Mobility Solution Design - Foundations -

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Conditions

- Master Course „Sustainable Mobilities"
- Lecture WS 2017/2018
  Semester 1 „Mobility Solution Design - Foundations",
  7 students
- 5 ECTS, 2 SWS

Learning objectives

After this lecture….
- …participants know what a mobility solution could be
- …participants understand how a mobility solution could be assessed
- …participants are able to develop and assess a specific mobility solution

Didactic concept

Task:
- Students have the task of developing a marketable, feasible, viable and precautionary solution for the traffic situation in Stuttgart by following the design thinking procedure step by step.

Methods:
- Step-by-step input by the lecturer with respect to content and methods (Define the problem; Research the stakeholders; ideate solutions; prototype solutions; test the prototypes)
- Step-by-step solution development in a group of students
- Step-by-step presentation and discussion of the results
- Elaboration of one specific mobility topic by the students for their assignment (paper and presentation)
- Field trip to the city of Stuttgart, dept. Referat Strategic Planning and Sustainable Mobilities (Enhancement of e-mobility in Stuttgart, initiation of company-related mobility management, design of attractive Park&Ride offers etc.)

Results

Tested prototypes for the following problem statements:

- How might we motivate commuters in Stuttgart to use public transportation in order to decrease the number of cars?
- How might we increase the usage of car sharing inside Stuttgart?
- How might we design "mobility hot spots" in Stuttgart for public transport users?
- How might we design attractive Park & Ride offers for commuters in Stuttgart?
- How might we lower freight traffic inside and outside the city of Stuttgart?
- How might we initiate company-related mobility management for commuting employees?

Evaluation

- Design Thinking is a valuable approach for specifying ideas in close contact to various stakeholders
- Developing appropriate starting questions is a challenge – you experience that only when you do it
- The step-by-step-approach provides good guidance for applying Design thinking
- More field trips would help understanding the mobility issues

Prototype Solution: Redesign of Stuttgart „Schützenplatz"

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PHOENIX
Problemorientierte Hochschullehre im
Nachhaltigkeitskontext