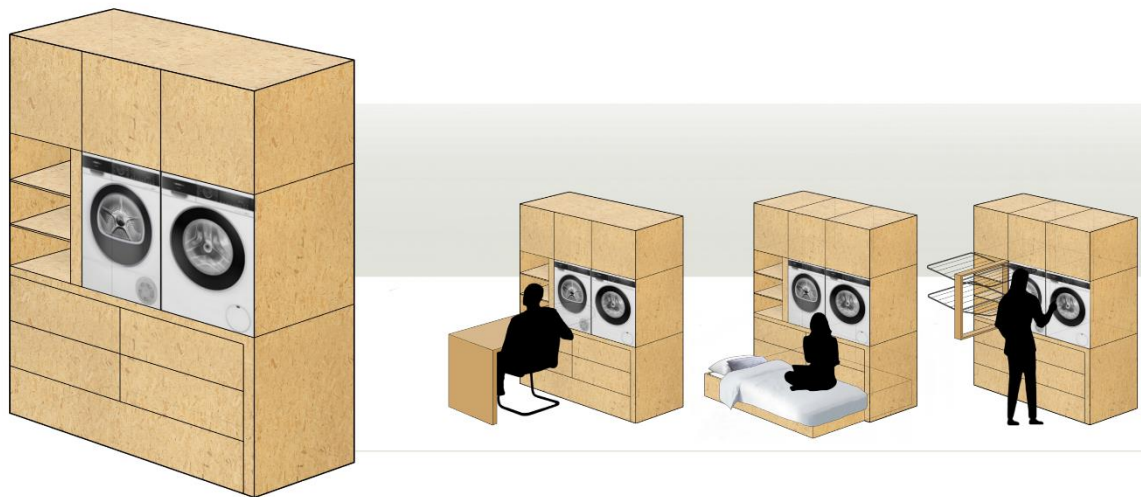


This thesis assignment is provided by the company DropCabin, which builds DropCabins that function as a house and can be placed at a location of the residents' choice. The purpose of this thesis is taking the DropCabin to the next level of development by answering the main research question; "How could a modular interior design that is suitable for both starters and seniors in the housing market be designed in a DropCabin?"

Research is performed into both the starter and senior target group. The methods used are reverse architecting; analyzing existing floorplans of houses made specifically for these target groups, and interviews aiming to understand the needs and values of both target groups. This research showed that seniors are more often at home than starters, but both groups spend most time in the living room and value the spaciousness and natural light in their house, but particularly the living room. Secondly, research is performed into the current market. Again, reverse architecting is applied to analyze existing cabin floorplans. Desk research is performed on the internet to gather existing interior solutions for one-purpose and multi-purpose interior functionalities. This research shows a collection of general kitchen and bathroom layouts for the one-purpose functionalities, and a collection of solutions to combine storage, the dining area, guest bedroom, laundry space, and the office space. It is found that the office space and storage are most combined with other functionalities, and there does not yet exist a solution where all multi-purpose functionalities are combined in one. All research insights are combined into the requirements.



The design phase is guided, but not constraint by these requirements, and led to eighteen interior design proposals. Applying multiple rounds of assessment shaped the design phase into two cycles of diverging and converging. The rounds of assessment are based on the client's preferences, the requirements, and a multi-criteria analysis. The final design visualizes in 2D and 3D how the DropCabin interior can be designed to fit the needs and values of both starters and seniors. Characteristics of the design to enable this are walking routes with a minimum width of 90 cm, connecting the bathroom to the bedroom, and a spacious, open living room with large windows.



The final design not only contributes to the company of DropCabin because of answering the research question, but also by proposing a new furniture design. Besides, the research itself is also valuable. The research can be applied in other fields of development to solve broader associated problems in the housing market. If further research and development will be done upon this thesis, it is recommended to improve and detail the final design based on additional requirements. These requirements should be based on new research into cost efficient interior development and styling and decoration for both target groups. Finally, it is recommended to further validate the final design and apply optimized aspects defined by the validation. The discussion critically argues what

decisions made in this thesis affected the final design definition. Although these are several decisions in the research and design phase, most important is that these decisions are made with clear rationale and are documented in a structured way. Therefore, the approach of the thesis is traceable.

