

ENABLING ORGANISATIONAL LEARNING AND KNOWLEDGE SHARING THROUGH EMPLOYEE INVOLVEMENT.

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Abstract

In this paper we want to suggest that involving the employees in the development of the new workspaces is an important element in organisational learning and that it makes good sense to rethink space in order to support both tacit knowledge and collaboration.

We want to argue that involving the employees in the design of their future workplace is key to giving the employee ownership for the change and may provide the organisation with invaluable ideas for the new work environment and the process of enabling organisational learning and knowledge sharing. We base our argument on a series of research-based consulting processes we have carried out with both private and public organisations in Denmark.

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Companies increasingly focus on unleashing creativity and knowledge in their organisations to be able to compete on a global and rapidly changing market. Many initiatives are being taken to increase innovation, like for instance changes in organisational structures and work-flows, focus on leadership, focus on understanding customer needs, design of new business concepts etc.

But creativity and new ideas basically come from people, so people are in the centre of attention when it comes to creating a competitive advantage and so are the learning environments that enhance collaboration, improvisation, creativity and motivation and here also the physical office design gets a new role as knowledge enabler. The argument is that work is becoming more nomadic and more flexible; that it takes place anytime, anywhere, and that this should be reflected in the way office environments are designed with focus on physical meetings, interaction and knowledge sharing.

In Denmark, the implementation of New Office Design (Duffy, 1997) in the nineties was mainly based on the idea that different working activities required different kinds of space, and this resulted in a lot of companies introducing more open office design to enhance knowledge sharing and collaboration and the method used was a top down process. Although New Office Design often was coupled with general vision statements about increased collaboration and knowledge sharing, there was a tendency to consider workspace design as a change agent in itself – e.g. that more open offices would automatically lead to increased organisational learning and creativity:

“A flexible workplace can encourage flexible thinking, so workers can be more creative”.(Raymond, Cunliffe, p 2, 1997)

In our earlier case studies we discovered that introducing new office environments can be a challenge for the organisations (Bjerrum et al 2005). Often, the change from traditional office design to new office design results in frustrations and complaints about noise, and unfruitful discussions on traditional office design versus open offices paralyse many organisations. The reason for this is often a combination between ill-considered processes and ill-considered solutions (Bjerrum et al 2002, Bjerrum et al 2007).

While this trend took its point of departure in architectural design, similar ideas of the coupling of workspace and learning were raised within the academic community. Academics such as Lave and Wenger (1991) introduced learning as “legitimate peripheral participation” and saw organisational knowledge and learning as an integrated and inseparable aspect of a social praxis, arguing that much work was based on peripheral overseeing and overhearing of

the work of co-workers in the office. But Lave & Wenger primarily focussed on learning and knowledge sharing and did not attach much importance to the physical environment.

Recently, some companies in Denmark have left the top down approach and are introducing a more employee driven bottom up process where employees work continuously and consciously with reflecting their own change in work styles and attitudes in the office design. This employee involvement often results in a realisation process challenging habitudes and giving new ideas and energy.

In this paper we want to argue that involving the employees in the design of their future workplace is the key to give the employee ownership for the change and may provide the organisation with invaluable ideas for the new work environment and the process of enabling organisational learning and knowledge sharing. We base our argument on a series of research-based consulting processes we have carried out with both private and public organisations in Denmark.

Drawing on the notion of 'Ba' in the work of Ikujiro Nonaka and Georg von Krogh (Krogh et al 2000, Nonaka et al 2000, Nonaka et al 1998), we want to show how a unification of the physical spaces, virtual spaces and mental spaces can create a foundation for knowledge creation and learning.

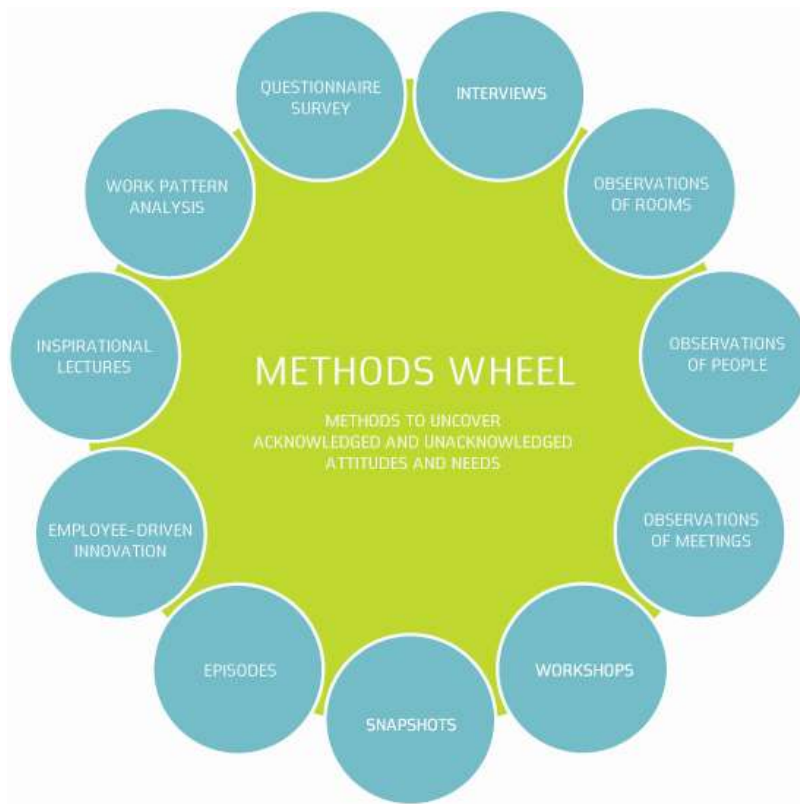
Nonaka, Toyama and Konno (2000) view an organisation as an entity that creates knowledge continuously through action and interaction and they define socialisation as a process of converting new tacit knowledge through shared experiences and this can be acquired by spending time together or living in the same environment.

1. Employee involvement in new office design

In some of our research-based consultancy processes we have used ethnographic observations in combination with a user involvement process where our role has only been to facilitate the process. Where the employees themselves have decided what they would like to focus on, where they have worked with different tasks, e.g. made their own ethnographic observations in their workplace and given their own picture of challenges and advantages and in this way worked continuously with a unification of the physical, virtual and mental spaces.

In the Centre for New Ways of Working we use different methods to get different pictures of companies, but also to involve users in ways that can lead to new insight and knowledge creation. We base our work at this method wheel in order to uncover acknowledged and unacknowledged attitudes and needs in organisations:

Figure 1.



Our ethnographic studies consist of two different elements; observations of the work environment and observations of the use of facilities and work processes. The ethnographic observations represent an indirect user involvement where we use our observations of the work in a workplace as an image the employees can reflect upon.

Our approach to ethnographic field study is passive participation (Spradley, 1980). We are present at the scene of action, but we do not participate or interact with people to any great extent, because we don't want to mix up the roles. As Spradley puts it "The more you know about a situation as an ordinary participant the more difficult it is to study it as an ethnographer (Spradley,1980, p.61). Our aim is to be explorative and focus on not to be preconceived, but study the field with wonder: " One can infer a great deal about the cultural rules people follow from the vantage point of passive participation"(Spradley, 1980,p 52).

When we enter an organization the first thing we do is to make broad descriptive observations of everything in the office environment: Atmosphere, general activity and sound picture. We make observations of the physical design of the work environment. What facilities do they have?

Afterwards we make focused observations where we narrow the scope at what we are looking for: How do different departments accommodate themselves in the work environment? Do they have a lot of personal stuff? Have they arranged the furniture to support individual or collaborative work? How is the manager placed in the work environment? How do they use the office space? What are the characteristics of their working pattern? Are they primarily working individually? Are they collaborating? Do they have a lot of meetings? Are there movements through or around in the office space? Are people working at their desk? Or at other's desks? How many people are present? What are the dominating sounds: Voices? Phones ringing? Keyboards? Footsteps? Is there a variety in the activity pattern during the day or is it rather predictable what you will meet when you enter the room?

In the following we will present two cases where user involvement has been practised with different methods

2. Enabling knowledge sharing in a Call Centre

In 2009 and 2010 we provided consultancy for a small company in Denmark. They contacted us because they wanted to rethink the office space in their call centre. 12 women were employed in the call centre and they were sitting in small groups of three in an open office space. In one end of the room there was a natural passage and two group managers were placed next to it.

The first meeting was with a group manager who wanted to get some advice on how to make a better office solution for the employees. "A better office solution" covered some practical changes and she had no focus on learning aspects of their work. She suggested that maybe the office space could be split into four sections to divide the groups and thereby reduce the sounds from the telephones and the voices. She described the work in the call centre as individual work where each employee spent most of the time answering calls from customers. We suggested to make some ethnographic observations in the space to get a picture of what was going on there and then involve the employees in a workshop where they could reflect on the observations and give their own viewpoints and ideas for their future work environment.

The employees in the call centre were placed in one large open office in four groups with three desks in each and at half the desks were personal stuff e.g. children's drawings and pictures of families and holidays. On the wall was a big board with an overview of the duty roster. In one end of the open office was a visualization of the telephone queue on the wall, but it was only visible from a part of the office.

In the call centre there were a very good and relaxed atmosphere with a lot of humour and laughter during the day. The sound pictures were the voices and different ringtones, typing and a radio playing pop music.

In every observation the overall picture was very much the same. A good atmosphere and a lot of activities in the open space. There were a lot of phone calls, constant voices, movements and ad hoc meetings in the workplace and it was never quiet. If there was a small break in the sound tapestry you could suddenly hear the hot tempered rhythms from the radio playing.

In our observations we make extensive field notes, but in order to provide ourselves with an overview of the working patterns we have developed two supplementary methods that also serve as important communicative tools in our feedback to the organization:

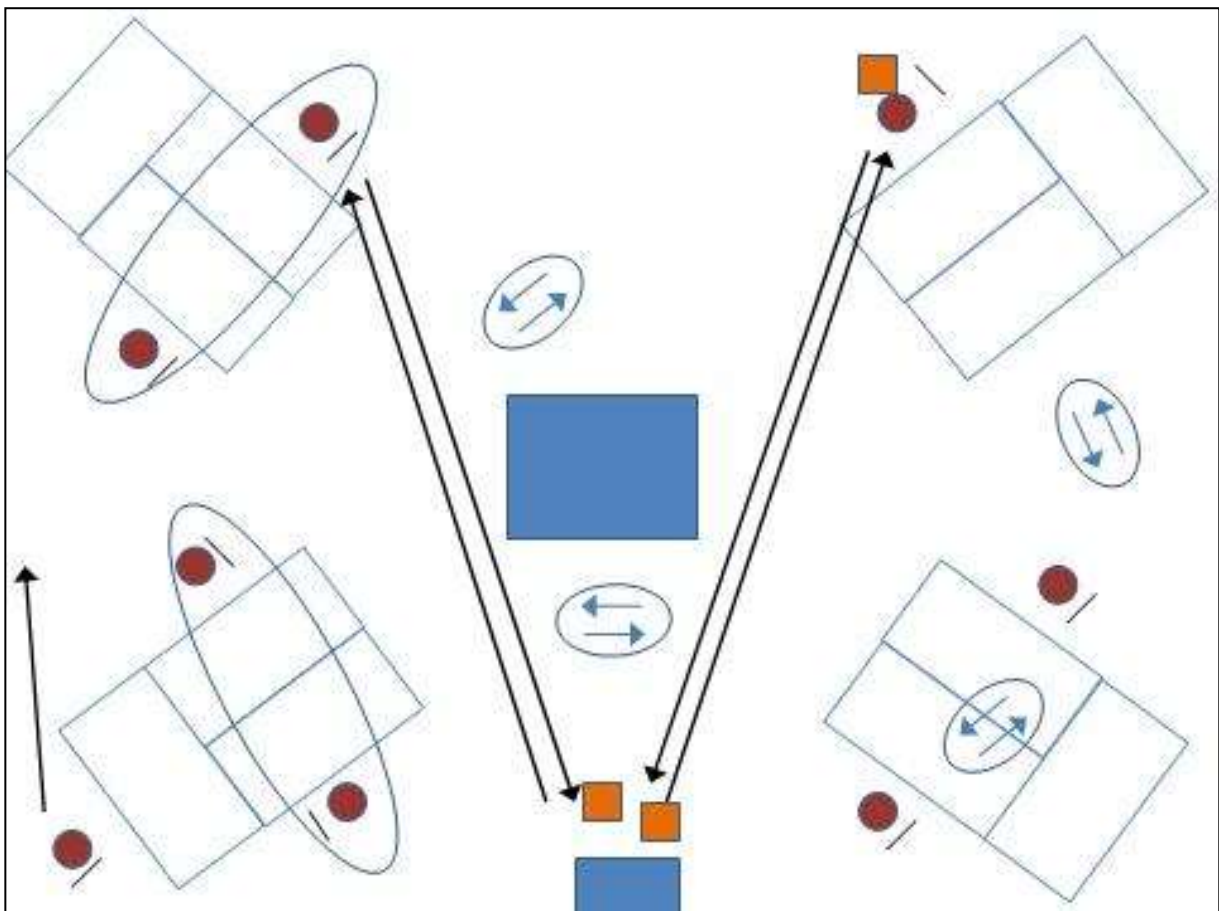
- 1) Snapshots, where we make 5-minute registrations of activities in the office environment.
- 2) Episodes, where we make 15-minute descriptions of all what we see and hear in the office space.

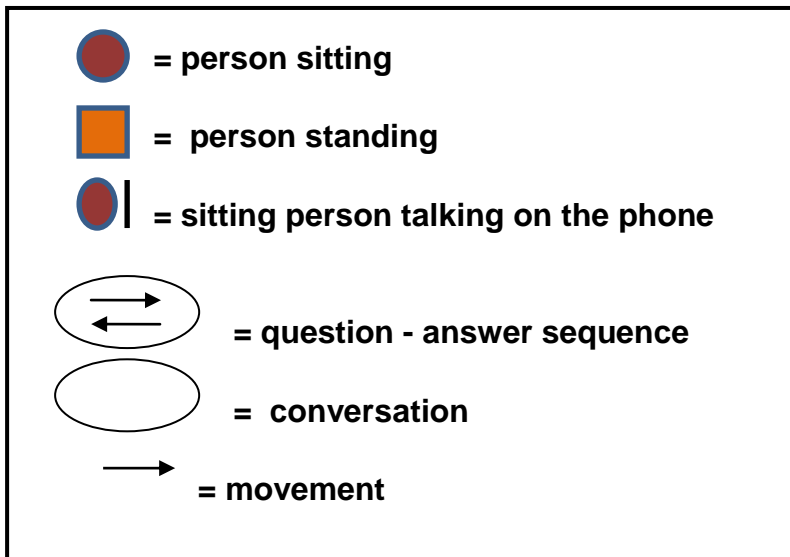
These repeated descriptions provide us with an overview of patterns and are also useful for illustrating and presenting the work processes in the work environment.

There is an example of a typical 5-minute snapshot from the call centre in figure 2.

The snapshot is a summary of the activities for five minutes, so this is an overview, but you can't see each activity. In fact this snapshot covers a change in scene 25 times and this is a typical snapshot from the call centre.

Figure 2.





In this snapshot there are a lot of phone calls, ad hoc meetings and questions/answer through the open office space. In those 5 minutes they are all on the phone. Two persons have 3 different phone calls, one person has 2 calls and 5 persons have one call each. In between those calls are movements to the printer, conversations across tables and across the open space.

This is also the behavior we recorded in episodes in the office environment

Figure 3. 15 minutes in the call center

"This is Morten from the accountancy", Customer service", typing, "Safety shoes?", "Customer service – this is Karen", sounds from typing, "It's Dorthe", "all right", "I promised to tell you", "Customer service – this is Karen", "Can I get your customer number?", "We are always busy", "An on/off button – we still haven't heard from our supplier". A person passes by in the hallway."Customer service – this is Anne", "Are you going to fetch it tomorrow?", "It will be at his place around 3 p.m.", "We have an offer on that product here in January". "We will send a message that you are one hour and a half late due to the snow", "Yes what do you need", sounds from typing, "You're welcome goodbye", Customer service- this is Laura", "Please give me your phone number", sounds from typing, "Oh has he not arrived yet?". Yelling through the room (Karen): "Is that somebody from Viborg?" "He is one hour and a half late". "Customer service – this is Lisa". "Customer service - this is Jane". "Can I have your phone number, please?", "I will send you a return receipt". "Customer service – this is Lisa", "We will deliver it tomorrow", "Customer service – this is Karen", "Yes this is Dorthe from XXX", "Yes is it for tomorrow, yes – that is alright". This is Lisa, I have a customer who is complaining about a boot – there is something wrong with the sole", "I suggest I take it back", "Customer service – this is Anne", "Do you want to buy 50?", "It depends on how you're treating it", "Let's see what they think about it", "If you exceed 15000". A person walks through the room. Another one leaves for print. "Yes Okay". 3 persons walks through the hallway". "Yes, Yes – and this is for tomorrow. Customer service – this is Lisa. "What about gloves?"

In this episode there are constantly different ringing tones, sounds from typing and voices speaking on the phone. At this particular day in January 2010 there were a lot of snow in Denmark and in this episode two persons communicate through the open space to give the customer the information that his goods will be delivered late because the chauffeur is running late. The two employees are sitting at opposite ends of the open space and one of them hears that the other get complaints about a late delivery of goods. She then passes on the information about the chauffeur. So this is a typical example from the call centre where overhearing the other's conversations sometimes leads to information exchange among the employees. To make episodes in the call centre was challenging because there were so many activities and impressions within 15 minutes so it was difficult to record it all. In other companies where we have made episodes e.g. at a newspaper, a software company and a bank we have never before experienced so intensive communication between employees and so hefty a sound track and shift in activities.

Based on the different observations, episodes and snapshots we made in this call centre we could see, that there were much focus on good and professional customer service and an evident professional pride in the way the job was handled. We heard discussions on how to improve the service for the customers, how they could ask different questions or be more helpful in different ways? We also heard suggestions on how to improve their own performance. We heard experienced workers explain issues to newcomers.

There were a lot of ad hoc meetings and questions/answers in the open space concerning both customer related topics, but also different features in the IT system and the different software applications. There were laughing, private conversations and jokes and when somebody took a cup of coffee at the table in the middle of the office space she often asked the others whether they wanted some and served it to them. In some companies there is a constant change and you will never know how many people are present, where they are placed or how the activities will be. Here it was constant crazy in a hectic and friendly atmosphere. During the time we made the observations in the company there were some organisational changes and as part of this the call centre became a self organized department without a group manager.

When we spoke to the group manager she described the work in the call centre as individual jobs where each person was responsible for answering the phone and then they each had responsibilities for some other tasks like the duty roaster, some economic issues, customer figures etc.

What we found was that the work in the call centre was based on a lot of joint problem solving, knowledge sharing and peripheral overseeing and overhearing the work of co-workers and also legitimate peripheral participation (Lave et al. 1991).

Krogh et al (Krogh et al. 2000) define knowledge work in a broader sense than the traditionally. They say: "In other words, knowledge work is a human condition, not a privileged one"(Krogh et al, p 12, 2000).

Wynn and Suchman's (1984) early studies of procedures and problems in the office pointed out how much work, in what at a first glance seemed to be highly routinized, is based on close cooperation. Based on interviews with clerical workers they conclude: "Discussion is sponta-

neous and topical, premised on the notion that because we all know this work, and we know what each of us is up against, the issues raised are of mutual relevance” (p.140).

The observations in the call centre provided evidence for the significance of the office environment to everyday problem solving, but we also gained insight into all the different and sometimes conflicting activities which had to take place at the same time and in the same space.

We presented our observations at a workshop with the group manager, the director and the call centre. What we tried to do was to hold up a mirror in front of the organisation and then give the company a possibility to reflect their own work practises and their ideas for the future. In the workshop the employees worked with the problems they thought they had today and the solutions for the future. They discussed the importance of the open space to support their collaboration, so they did not come up with the solution to divide the open space into group offices as the group manager initially had suggested. Instead they made the agreement that they would change seats on a regular basis to continuously be part of different groups in the open office and they made an agreement that they would throw out the radio because it sometimes added to the noise in the space. They suggested to the management that they would like another office in connection with the call centre to the additional tasks they had that required concentration. When we were listening and observing at the workshop and heard the reflections and ideas we found out that most of the women in the call centre had been there for many years. They knew each other very well and they were friends in their private lives as well. In “Enabling knowledge creation (Krogh et al. 2000) the authors state that to enable knowledge you need: creating trust, increasing active empathy, fostering helping behaviour, lenience, courage and mentorship and seen in that context the call centre was a micro-community of knowledge.

A month later when we came back to the company they had changed the office space. The open office was the same size as before, but in the “passage” they had put in two offices: one for 3 sales people who came in once or twice a week, the other belonging to the call centre to support their individual tasks.

This was not a very big change, but both the employees and the management said that the observations had given them new insight in their call centre work. So the mirror we put in front of this company gave them another view at the work in the call centre. The observations, episodes and snapshots were an eye-opener to both managers and employees who realized that the work in the call centre was much more collaborative that they had thought and that this combination of indirect and direct participation gave new learning to the organisation. Hence the original assignment to make a more optimal office design became a catalyser for reflecting work and work practises. Vålund (2009) also concludes that space may represent the opportunity to talk about complex organisational issues.

In enabling Knowledge creation (Krogh et al. 2000) it is stated that knowledge creation both explicit and tacit requires extended conversations and good personal relationships. The author also draws attention to the enabling context as an important precondition for effective knowledge creation. In this call centre the Japanese idea of *ba* (or “place”) is found. In their organisational context they have a shared physical space (the open office space), a shared virtual space (the intranet, e-mail, customer database) and the mental space (shared experiences, emotions, ideas)

3. Managing conversations - The administrative Workplace for the Future.

The second case we are going to present is a more direct employee-driven innovation process in a municipality with a view to make suggestions and ideas for concepts for the future administrative workplace in the municipality.

The initiative came from a director who wanted a concept based on the different working patterns at the workplace.

The participants in the working group represented a wide selection of job functions and work processes. There were: a school psychologist, a speech therapist, a child minder, an IT specialist, a health visitor, a social worker, a technical administrator, a director, a facility manager, a HR consultant and a strategic consultant. Their role was to suggest an appropriate office lay out to different types of administrative workplaces.

We suggested to create a process where the group would meet and exchange ideas based on individual conversations in the workplace:

“We cannot emphasize enough the important part conversation play. Good conversations are the cradle of social knowledge in any organization. Through extended discussions, which can encompass personal flights of fancy as well as careful expositions of ideas, individual knowledge is turned into themes available for others . Each participant can explore new ideas and reflect on other people’s viewpoint. And the mutual exchange of ideas, viewpoints and beliefs that conversations entail allows for the first and most essential step of knowledge creation: sharing tacit knowledge within a microcommunity.(Krogh et al, p 125, 2000).

The project consisted of 4 conversations at intervals of four weeks and in between those meetings the employees had different tasks. The working group was selected by the HR director. Some of the participants were managers and some were employees and each of them represented different positions, attitudes and working areas in the municipality.

The first conversation.

At the first meeting the workgroup were introduced to one another and after a short introduction to the purpose of the project by the project manager, the participants received their first task. We asked each participant to describe:

- Their work
- The workplace
- Their wishes for the future workplace

They all had 10 minutes. When we look through those first description of the different workplaces in the municipality they were all very protective of the current work practices and they generally had big focus at activities like “writing”, “reflection” ,”absorption”, “meeting with clients” and the work was characterized as confidential and a focus on quietness and concentration. But 2 persons also mentioned “collaboration”, “teamwork” and “empty spaces”.

When they mentioned their wishes for the future administrative workplace in the municipality they wanted the solution they had today but with some extra features like more space, more meeting rooms, less bustle. At the end of the meeting we gave the workgroup a task for the next meeting.

The task

We asked all the representatives to make ethnographic observations in their own department or a section of the department. We gave all the employees a detailed description of what they might focus on: Movements, communication internally and externally, sounds, artifacts, different work routines e.g. They all could use 1 day for this task but we recommended to divide the observations into different days and hours. They should also make a registration of employee presence during one week. And we told them that they each would have a quarter of an hour to present their results at the next meeting and that they could present the way they found most convenient.

The second conversation

At this workshop they each gave a presentation of the observations in the different departments. Some of them gave a PowerPoint presentation, but there were also presentations with a collage of pictures, stories, a fairytale and an art exhibition.

It is very difficult to make an ethnographic observation in one's own department, to really observe things openly and to see and to wonder, because you yourself is an integrated part of the working area. But nevertheless there were some of the participants who remarked that they had been taken by surprise. They told that the observations had revealed another picture at their workplace and thereby challenged some of their habitual assumptions.

One of the participants said: "I have always thought that our workplace is very noisy, but suddenly I found out that parts of the day are very quiet." Another participant was surprised when he recorded the employee presence and found out that fewer people than he had thought were present at the same time.

The different presentations gave energy to the group, but at the same time it visualized the attitudes and the foci and gave a very varied point of departure for the following conversation. In the conversation they reflected on the different working styles in the municipality and different themes like mobile work, individual work and collaboration unfolded. The distinction between self and the group vanished as they asked each other additional questions, provoked each other in a friendly tone, reflected, discussed.

At the end of the meeting we gave the workgroup a new task for the next meeting.

The task

We asked all the representatives to consider the physical surroundings impact on:

- The quality in the meeting with the citizens
- The quality in the meeting with colleagues
- Knowledge sharing and learning

- Individual and team-based work processes
- Flexible organization of project groups
- Professional absorption
- Efficiency
- Exploitation of the physical surroundings
- Health and well-being

They should point out the advantages and disadvantages for each theme and come up with some suggestions for improvement.

The third conversation

At the third meeting the participants once again were presented for a whole range of different images from different departments, this time in form of a movie, a science fiction story, a fairy-tale and a ground plan.

Based on the input from the groups, three themes were chosen in the following conversation: Work processes, meetings, interaction/absorption. When they all discussed the themes they dwelled on the link between space and concentration. In the movie an employee said: "Anne, she also has her own office, but she always complains about that she doesn't have time for concentrated work." So the conversation draws the conclusion that the concentration issue just as well might be a time issue than a space issue. They also talked about the meetings with clients and agreed that the meetings were not thought through. Sometimes a counter made an undesired distance other places lacked the distance.

The participants worked with the themes in groups and they all came up with suggestions for concepts for the future administrative workplace in the municipality.

The task

Based on all the inputs from the three meetings Center for New Ways of Working worked with all the themes from the conversations, the reflections, discussions and conclusions from the conversations and produced four concepts for the future administrative workplace.

Based on the process in the municipality we concluded that:

- The workspaces only support parts of the employees' work processes
- The meeting with the clients are not sufficient
- The technical solutions are a hindrance
- Immersion is more a time issue than a space issue
- Offices were allocated on behalf of the hierarchy
- The use of space was not properly thought out

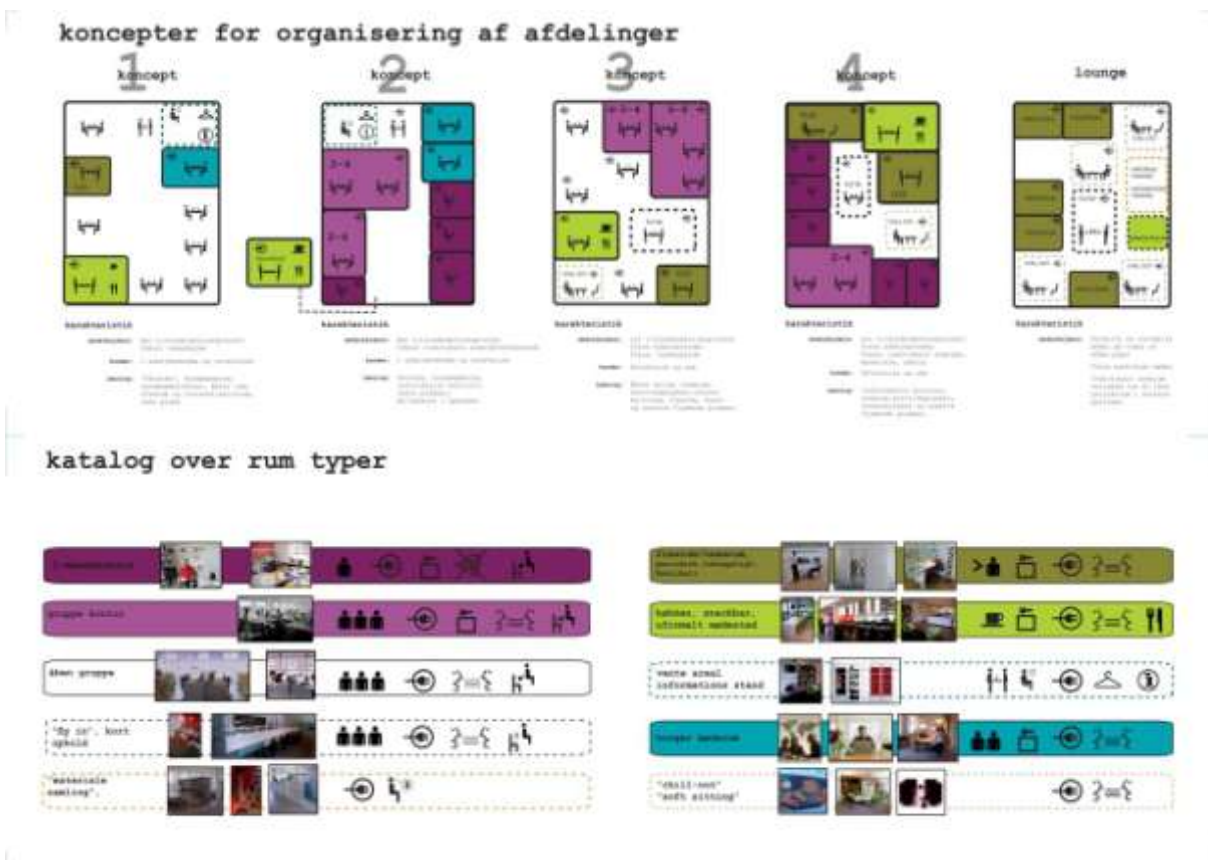
The concepts were based on all the inputs the employee participation process had given. So the concepts were made so they supported both individual work and teamwork, meetings with the citizens and the conception of work. But the concepts also all contain an experimental

part, which challenges both managers and employees , the present conception of work , the present work content and the present wishes

The fourth conversation

At the fourth meeting centre for New Ways of Working gave an overview of the themes from the conversations and their way into the following four concepts:

Figure 4.



When we presented the four concepts all the employees in the workgroup could identify with the suggested solutions, but the most interesting finding from the process was the different realization of the work in each department, the contact with the citizens and the physical surroundings. The conversations challenged individual perspectives and gave ownership and energy. At the first meeting we asked the participants to describe their work and physical surroundings. During the tasks, conversations and presentations the participants got another realization both about work in their own department, but also work across the municipality so at the last meeting the conversations resulted in quite different content in the descriptions of:

- Their work
- The workplace

- The wishes for the future workplace

So this was a result of conversations in a micro-community. The conversations made the group members be absorbed of the themes and made them solve problems rather than just focusing on individual needs for each department. The participants identified with the conversation themes and the lively engagement gave new insight and new ideas.

Enabling organizational learning and knowledgesharing

The employee involvement gave new reflections and stirred up habitual conceptions of work and space. Managers' and employees' habitual conception of the work going on in the organization can sometimes be very misleading. So if you change or design the physical environments based on the spontaneous allegation of requirements there is a risque that the physical environment will be a hindrance for the actual work processes in the organization and that vital knowledge sharing mechanisms will be damaged.

We have described different methods to involve employees and thereby enable organizational learning and knowledge sharing. We have described methods to study and reflect on work, physical spaces, knowledge sharing, social interaction and learning.

In the call centre case an ethnographic study was used as a mirror showing communication and interaction patterns in the work there. The ethnographic study gave new insight and also surprises, because it showed that the nature of the work in the call centre were much more collaborative than they originally had perceived.

In the municipality we orchestrated conversations and individual tasks that also mirrored different working styles and attitudes and brought new insight to the nature of work in the municipality, a more open and multi-dimensional description of activities and needs and thereby quite different demands for the physical design in the future than they had originally thought would be the essential ones.

In both cases the employees got the chance both to study their own work from a distance and also to mirror their own work and attitudes in other's work. Through this user involvement process a new realization of work arose.

It is possible to enable organizational learning and knowledge sharing through employee involvement, but it requires an open and curious participation from both managers and employees because you will not be able to control the output of such a process. So it takes some courage. But if you dare, it can both lead to more innovative ideas, provide a new platform for learning and reflection and a change process that the employees will feel ownership to.

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