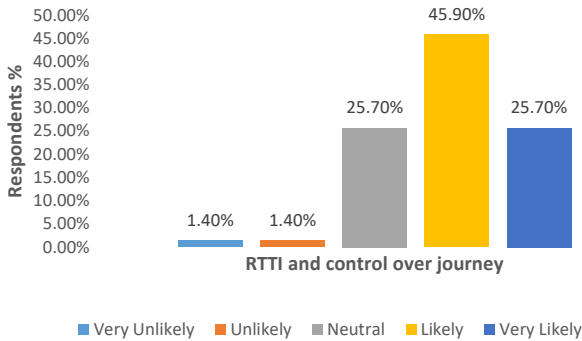# Impacts of Trip-Planning Applications on Mode Choice Decision

Master's Thesis of Sameera Rashid
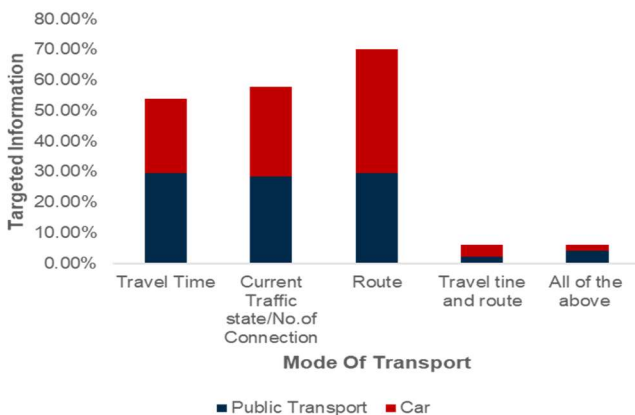
Mentoring:
Dr.-Ing. Florian Dandl
M.Sc. Katrin Lippoldt

Fig 1: Real-time Traffic Information Gives You More Control Over Your Journey

Trip-planning apps are good choices for people for planning their trips and consider them useful applications or tools. The usage of trip-planning applications differs with respect to location and time of day but also depends on trip purpose. People are likely to use trip-planning applications more on unfamiliar locations and for unknown routes as compared to the route they travel regularly. Similarly, regular and irregular trip purpose, people use it more for irregular trips as compared to regular due to unfamiliar locations, public transport connections and timetables. on their route.
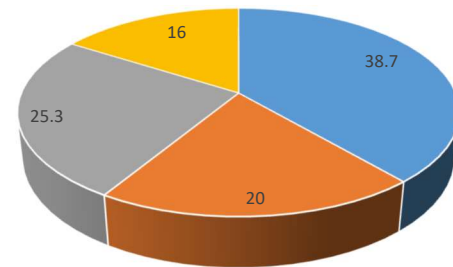

Fig 2: Targeted Information with Respect to Mode of Transport

Research Question and Objectives

The study will focus on the usage of trip-planning apps and how it changes people's behavior towards trip planning and their mobility patterns. This study also involves studying the effects of real-time information on the mode choice decisions of people. Therefore, the main objectives of the research are,

➢ To review the available trip-planning applications and how they have evolved over time.

➢ To study the effects of real-time information such as delays, congestion, disturbances on road networks, public transport schedules, and their availability on trip planning and mode choice decision.

➢ To analyze users' dependency on trip-planning apps for planning their trips for example who, when, where, and how they use the trip-planning apps.

Fig 3: Use of Trip-planning Applications in a Month

Effects Of Real-time Traffic Information On Mobility Behavior

➢ Real-time traffic information is a major tool for people to plan their trips more organized and efficiently

➢ People benefit from real-time traffic information in terms of time-saving, convenience in mode selection, fastest route, and cost savings

➢ In terms of convenience and accessibility real-time traffic information is likely to influence your mode choice by making certain modes of transport more accessible and convenient with respect to your location both departure and arrival.

➢ People are likely to increase their mobility and lessen their environmental impact by choosing the most effective, practical, economical, and ecologically friendly forms of transportation such as active mobility.

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