle manager, a head nurse, who was dissatisfied with the current service of SC. Her concerns were about the changed division of labor between the manager and the support service.

The participants were asked to collect and describe real disturbances and problems in advance, and their task in the workshop was then to try to create solutions to them in small groups. The task compelled them to handle the problems as tangible material for innovative solutions or improvements. Another task was to increase understanding of how a customer experiences the ruptures, disturbances and innovative solutions in their service process. The service process groups were asked to write a story or act out a sociodrama of either a failed service episode or a successful solution.

At the end of the workshop, the facilitators presented examples of promising service innovations from other fields, e.g. from children's day care services and travelling services. These examples were meant to inspire and encourage the participants to innovate their own services. Their homework task was to invent, in small groups or in

pairs, several improvements or new service ideas for their own service before the following workshop.

4.3 Workshop 3: Inventing new service improvements

The purpose of the third workshop was to invent and concretize the service improvement proposals made by the participants. The space for the workshop was different this time; it was an open hall and not too many chairs, so that people could stand and move easily. The facilitators started the day with an assignment to practice idea-creation through positive communication.

The service workers had invented 35 ideas to improve their services. This time the groups were mixed in order to gain new perspectives. The facilitator presented tools for further constructing the ideas. The tools helped them make a personal profile of a key customer, visualize the network need for implementing the idea, and visualize the phases of the service process, customers' actions, and their contact points (a tailored service blueprint-model for SC).

Each group picked one preliminary idea and started to develop it with the given tools. Later on they were invited to experiment with the innovation idea and the improved service process using toy mobile figures. An outsider, an innovation expert entitled 'innovation activist' visited the workshop and inspired the participants to move on quickly to 'quick and dirty' experiments and avoid the overly heavy planning phase.

At the end of the workshop, new solutions were presented with the help of the toy mobile figures. The facilitators were surprised at how easily the groups adopted the service design tools and could produce sensible solutions. Finally, the groups chose the ideas which they wanted to work on during the remaining workshops. They were divided into 1) Minor improvements, which could be implemented immediately, 2) New, inspiring and feasible ideas, which concern a significant problem and should be worked on, and 3) Challenging and demanding ideas.

4.4 Workshop 4: Evaluating service innovation ideas and experiments

The purpose of the fourth workshop was to evaluate the service innovation embryos, which had been worked on and even experimented with on a small scale between the workshops. The perspectives for evaluation were: 1) The feasibility of the idea, which was evaluated by the service process itself, 2) The SC management's evaluation of the solution's influence from the SC business perspective, 3) The customer perspective, represented by a medical doctor and partly simulated by the participants themselves, 4) Innovativeness and possibilities to generalize the solution, evaluated by the innovation researchers – in our case the facilitators themselves. Each innovation embryo was presented, and evaluated from these perspectives in the workshop. One of the proposals concerned an improved process of collecting customer feedback via the intranet.

As a point of comparison, the CEO of another outsourced service center of the hospital district was invited to describe its journey of change in order to encourage the development of SC. At the end of the workshop, each service process once again picked an idea that they wanted to promote together. The responsibility of planning and organizing the next workshops was then shifted from the outside facilitators to the SC.

A group of workshop participants, led by the SC's Head of Customer Services, was named to organize the following workshop.

4.5 Workshop 5: Creating a continuous employee-driven innovation model for SC

The fifth workshop was organized by the service personnel group led by the Head of Customer Services who was also the member of the SC top management team. As an internal developer, he had participated actively in the planning of the entire workshop process together with the outside facilitators. SC's management group and facilitators were invited to the workshop. A summary of the entire process was made and tools which had been used along the process were acknowledged. One signal for them to be implemented in future use was that they were presented with the logo of SC.

The objective of the workshop was to develop ways of innovating in the future for creating a continuous employee and customer-driven innovation model. The group of organizers fluently utilized the script of previous workshops, as they e.g. offered roles for managers and facilitators for evaluating the outcomes of the group work. The outcome was promising, and the CEO prized the process and voiced her admiration of the employees, having witnessed their advancement. However, it was obvious that there was still a lot of work to do to create the first version of a feasible innovation model for SC.

5 CUSTOMER INFORMATION AND PATIENT TRANSFER SERVICES AS AN INSPIRED AND EMPOWERED TEAM

Four service processes participated in the service innovation pilot process altogether. In the following analysis, we highlight one service process which seemed to benefit most from the development process. The enthusiasm of *the Customer Information and Patient Transfer Services group* (further on the CIPT) was observable throughout the process.

The following table presents what *the double stimulation*, a means used for triggering 'out of the box-thinking', produced in each workshop, and how new elements of their object of work emerged in their solutions. We could identify how their understanding of the customer expanded during the workshop process. Each observation is based on a descriptive analysis of video excerpts from workshops 1-4. With the concepts of expansive learning, the outcome of each workshop reveals that it had expanded their understanding of their customers, and broadened the horizon of their work. However, this analysis does not yet include interviews of the participants.

Table 1. Analysis of the service design process of the *the Customer Information and Patient Transfer Services group (CIPT)*

Workshop	What happened in and around the workshop? Outcome of the dual stimulation	Evidence of empowerment, enthusiasm, and expansion of the object of work among CIPT services
1) Horizon of future services	CIPT services defined their future horizon as consisting of a multiservice concept, which combines the transfer of patients, information services and courier services.	The CIPT services group was able to define their future horizon more easily than other services. The new concept integrated their existing services in a novel way. However, its effects on customers were not yet expressed.
2) Analyzing current services	CIPT services related the case of a blind Swedish-speaking patient (representative of a minority group) who was escorted from a bus stop to the hospital care process and guided through the appointments.	Compared to the previous workshop, the group was able to consider the point of view of a customer and offer a service solution which was more devoted to the patient's life and situation than traditionally.
3) Inventing new service improvements	CIPT services simulated its future service process, which was supported by a new technical device, an RFID-system. It consisted of a bracelet on the patient's arm, which could be used for calling a janitor, when the patient wanted to move from one place to another at the hospital. The improvised scenario acted out with the toy mobile figures showed how the patient was guided through different interactions; to pay bills, visit facebook, go to the movies, and through different clinical examinations. The actors and the audience had great fun while acting out the sociodrama: there was a great deal of laughter.	The simulation of a future service added a new component to the service; the significance of a technical tool to improve the service process and its communication channels as a whole, from the customer view point. The ease and pleasure taken from adopting these new simulation tools was striking.
4) Evaluating service innovation ideas	CIPT services studied the current websites of their hospital district from the customers' perspective. For instance, how the customers could find information on how to cancel their appointment. They had studied how the websites of other hospital districts and suggested improvements to the layout and organization of their own pages.	Compared to previous workshops, the group thought of their customers not only as their own individual customers, but as masses of patients of the entire hospital district . The CEO commented that this kind of thinking is novel for the entire SC. A new component was also systematically learning from other organizations' solutions . The new suggestion was carefully analyzed and worked on in a group. This was exceptional, because some of the groups had not continued to develop their ideas. However, the solution had not yet been discussed with the Head of Communication and web specialists of the hospital district.
5) Creating a continuous employee-driven innovation model	<p>A few employees from the CIPT services volunteered to organize the last workshop. One person of the CIPT was especially active in planning the meetings and readily took on the responsibility. The planning group identified themselves as part of the facilitator group, and joined the outside facilitators at the lunch table, expressing their enthusiasm.</p> <p>Ideas had been implemented from previous workshops and two of the employees had been promoted.</p>	The agency for establishing ways to continue the employee-driven innovating was most clearly seen among the CIPT services.

In the first workshop, the CIPT services expressed their horizon of services as an integrated holistic concept, which integrates the existing services in a novel way. This was an exceptional vision compared to other groups. The group expressed that they were eager to develop their services and make themselves irreplaceable. This intention was already identified among the group members before the workshop process. The Head of CIPT services also participated in the process and worked as one of the team members in the workshops.

In the second workshop, the group developed a story, which showed how well they could identify themselves with the situation of a customer who had multiple diseases. A novel part of the narrative was to extend the service to the bus stop instead of the information desk of the hospital, as the following excerpt from the workshop shows:

A male member of the CIPT services: It is a dark and stormy morning. The telephone is ringing. As promised to customers, an eager officer answers the phone immediately after the first ring. The person calling is an elderly man, who is blind and Swedish-speaking. He has several appointments at the hospital that the same day. He needs advice; how to get from Veikkola to the hospital, what kinds of appointments he has in, and if the places are easy to find. Our officer answers all the questions. He promises that the customer will be escorted from the bus stop to the hospital. After the phone call, our officer orders a Swedish-speaking guiding officer for the customer. Time passes. When the agreed time comes, our officer is at the bus stop to meet the patient. He is escorted to the main lobby of the hospital, where our Swedish-speaking guiding officer takes him under his guidance. He accompanies the patient to his appointments and acts as a translator when needed. At the end of the day, he escorts him back to the bus stop to catch the bus to Veikkola. (The same story is then started in Swedish by a female member of the janitor services. The audience laughs in surprise and amusement).

In the third workshop, the group adopted the service design tools easily, and invented a new element in the development of the customer journey. A technical communication RDIF device was tested as a tool for the customer to obtain help from the CIPT employees during her stay at the hospital.

In the fourth workshop, the group handled customers as a flow or masses of customers seeking relevant information from the hospital district websites. The concept of customer expanded. The group compared the websites to other hospital district's solutions, thus also demonstrating the capability to learn from other organizations.

In the fifth workshop, a member of the CIPT services who had volunteered as one of the organizers of the last workshop, seemed to identify with the facilitators. She was active and communicative in the planning meetings, and volunteered to take responsibility. She had personally been promoted and had already worked as a change agent in her community. It became obvious for the facilitators that as she was now allowed to innovate as part of the job, her agency for innovating was empowered.

All in all, we could ask why the members of the CIPT services were so obviously empowered by the development process. During the process, they were the groups that seemed to most quickly learn how to innovate.

One explanation may be that they were the ones who concretely faced the different kinds of customers (health care personnel and patients) in various contexts during their everyday work. Especially in services, knowledge and experience of front-line

employees is seen as a critical part of user-driven innovation (e.g. Bunt & Harris). Other processes such as accounting services and personnel administration services were connected to the customers via a computer program, which makes the relationship to the customer as a person more distant and mediated. Making their service process more fluent often requires influencing the ICT-systems and their user-friendliness.

Another explanation may be found in the management's general attitude towards employee-driven innovation. We interpreted that in CIPT services, the Head of Services supported employees' ideas to improve their own work more actively and enthusiastically than in other services. However, he acted not as a manager who knows best, but as a learner and a true member of the team. The development process 'hit a fertile terrain', thus opening a new space for further learning in terms of creative collaboration. It provided new tools for the participants to support making the innovative ideas even more tangible and feasible.

6 CONCLUSIONS

First and foremost, our pilot process for empowering hospital support service employees to innovate was a thought-provoking endeavor. We discovered that the development of new support services in health care contexts deserves attention from the point of view of health care innovation research. Support services may be seen as marginal, especially in hospitals providing specialized care. However, their volume may be significant, and related consequences in terms of efficiency and costs may be critical. Our analysis supports the view of Djellah and Gallouj (2005), who point out how service relationships in health care form complex system hubs which do not end at or start from the door of the clinical department. Support services can be seen as an integral part of the health care service package, forming a basis for efficiency as well as for customer experience and satisfaction. Our case example showed how the employees' new service ideas expanded spatially to serve the patient in, for instance, planning his travel to the hospital and picking him up from the bus stop.

The employee-driven innovation process that we initiated in the SC proved to be promising. We argue that employee-driven innovation requires effort, it is not enough to just call on employees to innovate. It needs a supportive process, in which a network of potential internal service developers is formed and participants are stimulated to create a broader horizon for their service work. However, we also found that building and mastering such a supportive process in a relatively short time is a challenging task. In our process, the participants came from different services and different hospital districts, and the balance between the different contexts proved to be challenging. Our experiences support the recent findings of Kesting and Ulhoi (2010), who suggest that even though it makes perfect sense to involve ordinary employees in innovation, naive or ungoverned participation is counterproductive.

The process, which we planned and organized together with the management of the SC, initiated 35 service ideas, which produced either minor improvements or challenging embryos for service innovations. The employees presented their most inspiring proposals or solutions, and their feasibility was evaluated from different angles. Continuity of this kind of activity in the future, i.e. that of using employees' own initiatives and experiments as sources of service innovations, was raised as a significant topic for the further development of management practices at the service centre. Drawing from John-Steiner's (2000) work, we suggest that nurturing the continuity of

mutual support and creative collaboration on the level of groups and pairs is also a managerial task worth investing in.

We learned that service employees were eager to act as innovators of their own services when they were given the permission, time, space, and tools to create them. Although the approaches and tools and perhaps even the professional language of the facilitators used in the workshops were unfamiliar to the participants, they were easily adopted. They seemed to enhance a creative atmosphere, which is crucial for innovativeness. They also facilitated discussions within and among teams, as well as the development of the overall picture of service processes and how they interact with the customer's world. Our experiences support Fraser's (2010), Martin's (2009) and Lockwood's (2010) views on design thinking competence, suggesting that it is possible to enhance and even accelerate the founding of explorative mindsets in organizations. However, it requires resources, openness for experimenting and management support.

Our case analysis of one service process group that participated in the development process indicates that the general development phase of the particular service and the encouraging attitude of managers towards the initiatives of the employees may have critical significance when it comes to implementing the ideas. However, the employees who did not learn to innovate, or became frustrated during our development process, will be paid attention to in our future studies. It was evident that participants experienced the process differently.

Our findings support the controversial views of the relationships between employee empowerment and well-being. Preliminary results from the survey suggest, however, that positive changes are found in some research variables between the two measurements. Among all the same respondents who answered the survey the first and the second time (n=149), statistically significant positive changes were found, especially in the experienced prerequisites for development and in applying customer feedback. Analyzed at small-group level, a slight positive change in experienced work engagement and a few other related research variables was observed between the two measurements in the group who participated in the development process.

Finally, it seems crucial to co-create the development process of enhancing service innovations together with the internal developer and top management of the organization. In such collaboration, the capability of internal innovation management accumulates, and guarantees the continuity of the development of the organization's innovation infrastructure, when outside facilitators are no longer involved.

References

- Adler, P. (1995), 'Democratic taylorism: The Toyota production system at NUMMI' in Babson, S. (ed.), *Lean work: Empowerment and exploitation in the global auto industry*, Wayne State University Press, Detroit, pp.207-219.
- Bunt, L. & Harris, M. (2009), 'The human factor. How transforming healthcare to involve the public can save money and save lives', Discussion paper. NESTA, available at www.nesta.org.uk, accessed 8 March 2010.
- Carlzon, J. (1978), *Moments of truth. New strategies for today's customer-driven economy*, Ballinger Publishing Company, Cambridge, Mass.

- Djellal, F. & Gallouj, F. (2005), 'Mapping innovation dynamics in hospitals', *Research Policy*, vol. 34, pp. 817-835.
- Elo, A-L., Ervasti, J., Kuosma, E. & Mattila, P. (2008), 'Evaluation of an organizational stress management program in a municipal public works organization', *Journal of Health Psychology*, vol. 13 no.1, pp. 10-23.
- Engeström, Y. (2001), 'Expansive learning at work: Toward an activity theoretical reconceptualization', *Journal of Education and Work*, vol. 14 no. 1, pp. 133–156.
- Fraser H. M. A. (2009), *Designing business: new models for success* (p.35-45) in Lockwood Thomas (eds) (2010) *Design Thinking integrating innovation, customer experience and brand value*. Allworth press, NY. US.
- Goold M., Pettifer, D. & Young, D. (2001), 'Redesigning the corporate centre', *European Management Journal*, vol. 19 no. 1, pp. 83-91.
- Hakanen, J.J., Perhoniemi, R. & Toppinen-Tanner, S. (2008), 'Positive gain spirals at work: From job resources to work engagement, personal initiative, and work-unit innovativeness', *Journal of Vocational Behavior*, vol. 73, pp. 78-91.
- John-Steiner, V. (2000), *Creative collaboration*, Oxford, University Press Oxford.
- Kesting, P., & Ulhoi, J. P. (2010), 'Employee-driven innovation: extending the license to foster innovation', *Management Decision*, vol. 48 no. 1, pp. 65-84.
- Leppänen, A. & Lindström, K. (2009), 'Participative improvement of work and worker well-being - Scandinavian and Finnish interpretations of the democratization of the work movement', *Wirtschaftspsychologie Heft*, 4/2009, pp. 19-31.
- Lockwood T. (ed) (2010), *Design thinking integrating innovation, customer experience and brand value*, Allworth press, NY, US.
- MacDuffie, J.P. (1995), 'Worker's roles in lean production: The implications for worker representation', in Babson, S. (ed.), *Lean work: Empowerment and exploitation in the global auto industry*, Wayne State University Press, Detroit, pp 54-69.
- Mager, B. (2010), 'The Service design network manifesto', available at <http://www.service-design-network.org>., accessed 14 April 2010
- Roger M. (2009), *The design of business*, Harvard Business Press, Boston Massachusetts, US.
- Vidal, M. (2007), 'Lean production, worker empowerment, and job satisfaction: A qualitative analysis and critique', *Critical Sociology*, vol. 33, pp. 247-278.
- Vygotsky, L. S. (1978), *Mind in society*, Harvard University Press, Cambridge.
- Winsor, J. (2006), *SPARK. Be more innovative through co-creation*, Dearborn Trade Publishing, US.