Summary:

## New mobile communication tools on everyday travels. What happens to the travel experience?

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Rapid adoption of mobile and wireless broadband connections in the population have provided everyday travellers with a range of new services. Travellers' in the cities of Oslo and Trondheim have largely adopted the new technology, although there are significant differences related to gender, age and status at the workplace.

Mobile communication technology, combined with broadband wireless networks and new content services have given everyday travellers new options for how to use their travel time. The purpose of this study is to obtain more insight into what kind of mobile technologies travellers bring along on their journeys, how it is used, and how this affects their general use of travel time. The analysis is also directed towards developing a tentative categorization of travellers based on an exploratory cluster analysis. The analysis is based on an online survey of travelers in Oslo / Akershus and Norway, conducted from September to October 2013. Net sample includes 1,650 informants where of 1,139 are in Oslo/Akershus and 483 in Norway. Further 28 people lived elsewhere in the country.

The survey shows that 83 percent of the travellers bring along mobile phones with internet (so-called smart phones), while 17 percent have an older phone with no opportunity to go online. Personal Digital Assistant (PDA) or tablet is used by 15 percent, while 18 percent have a computer laptop. Only two percent say they travel without any technologies. Those who travel daily by public transport are in general equipped with more, and newer technologies than those who travel by private car.

Three out of four smartphone users have downloaded one or more apps on their phone. In Oslo, Ruters travel app is most the most frequently downloaded mobile travel application, followed by NSBs ticket application. In Trondheim, AtBs ticket and travel apps are most popular, followed by NSBs ticket application.

Text messaging is still the most popular service for travellers'; three of the four states that they usually send or receive text messages. Other popular services for travellers include, ordinary telephone calls, reading news, email and social media. Use of social media is used by every three and every second traveller read news online. There are clear differences between men and women when it comes to the use of the mobile communication technologies: Men often use e-mail and news, while women prefer text messaging, social media and listening to music.

Students are more active on their travels than employees and homemakers / retirees, and they are more involved in technology-related activities. Younger

informants are also more involved in more ICT -related activities while traveling than older.

A cluster analysis was conducted to construct natural groups of travelers with similar access to mobile technologies, travel habits and preferences. Four clusters were suggested.

- The first cluster ("Tilgjengelig underveis") involves individuals who have access to smart phones, and well acquainted with the functionality of the mobile Internet. Yet it is not advanced usage that characterizes this group, but for most calls, messages and some surfing on the Internet. People in this group tends to rely on private car for their daily travels.
- The second cluster ("Arbeid og nyheter") are travellers who are well equipped with mobile ICT and active users of the technology. They prefer largely functional activities such as email, messaging and browsing of news. Members of this group are also active users of private car.
- The third cluster ("Aktiv og social") includes young people who travel a lot by public transport and are very active users of mobile ICT. Unlike the previous group, these are in particular geared towards social networking, entertainment, and music.
- The final cluster ("Teknisk uavhengig") includes nearly one in five travelers. This group includes people who usually travel with simple mobile technology; usually mobile phones without internet access, or without any technology. Their use is very limited, usually only a few text messages and/or calls.

The four groups of travelers indicate variations in needs and preferences among travelers. They may be used as a framework for the development of new mobile services and products, or in the design of new public transport services. The clusters will be used to develop "personas", that will inform developers at a digital innovation workshop<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup> <u>www.travelhack.no</u>