

Demand side Research: Quantitative & Qualitative methods

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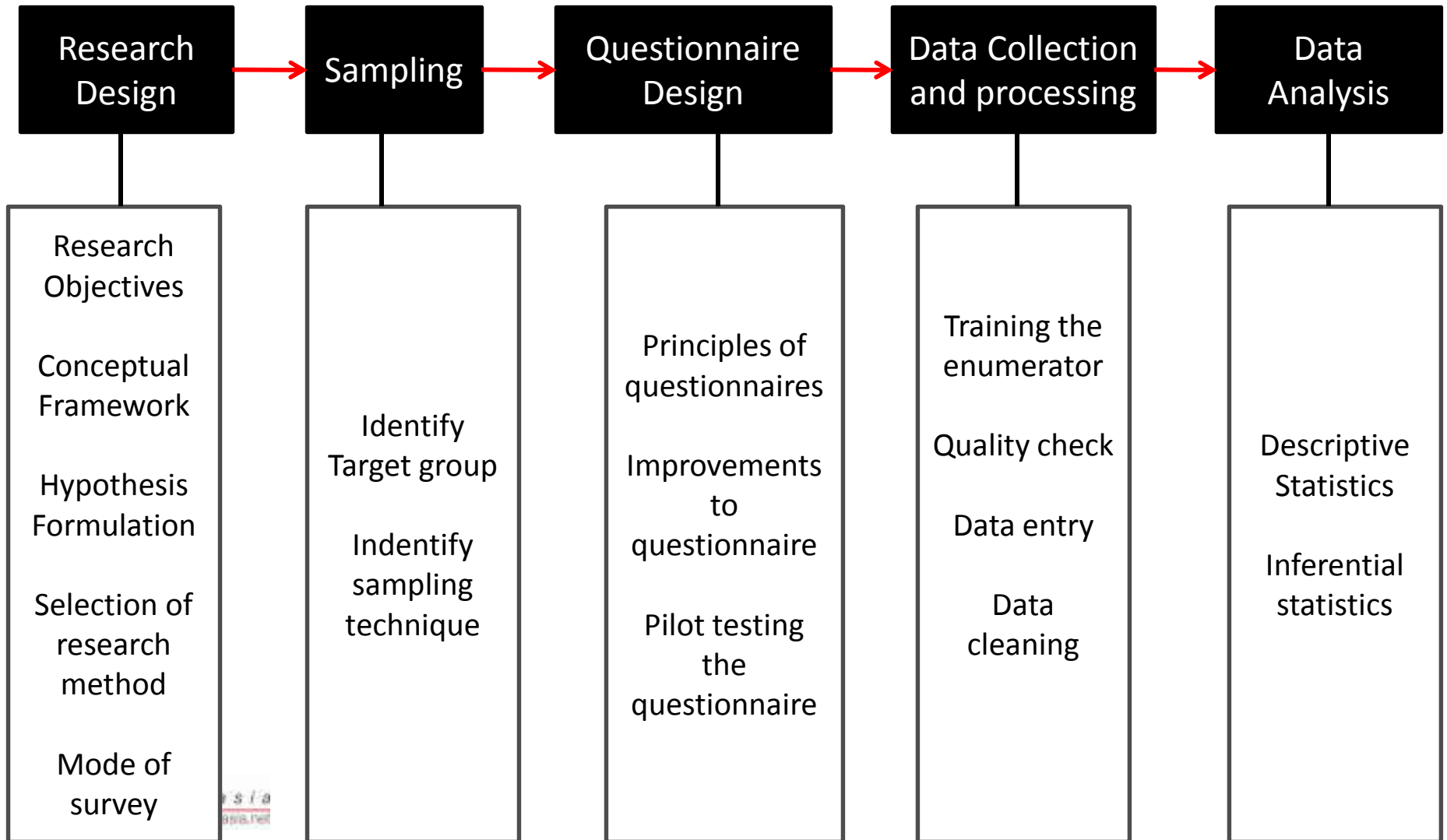
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Teleuse@Bottom of the Pyramid (T@BOP)

- Large surveys of 'BOP' conducted in 2005, 2006, 2008
- Almost 20,000 face to face interviews in 6 countries since 2005
 - Bangladesh (2008)
 - Pakistan
 - India
 - Sri Lanka
 - Philippines
 - Thailand

Basic steps in a Research Process



What is your research objective?

□ It is identifying;

- what do you want to study

or

- what is the focus of your study?

and

- why do want to study it?

- *Research Objective for Teleuse@BOP: To understand how those at the Bottom of the Pyramid interact with ICTs (mostly phones) to better inform policy*

Conceptual Framework

- ▣ Do your background research through:
 - Literature reviews
 - Talking to others who have done previous research

Hypothesis formulation

- ❑ Derived from your research question or objective
- ❑ It is your educated guess or a prediction of expected outcomes
- ❑ It states the relationships between variables that the researcher expects to find as a result of the study
- ❑ Hypotheses should be as specific as possible.
- ❑ Example from Teleuse@BOP:
Public phones: *'the use public phones have decreased with the increased use of mobile phones among the BOP'*

What methods can we use?

Quantitative methods	Qualitative methods
Numerical data, use of statistical methods	Non-numerical data
Representative figures (what, where , when and maybe even why)	In-depth understanding of human behaviour (why and how)
Surveys, questionnaires	Focus group discussions, key informant interviews, ethnographic story-telling, content analysis
More generalisable	Less generalisable

Quantitative

- Questionnaires to 9,950 face-to-face interviews
- 1 week usage patterns via “diary” (50% of sample)

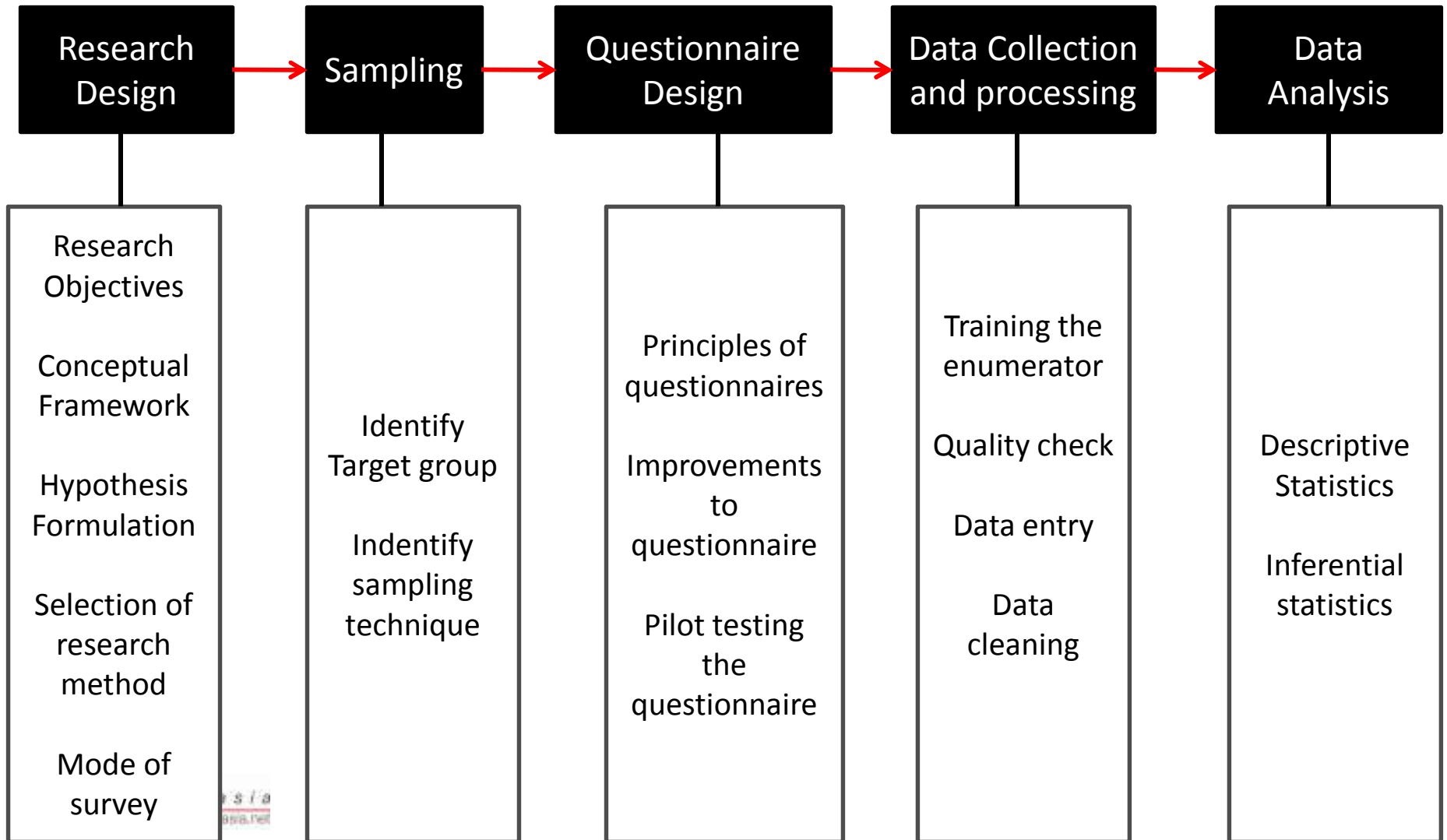
Qualitative

- Focused group discussions
- Mini-ethnographies
- Depth interviews with migrant teleusers

Modes of survey

	Cost	Response rate	Researcher bias	Potential misinterpretation	Annonimity
FTF	High	Very High	High	Low	None
Phone	Medium	High	Medium	Low	Low
Mail	Low	Low	None	High	High
Online	Very Low	Low	None	High	High

Sampling



Identifying your sample

- ❑ Sample - representative part of an entire group or population
- ❑ Without a representative sample a survey will produce results that are biased and misleading
- ❑ Minimum sample size: $n = 30$

Sampling Techniques

□ Random Sampling

- Simple random sampling
- Stratified random sampling

□ Non-random Sampling

- Purposive sampling
- Convenience sampling

Random Sampling

- ❑ Every member in the population must have an equal opportunity of being selected
- ❑ The selection of any member of the population must have no influence on the selection of any other member
- ❑ Random sampling always produces the smallest possible sampling error.
- ❑ sampling error in a random sample is affected only by random chance

Simple Random Sampling

- used with a homogeneous population

- sampling frame is needed
 - Sampling frame is a list of the people or items from which a statistical sample is taken

- A computer programme can be used to generate a set of random numbers

Stratified Random Sampling

- ❑ Used when the population is heterogeneous
- ❑ Selection of independent samples from a number of subpopulations, group or strata within the population
- ❑ Requires detailed knowledge of the distribution of characteristics of the population
- ❑ For T@BOP:
 - Multi-stage stratified sampling, random selection of households and individuals

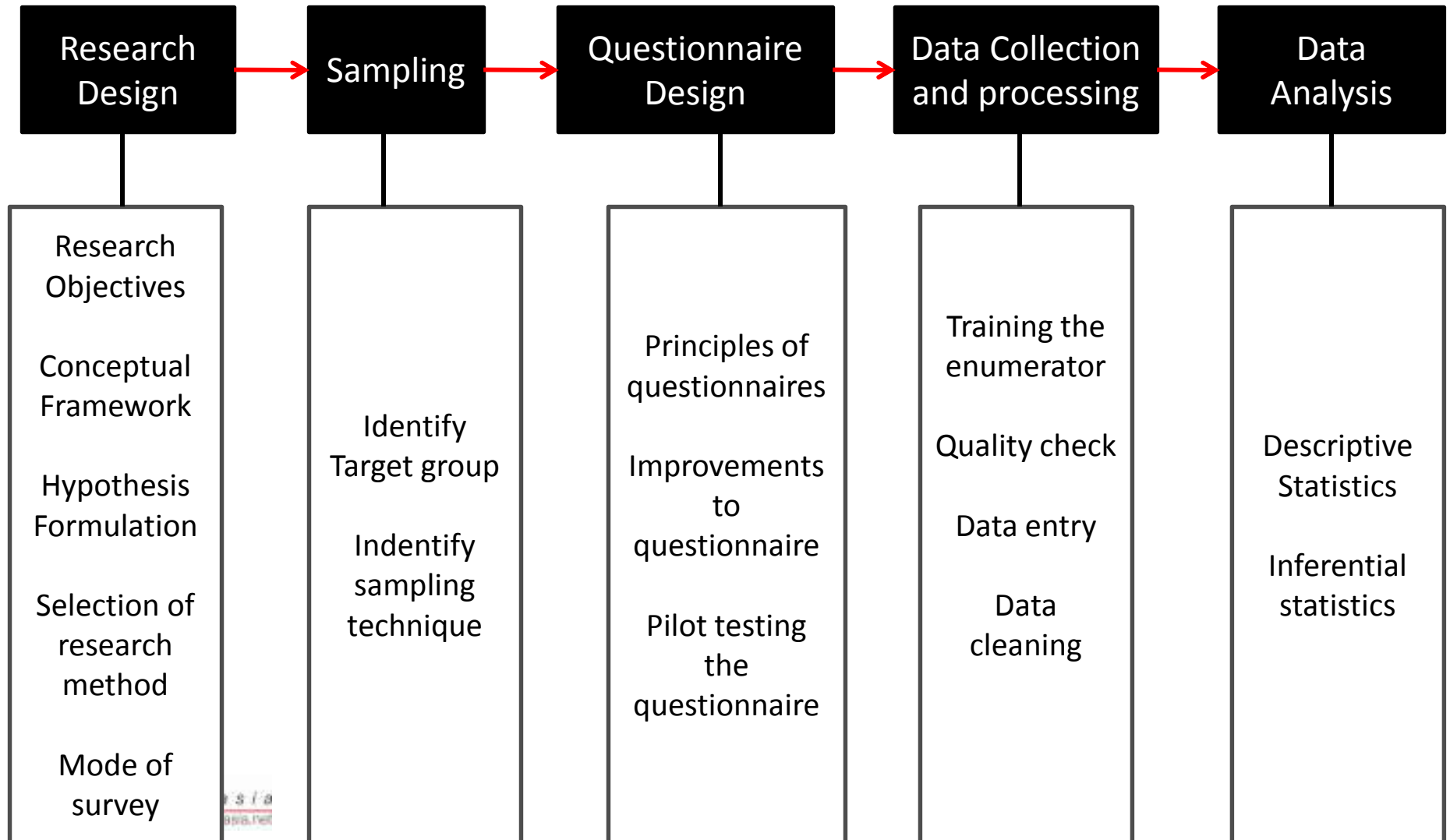
Purposive sampling

- ▣ Usually would have one or more specific predefined groups
- ▣ The researcher chooses the sample based on who they think would be appropriate for the study
- ▣ Eg. T@BOP Migrant Sample was selected through purposive sampling and to some degree snow ball sampling

Convenience Sampling

- ▣ Sample drawn from a population close at hand
 - Ex: First 10 people you meet
- ▣ Sample may not be representative

Questionnaire Design



Before starting the survey...

- ❑ Explain the purpose of the survey
- ❑ Respondents should be assured of confidentiality
- ❑ A clear set of instructions should be given either verbally or in written form on how to complete it

When constructing Questionnaires, keep in mind the following...

□ Clarity

- Keep the language simple
- Limit each question to one idea or concept
- Have a logical flow

□ Simplicity

- Keep the questions short

□ Data requirement

- Absolute Vs. categories

□ Cultural sensitivity

- Localisation
- Translation
- Checking translation

When constructing Questionnaires...

- Neutrality of Language
 - Avoid leading questions
 - Morally or culturally sensitive issues

- Length
 - Keep the number of questions to a minimum

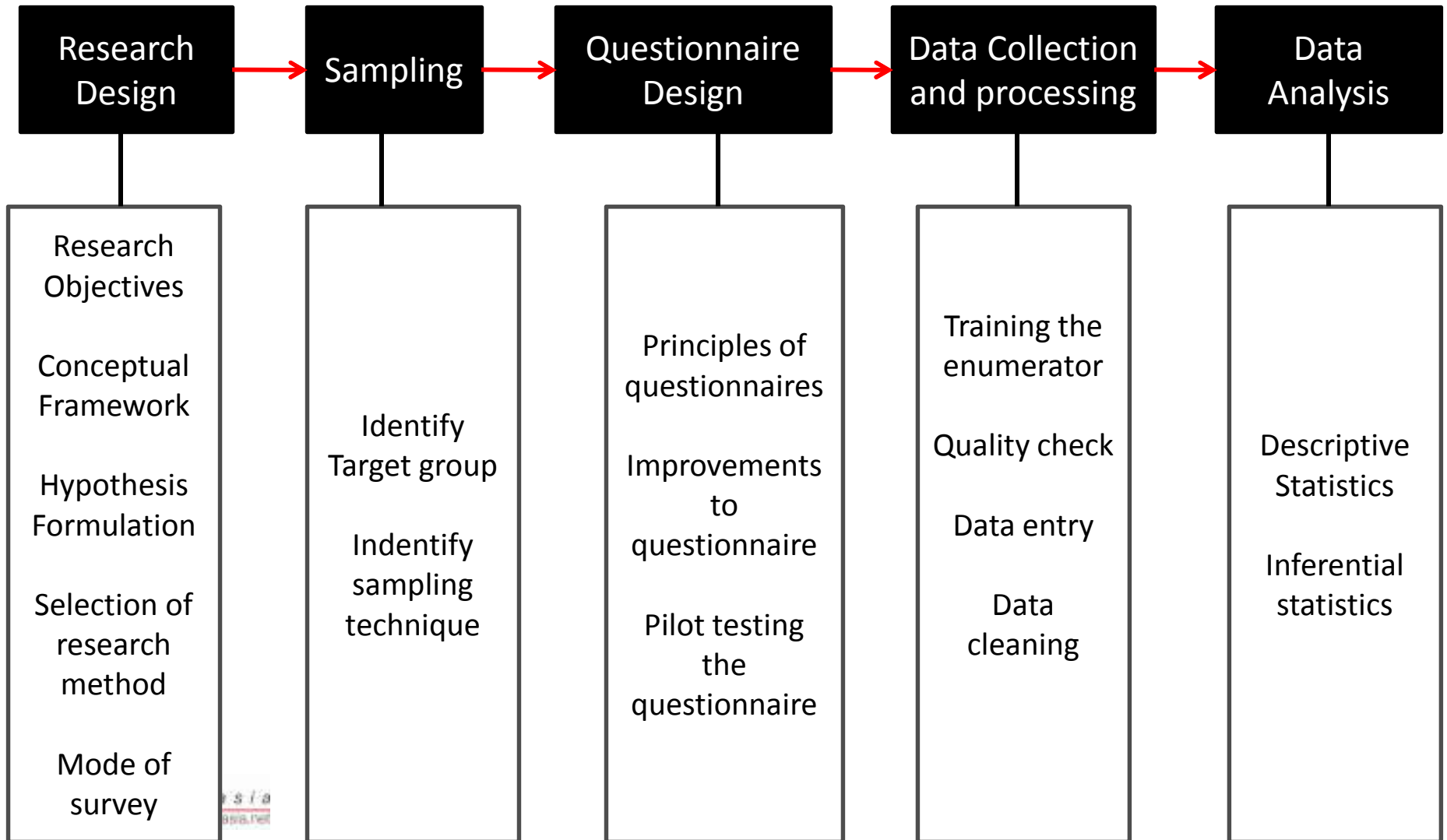
- Triangulation
 - Have few questions to double check the validity of the other answers

- Pilot test your questionnaire

Types of questions

- ❑ The classifier or background questions
 - used to obtain demographic characteristics such as age, gender, education, occupation etc
- ❑ Multiple choice or closed-end questions
- ❑ Numerical questions
- ❑ Open ended questions

Data Collection and Processing



Data Collection – if surveying is outsourced

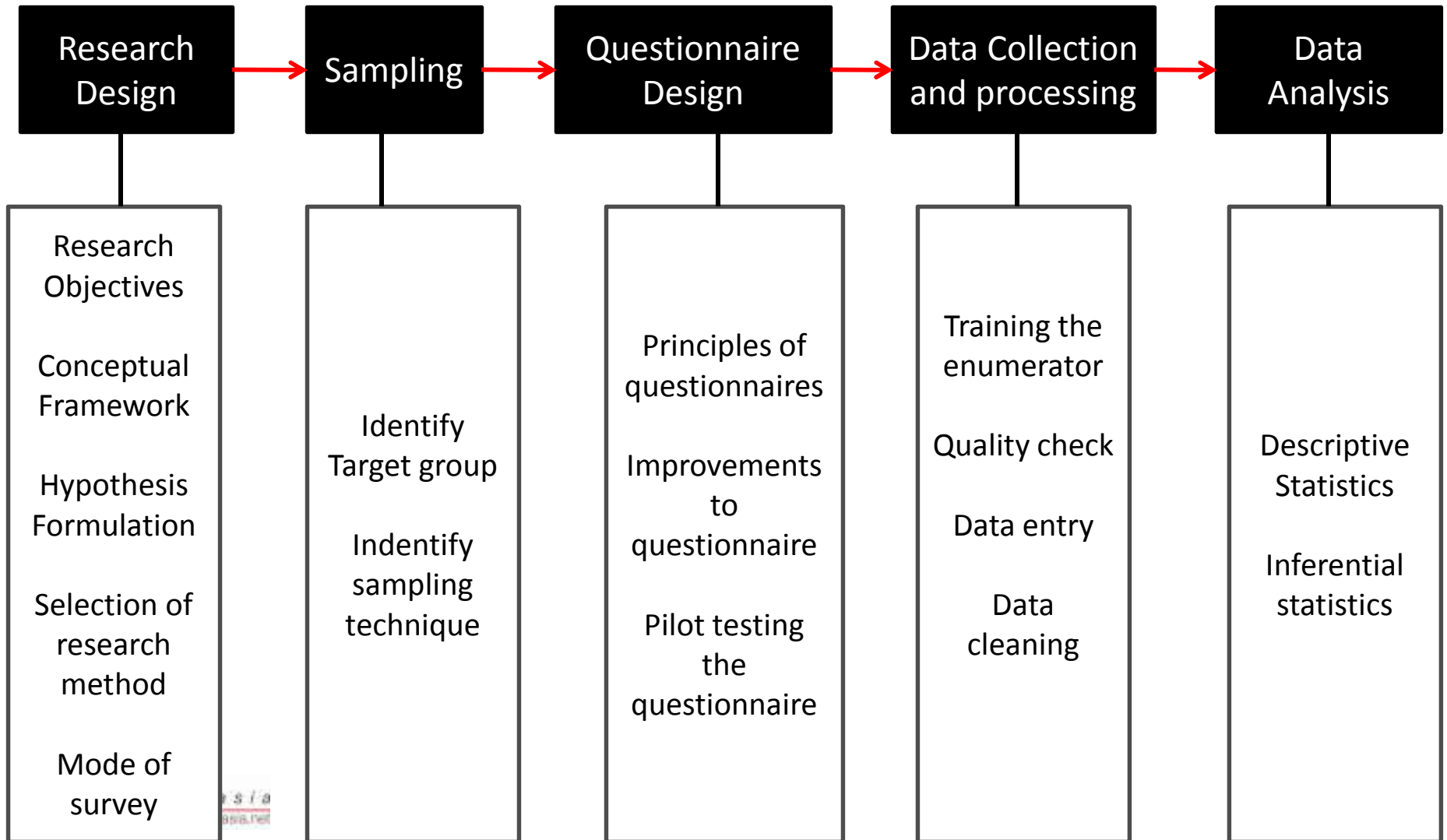
□ Training the enumerator

- Interpretation of the questions
- Body language
- Neutrality

□ Quality check of the data

- Is your data being recorded properly?
- Is the enumerator actually surveying the respondents?

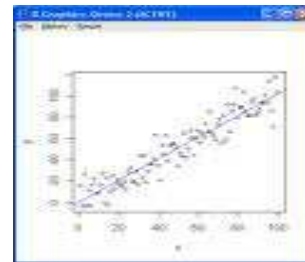
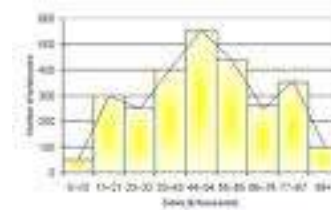
Basic steps in a Research Process



Methods

▣ Descriptive Statistics

- Histograms
- Cross tabulations
- Scatter plots



▣ Inferential Statistics

- Estimates
- Statistical modeling