



CMA

Case Management Application

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Overview

- Background
- Design Principles
- Basics
- Features
- Demo
- Future Work

Background – Blaise Survey Software

- Statistics Netherlands (CBS)
- Computer-Assisted Interviewing (CAI) system and survey processing tool
- Purposefully did not develop a case management system
 - Difficult to design one-size-fits-all

Case Management Definition and Features

- Automated computer system to track fieldwork efforts, so that supervisors can effectively and efficiently monitor fieldwork and manage cases
- Needed supervisory features (at minimum)
 - Track status of each case (e.g. not started, contact made, but R not selected, incomplete, complete, etc.)
 - How many calls (or visits) to the household
 - Review case notes
- Needed administrative tasks (at minimum)
 - Add and manage users (e.g., supervisors, interviewers)
 - Add and manage cases (e.g., transfer cases, remove cases from interviewers' devices)
 - Export data and paradata

Case Management Software

- Some organizations developed their own case (or sample) management systems
 - Statistics Netherland use Maniplus (or Manipula Dialogs)
 - SRC University of Michigan use PowerBuilder and Blaise APIs to develop SurveyTrak
- Some organizations do not have the resources to develop a case management application
 - Some manage with email and spreadsheets
 - Manual process
 - Not real-time

CMA – Development

- UM-SRC and CBS had early discussion about a CMA in 2016
 - Only way to develop at the time was using Dep Starter Kit, but each OS needed its own implementation
- Revisited CMA development in 2019
 - Blaise had a new tool: Manipula Dialogs
 - Decided to do a feasibility study
 - Specification developed by UM-SRC and CBS
- Beta testing started October 2019
- Many rounds of testing
- Many improvements and new features added

Design Challenges and Principles

- CMA...
 - Must handle multiple surveys at the same time
 - Use automation whenever possible
 - Example: Installing and removing
 - See all cases for all surveys in one list or filter by survey
 - Be agnostic from the surveys it has to manage
 - Easy to set up in different languages
 - Utilize underlying Dev App
 - Manipula Dialogs and Survey
 - Organizational- or study-specific features should be in separate CMA-specific datamodels

CMA - Basics

- Run in Windows desktop and Android devices
- Everything revolves around launcher database
- Centralized database contains all cases for all surveys
- Each case contains:
 - Information linking it to an entry in a specific survey
 - The information needed to contact the respondent
 - Many administrative fields to manage / to monitor field work
- In the launcher database each case is assigned to an interviewer that is defined as user in Blaise
- When CMA starts on device, all surveys needed to handle cases and the cases assigned to that interviewer are downloaded & installed on said device

CMA - Basics

- For the developers:
- Support for a survey specification file with some options for type of questions
 - E.g., yes/no, questions, register the geo position for the attempt
- Each survey can have a tailored attempts instrument
- Each survey can have a tailored contact info instrument and a template to display information on CMA screen
- Full translation of user interface
- Launcher case can contain image
- Launcher case contains 'backup' of attempts and collected survey data (i.e., paradata)
- Interviewers can be allowed to add cases

CMA - Features

- For supervisors:
 - Ability to re-assign cases to another interviewer (from X to Y)
 - Ability to restore all cases for a specific interviewer on a new device
 - Ability to remove completed cases
 - Writes a log file of the interviewers' actions in CMA and uploads a log file once a day / on demand to the office

CMA - Future

- Developing Admin Tool
 - Menu driven interface for non-technical person to manage case (sample), users and export data
- Extensions planned
 - Training mode
 - Add support for linked surveys

CMA - Demo

Thank you!

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