Into the Digital Age:
A Review of the Hungarian TUS2017 Pilot Project

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TUS 2017 Overview

- Explicitly a pilot program
- First attempt at gathering TUS data digitally
- Precursor of the „real” TUS 2020

Creating the questionnaire

Iterative process going through repeated tests

- cognitive interview
- group focus tests
- technological tests

Selecting the test subjects

The following factors were found to be important

- Type of settlement: Budapest + rural areas (small towns, villages)
- Educational attainment: high + low qualifications
- Age: youth + middle aged + elderly
- Work status/economic activity: students (secondary education, tertiary education) + actively working/employed + retired
- Type of occupation: traditional + non-traditional; working in different schedules (shifts, informal, etc.)
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Cognitive interviews - participants

- 20 respondents
- 5 interviewers
- observers (TU researchers, IT developers)

Cognitive interviews - objectives

- checking contents and comprehensiveness of questions and answers
- identifying defective interpretations and the reasons for them
- identifying confusion between idiomatic expressions and technical terminology
- finding the right ordering of questions and question blocks
- making the questionnaire more interviewer- and respondent-friendly

Focus group tests - participants

- Five homogeneous groups (each with 8 test subjects):
  - Elderly (over 60 years old)
  - Young (16-20 years old)
  - Families with small children
  - Economically active/working people
  - People with lower status (low educational attainment and occupational status, living in small towns)
- Moderator
- Facilitators
- Passive observers

Focus group tests - objectives

Getting acquainted with the respondents' views, problems and suggestions regarding:

- data collection
- questionnaires
- guides

Technological tests - participants

- Researchers
- IT personnel
- Colleagues
- Former test subjects

Technological tests - objectives

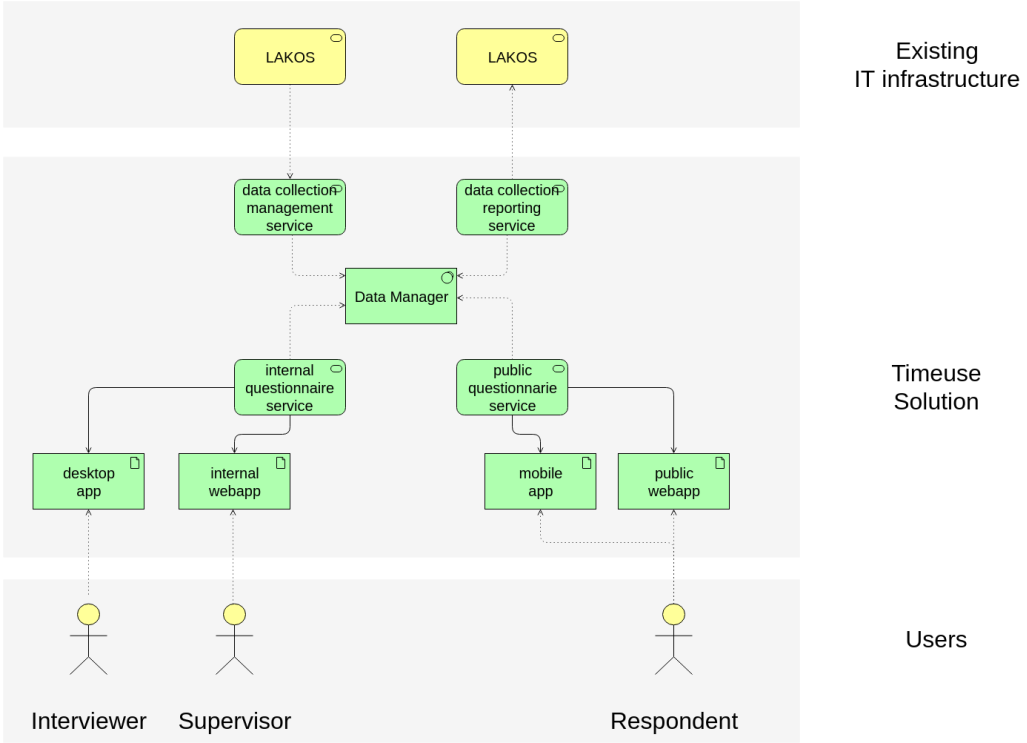
Testing the software:

- Testing various design choices
- Checking general user-friendliness
- Finding bugs

Running the survey

- 61 interviewers, 1416 assigned households
- interviews on a designated date in a two-month period with an interviewer or on the web
- 44% respondent rate among the valid address (37% in total)
- 978 individual diaries collected
- Additional data collection with self-filled diaries via web or mobile app

Software solution - overview



Software solution - properties

- General questionnaire engine with strong diary handling
- Extensible
- Modular

Software solution - interfaces

Communicating with the KSH's IT system

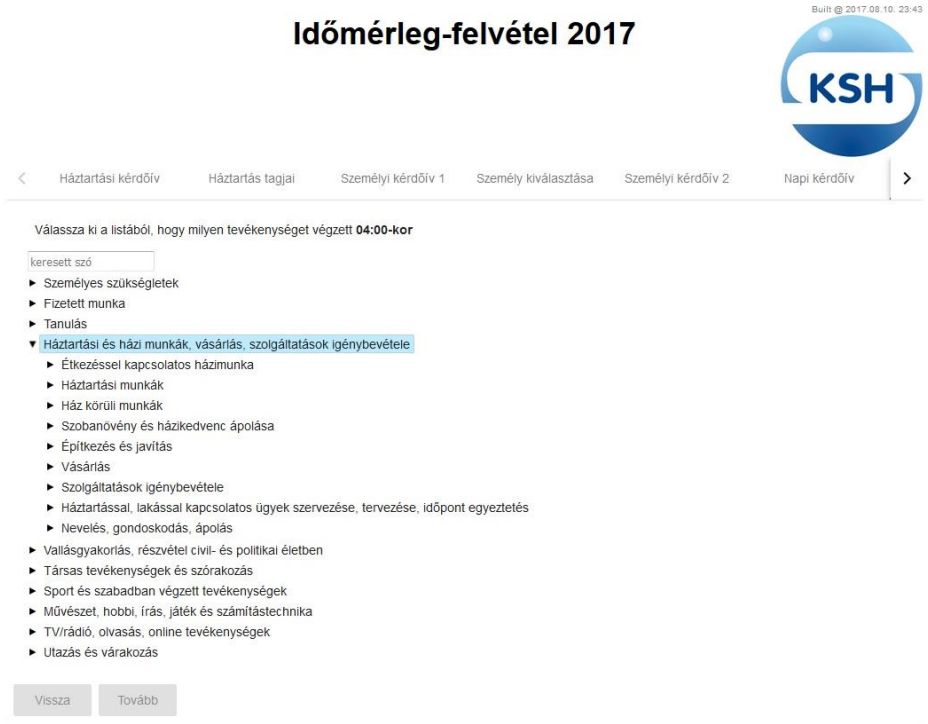
- Receiving list of interviewers
- Receiving list of designated addresses with interview dates and associated interviewer
- Reporting interview status for the households

Software solution - interfaces

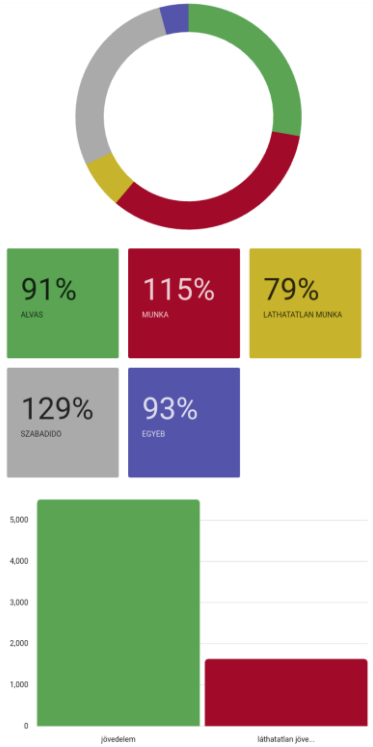
Presenting the questionnaires to interviewers and respondents

- Desktop application for interviewers that manages data for multiple households
- Web app for respondents for self-filling diary
- Mobile app for respondents

Software solution - interfaces



Software solution - interfaces



Software solution - interfaces

Reporting web app about questionnaires

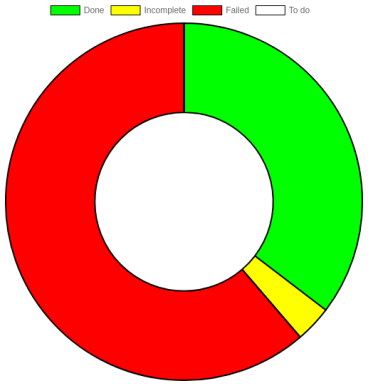
- Status of households
- Progress of interviewers
- Downloading questionnaire data

Software solution - interfaces

HOUSEHOLDS SURVEYS INTERVIEWERS

Households

Code	Description	Count
1	not started	0
10	fully completed via interviewer	482
11	partially completed via interviewer	42
13	fully completed via web	15
14	partially completed via web	5
15	fully completed via interviewer and web	4
16	partially completed via interviewer and web	0
21	can't identify address	25
22	non-existant address	10
23	unoccupied address	130
24	address is not of apartments	52
25	address can't be accessed	4
31	noone was found at home after 3 tries	166
41	refused to answer	458
42	unable to answer due to age, sickness etc	12
43	unable to answer due to language barrier	11
80	only household data yet	0



Lessons learned

- It's NOT “like a paper survey but on a screen”
  - new possibilities (non-fixed question, filtering possible answers etc)
  - new medium (navigating a GUI versus using paper and pencil)
  - new capabilities (recording GPS coordinates)

Lessons learned

- Understanding of the problem
  - no one really knew what is needed
  - ended up with working software

Lessons learned

- Creating a model of the problem space
  - identifying objects and actors
  - flexibility vs legibility
  - defining the foundations for future developments

Thank you for your attention!

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