Questionnaire Testing for Business & Establishment Surveys

Experiences at Statistics Canada

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Overview

- Background
- Testing Business Surveys at STC
- Practices and Considerations
- Challenges
- What we have learned. How can we improve?
- Emerging Issues
Questionnaire Design Resource Centre

- Focal point for questionnaire design & testing at Statistics Canada
- Established in 1985
- Provides consultation & testing services for:
  - Social surveys
  - Business & establishment surveys
  - Agricultural surveys
- Services provided in both official languages
Cognitive Testing at Statistics Canada

- Cognitive methods first used to test household & social surveys (1987)
  - 1991 Census
  - Labour Force Survey
  - Survey of School Leavers

- Methods extended to business & agricultural survey questionnaires (early 1990’s)
  - Census of Construction
  - Survey of Employment, Payrolls and Hours
  - 1992 Farm Financial Survey
Testing Business Surveys

- Increased demand in recent years.
  - Program initiatives (respondent relations, efficiencies)
  - Broader scope of subject matter
  - New & emerging data needs

**Examples:**
- Information & Technology
- Research & Development
- Environment
- Globalization
Practices & Considerations

- Recruitment and scheduling
- Test materials
- Methodologies & fieldwork
- Reporting
Recruitment Considerations

- Selective
- Sources:
  - Centralized, confidential lists of business operations (e.g. business or farm registers, or survey-specific sampling frames)
- Recruiters:
  - Experienced STC recruiter or trained interviewers
  - Task is not out-sourced
  - Improved control over recruitment
Recruitment Challenges

- Accuracy and completeness of recruitment lists
- Finding Person Most Knowledgeable (PMK)
- Endorsement by industry associations
- Scheduling & on-site visits
- Monitoring overlap
Preparation of Test Materials

- Timing
- Translation
- Developing interviewer guide
- Are participants receiving advance materials?
Methodology & Fieldwork

- Cognitive Interviews

- Verbal Probes
  - Maintains control of the interview
  - Consultant manages time for test items & probing
  - Pre-determined & situational

- Think-alouds
  - Not typically used
  - General lack of proficiency; burden; ‘training time’
  - ‘Over-think’ reality
Concurrent or Retrospective

• Decided as part of overall test strategy

Factors

• Questionnaire size and complexity
• Proposed data collection methodology
• Scope of testing requirements or phase
Other Fieldwork Considerations - Business Surveys

- One-on-one interviews (with observer)
- Small interview team
- Recording
- Testing in phases (locally, when feasible)
- Reporting
  - Interim debriefing sessions
  - Draft & final reports
Challenges - Summary

- Recruitment & scheduling
- Test-ready materials
- Implementing fieldwork
Business Survey Testing – Recent Developments

Usability Testing

- Example: Greenhouse Gas (GHG) Report
  - Concurrent cognitive interviews & usability testing
  - On-site visits with large oil & gas, manufacturing & mining and electricity companies.
  - QD Consultant, Program Developer and Subject Matter Expert
Testing & Survey Practices - Recent Examples

- **Tillage Survey**
  - Land management practices
  - Machinery

- **Information & Communication Technology Survey**
  - Terminology and level of knowledge
  - Comparability

- **Agricultural Water Use Survey**
  - Data collection methods
  - Data complexity and detail
Looking Ahead

Areas for continued improvement:

- Earlier involvement with conceptual development
- Usability testing - gain experience
- Alternative measures of success