SMALL-SCALE USABILITY TEST OF OCR IN MOTUS

A THINKING ALOUD EXPERIMENT

Theun Pieter van Tienoven
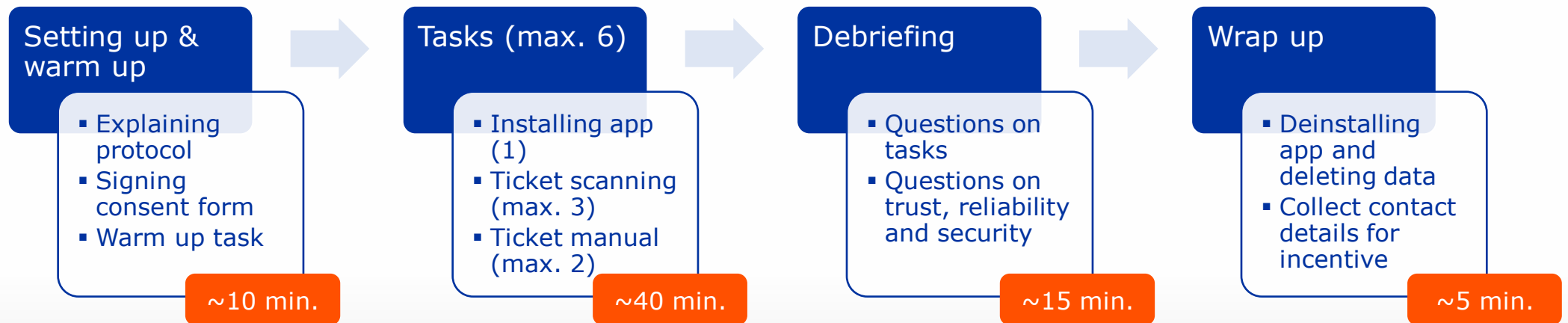
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BRUSSELS INSTITUTE FOR SOCIAL AND POPULATION STUDIES

Research Unit
Tempus Omnia Revelat (TOR)

METHODOLOGY & PARTICIPANTS

SET UP AND PROCEDURES

- 20 test persons (TP) planned, **18 conducted**
- Voluntary sampling in interviewers' network
- TPs used their own smartphone (Apple iPhone, Google Pixel, Samsung Galaxy, Xiaomi Redmi, Sony Experia)
- Time frame: 60-90 minutes
- Incentive: 20.00€ gift voucher from online store
- Survey period: May-June 2024

Setting up & warm up
- Explaining protocol
- Signing consent form
- Warm up task

~10 min.

→

Tasks (max. 6)
- Installing app (1)
- Ticket scanning (max. 3)
- Ticket manual (max. 2)

~40 min.

→

Debriefing
- Questions on tasks
- Questions on trust, reliability and security

~15 min.

→

Wrap up
- Deinstalling app and deleting data
- Collect contact details for incentive

~5 min.

CRYSTALLISED INTELLIGENCE IS THE ABILITY TO USE LEARNED KNOWLEDGE, SKILLS AND EXPERIENCE

= SMART

FLUID INTELLIGENCE IS THE CAPACITY TO SOLVE PROBLEMS AND REASON ABSTRACTLY WITHOUT RELYING ON PRIOR KNOWLEDGE

= CLEVER

~ RAYMOND CATTELL

01 ONE SIZE DOES NOT FIT ALL BUT SOME GENERAL IMPROVEMENTS ARE POSSIBLE

02 SCAN OPTION IS PREFERRED METHOD, BUT EXPECTATIONS ARE EXTREMELY HIGH

03 ONLINE SMART SURVEY DOES NOT MEAN NO INTERVIEWER IS NEEDED

04 CLASSIFICATION IS DIFFERENT FOR RESPONDENTS AND STATISTICIANS

05 INCREASING RELIABILITY OF DATA BY ADDING MORE CONTEXT INCREASES RESPONDENT BURDEN

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03 ONLINE SMART SURVEY DOES NOT MEAN NO INTERVIEWER IS NEEDED

MAIN FINDINGS

- Several respondents had a long run up ranging from **finding the ➕ button** to **understanding the entry fields**

- When stuck and asked about how they would normally proceed, the majority of respondents said **they would give up**.

- However, through trial and error – and some help from the interviewer – all respondents **came to grip with the registration flow**.

USABILITY ATTRIBUTES

Clear Instructions
Time efficient
Clear task flow guidance

Engagement
Data collection efficiency

Clear and intuitive UI
Clear task flow guidance

TSS E2E SOLUTION

Involvement and engagement

Acquiring/processing/combining data

Involvement and engagement
Acquiring/processing/combining data

Acquiring/processing/combining data

03 ONLINE SMART SURVEY DOES NOT MEAN NO INTERVIEWER IS NEEDED

POINTS OF ATTENTION	USABILITY ATTRIBUTES	TSS E2E SOLUTION
The **learning curve is very steep**. Interviewers might help with:		
WHY making the effort (i.e. engaging respondents)	Engagement Trust and credibility	Involvement and engagement Trustworthiness
WHAT is expected (i.e. managing expectations)	Clear instructions User control over data/info	Involvement and engagement Trustworthiness
HOW to make/correct diary entries (i.e. explaining the logic)	Clear and intuitive UI Clear task flow guidance (In app) training Data collection efficiency	Acquiring/processing/combining data
WHEN to make them (i.e. following up on progress)	Time efficient (In app) feedback	Involvement and engagement Acquiring/processing/combining data