Designing a Sample Management System for use in a cross-national on-line web panel: initial thinking and ideas

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CSDI workshop - March 18th / March 20th 2019 - Warsaw
Outline

- Challenges and the need for a Sample Management System (SMS)
- Aim of the project
- Functionality of the SMS
- Content with key fields
- High-level software architecture
The need for a cross-national SMS

The ESS experimented with the world’s first input harmonised probability-based cross-national web panel in three countries by recruiting panel members who had taken part in the face-to-face survey.

Key challenge:
- absence of a sample management system suited for use in a multi-country environment and which could also meet data protection requirements.
Major challenges

- Harmonised management of the sample in the three different countries
- Harmonised management of incentives
- Central management of different survey contacts (postal mails, emails and SMS)
- Harmonisation of the surveys’ translation into three different languages
- Access to panellists’ information at country and central level: restricting access right and preventing subsets of the staff being able to access panellists’ personal information proved challenging
Aim

- No “off-the-shelf” commercial software that was flexible enough to manage the complexity of a cross-national sample.

- ESS ERIC and Sciences Po will design a sample management system (SMS), based on prior experience with their national web panel, to meet the needs of cross-national projects.
Functionailities

**Storing** and updating panel member information
- Add new cases
- Add new variables
- Update existing variables

**Managing** a panel throughout the course of survey life cycle keeping track of the panellists’ activity
- Updates from participants (e.g. contact details, opting out)
- Updates from survey data (e.g. Whether or not the panel member has started/completed the interview)
  - The SMS should link directly with the survey instrument, allowing for updates to be pulled in ‘live’
- Fieldwork monitoring: generating basic tables

**Participant communications**
- Centralised management of email, text message, and (possibly) letter communications to panel members
  - Design of templates
  - Dispatch of emails
  - Collection & storage of paradata
### Key fields

<table>
<thead>
<tr>
<th>Variable description</th>
<th>Source</th>
<th>Fixed?</th>
<th>Editable?</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual ID</td>
<td>ESS</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Household ID</td>
<td>ESS</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Username</td>
<td>Original CRONOS sample file</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Password</td>
<td>Original CRONOS sample file/Updates</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Contact Information</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Title</td>
<td>ESS/Updates</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>First name</td>
<td>ESS/Updates</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Surname</td>
<td>ESS/Updates</td>
<td>No</td>
<td>Yes</td>
</tr>
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<td>Postal address (Address line 1, etc.)</td>
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<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Email address</td>
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<td>Yes</td>
</tr>
<tr>
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<td>Yes</td>
</tr>
<tr>
<td>Other phone number</td>
<td>ESS/Updates</td>
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<tr>
<td>Wave-specific variables (Participation)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whether issued</td>
<td>Manual updates</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Outcome (Live)</td>
<td>Updates</td>
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<td>Yes</td>
</tr>
<tr>
<td>Outcome (Final)</td>
<td>Manual updates</td>
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<td>Interview date</td>
<td>Survey data</td>
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</tr>
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<td>Date of mailing</td>
<td>SMS-computed/Digital comms paradata</td>
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<td>Digital comms paradata</td>
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<td>Experimental group 1</td>
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<td>No</td>
</tr>
</tbody>
</table>
Partners

- Consulting with other major infrastructures (EVS, SHARE and GGP)
  - To identify their specific needs
  - To try and make the tool versatile enough to be used by all
High-level software architecture
Two communicating web applications

- Survey developers
- Headquarters managers
- National coordinators
- Respondents

Survey Platform

Sample Management System

Web API
User roles

Survey developers

- User accounts on survey platform
  - Need not be aware of the SMS
- Implement questionnaire design
  - Limited privileges (e.g. no access to answers)
User roles

Headquarters managers

- Create national *samples*
  - *Set of respondents*
  - Managed by national coordinator
  - No HQ access to sensitive respondent data

- *Distribute* surveys to samples
  - Access to all surveys available on the survey platform
  - Dispatch surveys among samples

- Manage *national coordinator* accounts
  - Create accounts
  - Assign national coordinators to samples
Surveys
All the surveys currently available on Qualtrics

<table>
<thead>
<tr>
<th>Survey name</th>
<th>Samples concerned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naval history quiz</td>
<td>1</td>
</tr>
<tr>
<td>Test survey</td>
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</tbody>
</table>

Managers

<table>
<thead>
<tr>
<th>Username</th>
<th>Last name</th>
<th>First name</th>
<th>Email</th>
<th>Unassign</th>
</tr>
</thead>
<tbody>
<tr>
<td>anne.c</td>
<td>Corriveau</td>
<td>Anne</td>
<td><a href="mailto:anne@cdsp.fr">anne@cdsp.fr</a></td>
<td></td>
</tr>
</tbody>
</table>

Distributed surveys

<table>
<thead>
<tr>
<th>Survey</th>
<th>Started</th>
<th>Finished</th>
<th>Status</th>
<th>Cancel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naval history quiz</td>
<td>0</td>
<td>0</td>
<td>Published</td>
<td></td>
</tr>
</tbody>
</table>

FR 5 members
Assigned managers and distributed surveys
User roles

National coordinators

- Manage national *samples*
  - Import respondent data in the SMS
  - Access only data of sample they manage

- Survey *publication lifecycle*
  - View only headquarters-assigned surveys
  - Initiative to publish surveys to respondents
  - Follow response rates
User roles

Respondents

- Members of a *sample*
- Update *personal information*
- Access *published surveys*
Surveys

Surveys available for Jade Bernard

<table>
<thead>
<tr>
<th>Survey name</th>
<th>Last accessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naval history quiz</td>
<td>Dec. 11, 2018, 3:27 p.m.</td>
</tr>
</tbody>
</table>

Update personal information

First name
Jade

Last name
Bernard

Email
ad@example.org

Language
French

Save Cancel
In a thousand words...

Survey developers

Survey platform

SMS

Headquarters manager
Thank you for your attention!

We’ll gladly take questions!