The goal of this bachelor's final assignment was to extend the professionalism of **creativity**. DEMCON is a high-end technology supplier of products and systems, with high-tech, industrial systems & vision, opto mechatronic, robotic and medical systems as focus areas. They find creativity very important but have no system in place for using creativity in their day-to-day work.

What can a toolkit do for Demcon employees to improve their use of creativity techniques in their day-to-day work?

The research for this project consists of 3 parts; creativity theory; creativity in practice and Demcon. The research on creativity theory starts with the exploration of the definition of creativity and is concluded in a definition that states that creativity is **the creation of novel and useful ideas**. Research on different subjects related to creativity are reviewed; the relation between creativity and innovation; the different components of creativity; the different types of creativity. The influence of the surroundings on creativity and measuring creativity are important for Demcon and therefore they are included but no systematic research was done on this topic, it falls outside of the cope of this project.

Different creativity techniques have been researched and included in the toolkit. The information on the phase of the project the technique is applicable for, the advantages and limitations of each technique are mentioned in the virtual toolkit. The **creativity techniques** that were included are Brainstorming, Brainwriting, Force Field Analysis, Lateral thinking, Mind mapping, Morphological approach, Negative Brainstorming, SCAMPER, Six thinking hats, Storyboarding, Synectics, TRIZ, Walt Disney method and 5W1H. These were selected according to a systematic literature review of the research on creativity techniques and requests from Demcon.

Creative facilitation is also an important part of the creative process, some general suggestions for good creativity facilitation are given, like avoiding criticism. In the current times, the COVID-19 pandemic makes working from home the new normal. Remote creativity sessions via skype have replaced in-person face-to-face sessions. Virtual sessions are a bit different from face-to-face sessions, some general guidelines on how to this properly are given, like using online platforms like miro and mural.

The situation at Demcon was analysed by doing **interviews**. The participants answered 2 questions about their view on creativity and how they use in their day-to-day work. These results were analysed by coding the responses and result in an overview where it is clear that Demcon employees mostly equate creativity with problem-solving, creating something and new ideas/solutions. This is not quite the same as the most commonly used definition of creativity, but it comes close. The observations that the author made during the Demcon internship were combined with the results from the interviews into a persona and scenario, these were later used for the design of the toolkit. A **co-creation session** was held to uncover the needs and wants of the employees of Demcon. The 5W1H technique was used to find out the background and start coming up with some initial ideas. This resulted in a list of requirements ranging from the need for intuitive use to the need for both a physical and virtual element.

Two creativity sessions of 3 and 4 participants were facilitated by the author to gain experience in facilitating and to gain insight into the way the employees work. The experience was that facilitating is quite difficult and it takes practice, some help from the toolkit could be valuable in this aspect.

With the gained knowledge and experience the toolkit was conceptualized. Several prototypes were made and **evaluated by the employees** in 4 individual sessions, of which 2 with a case in mind and 2 without. Changes were made to the toolkit to fit better with the needs of Demcon. Finally, the tool was also **evaluated in practice**, a group creativity session was held, and the toolkit was used.

A toolkit with a **virtual and physical element** was designed to help the employees of Demcon improve their use of creativity; by giving practical tools on using creativity techniques, learning about creative facilitation, help them reflect on the creativity in a session and includes a wizard on finding the best fit with a creativity technique for their specific case.

In the discussion the research questions are reviewed, all research questions are answered, some more extensively then others. The sub-questions about measuring creativity and the influence of the surroundings fall outside of the focus of this project, to explore to the same extend as the others.

One of the limitations of this thesis is that the toolkit was not extensively evaluated in practice, it was only evaluated in practice once. This should be done more, and it should also be evaluated compared to a group not using the toolkit to see its effect.

Several more recommendations are made to further this project and **integrate it into Demcon**. Things like making the virtual toolkit into a website and expanding the creativity competence group.

Overall, this project has brought Demcon many things. They have been made more aware of the possibilities creativity has to offer, **brainstorming is not the only way,** many creativity techniques are often a better fit for specific situations.

The toolkit should become a normal part of the design process. More widespread use of the toolkit also creates a better opportunity for further evaluation. The employees already show interest in creativity and the toolkit so this a good opportunity to take steps in implementation and **stimulate creativity at Demcon.**