

# *USING SMARTPHONES FOR SOMETHING MORE THAN TRACKING ONLY*

**Martin Hudak & Marian Gogola**

*ERAdiate, University Science Park*

*University of Zilina*

*Slovakia*

# OUTLINE

- Introduction
  - Traditional travel surveys
  - Smartphone-based travel surveys
- Analysis
- **MoTiV** (Mobility and Time Value) project
- MoTiV mobile app
- Conclusion



# INTRODUCTION

## **Traditional travel surveys**

- Face to Face surveys (1950)
- Paper forms of questionnaires
- Telephone surveys
- Computer-assisted personal interviews (CAPI)
- Computer-assisted self-interviews (CASI)

## **Smartphone-based travel surveys**

- Based on the usage of GPS (1990)
- Smartphone identified as an innovative tool to get the traditional data

# INTRODUCTION

## Smartphone-based travel surveys

### Europe

- METPEX
- SOMOBIL
- SmartMo
- MoveSmarter

### Worldwide

- Modalyzer
- Happy Mobility Survey - Singapore



# ANALYSIS

## Smartphone-based travel surveys

The comparison of current mobile apps:

- **Human mobility(travel) apps**

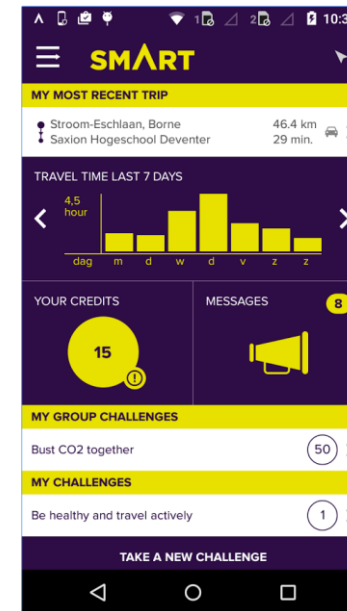
- Moves, Modalyzer, MotionTag

- **Human activities apps**

- Strava, Google Fit, Lifecycle

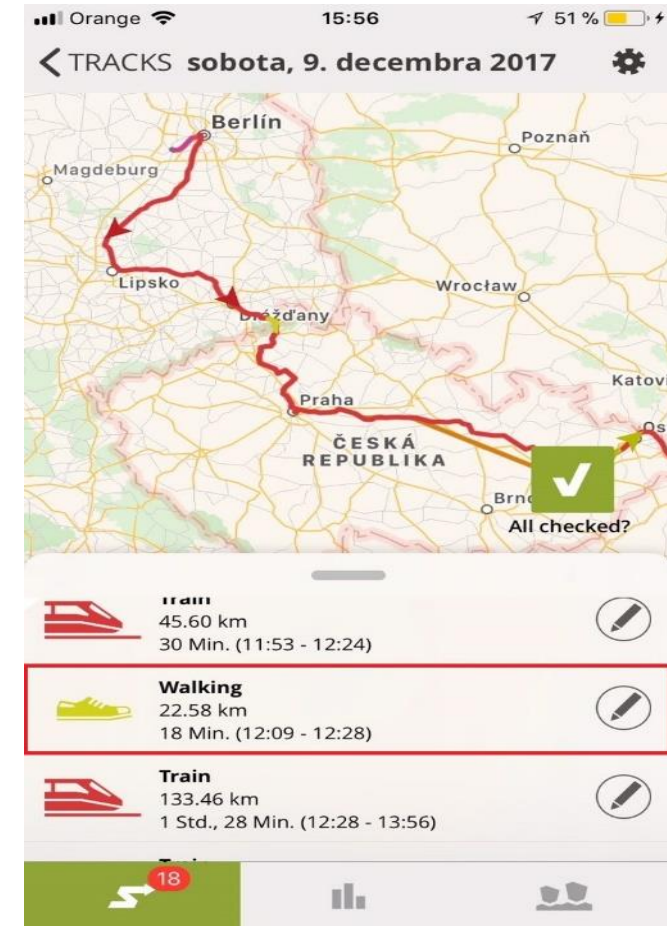
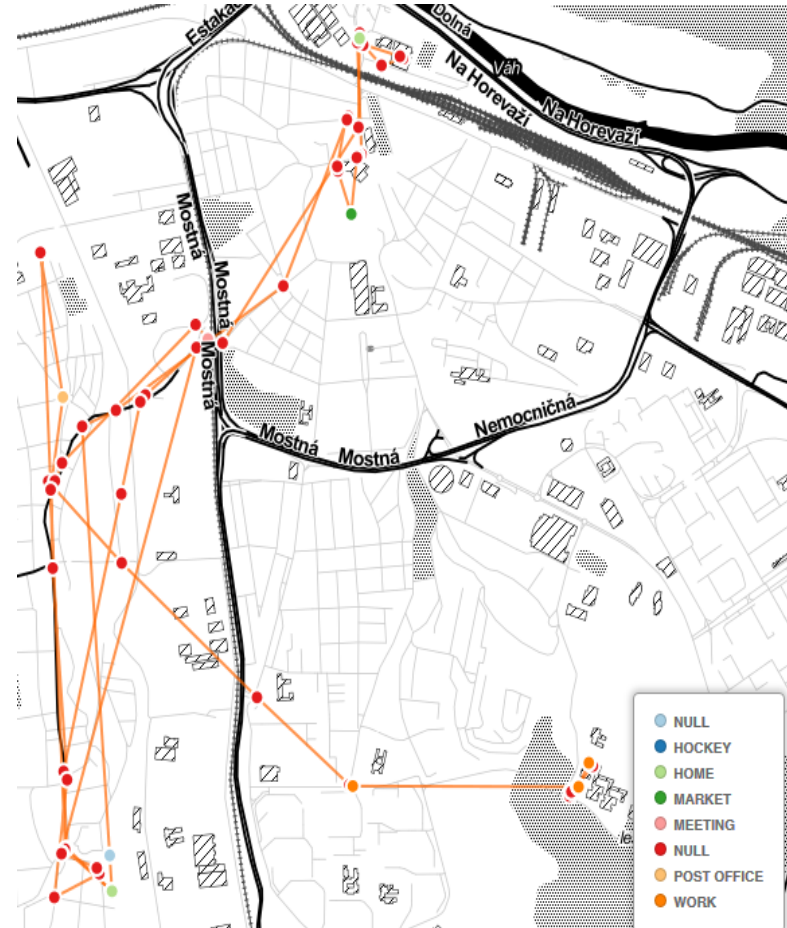
- **Human mood app**

- Mood meter, Mood Tools, How are you filling?



# ANALYSIS

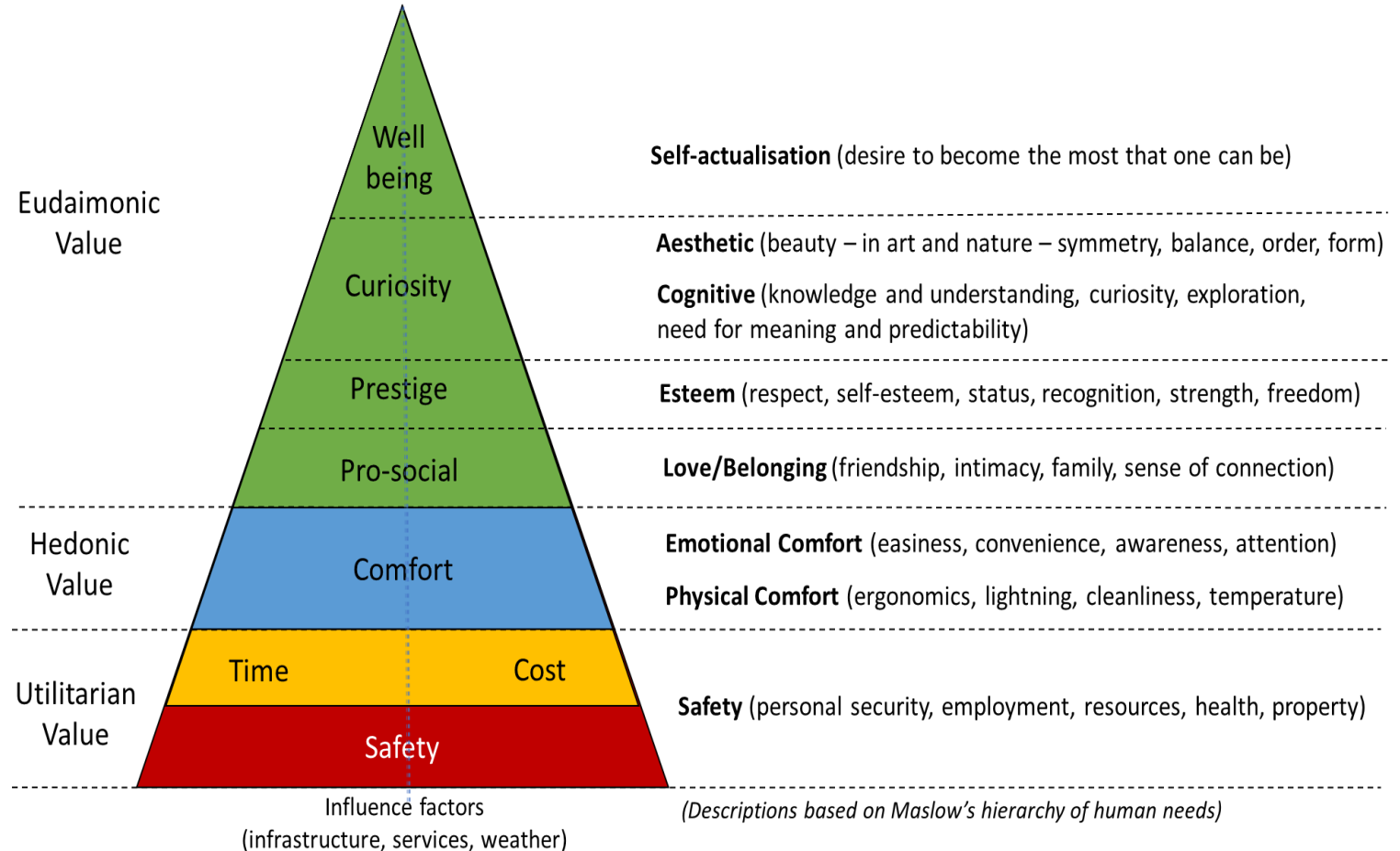
- Incorrect recorded data
- Transport mode was not detected properly
- Low user's interest



# MoTiV PROJECT

## Mobility and Time Value

- To introduce and validate a conceptual framework for the estimation of value of travel time (VTT)
- Smartphone-based Data Collection Campaign



# DATA COLLECTION CAMPAIGN

- Collecting the data from the users of **MoTiV** mobile App
- >5.000 users from at least 10 European countries
- Involvement of different stakeholders
- Open mobility and behavioural **dataset**
- Stimulate further research and applications on **Value of Travel Time**

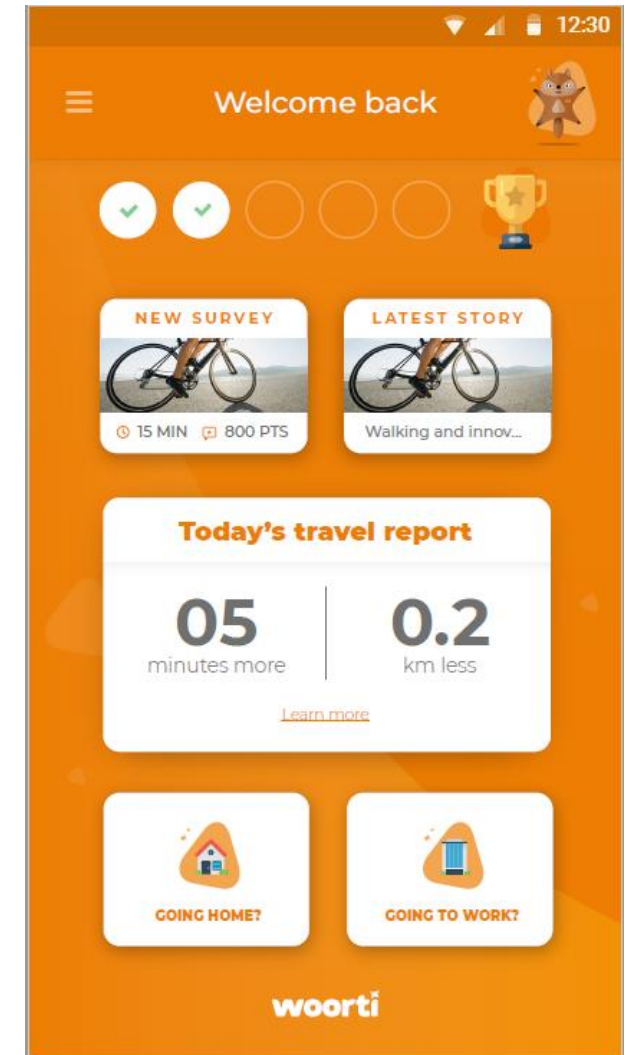




# MoTiV MOBILE APP

## Main functionality

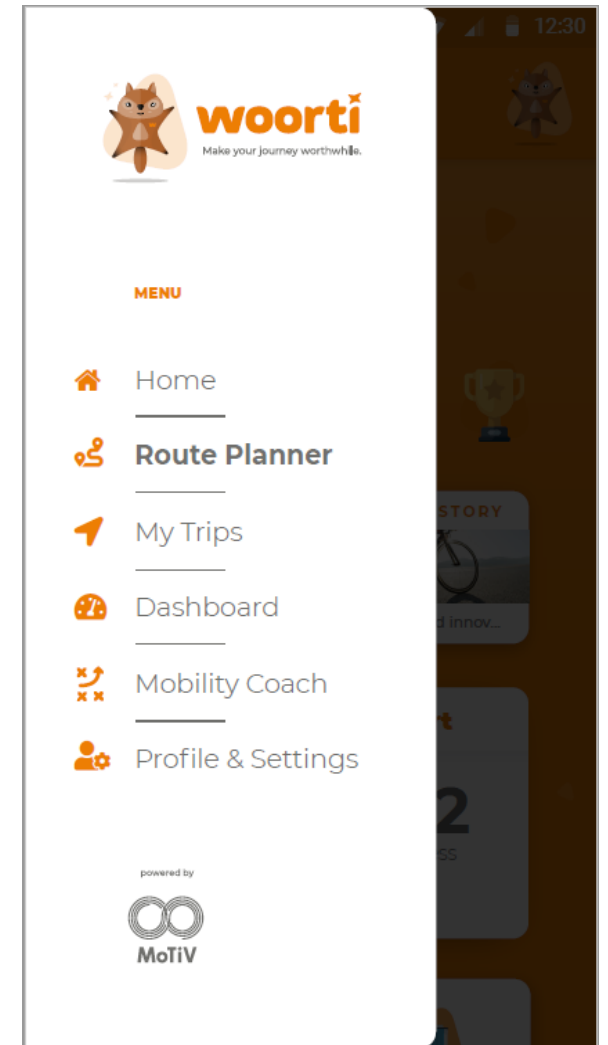
- Collecting the data from the users:
  - **Mobility data** - user's movement
  - **Activity data** - activity during the travelling
  - **Behavioural data** - user's behaviour during the travelling



# MoTiV MOBILE APP

## More functionalities

- Mobility Coach
  - Recommendations for better travelling
  - Optimizing user's trips
- Route Planner
  - Search for the best trip from place **A** to place **B**
- Live surveys
- User's feedback



# CONCLUSION

- How to use the smartphone in data collection process at maximum?
- The most important are applications dealing with the data collection as well as development of the users' interface.
- The MoTiV project brings the different approach with potential usage for any researchers, scientists or persons who are interested in this issue.

# THANK YOU FOR YOUR ATTENTION!



**Dr. Martin Hudák**  
[martin.hudak@uniza.sk](mailto:martin.hudak@uniza.sk)  
[www.motivproject.eu](http://www.motivproject.eu)