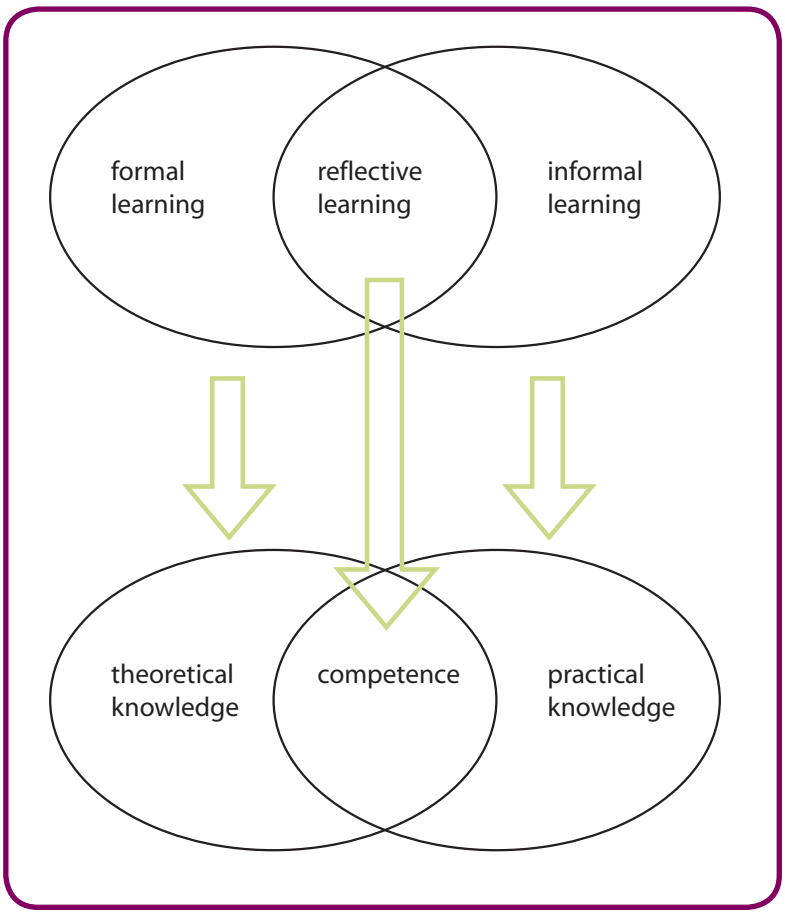
This product report presents the results of the design process. It is the output of identifying the problem, building a concept to solve this problem, and exploring the concept to develop a solution that can create value to the actors involved.

REFLECTIVE LEARNING

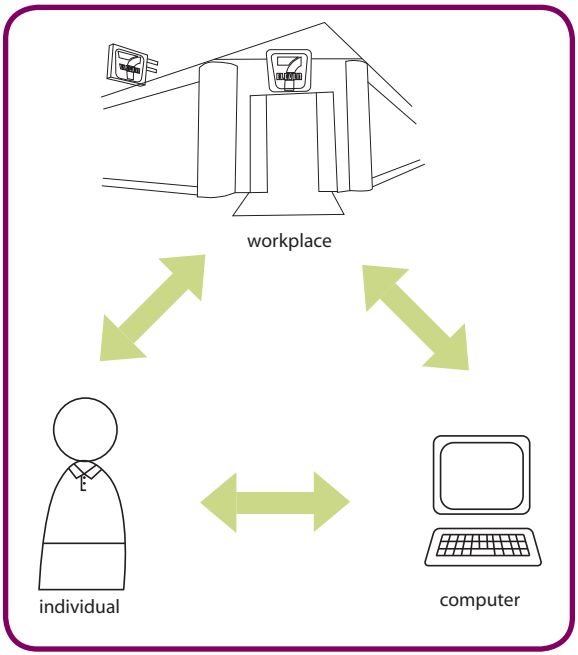
When formal and informal learning meet, there is room for reflective learning to be created. Instead of seeing the difference between these two types of learning, see them as how they can complete each other. A dynamic can be created in the meeting between the formal and informal, between the directly experienced and the communicated, between the practical and theoretical.
The illustration below shows how competence involves a combination of practical and theoretical knowledge.

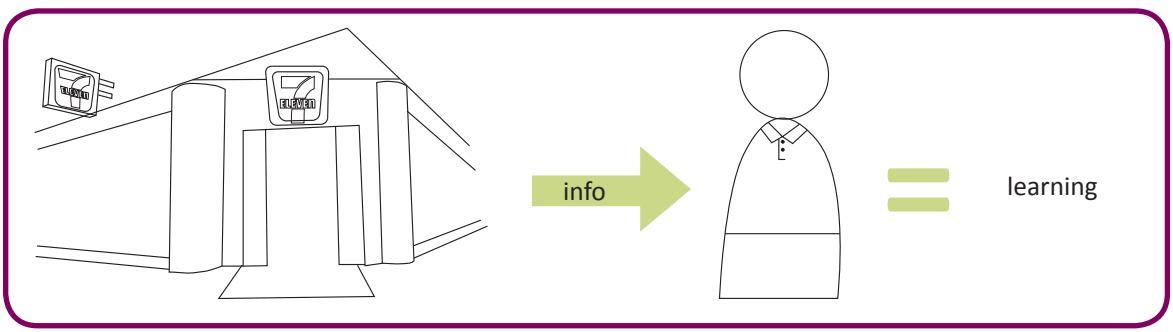


CONCEPT

Often e-learning is presented as a simple solution to a complicated problem. It is very technical and oriented towards the individual. But can e-learning and workplace learning be combined to strengthen motivation and create something meaningful?

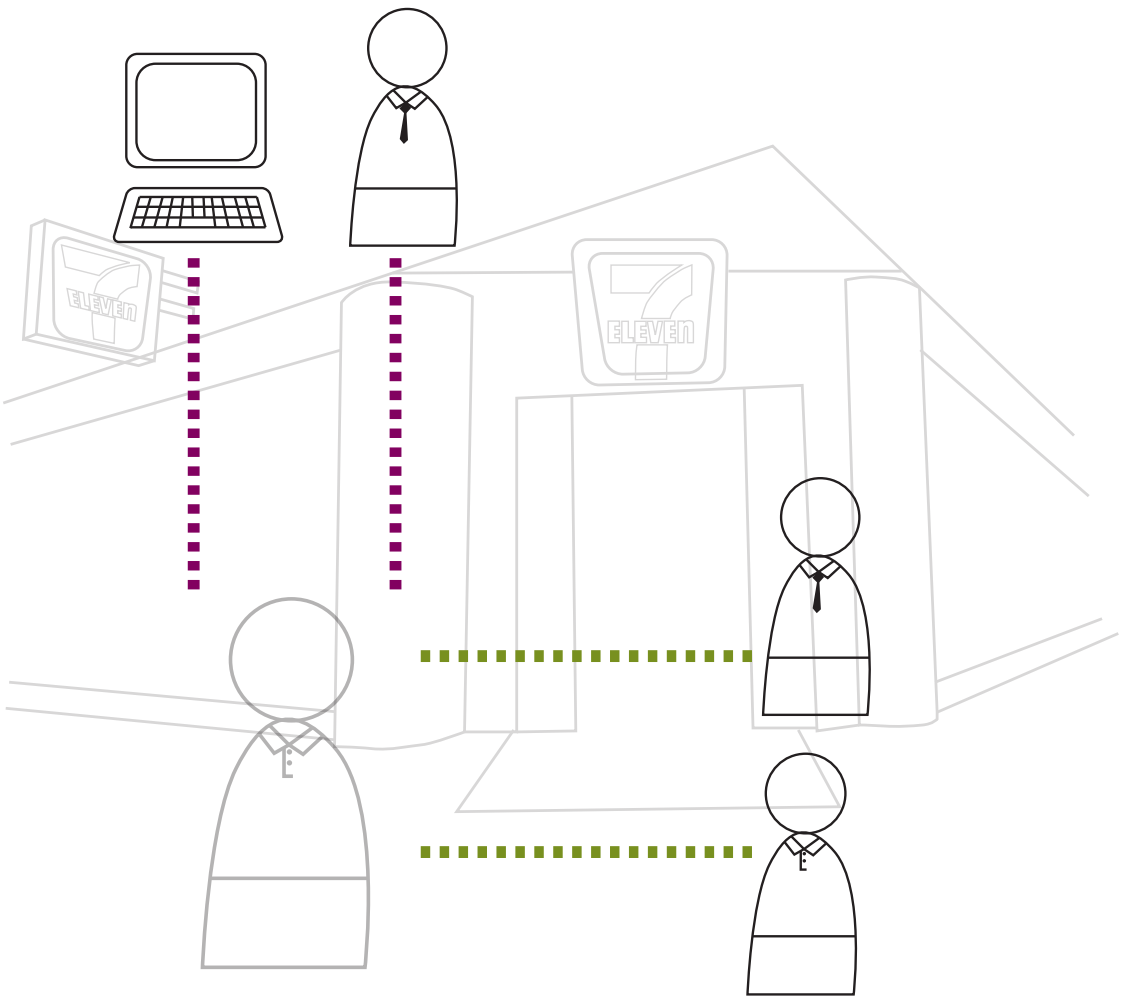
The concept takes its starting point in the idea of the workplace being part of the supporting structure for the e-learning. The e-learning is still a part of the structure, with the advantages this can give towards learning. By looking at what the supporting structure could be, a focus is taken towards the workplace being part of the everyday learning situation. Often a formal education entails better opportunities to pick up the informal learning on the workplace, and vice versa. Workplace learning becomes interesting because of this perspective on knowledge. The workplace becomes a learning space and the connection between theory and practice can happen in a natural way. The workplace becomes the learning space and provides information needed for the employee to learn.


workplace
individual
computer


info
learning

INFORMATION

The workplace can provide two types of information to the employee. They need to learn from two aspects of working in 7-eleven.
The first one is functional information, which primarily is provided through the store manager, or the computer through headquarters, e-learning or other sources that provide information on specific things in the store. This could be on handling products or machines in the store.
The second aspect they need to learn about is the practical. The information for this part of learning comes primarily from other employees working in the 7-eleven store, or from other stores, and from the store manager. This type of information contains the aspect of 7-eleven identity, how to act and show the proper 7-eleven behaviour, it is more a social type of information than the functional information.

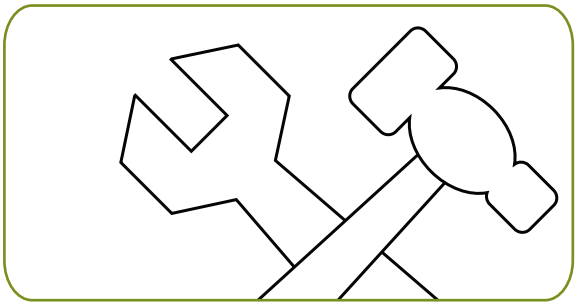

ELEVEN
ELEVEN

ROLE OF PDA

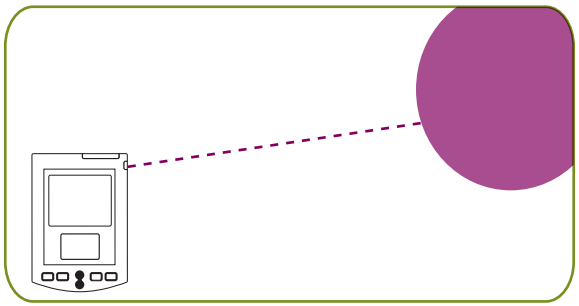
The main role of the PDA in the service of workplace learning is that it delivers the information provided by the workplace and communicates it to the employee. It is a communication tool between the different actors involved in the service, and it is the main tool in motivating the employees to live out the identity of 7-eleven and see that they can develop their competences while still finding their work interesting.

When using the PDA the employee needs to log on with a username and password and then they have a personal account so the PDA recognizes the person and other people know who they are when communicating. The PDA contains a technology, which makes it possible for it to recognize different areas of the store where the employee needs to learn.

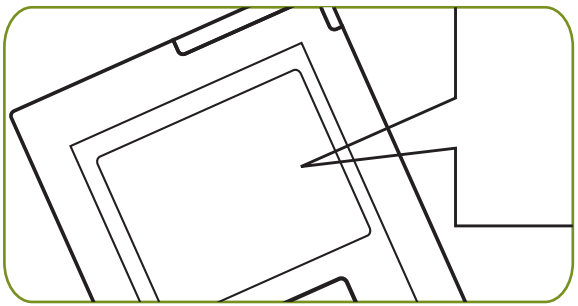
account where they log on with username and password



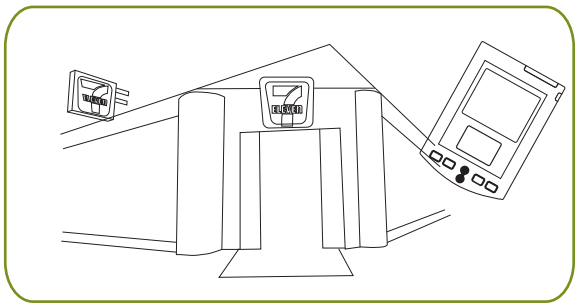
learning tool



RFID

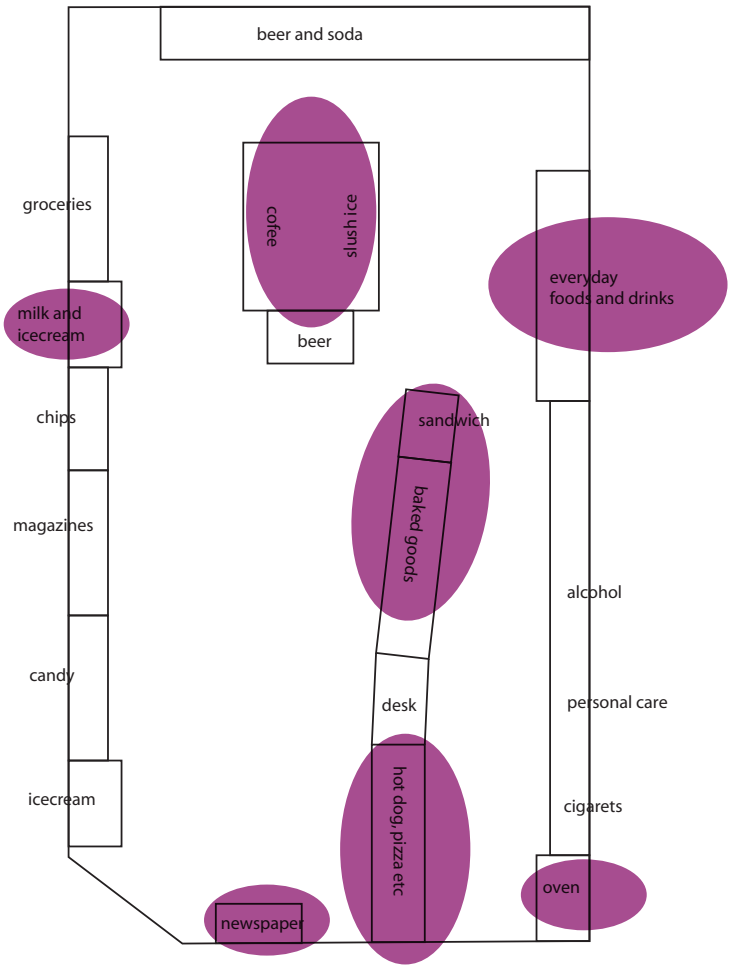


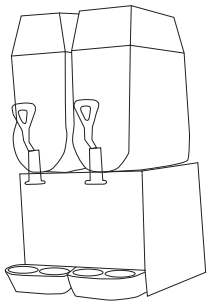
communication tool between different actors in the service

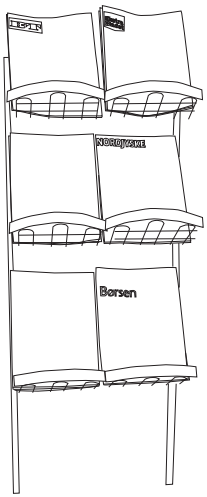


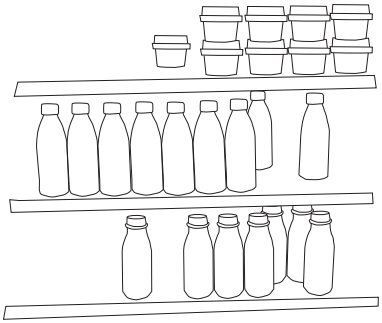
together with workplace provides info to employee

FUNCTIONAL LEARNING







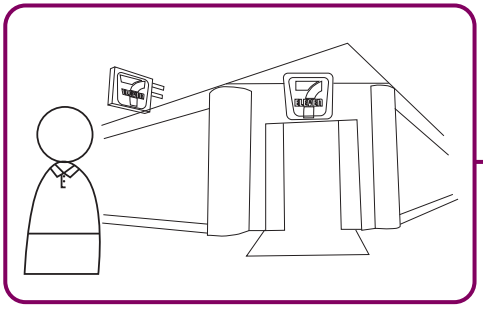


As explained in the section on information, the workplace provides two types of information for the employee to learn. To elaborate on what type functional information could be, some examples are given here, together with a plan of the stores, to give an impression of where in the store the employees get this type of information.

This information includes:

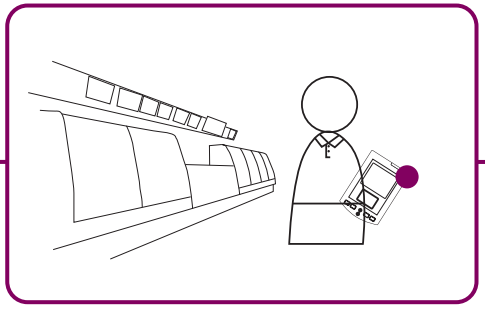
- Checking expiration dates on products like milk, yoghurt and other perishable foods, and making sure they are sold before they expire.
- Making sure that the temperature is right in the refrigerated counters and the refrigerators.
- Follow rules about cleaning the oven, coffee and Slurpee machines, and areas were food is prepared etc.
- Hygiene rules when handling baked goods, or foods like hot dogs and pizza slices.
- Making sure that there are no old newspapers on the news stand
- Etc.

FUNCTIONAL LEARNING

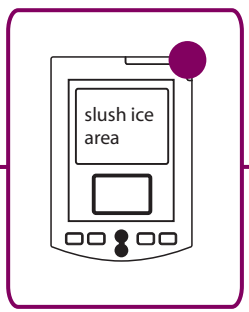


The employee comes to work in the 7-eleven store

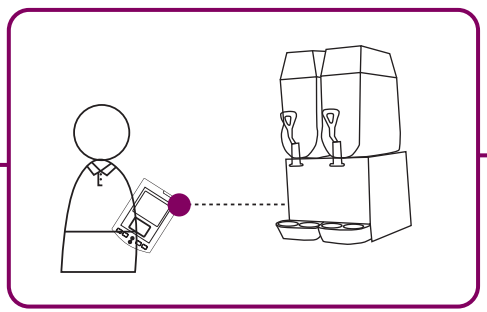
He picks up a PDA and enters it with a username and password



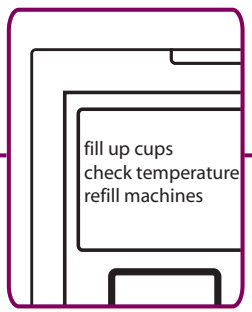
The employee walks around in the store doing the everyday things needed to keep the store running. The PDA picks up a signal from an area in the store, and gives a signal to the employee.

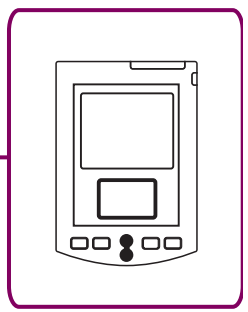


The PDA tells the employee that the signal is from the area with the slush ice machines



The employee walks over to that area and gets further information from the PDA

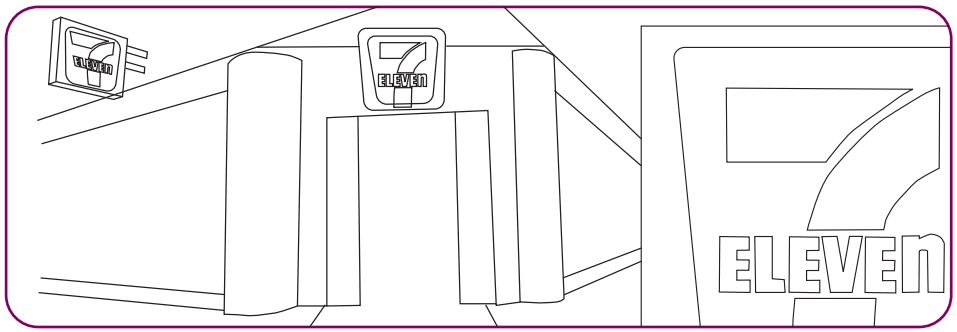




In this area he needs to remember to fill up the cup holder so the customer has a container for the slush ice. He needs to check if the temperature is right, that the drink is cold enough. And if there is not enough ice or drink in the machine he needs to refill it. After doing the tasks, the PDA remembers telling the employee about this area. It can be preset to tell the employee a couple of times, if it is necessary to explain it more times for it to become a routine for the employee.

PRACTICAL LEARNING

The practical learning contains more social related information. It includes the 7-eleven community, where the employee is able to get information or news from headquarters or managers, or ask questions or get advice from other employees in other stores, or actors in the service. It holds information about 7-eleven identity and how to show the right 7-eleven behaviour when providing service in stores, what to do, and what not to do.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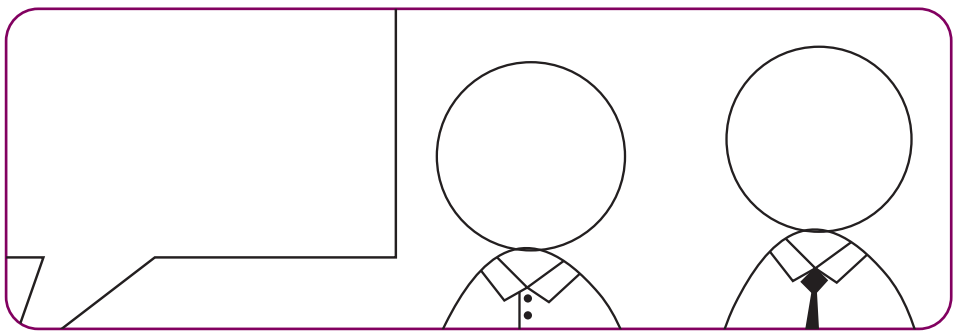
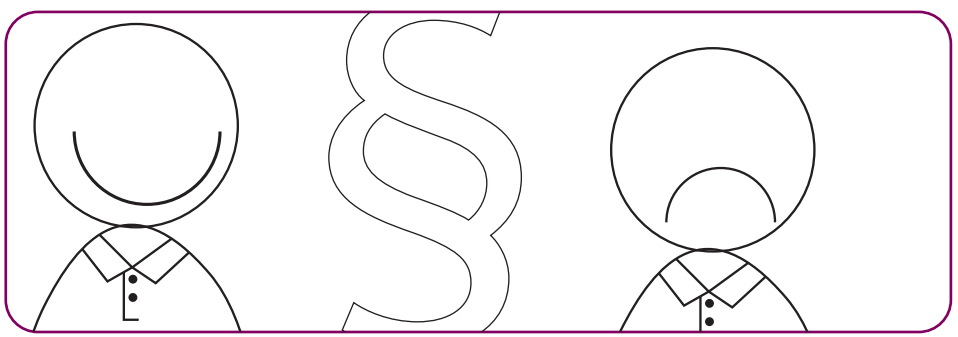
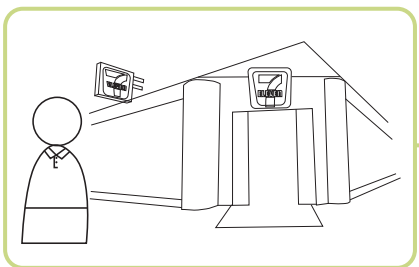


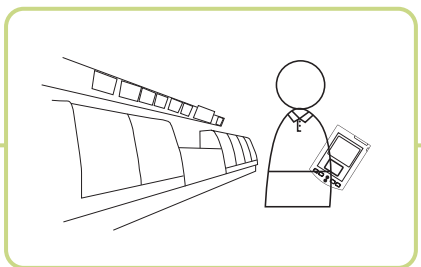


PRACTICAL LEARNING

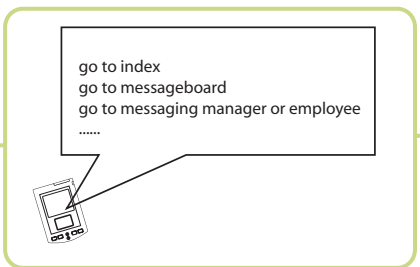


The employee comes to work in the 7-eleven sto

While doing the work he runs into the product Slurpee and realize that he does not know a lot about the product

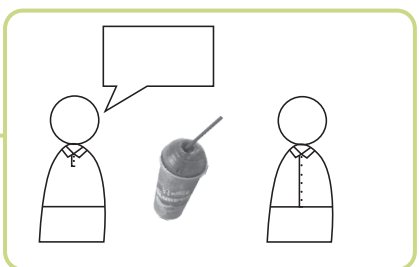


He takes the PDA and types the word Slurpee.



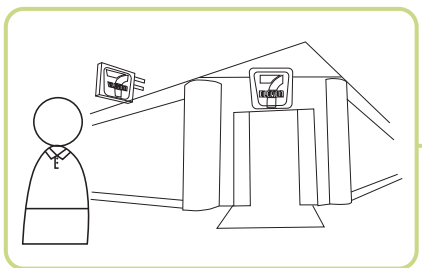
There are now different options for the employee to choose from. Does he want to go to the index, containing information typed in by the company? Does he want to go to the message board and type in a question about the product? Or he could send a message to the store manager or an employee in another store

He chooses to go to the index and search under products in the menu. The PDA now comes up with information concerning the Slurpee products

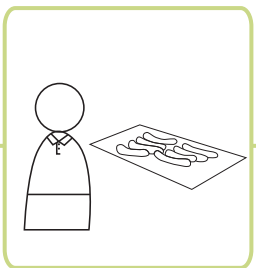


Now the employee is able to have a dialog with customers surrounding the product. This gives him confidence, which appears in the way he talks about the product, which then can end up in him selling more of that product.

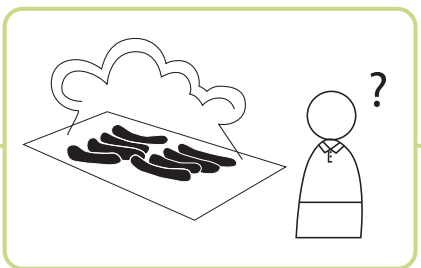
PRACTICAL LEARNING



The employee comes into the 7-eleven store to work

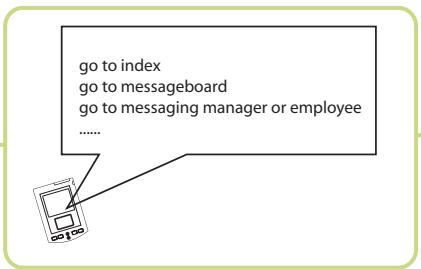


He is standing by the roasting surface and roasting some sausage to sell to customers

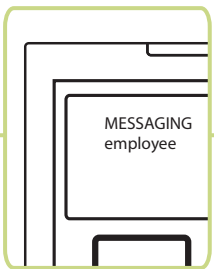


In an inattentive moment, the sausages get burned and start getting black. Because the employee is relatively new in his job, he does not know what to do.

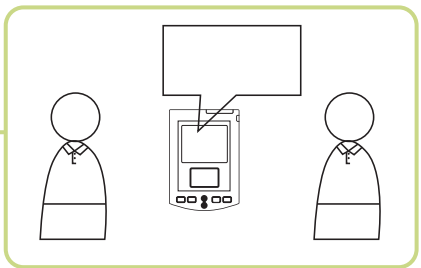
He takes the PDA to search for a solution to his problem



There are now different options for the employee to choose from. Does he want to go to the index, containing information typed in by the company? Does he want to go to the message board and type in a question about the product? Or he could send a message to the store manager or an employee in another store



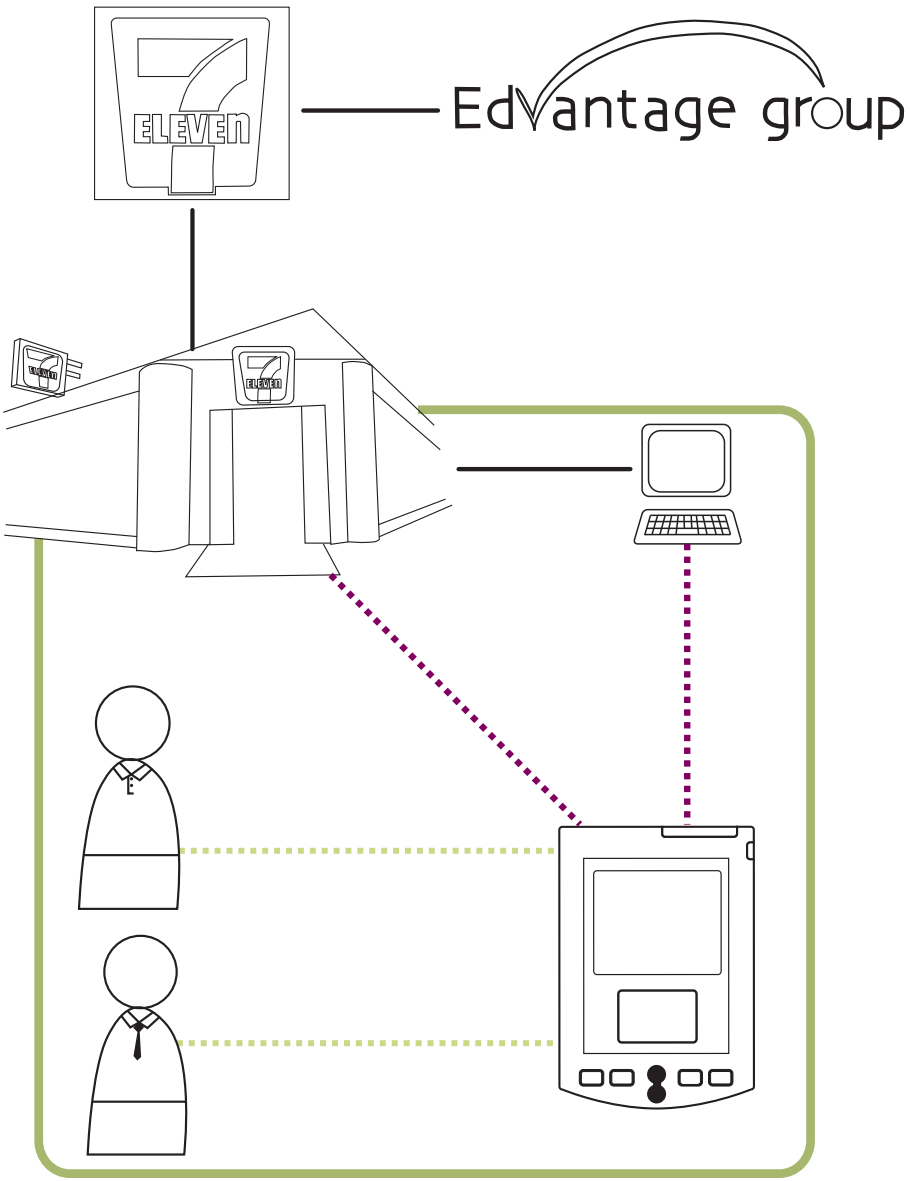
He chooses to send a message to an employee



The employee answers and gives him tips on how to do it better next time and avoid the sausages burning

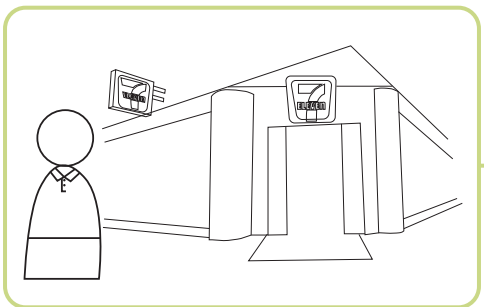
SYSTEMIC MAP

The illustration on the following page maps out how the different actors in the service are connected to the products of the service. In this case the products are the PDA, computer and the workplace.
Edvantage is seen as the service provider, and 7-eleven as a concern is the recipient of this service. 7-eleven makes sure that the service comes out to the different stores around Denmark, and also have to provide the stores with PDAs for the service to function, and the learning to happen as it is thought. The computer is still a part of the store, and together with the workplace they are the primary provider of functional information and learning. Employees in the particular store, and from other stores offer the practical information and the social interaction, as does the store manager. The two types of learning al goes to the PDA, which then delivers it to the new employee that needs to learn about working in 7-eleven.


ELEVEN
Edvantage group

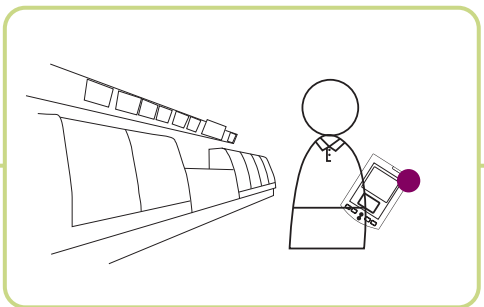
FUTURE SCENARIO

This scenario is created to see how the service can be useful in the future. It is based upon how rapidly the technology of RFID is developing. All research is pointing in the direction that more and more products in the future will contain RFID tags, which will make it easier for stores to supervise individual products.



The employee comes to work in a 7-eleven store

picks up a PDA and enters it with a username and password



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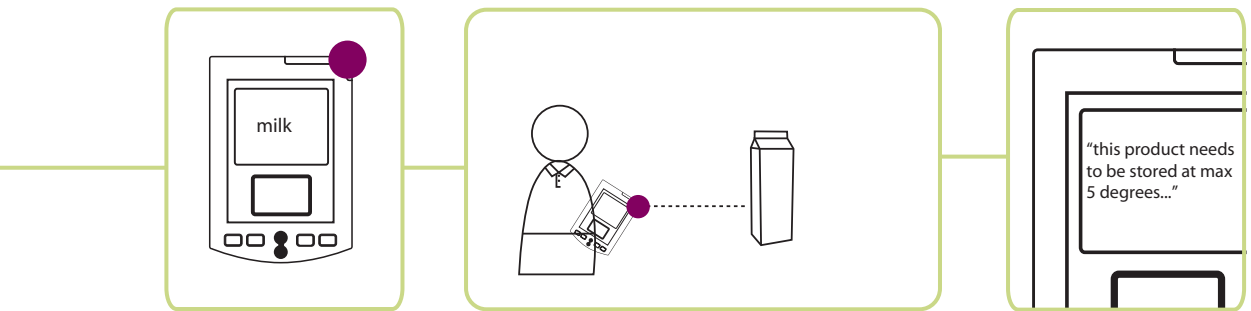
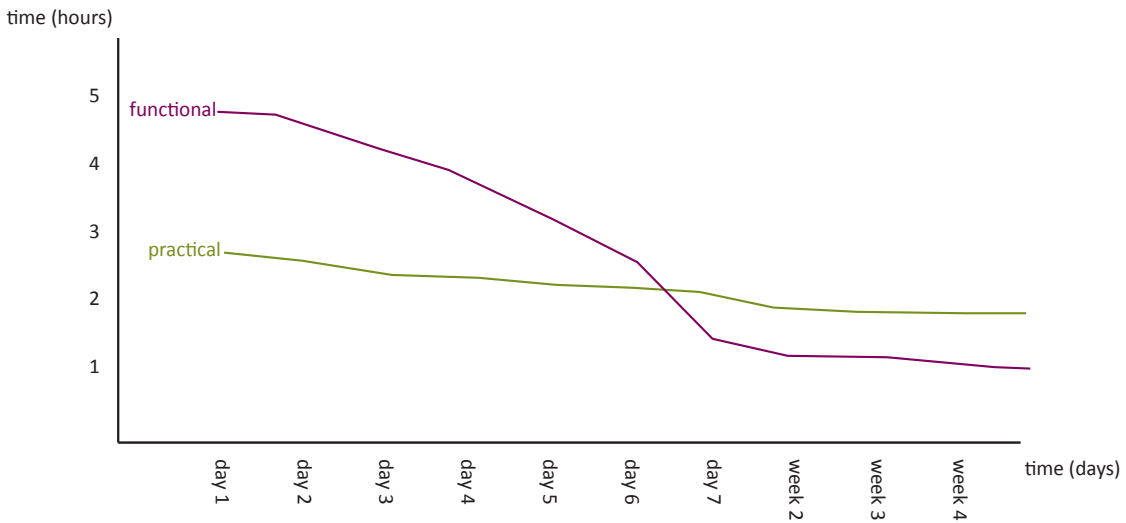


The PDA tells the employee that the signal is coming from a milk carton

Then the PDA gives specific information on that milk. That it needs to be stores at 5 degrees, where, that it expires in two days and other important information

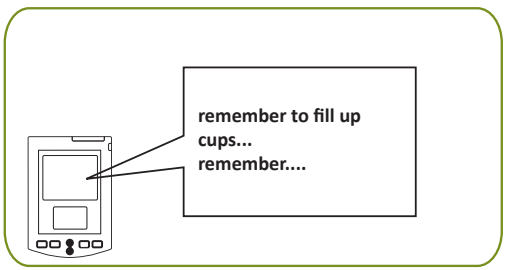
FUTURE OF THE SERVICE

The time line below is an estimation on how much time is used on the two types of learning in the first couple of days and in the following weeks. It is made from a perspective of a twenty-four hour day, even though a shift is not twenty-four hours long. And then a five hour span is taken out, to show how much time of a twenty-four hour day would approximately be spend on learning from the PDA. The first couple of days, when the employee is new in his job, a lot of time is spend on functional learning, getting to know the store, its products and structure. Also the practical learning takes up some time, because they need to learn about 7-eleven amongst others. After a while of employment, the learning evens out, only taking up a small part of the employee's day. The practical information is kept at an even level because of the social aspect.



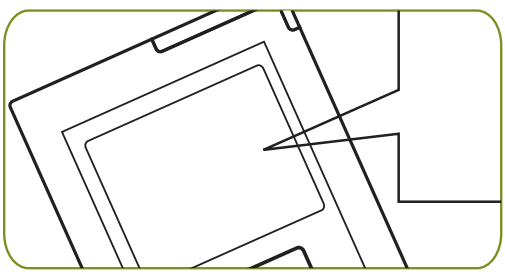
After the first introduction period the PDA can still be used in stores. It can be used in the everyday work, and be set by the employee to remind him of different tasks. It is still used to communicate with others, and could here also work as a news channel to inform employees about for example new concepts in stores. The employee can upload knowledge they gain at work to other employees to help them optimize their work. The PDA can also work as a tool to see how other stores are doing in different areas and thereby have an element of competition, which can help the employee to stay motivated.

For the service to be sustainable this future aspect is important. It is important because both Edvantage group and 7-eleven can see that the service can work and be used after the first introduction period, and that it is a long term investment in developing the employees competences and the company.

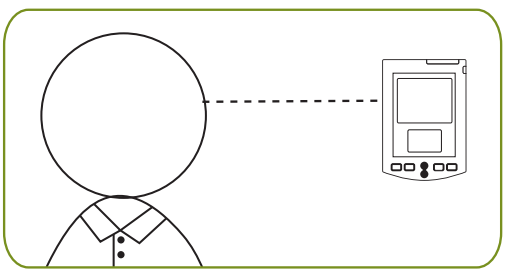


remembering things for you in everyday routines

compete with other stores



communication tool between different actors in the service



upload you knowledge about work to help others