

# SURVEY AS RESEARCH METHOD

**Presented by:**

**Prof IM Ambe**

**Department of Entrepreneurship, Supply  
Chain, Transport, Tourism & Logistics**

**Management Email: [ambeim@unisa.ac.za](mailto:ambeim@unisa.ac.za)**

**ADDIS, ETHIOPIA  
30 MAY 2017**



# **PURPOSE OF SESSION**

To explore survey as a research method

# Research strategies

- select
  - Experiment – variables; hypotheses
  - Survey – questionnaires; quantitative data
  - Archival research – admin records & documents
  - Case study – phenomenon in its real life context
  - Ethnography – study groups
  - Action research – iterative process of inquiry
  - Grounded theory – develop theory inductively
  - Narrative inquiry – collect & analyse complete stories
- Or a combination of strategies

# WHAT IS A SURVEY



1. Gathering of a sample of data or opinions considered to be representative of a whole group or population.
2. Information is collected primarily by asking questions.
3. Information is collected from a sample (or portion) of a population.

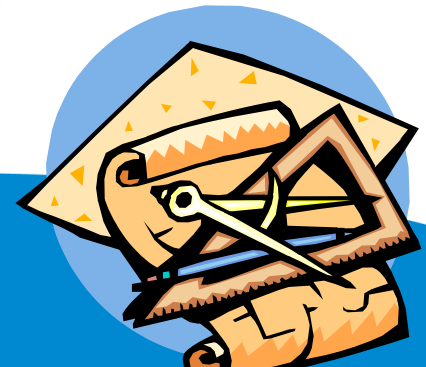
# Therefore, survey research is about asking questions about...

Setting out to describe what is?

- Behaviors
- Opinions/Attitudes
- Facts
- Beliefs

Ways to ask these questions:

- Telephones
- Interviews
- Mail
- Internet



# Topics appropriate for survey research

- Descriptive, exploratory, and explanatory
- Units of analysis = respondents
  - Respondents – A person who provides data for analysis by responding to a survey questionnaire.
- Large samples, original data, measuring attitudes and orientations



# Types of survey designs?

## Time of Data Collection

### Study Over Time

#### Longitudinal

Trends in the same population over time

Trend

Changes in a sub-population group identified by a common characteristic over time

Cohort

Changes in the same people over time

Panel

### Study at One Point in Time

#### Cross-sectional

Attitudes and Practices

Group Comparisons

Community Needs

National Assessment

Program Evaluation

# KEY CHARACTERISTICS OF SURVEY DESIGNS

- Sampling from a population
- Collecting survey data through questionnaires or interviews
- Designing instruments for data collection
- Obtaining a high response rate
- Designing and using a mailed questionnaire
- Conducting an interview survey



# POPULATION, TARGET POPULATION, SAMPLING FRAME, SAMPLE

*Warning: Bad Sample = Bad Data*

## **The Population**

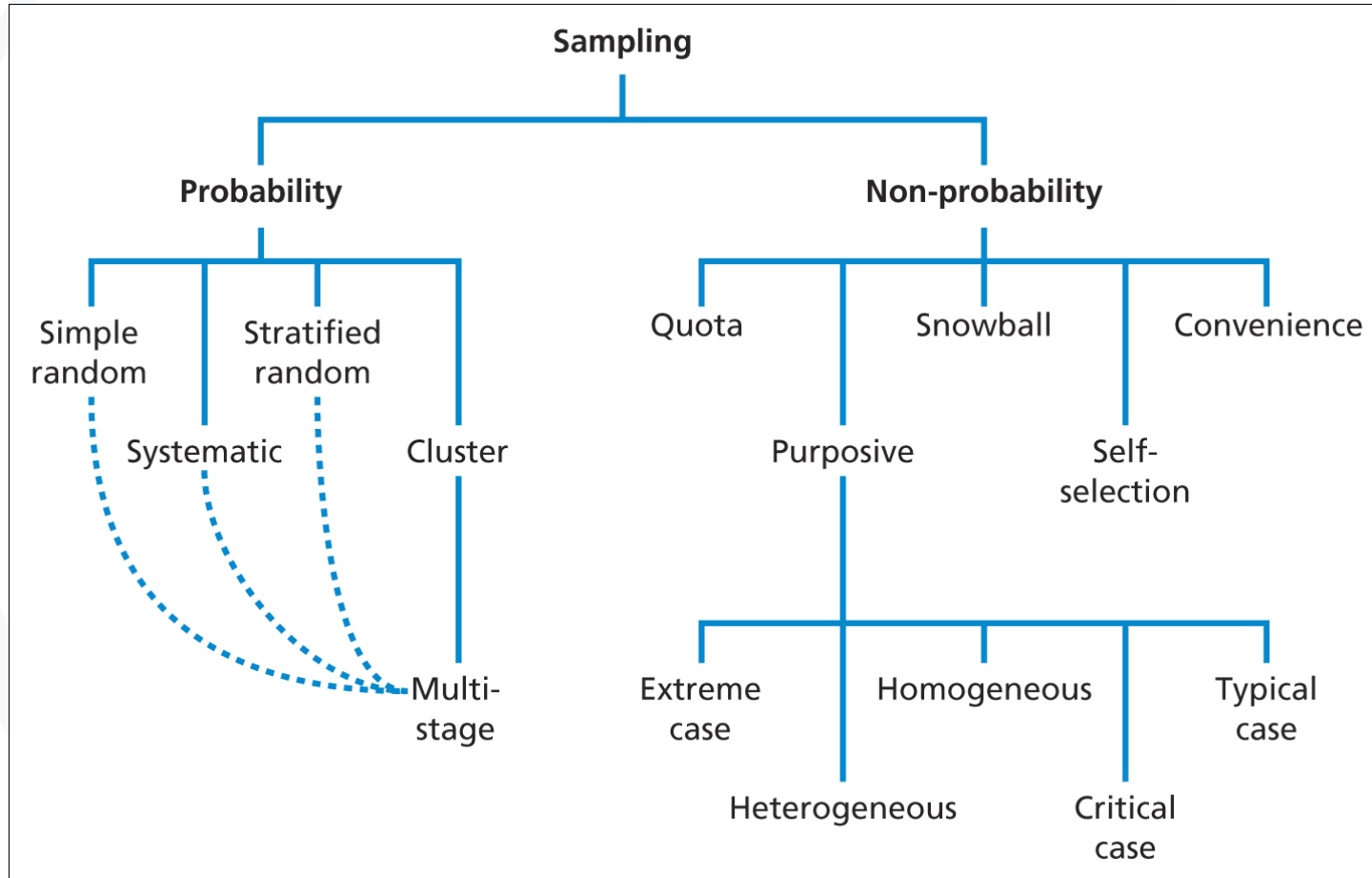
is the group of individuals having one characteristic that distinguishes them from other groups.

**The Target Population or Sampling Frame** is the actual list of sampling units from which the sample is selected.

## **The Sample**

Is the group of participants in a study selected from the target population from which the researcher generalizes to the target population.

# Selecting Samples



# COLLECTION DATA IN SURVEY RESEARCH

Survey data can be collected using two broad categories: the **questionnaire** and the **interview**.

**Questionnaires:** Usually paper-and-pencil instruments that the respondent completes.

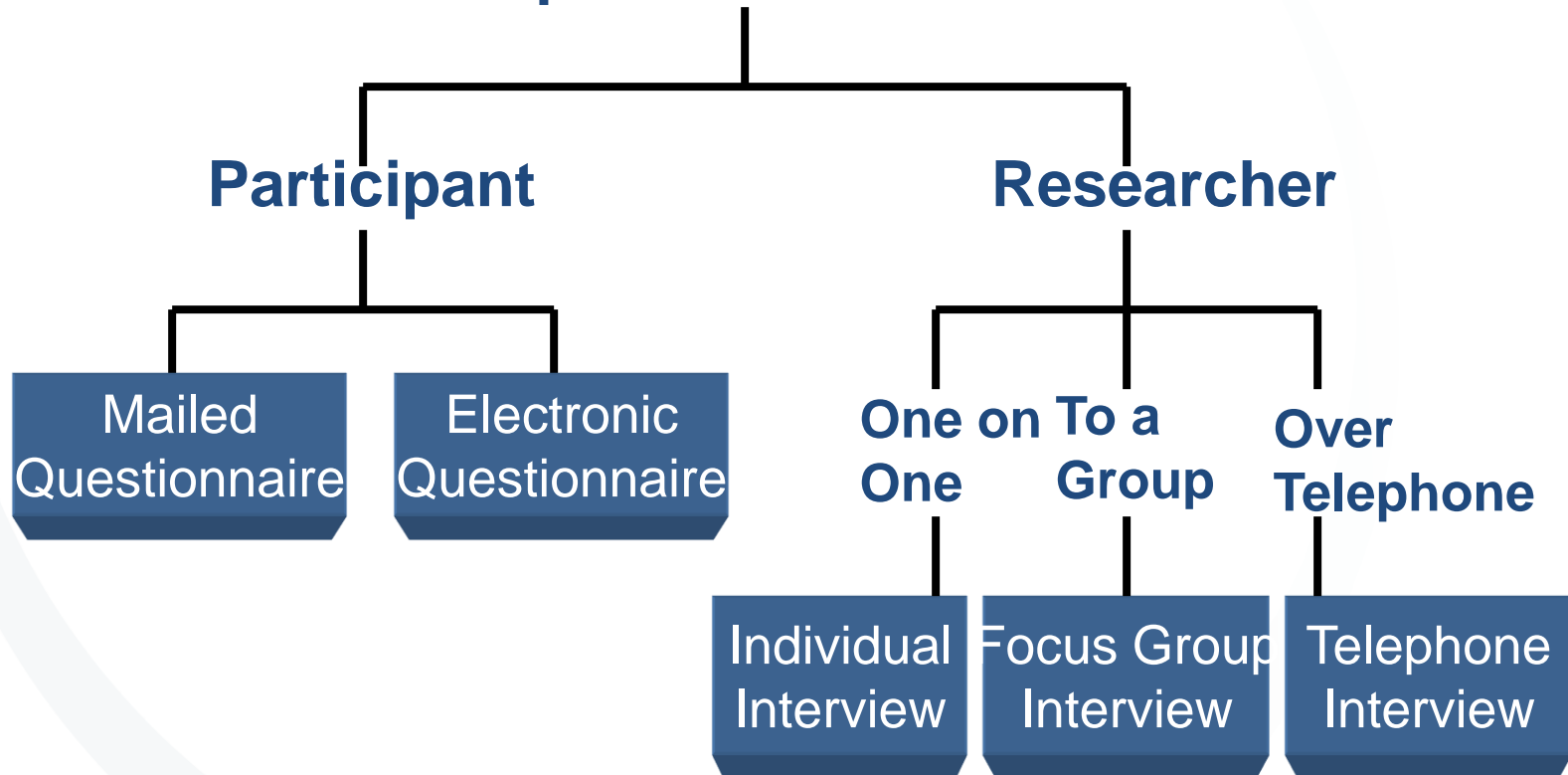
**Interviews:** Completed by the interviewer based on the respondent says.

# Collecting data through questionnaires

- Mailed questionnaires
- Electronic questionnaires
- One-on-one interviews
- Focus group interviews
- Telephone interviews

# Forms of data collection in survey research

## Who Completes or Records the Data?



# Group administration of questionnaire

## Advantages

- Many respondents can complete the questionnaire in a short space of time
- Test administrators can check questionnaire for accuracy
- Relatively cheap and easy to do.
- Respondents can be reached across long distances.
- Response rate optimal
- Interviewer can assist immediately if question is unclear

## Disadvantages

- When managed by different administrator, it could lead to different responses.
- Primary researcher has limited control over what happens in the field.
- Condition over which questionnaire is administered cannot be controlled by primary researcher.
- Costs could be rather high when using standardised tests.



# Mail/Postal survey

## Advantages

- It is relatively cheap and easy to do.
- Respondents can complete the questionnaire at a convenient time.
- Respondents can check personal records if necessary.
- There is no interviewer who may affect the respondent.

## Disadvantages

- Low response rate are very common.
- The conditions under which the questionnaire is completed cannot be controlled.
- No one can assist with problems the respondents may have.
- The respondent can give the questionnaire to someone else to complete.
- Respondents must be literate.

# Telephone survey

## Advantages

- The survey can be done relatively quickly.
- Respondents can be reached across long distances.
- The response rate is usually very high.
- The interviewer can assist with issues that are not clear to the respondent.
- Respondents need not be literate.

## Disadvantages

- The cost is relatively high.
- The questionnaire cannot be too long.
- Only people with telephones can be reached.
- The interviewer may influence responses (interviewer bias).



# Face-to-face survey

## Advantages

- This method has the highest response rate.
- Long questionnaires can be used.
- The interviewer can assist with issues that are not clear to the respondent.
- Respondents need not be literate.

## Disadvantages

- The cost is usually very high.
- Interviewers should be well trained.
- Interviewers bias is a great risk.

# DESIGNING QUESTIONNAIRE

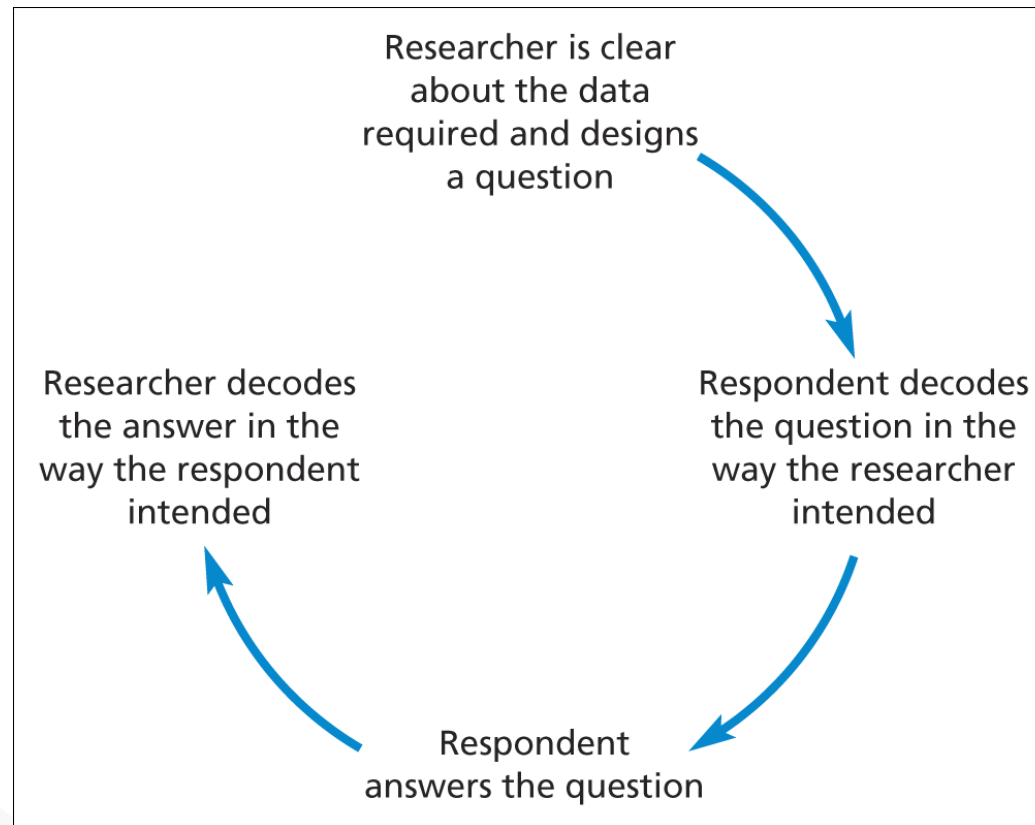
The way a question or statement is worded and the response options offered determine the nature of the data received.

**Bad question = Bad data**



# Designing the questionnaire

## Stages that must occur if a question is to be valid and reliable



# Designing the questionnaire

## Open-end Questions

- Respondents write question response in own words

## Closed-end or Forced-choice Questions

- Respondent selects question answer from among a list of possible responses
- An example of a close-ended survey question would be, "Please rate how strongly you agree or disagree with the following statement: 'I feel good about my work on the job.' Do you strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree, or strongly disagree?"

# Examples of closed and open questions

## Closed question

Why don't you eat ice cream at Fictionals Ice Cream Parlour?  
*(Choose at least one answer.)*

- I don't like the flavours
- It's too expensive
- The service is bad
- I don't like the ice cream
- It's too far from my house
- I don't know

## Open-ended question

Why don't you eat ice cream at Fictionals Ice Cream Parlour?

I am lactose intolerant so I can't eat most ice creams, and it's really hard to find a store that offers good lactose-free ice cream. I've never heard of Fictionals but if I knew that they offered some, I would definitely try them out because I love ice cream!

# Good questions...

## Good Questions...

- Are clear and use simple language
- Are concise
- Are specific
- Are possible to answer
- Are relevant to the respondent
- Do not use negatives
- Avoid biased terms

# Examples of question types

## Open questions

**Please list up to three things you like about your job**

1.....

2.....

3.....

# Examples of question types

## List questions

**What is your religion?**

**Please tick ✓ the appropriate box**

Buddhist

None

Christian

Other

Hindu

Jewish

Muslim

Sikh



# Examples of question types

## Category questions

### How often do you visit the shopping centre?

Interviewer: listen to the respondent's answer and tick ✓ as appropriate

- First visit
- Once a week
- Less than fortnightly to once a month
- 2 or more times a week
- Less than once a week to fortnightly
- Less often

# Examples of question types

## Ranking questions

**Please number each of the factors listed below in order of importance to you in choosing a new car. Number the most important 1, the next 2 and so on. If a factor has no importance at all, please leave blank.**

<i>Factor</i>	<i>Importance</i>
<i>Carbon dioxide emissions</i>	[   ]
<i>Boot size</i>	[   ]
<i>Depreciation</i>	[   ]
<i>Price</i>	[   ]

# Examples of question types

## Rating questions

**10 For the following statement please tick the box that matches your view most closely**

**Agree   Tend to agree   Tend to disagree   Disagree**

I feel employees' views have influenced the decisions taken by management

# Examples of question types

## Quantity questions

**What is your year of birth?**

1	9		
---	---	--	--

(For example, for 1988 write: )

1	9	8	8
---	---	---	---

# Pilot testing

- Test on a small number of individuals in the sample
- Ask for written feedback on the questions
- Revise the survey based on the written comments
- Exclude the pilot participants from the final sample for the study

**Test the survey instrument before doing the actual study.**

**Suggestion:** It's also a good idea to test out your sample design, data collection methods, data processing, and data analysis if possible.

# Obtaining a high response rate in mail questionnaire

- Mail out original questionnaire with cover letter
- Follow it in two weeks with a second mailing of questionnaire to those who have not responded
- Follow again in two weeks with a postcard to non-respondents reminding them to complete the questionnaire

# Conducting an interview survey

- The interviewer should maintain a neutral stance during the interview
- Train the interviewers prior to the interview
- Take good notes of responses or use a tape recorder
- For telephone interviews, develop a telephone interview guide prior to the interview

# SURVEY DATA ANALYSIS AND REPORTING

Socio-demographics of pop / sample / respondents  
analysis methods

- content analysis
- factor analysis
- latent class variable analysis

quantitative analysis

- summary data
- basic statistical analysis
- econometric modeling



# STEPS IN CONDUCTING SURVEY RESEARCH

- Decide if a survey is the best design to use
- Identify the research questions or hypotheses
- Identify the population, the sampling frame and the sample
- Determine the survey design and data collection procedures
- Develop or locate an instrument
- Administer the instrument
- Analyse the data to address the research questions or hypotheses
- Write the report

# CRITERIA FOR EVALUATING SURVEY RESEARCH

- Was the target population or sampling frame clearly specified?
- Was the sampling procedure specified?
- Was the sample clearly identified and the basis on which it was chosen specified?
- Did the type of survey match the questions or hypotheses advanced by the author?
- Was it clear whether a questionnaire or an interview survey comprised the form of data collection?
- Was information reported on reliability and validity of scores from past use of the questionnaire or interview?
- Did the author mention the dates on which the questionnaire or interview was administered?
- Were the administration procedures clearly identified?

# Criteria for evaluating survey research

- If a questionnaire was used, were the procedures for obtaining responses identified?
- If an interview was used, were the field procedures for collecting this information specified?
- Did the data analysis match the research questions or hypothesis to be answered in the study?
- Did the researcher check on the reliability and validity of scores from the data collection in the study?
- Was the study written scientifically and ethically?

# STRENGTHS AND WEAKNESSES OF SURVEY RESEARCH

## Strengths

- Useful in describing large populations
- Make large samples possible
- Surveys are flexible
- Standardized questions

## Weaknesses

- Round pegs in square holes
- Seldom deal with context of social life
- Inflexible
- Artificial
- Weak on validity (but strong on reliability)

# Surveys

- Many rules
- No such thing as perfect sample or survey or study - so, sometimes better to plow ahead

**Thank you**

**Define tomorrow.**

**UNISA**

