

Quality Assurance through Computer Audio-Recorded Interviewing

“The Statistics NZ implementation”

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Problem

How do you ensure the quality of field collected Data?

Traditional methods are often:

- Logistically challenging and expensive for remote areas.
- Expensive and time consuming
- Difficult to qualify
- Subjective views can be reached through comparison of audit information



$$\frac{8}{6} \quad x = \frac{20}{15} \quad x = 2.5$$

$$\begin{array}{r} 4 \\ 15 \\ \times 8 \\ \hline 125 \\ 2.5 \\ \hline 6 \overline{)125} \\ \underline{12} \\ 5 \end{array}$$

$$\begin{array}{r} 4 \\ 15 \\ \times 8 \\ \hline 120 \\ 6 \overline{)120} \\ \underline{12} \\ 00 \end{array}$$

Solution

Introduce a set of field interviewer best practice standards and quality assurance mechanisms.

The use of Computer audio-recorded interviewing (CARI) aids :

- Quality assurance of the data collected
- Monitoring of adherence to standards
- Evaluation of the effectiveness of questionnaires



Computer audio-recorded interviewing

CARI provides the unobtrusive recording of verbal communication between an interviewer and respondent as the survey is conducted.

*“CARI is a laptop computer software application that allows the computer to act as a sophisticated tape recorder as the interviewer administers a computer assisted personal interview questionnaire”. **

* Herget, Biemer, Morton & Sand, 2009. Retrieved 20 May 2009 from www.fcsm.gov/01papers/Herget.pdf

Implementation

Build into Blaise the ability to record audio.

Considerations

- Audio file compression, large audio file(s)
- Audio file naming, uniquely identifying the audio file
- Security, who has access
- Disablement, the ability to record only if consent is given



Implementation – Cont.

Two choices exist:

- Component Object Model (COM) using Blaise
 - Alien Router
 - Alien Procedure
- Audit Trail extension
 - Used to capture information as the interview is conducted

Prototype:

- To determine the best approach



Implementation – Cont.

Extending the Audit Trail function:

- Audit trail functionality was ‘familiar’
- Audit trail functionality was stable
- The existing Audit trail functionality remains in place

Can be ‘configured’ for use on new and existing Blaise instruments without modification.

Usage

Configuration

- Blaise
- CARI - uses the Audit Trail Information file (.AIF) to store configuration
 - Question(s) to record
 - Duration of recording per question
 - Recording device
 - Audio recording format
 - Consent question text

Integration

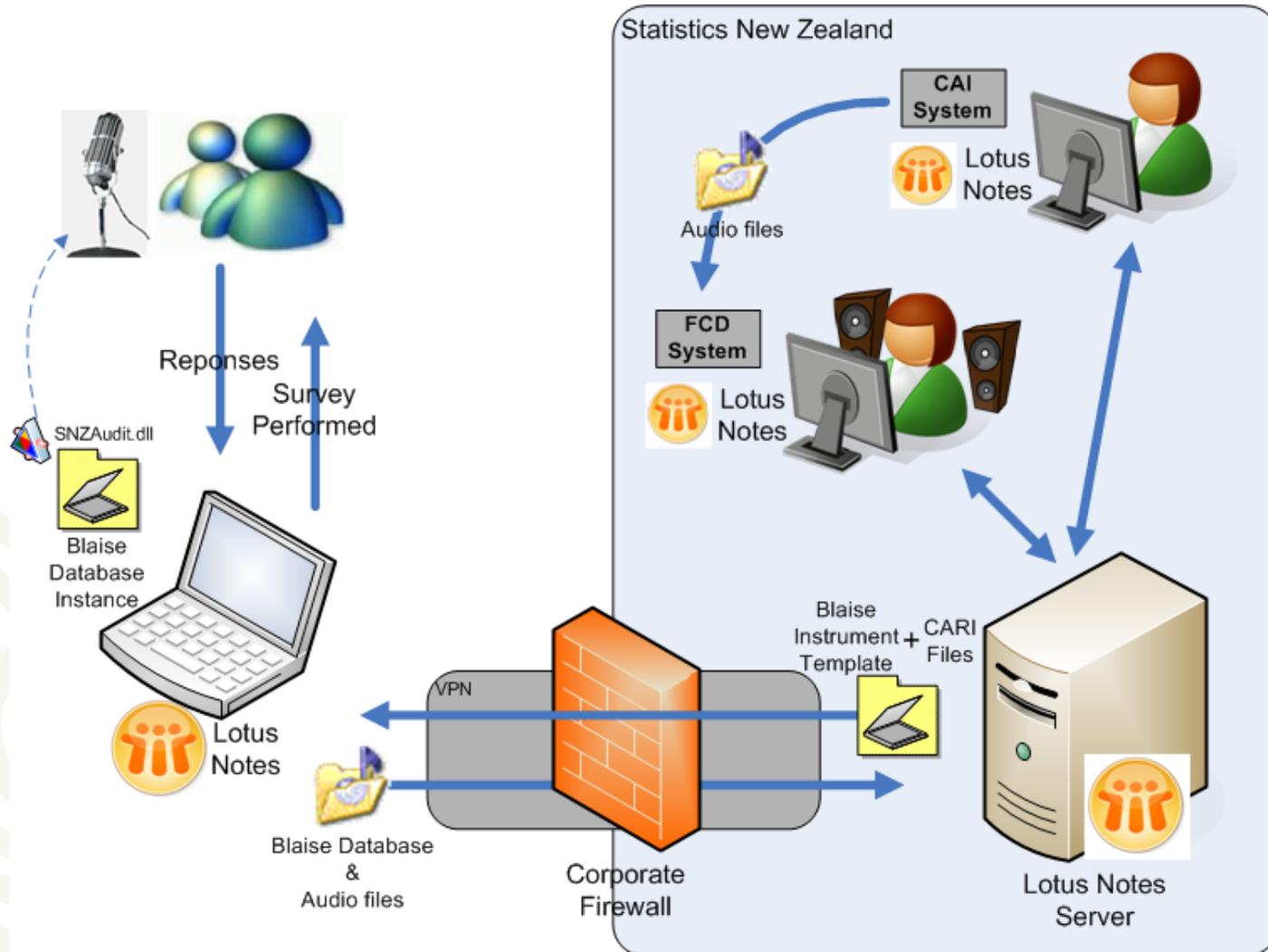
CARI by itself does not solve the quality assurance problems.

Field Collection Directory (FCD)

- Allows quality assurance staff to use the audio recording to rate and comment on the interviewer performance
- Allows questionnaire developers to evaluate performance of the instrument

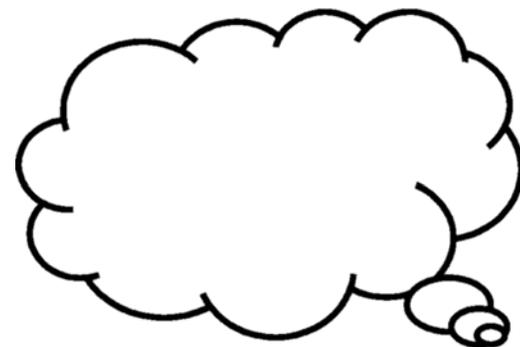


System



Conclusion

- While CARI appears to be a relatively simple concept, the amount of work required to develop and integrate an end-to-end solution should not be underestimated
- Other considerations include:
 - Response rates
 - Privacy
 - Governance & Archiving



Questions?