## **Design Concept for Thule Luggage**

A Flexible Solution for Traveling with Multiple Bags

The travel industry has increased twofold in the last twenty years and we are, both as individuals and as society, constantly finding new ways to make our journeys as fast and smooth as possible. Are you one of those who can relate to the struggles that occur when carrying several belongings simultaneously?

This master's thesis was performed in collaboration with Thule Sweden AB and the purpose was to develop a design concept that would make it easier to travel with a wheeled luggage, such as a carry-on sized bag with two or four wheels, in combination with a secondary bag such as a laptop bag or handbag. The designed concept is a product which utilizes the telescopic tubes as a backrest and the top surface of the wheeled luggage as a shelf where a secondary bag can be placed.

The design process started off with benchmarking competitors and their solutions to similar problems followed by a user study including observations of travelers and their habits, interviews and user journeys. The observations accounted for the biggest part of the research. From them, it was found that 45 percent of the travelers brought a handbag or a briefcase and did not have a simple way of connecting it to the wheeled luggage.

After the research, key findings were gathered and served as foundation for the identification of user needs, creating of personas and for decomposing the problem into the most important functions. Based on these, a large number of concepts were produced in a first concept generation

phase through brainstorming, sketching and prototyping. The concepts were evaluated and one was chosen to be elaborated in a second concept generation phase.

The final concept is a feature which enables fast and easy attachment of a secondary bag onto a wheeled luggage. The solution consists of a bar integrated into the front side of the wheeled luggage and does not interfere with the design of the luggage nor its fixed- or telescopic handle. Attached to the bar are two elastic bands whose other ends are fastened on the inside of the luggage.

When using the feature the user places their secondary bag on top of the wheeled luggage, pulls the bar over and around the bag and the telescopic tubes, and then releases it. The bar is pulled against the telescopic tubes by the elastic bands which are at the same time pressing the secondary bag towards the wheeled luggage. The feature allows fastening of various types and sizes of secondary bags and is easily managed with only one hand.

The concept aim travelers who are not willing to compromise in the choice of their personal everyday bag. The functional and minimalistic design of the concept would fit into a Thule wheeled luggage and achieve the company's mission to help people transport the things they care for safely, easily and in style.

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