

# How to design a product for two users - one human and one dog



**How can a product be designed when the users will be both human and dog? The goal with this project was to develop a dog carrier for the rear seat of the car. Since both humans and dogs will interact with the product, it was important to understand both of the users' needs. This was done by using a new unique design approach called Animal-Human Centered design. After understanding how dog behavior can affect the car ride, the project resulted in a foldable dog carrier intended to be used even outside the car.**

The goal of the master thesis was to design a dog carrier for the rear seat of the car that provides safety and improves user experience, for both dog and human. In order to include both users during the design process and to understand the needs of each user, two approaches were combined - Human Centered Design (HCD) and Animal Centered Design (ACD). Human-centered design is an established design approach that helps designers develop products based on human needs and behavior. Animal-Centered Design was recently developed to bring animals into the design process to enable codesign between humans and animals.

Using design methods such as animal-friendly personas and user journeys were identified as key methods to ensure that the dog perspective was not lost during the process. One of the methods recommended by both ACD and HCD was *testing with users* and was used frequently during the design process. The purpose of testing according to ACD was to engage the dog with the prototype to determine if any further changes need to be made. However, we soon realized that testing with dogs was more difficult than we could imagine. The dogs got stressed because of the unfamiliar test scenario, especially when it included a car and a carrier. Because of the stressful event, the dogs did not like the carrier at all - but it was more due to the stressful situation, than how the carrier was designed.

Dog behavior is very much related to previous experience and how the dogs have been trained. We saw that dogs who had been trained to travel in a car a lot, would be more positive during our testing, than dogs that had a negative past experience with a car. This made us understand that the most important thing in order to improve the user experience for dogs, was that they have to get used to the product in a calm and non-stressful environment before using it in the car. The project therefore resulted in a foldable, easy-to-bring dog carrier that would allow the human to bring the carrier anywhere. This way the dog can get used to the product already in the home environment.

The carrier is a result of the Animal-Human centered design approach that was applied throughout the process. It made us constantly

think about the two users and how dog behavior differed from human behavior. Testing with the users is difficult to perform when one of the users is a dog. For a successful testing scenario, the product should be tested in the dog's natural habitat during a longer period of time - to be able to understand the 'true' needs of both users.