TECH 646 Analysis of Research in Industry and Technology

Surveys

Lecture note based on the Ch. 10 of the text book and supplemental materials:

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Surveys – Learning Objectives

Understand …
1. The process for selecting the appropriate and optimal communication approach.
2. Factors affect participation in communication studies.
3. Major sources of error in communication studies and how to minimize them.
4. Major advantages and disadvantages of the three communication approaches.
5. Why an organization might outsource a communication study.
The percent of business executives that believe that job loss and off-shoring will have the most impact on shareholder value in their industries in the next five years.

WWW Exercise
- Find a study that compares two methodologies
  - Telephone Survey vs. Internet Survey OR
  - Self-administrative Mail and Online Survey
Academic Quality Assurance Tools

- **Administrative/Staffs**
  - Faculty/Staff satisfactory survey
  - Chancellor/Vice-Chancellor
  - Dean/Dept. Char Performance survey

- **Academic Program Surveys**
  - New program needs/justification
  - Student course evaluation
  - Faculty course assessment (Self-administrative, Internet online)
  - Graduation survey
  - Employer survey
  - Alumni survey
Communication Approach

- Surveys, Interviewing people, and recording responses for analysis about
  - Attitudes, Motivations, Intentions, Expectations, Perceptions, etc
- Strengths
  - Versatility
  - Efficiency
  - Geographic coverage
- Weaknesses
  - Error
  - Inaccessible populations
Exhibit 10-3 Sources of Error

- Error Sources
  - Measurement Questions
  - Participant
  - Interviewer

Sources of Error (cont.)

- Measurement Question Error
  - Select or craft inappropriate questions
  - Ask questions in inappropriate orders, or
  - Use inappropriate transitions and instructions to elicit information
Sources of Error (cont.)

- Interviewer Error
  - Failure to secure full participant cooperation - Sampling error
  - Failure to record answers accurately and completely - Data entry error
  - Process error
    - Interview inconsistency
    - Interview environment
    - Data or survey falsification
    - Influencing behaviors
    - Physical presence bias

- Participant
  - Lack of knowledge
  - Misrepresentation of information
  - Concepts or construct misinterpretation
  - Incomplete participation
  - Refusal of participation (non-response error)
Exhibit 10-4 Factors Influencing Participant Motivation

Response Terms

- **Noncontact Rate**
  - A ratio of potential but unreached contacts to all potential contacts
  - A contact may be unreachable due to no answer, busy signal, answering machine or voice mail, and disconnects

- **Refusal Rate**
  - Refers to the ratio of contacted participants who decline the interview to all potential contacts

- **Incidence Rate**
  - Refers to the ratio of contacted people who actually qualify for the survey to all contacts
Communication Approaches

Self-Administered Survey

Telephone Survey

Survey via Personal Interview

Self-Administered Surveys

Modes

Mail

Intercept

Drop-off

Disk-by-Mail

Fax

CASI
(Computer-assisted self-interviews)
Self-Administered Surveys (cont.)

- **CASIs** (Computer Assisted Self-Interviews) - Computer-delivered self-administered questions use
  - Organizational Intranet
  - Internet
  - Online services
  - e-mail
  - Pop-up windows

Self-Administered Surveys (cont.)

- **Intercept Surveys** at
  - Malls
  - Conventions
  - State fairs
  - Vacation destinations
  - Busy steer corners

- **Via**
  - Paper-and-pencil questionnaire
  - Computer delivered survey via kiosk
Evaluation of Self-Administered Survey

- Topic Coverage
- Anonymity
- Systematic
- Costs
- Sample Accessibility
- Time Constraints

Designing Questionnaires Using the TDM

- Total Design Method (by Don Dillman) based on social exchange theory
  - Easy to read
  - Offer clear directions
  - Include personalization
  - Notify in advance
  - Encourage response
Options for Web-based Surveys

- A Survey both delivered and collected via the Internet
- Fee-based Service
  - www.SurveyMonkey.com
  - www.vovici.com (WebSurveyor and Perseus are now Vocivi)
- Off-the-Shelf Web-based Survey software

Advantages of Web-based Surveying Software

- Questionnaire design (word processing environment)
- Question and scale libraries
- Automated publishing to the Web
- Real-time viewing of incoming survey data
- Rapid transmission of results
- Flexible analysis and reporting mechanisms
# The Web as a Survey Research Venue

## Advantages
- Cost savings
- Short turnaround
- Use of visual stimuli
- Access to participants
- Perception of anonymity
- Access to data and experiences otherwise unavailable

## Disadvantages
- Recruitment
- Coverage
- Difficulty developing probability samples
- Technical skill
- System compatibility issues
- Possible self-selection bias

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## Advantages of Self-Administered Study

- Access inaccessible participants
- Incentives for higher response rates
- Lowest-cost
- Geographic coverage
- Minimal staff needed
- Perceived anonymity
- Reflection time
- Question complexity

- Rapid data collection
- Visuals possible
- Multiple sampling possible
Disadvantages of Self-Administered Study

- Low response rates in some modes
- No interviewer intervention
- Cannot be too long
- Cannot be too complex
- Requires accurate list

- Skewed responses by extremists
- Participant anxiety possible
- Directions necessary
- Need for low-distraction environment
- Security

Improving Response Rates to Surveys

- Advance notification
- Reminders
- Return directions and devices
- Monetary incentives
- Deadlines
- Promise of anonymity
- Appeal for participation
Telephone Survey

Advantages of the Telephone Survey

- Lower costs than personal interview
- Wide geographic coverage
- Fewer interviewers
- Reduced interviewer bias
- Fast completion time
- Random Dialing
- CATI (Computer-Assisted Telephone Interview)
Disadvantages of the Telephone Survey

- Lower response rate
- Early termination
- Higher costs if geographically dispersed sample
- Limited Interview length
- Inaccessible populations
- Limited complexity of scales

Survey via Personal Interview

- CAPI (Computer Assisted Personal Interviewing)
  - Employing visualization techniques
  - Can be costly
- Intercept Interview
  - Targets participants in centralized locations
  - Reduced costs
Personal Interview Survey

Advantages
- Good cooperation rates
- Interviewer can probe and explain
- Visual aids possible
- Illiterate participants can be reached
- Interviewer can prescreen
- CAPI possible

Disadvantages
- High costs
- Need for highly trained interviewers
- Time consuming
- Labor-intensive
- Some unwilling to invite strangers into homes
- Interviewer bias possible

Key Terms
- Communication approach
- Computer-administered telephone survey
- Computer-assisted personal interviewing (CAPI)
- Computer-assisted self interview (CASI)
- Disk-by-mail survey
- Computer-assisted telephone interviewing (CATI)
- Intercept interview
- Interviewer error
- Mail survey
- Noncontact rate
- Nonresponse error
Key Terms (cont.)

- Panel
- Personal interview
- Random dialing
- Refusal rate
- Response error
- Self-administered survey
- Survey
- Telephone interview
- Web-based questionnaire