

Monday 19th & Tuesday 20th September 2016 Evoluon Center, Eindhoven, Netherlands

# How much the multimodal real time information are effective on travel behaviour change? A case study in Europe – the OPTICITIES project





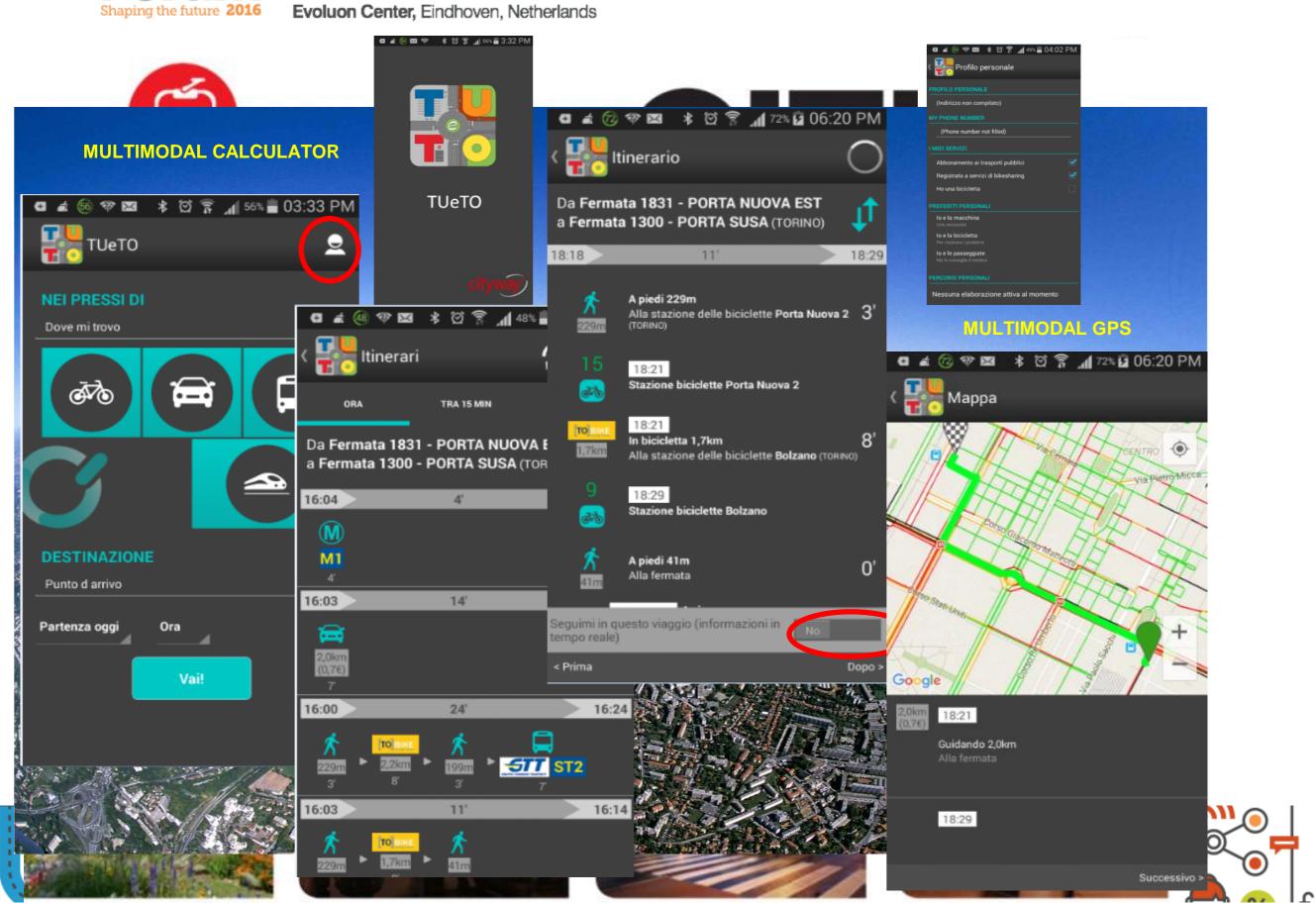
**Cristina Pronello** 

Politecnico di Torino Interuniversity Department of Regional and Urban Studies and Planning





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ex-ante

**Phase** 

### **DIGITALIZATION: THE GLOBAL TRANSFORMATION**

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Phase

# Methodology

Oct-Dec 2014

Feb-June 2016

July-Sept 2016

# **Ex-ante survey**

# Mixed method: quantitative questionnaire + focus group



Users' needs

Expectations

Potential for behavioural change

Selection of the sample

150 participants

# **In-itinere survey**

**Questionnaire** each month

Technical problems with the app

Ergonomic problems

Users' reactions

Behavioural reactions

A Smartphone Grand
Prime Galaxy and one
year free pass has
been given to
participants

# **Ex-post survey**

Mixed method: quantitative questionnaire + focus group

Potential behavioural changes

Sample of 140 participants

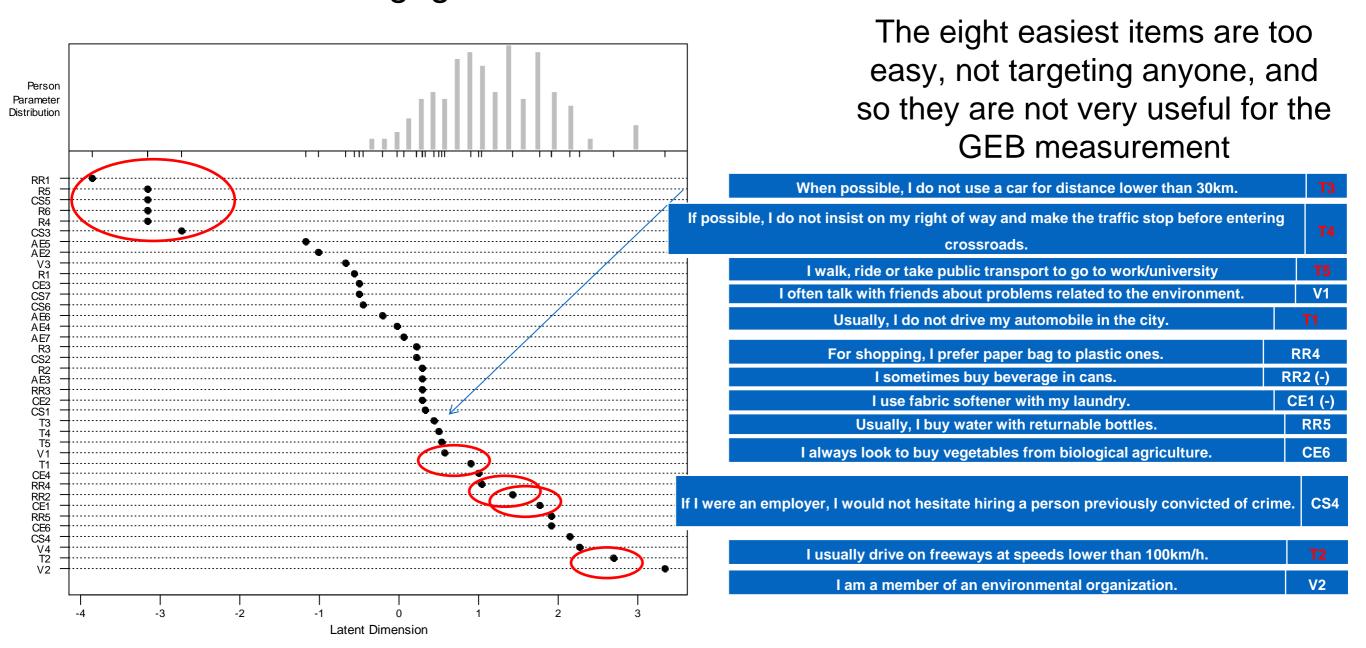


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# Results

From the easier-to-engage item to the most difficult one







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# Results

Personal norms (PN) Problem Awareness (PA) Adverse Consequences (AC)

Ascription of Responsibility (AR) Subjective Norms (SN) Affect (AFF) erceived Accessibility (PAC) Perceived Behavioural Control toward bicycle use (PBCb) Perceived Behavioural Control toward public transport use (PBCpt)

**Transport related Values (Exploratory Factor Analysis)** 

# psycho-social factors

5-point Likert scale  $\rightarrow$  the level of importance of choosing their mode of transport for their most frequent trip, according to:

"Cost", "Speed", "Comfort", "Pleasure (I like this mode of transport)", "Flexibility and independence", "Respect towards the environment" and "Reliability of travel time".



**Utilitarian (U)** (Speed, Flexibility and independence, Reliability of the travel time, Comfort **Convenience (C)** (Cost, Pleasure [I like this mode of transport], Respect towards the environment)



Home localisation (Home), divided into: Urban (U), SubUrban (SU), Rural (R)





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# Results

### **THREE CLUSTERS**

# **Neo-Luddites Opportunists:**

they value whatever they can benefit from

Neo-Luddism identifies people that follows a desire for a simple life where technological tools are restrained

to their minimum  $\rightarrow$  No use of TUeTO



# **Hedonic Techy Ecologists**

in favour of technological use higher score on the Convenience than on the Utilitarian transport value they prefer cheap and pleasant trips than fast and efficient ones



They expect that technology will solve many problems, including transport-related ones, and are aware of the need to pay to benefit from a service such as the multimodal navigator. They can represent the main source of revenue in a business model assessment

# **Neoclassical Agents**

Higher score on the utilitarian over the convenience transport related value low score on the measure of attitude toward the environment >

homo economicus: an agent who will tend to maximize its own short-term utility without consideration for the others or the environment



Even if they may benefit from the multimodal navigator, it is unlikely that they'll will shift from their most favoured mode until economical constraints will force them to do so





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# THANKS FOR YOUR ATTENTION



# CONTACT: Cristina Pronello

Politecnico di Torino - Interuniversity Department of Regional and Urban Studies and Planning
Viale Mattioli 39, 10125 Torino – ITALY
<a href="mailto:cristina.pronello@polito.it">cristina.pronello@polito.it</a>

