



Survey Research Operations

Survey Research Center

Institute for Social Research

Using CARI: Observations from Survey Organizations

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Motivation

- **Bring together survey organizations to discuss how each is using CARI technology.**
- **Specifically looking at the technical and operational approaches and challenges.**

US Census Bureau	Statistics Canada
University of Michigan, Survey Research Center	Statistics Netherlands
RTI, International	Westat



Background

- **CARI has been used since late 1990's. Part of a standard tool set for survey organizations.**
 - **CARI reviews for adherence to survey protocols and as interviewer performance feedback tool.**
- **Before CARI, audio tapes (field) and monitoring (centralized telephone) were the norm.**



CARI is a Multi-Purpose Tool

- CARI has now become an important and more commonly used tool in survey processes.
- Key uses during pre-production, production and post-production.
 - Sometime the CARI audio file is a project deliverable or input for behavior-coding the respondent-interviewer interaction.



Survey Life Cycle and CARI

1. Questionnaire design
2. Questionnaire programming
3. Interviewer training
4. Field work
5. Data processing & coding
6. Quality assurance
7. Data deliverable



Quicker Interventions

- Like monitoring, CARI can provide (closer to) real-time feedback to researchers, survey supervisors and survey directors on the survey collection process.
- Using CARI strategically could facilitate responsive interventions while a survey is “in the field.”



Key Issues Explored in “CARI Summit”

- **Data Collector Evaluation Criteria**
 - Frequency of interviewer monitoring/evaluation
 - Methods of feedback and reporting
 - Critical errors; major and minor
 - Could a common framework for evaluation be conceived?
 - How to best use paradata attached to CARI files?



Key Issues Explored (2)

- **Audio or Audio and Screen (or video)**
 - Tradeoffs to obtaining
 - What value does the screen capture add
- **Sampling/ Content to Record**
 - Stratifying for selection of segments or on other paradata
 - Best practices for selection of items
 - Difference in CATI vs. CAPI



Key Issues Explored (3)

- **Training – monitors and interviewers**
 - Do interviewers change their behavior if they know they are being recorded – is this good or bad?
 - How do we train evaluators?
 - How do we train interviewers?



CARI Summit Summary



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Operations & Sampling

- **Setting the rate of recording and proportion of recorded CARI segments to evaluate.**
 - **Varies by organization and project from 100% to 5%**
 - **Norm was ~10% (completed cases)**
 - **Some projects may target by time (e.g., 3 segments per week; first two completed interviews followed by sampling rate).**



Considerations for Rate of Evaluation

- The type and complexity of project and the staffing may affect the sampling plan for evaluating the CARI segments.
- Rates of evaluation may also vary across the field period, generally higher at the beginning of a project, or by key variables of the survey.
 - Use paradata to support evaluation



Selection of Content to be Recorded

- Questions or groups of question -- typically around **8-10** items evaluated per interview; though this varies by organization.
- **Pre-defined capture** list which never varies, based on key analytic variables.
- **Tailor** the type of evaluation to the recorded segment.



Evaluation Criteria

- **Consistent set of evaluation criteria – similar across all of the organizations.**
 - **Mostly noting errors – by type and severity – though ‘positive’ behaviors occasionally noted, as well.**
- **Interviewer skills and behaviors; knowledge and adherence to study protocol.**



Evaluation Criteria 2

- **Feedback provided to interviewers via report, typically via the direct supervisor.**
- **Some scores are standardized across interviewers and/or ranked.**



Training Evaluators

- Training provided to interviewer regarding the quality control process varied.
 - Ranged from a simple explanation of the consent to record question read to respondents to detailed review of the evaluation criteria.
- Significant interest in whether a **common framework** for evaluation could be developed – industry standard.



CARI -- Application of Technology

- All organizations using CARI – audio portion and typically audio and visual display of the Blaise screen. UM also uses an external program to take a “movie” of the collection process.
 - Discussion about the added value of external video file.
 - It does capture external programs outside Blaise (e.g. EHC) and interaction between questions.



CARI-- Movie

- **Demonstration video of UM interviewer (practice session) using Camtasia**



CARI-- Application of Technology

- **“CARI Hook”** -- the idea was formulated to open up Blaise CARI in such a way that the user can specify to use a recorder other than the Blaise CARI built-in audio recorder.
 - **Make it possible for the user to rely on their own recorder component while having the full benefits of Blaise CARI.**



CARI-- Application of Technology

- The CARI Hook has been implemented in Blaise 4.8.4.
- For example the new CARI hook could be used to record screen video (using for instance Camtasia®) but it can also be used to record VOIP.
 - Must create an ActiveX® component (DLL) to interface between Blaise CARI and the recorder.



Putting it Together

- **Blaise CARI is an important and useful tool. Survey organizations are using it across all types of projects.**
- **CARI has facilitated an improvement in data quality – primarily through enhanced feedback on interviewer performance.**
- **Also supports engagement with researchers – listening and seeing the survey in collection process.**



Contact Information

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