**Project Title:** Public transportation efficiency analysis

**Phase 1: Project Definition and Design Thinking**

**Project Definition:** The Transport System of the Recife Metropolitan Area is under change. As asubsidy to its change an efficiency analysis is done with the purpose of highlightingcharacteristics of the efficient systems. Twelve transport system from several countries inEurope and seven from Brazil are analyzed: nine from Europe and only one from Brazilwere found efficient. These system are characterized by very different power structure andtariff structure. Efficient ones adopted a more democratic power partition amongcommunalities and established a more broad system of tariffs. Among other lessons it issuggested that RMR adopts a structure that allows a more equal partition of the severalmunicipalities comprising the Metro Area including representatives of users groups likeworkers associations and syndicates. Also it should adopt a more flexible tariff systemsgiving advantages to usual users at the same time that decreases costs and improves theoperational efficiency.

**Design Thinking:**

* 1. Project Objectives: Design thinking has revolutionised the way we approach problem-solving and innovation.
  2. Analysis Approach:The first stage of any design thinking process involves designers seeking to understand and empathise with the needs of the users by conducting research, interviewing users and gathering data to gain insights into the users’ needs, challenges and behaviours.
  3. Visualization Selection: all interviewees used at least one app to help them plan their journey (Google Maps, Apple Maps, CityMapper or Moovit), though limitations were mentioned for every single one.