SURVEY RESEARCH
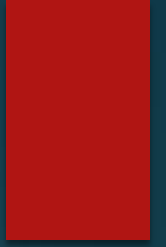
Two approaches to collect primary data

- 1. Observe → conditions, behavior, events, people, or processes

- 2. Communicate with people.

- Selected approach determines the research design to be followed.

Communication Approach

- Involves surveying people and recording their responses for analysis.
- Versatile approach: variety of communication media can be used.
- Traditional communication media – Human interactive media.
- Modern communication – use of digital technology – Electronic interactive media.
- Non-interactive media.

Human Interactive Media

▶ **Personal forms of communication. Face to face interaction of individuals and or groups. Can also be conversation on telephone**

Electronic Interactive Media

- Use of digital technology to reach people.
- Respondents are actively involved. Internet – new electronic interactive media

Non-Interactive Media

- ▶ **Traditional questionnaire received by mail**

- ▶ **Self administered questionnaires**

- ▶ **Questionnaires delivered through other means – Fax machine, uploading on internet, printing in the newspaper.**

Choosing a Communication Media

- Once decided about doing survey then collect data by using different media:
- - Personal interviewing
- - Telephone interviewing
- - Mail questionnaire
- - Self-administered questionnaire
- - Computer assisted medium
- - Mixed media

Personal Interviewing

- Face to face interaction between strangers
- Respondent provides information with little hope to receive any immediate or direct benefits.
- Personal interview can take place anywhere.

Advantages of Personal Interviewing

1. The opportunity for feedback

- Clarify respondent's apprehensions. Assurance for confidentiality.
- Clarify questions asked. Clarify instructions given for responses.
- Debriefing

2. Probing Complex Questions

▶ **Probing implies the verbal prompts made by the interviewer when:**

▶ **Response is not clear.**

▶ **Enlargement of the response is needed.**

▶ **All the more needed in open ended questions.**

3. Length of Interview

▶ **Compared with other interviews personal interviews can be lengthy, if needed.**

4. High Completion Rate

► **Interviewer to make sure that all applicable questions have been answered.**

► **In telephone, the respondent may just hang up in the middle.**

► **Personally administered questionnaire have hi incompletion rate. Don't want to write long answer for open ended questions.**

► **Item non-response: failure to provide an answer to a question. Low in personal interviewing**

5. Props and Visual Aids

- Can see the new product sample, taste a product and give his/her evaluation. It is not possible for telephone interview or a mail survey.

6. High Participation Rate

- ► The presence of the interviewer increases the % of people to participate.

- ► No reading, no writing – only talking. Share their feelings with friendly and sympathetic interviewers.

7. Observing the Non-Verbal Behavior

▶ **Interviewer can catch the body language, facial expressions. Observe the environment as well.**

8. Non-Literates can Participate

- Illiterate or functionally illiterate person can take part in the study.

9. Interviewer can Prescreen Respondent

- ▶ Respondent to fit the sampling criteria.

- ▶ Interviewer has some control over the environment.

- ▶ No control in mail survey, telephone interview, or internet interview

10. Computer Assisted Personal Interviewing

► **CAPI – Use of modern technology**

► *Microcomputers can be used for direct entry of responses. Reduces error and cost*

Disadvantages of Personal Interviewing

1. High Cost

- **Geographical proximity, length of questionnaire, No. of recalls – influence cost**
- **Training, supervision, logistical arrangements add to the cost.**
- **Estimates show 15 times higher than mail survey.**

2. Scarcity of Highly Trained Interviewers

▶ **For quality study we need quality interviewers. In short supply**

3. Callbacks –A Labor Intensive Work

▶ **Callbacks are attempts to re-contact the missing sample cases.**

▶ **Labor intensive work – increases cost.**

4. Interviewer Influence

- **Demographic characteristics of the interviewer can influence the respondent's responses.**

5. Interviewer Bias

▶ **Biases in understanding, recording, and interpreting the responses**

6. No Opportunity to Consult

- **Interview may take place anywhere – the respondent unable to consult any record or person in case he has to.**

7. Less Standardized Wording

- **Interviewers may make alterations in wording, and sequencing of questions. Bias the data**

8. Limitations of respondents' availability and accessibility

▶ Some executive officers and VIPs are never available or not willing to talk to researchers.

9. Some Neighborhoods Difficult to Visit

▶ **Security reasons**

▶ **Some neighborhoods may not allow outsiders. Some others may be scary for the interviewers.**

Door to Door Interviews

- Personal interviews at respondent's home or place of work.

- More representative than others. We walk through. Can catch those without phones or having unlisted numbers.

- May exclude living in multiple dwellings, high rise buildings, executives.

- People who are at home are special type – moms, retired persons

Intercept Interviews in Shopping Mall

▶ Shoppers are interviewed at a central point in the mall or at the entrance.

▶ Low cost.

▶ Incidence of refusal is high.

▶ May not be a representative sample of the population.

▶ Each mall will have its own characteristics.

▶ Hi traffic areas – some fast food center

Telephone Interviewing

- Mainstay of commercial survey research.
- Data quality comparable to personal interviewing.
- Respondents may more willing to give their opinions on phone.
- TS can provide representative samples of general pop in industrialized countries.

Central Location Interviewing

▶ **Conduct all interviewing from central location.**

▶ **Wide-Area Telecommunication Service (WATS) lines provided by long distance service at fixed rates, unlimited calls.**

▶ **Hire professional interviewers**

▶ **Supervise and control the quality of interviewing.**

▶ **Research cost-effective.**

Computer Assisted Telephone Interviewing (CATI)

▶ **Responses to be entered directly to computer.**

▶ **Telephone interviewers seated at computer terminals.**

▶ **Monitor displays the questionnaire – one question at a time, precoded responses.**

▶ **Interviewer enters the responses in computer**

▶ **Programming facilitates interviewing.**

The Strengths of Telephone Interviewing

1. High Speed

- ▶ **Quickly reach the respondents.**
- ▶ **With CATI quick data processing**

2. Saves Cost

- **Cost of telephone interviewing is less than 25% of the door to door personal interviews.**

3. Callbacks Easier

▶ **Unanswered calls, busy signal, respondent not at home needs callback.**

▶ **Telephone callbacks are substantially easier and less expensive than personal interviews.**

4. Expanded Geographic Area Coverage without increasing the cost.

5. Uses fewer but highly Skilled Interviewers.
6. Reduced Interviewer Bias

7. Better Access to hard-to-reach respondents

- Some people don't want to go for person to person interviewing. Prefer telephone interviewing.

- Interviewers may be reluctant to visit certain neighborhoods, especially in the evening. Telephone interviewing overcomes such problems

8. Use Computer Assisted Telephone Interviewing

- **Responses can be directly entered into computer file to reduce error and cost**

Weaknesses of Telephone Interviewing

1. Absence of Face-to-Face Contact

- **More impersonal than face-to-face interviews.**

- **Absence of face-to-face contact may be a liability. Respondent and the interviewer don't see each other what they are doing. (Respondent still responding when he/she is thinking and not speaking. Has the interviewer finished recording)**

2. Response rate lower than for Personal Interviews

- ▶ **Some individuals refuse to participate.   (Executives easily refuse. Participants find it easier to terminate)**

3. Lack of Visual Medium

- **Research requiring visual material cannot be conducted by phone.**

4. Limited Duration

▶ **Length of interview limited. Respondent may hang up when they feel spent up.**

▶ **(Plan telephone interviews approximately for 10 minutes)**

5. Many Numbers Unlisted or not Working

▶ Can affect the sampling design.

6. Less Participant involvement

- **Result In less thorough responses.**
- **Respondents' experiences less rewarding than a personal interview.**
- **Rapport building defficient.**

7. Distracting Physical Environment

- **Distractions on the side of the respondent.**

Self Administered Questionnaires

- Ubiquitous in modern living.
- Mail questionnaires + other modes

Advantages of Mail Questionnaire

- 1 Geographic Flexibility: Reach all corners of the country/world.

- 2. Sample Accessibility: Contact those who may inaccessible.

- 3. Save Time:

- 4. Saves Cost:

- Respondent Convenience:

- Anonymity:

- Standardized Questions

Disadvantages of Mail Questionnaire

- 1. Low Response Rate
- 2. Low Completion Rate
- 3. Increases Cost
- 4. Interviewer's Absence
- 5. No Control on Question Order
- 6. Cannot use Lengthy Questionnaire
- 7. No Control Over Environment
- 8. Cannot catch the non-verbal behavior
- 9. Non-Literates cannot Participate

Increasing Response Rate

- ▶ **Response rate is the number of questionnaires returned or completed, divided by the total number contacted.**

- ▶ **Response rate of self administered questionnaires is low.**

- ▶ **Here are some guidelines for increasing response rate.**

Cover Letter

- An important means of inducing a reader to complete and return the questionnaire.

- Establish rapport by telling: why this study, who is the sponsor, how was subject selected, assuring the anonymity.

- Make it a personal letter, individually typed on a personal letterhead.

Money Helps

- ►Offer monetary incentives or rewards.
- ►Attracts the attention and creates a sense of obligation

Interesting Questions

▶ **Topic and related questions cannot be changed.**

▶ **Certain interesting questions may added, perhaps in the beginning, to stimulate the respondent's interest.**

Follow-Ups

- Reminders
- May include another copy of the questionnaire.
- Number of reminders to be sent.

Preliminary Notification

► **Preparing the respondent through advance notice through letter/telephone.**

► **Notify closer to the questionnaire mailing time.**

► **Depends upon the infrastructure, nature of study, and the type of respondents.**

Survey Sponsorship

- **Goodwill of the sponsor may influence the response rates.**

Facilitate the Return of Questionnaire

▶ Simplify the return.

▶ Inclusion of self addressed stamped envelope encourages the response.

Postage

- Expedited delivery may be effective.
- Use first class mail.
- Use special stamps (if available) in place of metered mail

Personalization

- **Personal inside address, personally typed cover letter, and individually signed letter may make some difference.**

Size, Reproduction, and Color

- ► Use A-4 size paper
- ► Good quality of paper
- ► Attractive printing.
- ► Use different colors for different parts.
- ► Do not fold the questionnaire.

Make use of all the techniques simultaneously (Total Design Effort – TDE)

E-Mail Surveys

▶ **Relatively new method of communication.**

▶ **Quite frequently used where possible.**

Advantages of E-Mail Surveys

➤ **Speed of distribution.**

➤ **Lower distribution and processing cost.**

➤ *More flexibility.*

➤ **Less handling of paper questionnaires.**

➤ *Many respondents more comfortable in impersonal communication.*

Disadvantages of E-Mail surveys

- "Eves-dropping" of e-mails by organization

- Maintaining anonymity is difficult. Sender's address is there.

- Not all e-mails have thee same capacity: software limitations

Internet Surveys

- Self administered questionnaire posted on a Web-site.
- Respondents provide answers to questions displayed on screen by highlighting a phrase, clicking an icon, keying in the response

Advantages of Internet Surveys

Speed and Cost Effectiveness

- ▶ **Reach a large audience, personalize the messages, secure confidential answer quickly and cost effectively.**

- ▶ **Eliminates the cost of paper, postage, data entry, and other administrative costs.**

- ▶ **Incremental cost of reaching additional respondents is marginal. Hence enlarge the sample.**

Visual Appeal and Interactivity

- Internet surveys can be interactive.

- Use color, sound, animation which may increase respondent motivation.

- Visual material can be presented.

Respondent Participation

▶ Some computer users navigate to a particular Web site where questions are displayed.

▶ Expect participation and cooperation

Accurate Real-Time Data Capture

▶ **Respondents responses entered as soon as the questionnaire is submitted. (software for data cleaning as well)**

▶ **Researcher can review up-to-the-minute sample size counts and tabulation of data.**

Callbacks

- Depending upon thee sampling frame. Easier to callback.
- Those sending incomplete questionnaires can also be identified.

Personalized and Flexible Questioning

- No interviewer in Internet survey but the software interacts with the respondent.

- Computer asks question in a sequence determine by respondents previous answer.

Respondent Anonymity

- Respondents feel comfortable in sharing sensitive information.
- No interviewer, no address

Response Rate

- **Response rate can be increased by sending e-mail friendly reminders.**

Disadvantages of Internet Surveys

All People cannot Participate

▶ **Many people do not have access to Internet facility.**

▶ **All with access do not have the same level of technology.**

▶ **Many lack powerful compatible software.**

▶ **Some may have no skills to navigate.**

No Physical Incentive

- ▶ **Physical incentives cannot be sent**

Selecting the Appropriate Survey Research Design

► No "best" form of survey.

► Compare the research objectives with the strengths and weaknesses of each method. Also

► How much confidentiality is necessary? See which method can best deliver.

Ask question like:

- Is the assistance of interviewer necessary?
- Are respondents likely to be interested in the issues being investigated?
- Will cooperation be easily attained?
- How quickly the information be easily attained?
- How quickly the information is needed?
- Will the study require a long complex questionnaire?
- How large is the budget?

The Criteria

- The cost, speed, anonymity, and the like may be different for each project.
- If none is a good fit, then use *mixed method*.

TOOLS FOR DATA COLLECTION

Basically Three Tools

- 1. Questionnaire
- 2. Interview schedule
- 3. Interview guide
- Both 1 and 2 are list of questions.
- Questionnaire handed over to the respondent, who reads and fills it.
- I.S. remains with the interviewer, who reads the questions to the respondents, gets the response, and records it.
- We will use *questionnaire* for both.
- Interview guide is list of topics to be covered during an in-depth interview.

Guidelines for Questionnaire Design

- Questionnaire is an instrument for measuring variables.

- Properly worded questionnaire helps in minimizing many problems.

- Questionnaire design is a critical stage.

- Focus on: What should be asked? Phrasing of questions, sequencing the questions, and lay out of the questionnaire.

1. Questionnaire Relevancy

▶ **Question relevant to the respondent.**

▶ **Questions relevant to the topic.**

▶ **Rationale for each item of information**

2. Questionnaire Accuracy

▶ **Make sure that the information is reliable and valid.**

▶ **Come down to the level of the respondent. Avoid jargon, slang, and abbreviations. *Marital status*.**

3. Avoid Ambiguity, Confusion, and Vagueness

▶ **People use their perspective to interpret a word/concept e.g. What is your income? People assign different meanings.**

▶ **Avoid using words with indefinite frame of reference.**

4. Avoid Double-Barreled Questions

- D-B question consists of two or more questions joined together.
- Makes the answer ambiguous. "Does this Co have pension and health insurance benefits?"

5. Avoid Leading Questions

- LQ: That leads the respondent to choose one response over the other by its wording.
- Make respondents feel that all responses are legitimate.
- "You don't smoke, do you?" "Don't you think that women should be empowered?"

6. Avoid Loaded Questions

- LQ: suggest socially desirable answer or are emotionally charged.

- Should the city government repair all broken roads?

- Question loaded with such material that may hit the emotions of people e.g. Behaviors associated with masculinity in Pakistani society – Asking a husband – Have your ever been beaten up by your wife? Can be embarrassing.

7. Avoid Burdensome Questions

▶ **People forget.**

▶ **Certain question may make serious demand on respondent's memory. How did you feel about your brother when you were 6 years old?**

8. Arrange Questions Sequentially

► **Make the questionnaire an integrated whole. No jumping back and forth.**

► **Make the opening questions simple and interesting. Arouses respondent's curiosity.**

► **Funnel Technique: Moving from broader issues to specific one.**

9. Use Filter questions if Needed

▶ Asking question that doesn't apply to the subject can be irritating or bias the answer.

▶ Use filter question: That screens out respondents not qualified the second question.

▶ Asking about bringing up of one's children. Prior to that ask if a person is married. If yes is he/she a parent.

10. Layout of the Questionnaire

- Two issues: Overall physical layout, and format of questions and responses.

- Attractive in appearance is crucial in self administered questionnaire.

- Number each question. Never camp the questions.

- Make a cover sheet for each. Put the time and date of the interview, the interviewer name, the respondent ID number, interviewer's comments.

- Give instructions. Print in different style.

- Include a polite, professional cover letter on letterhead, identifying the researcher. Always end with "Thank you for your cooperation."

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PILOT TESTING THE QUESTIONNAIRE

Pilot Testing

- Also called pre-testing: Small scale trial run of a particular component.
- Here focus is on trial run of questionnaire.

Involves

- Small group selected on convenience.

- Could be 25+

- Similar to the one to be sampled.

- Administering questionnaire exactly as planned often is not possible (Problems in mail questionnaire).

- Usually go for personal interviewing

What aspects to be evaluated?

▶ **Reactions of Respondents**

▶ **Discovering errors in the instrument**

▶ **Checking the sampling procedure**

▶ **Staffing and activities of research team**

▶ **Evaluating the procedure for data processing and analysis**

1. Reactions of the Respondents

▶ **Availability of study population (timing).**

▶ **Acceptability of the questions asked. Experience stimulating. Were the questions sensitive/threatening? Acceptability of the wording.**

▶ **Willingness of the respondents to cooperate.**

2. Discovering errors in the instrument

▶ **Validity and reliability of the instrument. Tabulation of the results → Do these meet the measurement objectives? Determine the appropriateness of question.**

▶ **Time taken. Length of the questionnaire.**

▶ **Any need to revise the format of the tool? Placement of sensitive questions. Pre-testing helps in proper sequence, wording, translation, spacing, structuring answers, coding. Needing instructions.**

3. Checking the Sampling Procedure

▶ The extent to which the instructions given are followed to reach the respondent. Locating problems and possible solutions.

▶ Time needed to locate the respondents.

4. Staffing and Activities of Research Team

- How successful the training has been? Pre-testing a period of extra training.

- What is the work output of each member?

- How well the research team works together?

- Is the logistical support adequate?

5. Evaluating the Procedure for Data Processing and Analysis

▶ **Make dummy tables. Use appropriate statistics, and make interpretations**