

Introduction to Demand-side Research

Nilusha Kapugama

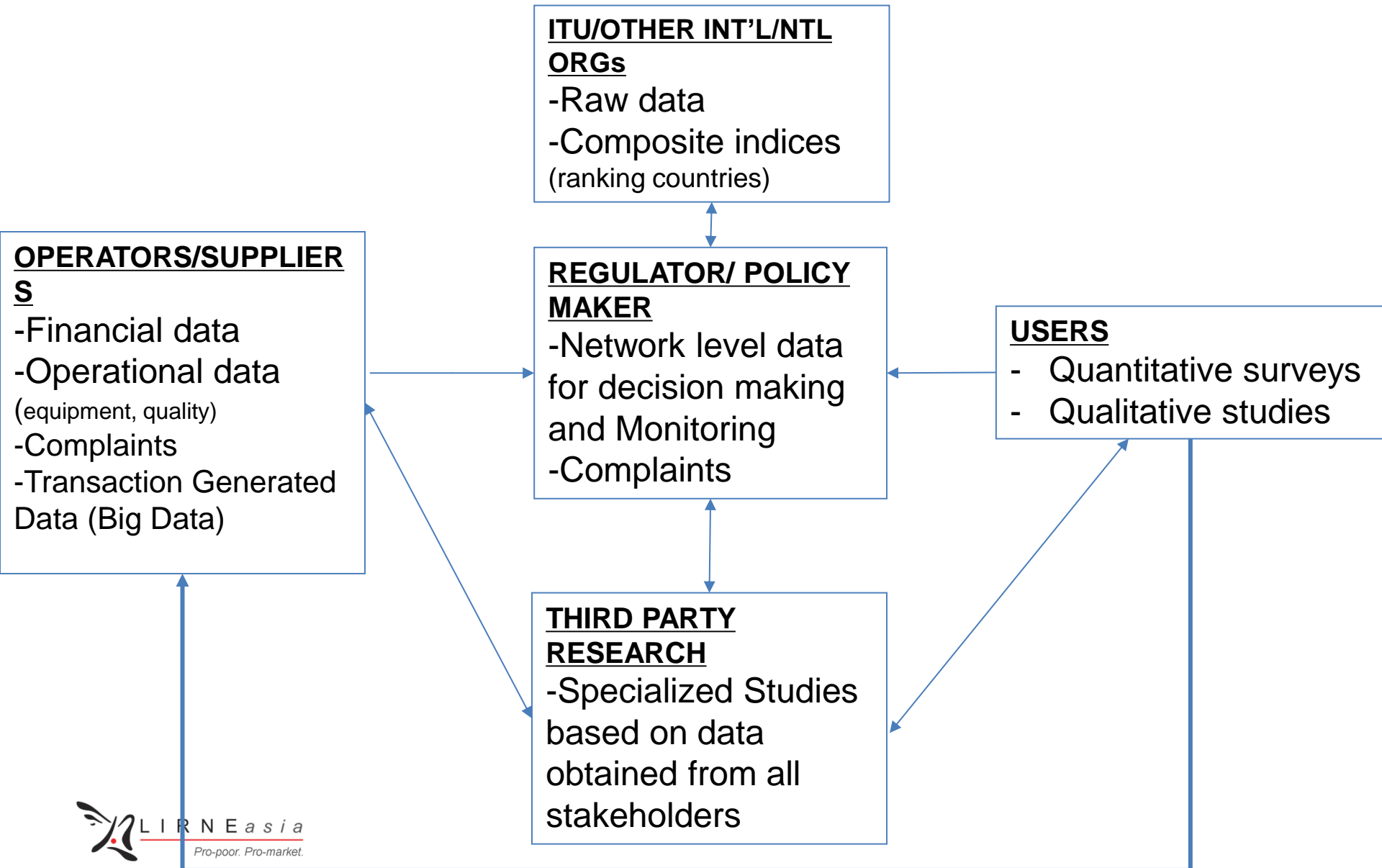
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Types of data... plenty to pick from...



What is demand-side research?

- Study of the end users/consumers or analysis of data from customers or end users
 - Quantitative Data
 - Qualitative Data
 - Transaction Generated Data (Big Data)

To understand our users mainly at the BOP we did...

- Pilot surveys in 2004
 - Very limited traction
- Large surveys in 2005, 2006, 2008, 2011, 2013, 2015
 - Over **20,000 face to face interviews** in **7 countries** since 2005: Bangladesh; Pakistan; India; Sri Lanka; Philippines; Thailand; Indonesia (Java only), Myanmar
- Qualitative studies in 2007, 2009, 2011, 2013, 2014

Quantitative Vs. Qualitative

- Combination was ideal; timing was crucial
 - E.g. multiple SIM ownership question

	Bangladesh		Pakistan		India		Sri Lanka		Philippines		Thailand	
	2008	2006	2008	2006	2008	2006	2008	2006	2008	2006	2008	
More than 1 SIM	10%	12%	23%	5%	9%	9%	16%	9%	19%	1%	13%	

– Qualitative told us

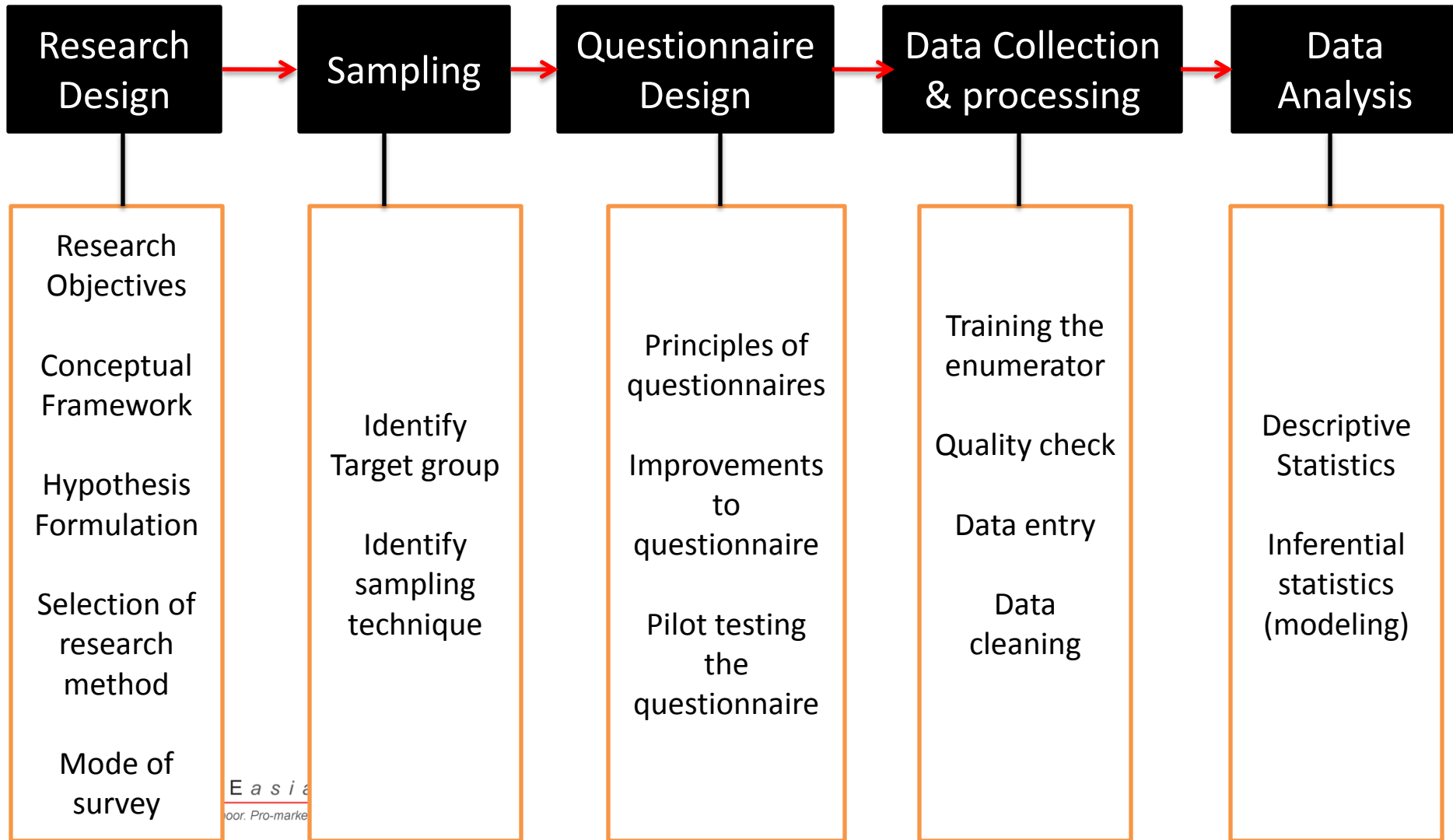
- Why

→ policy implications?

Final outcome depends on your objectives and resources

QUANTITATIVE APPROACH

The process we followed...



Research objectives?

- 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*

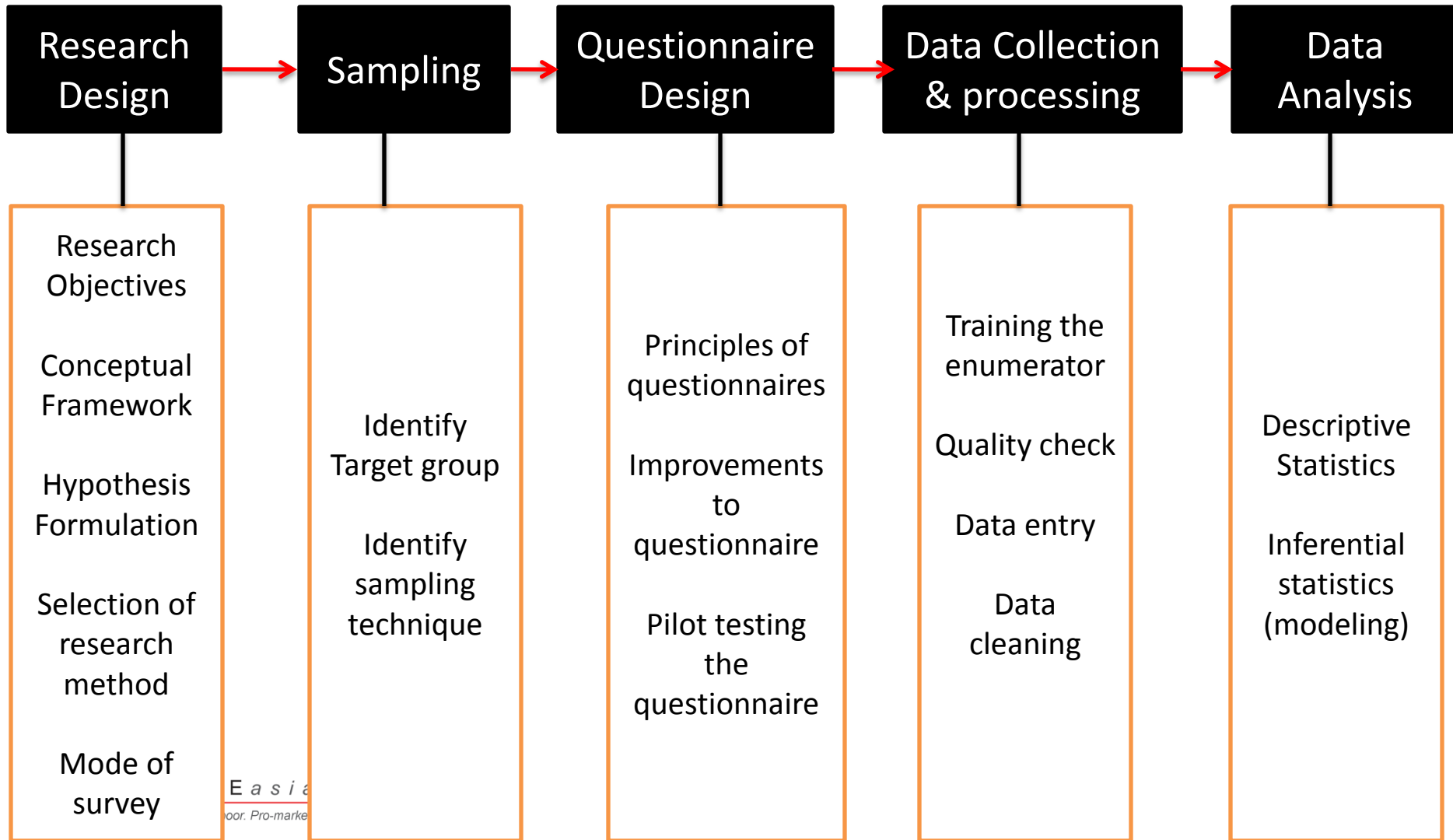
Hypothesis formulation

- Example from Teleuse@BOP:

Public phones: *'the use public phones have decreased with the increased use of mobile phones among the BOP*

- 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

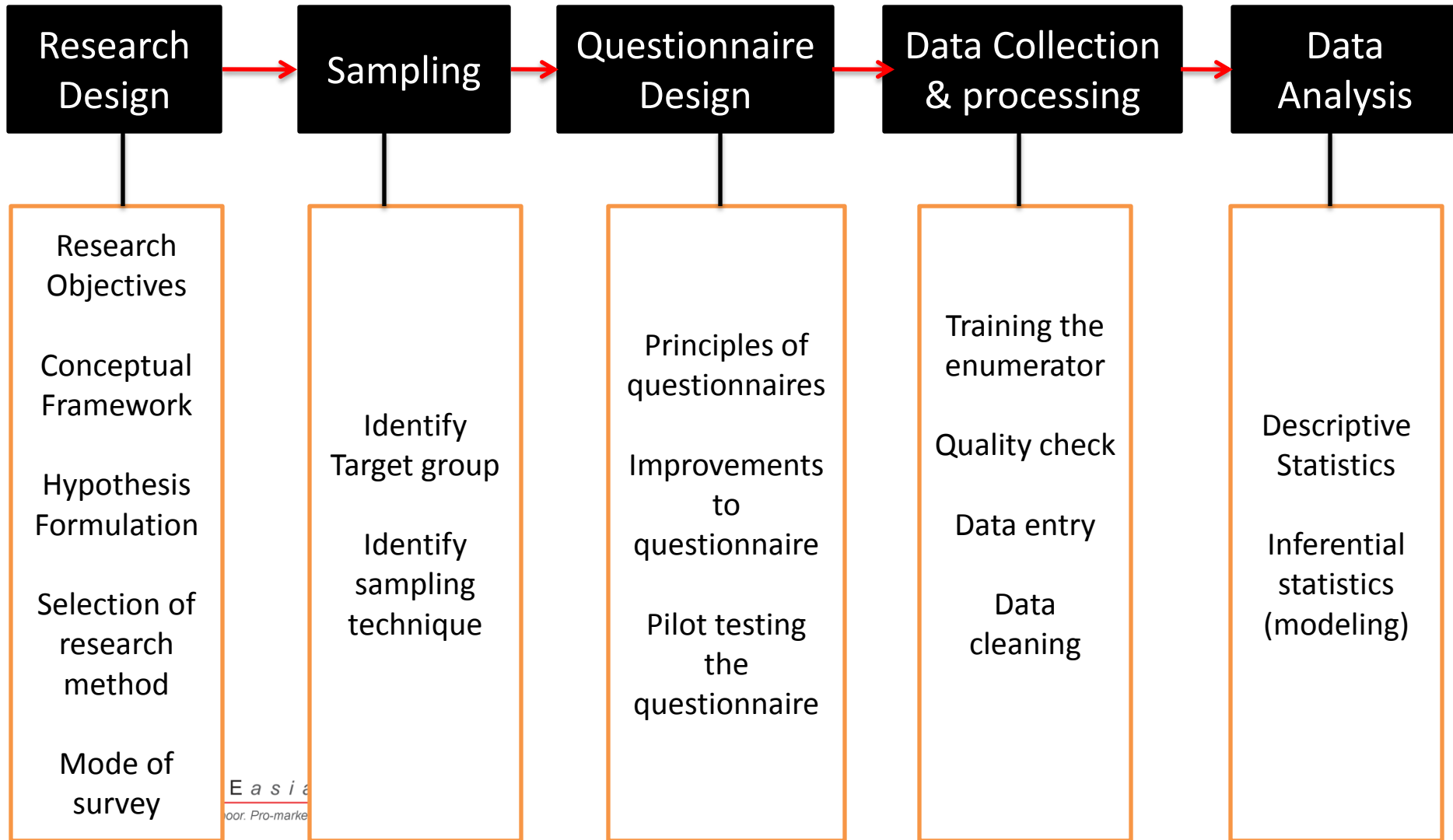
The process we followed...



Teleuse@BOP: Multi-stage stratified sampling (with variations)

1. **States / Provinces / Districts** (primary sampling unit) randomly selected
2. **Urban** and **rural** centers randomly selected
3. Starting points randomly selected (# determined in proportion to population)
 - fixed number of interviews around each starting point
 - Every 3rd HH selected – “right hand rule”
 - Household members listed into Kish grid (random number chart)

The process we followed...



Inferential Stats...

$$P(Y) = \frac{1}{1 + e^{-\sum_{i=0}^n B_i X_i}}$$

Table 7: Logistic regression output for Model 1 (predicting probability of mobile Internet-only use)

	Coefficient	Odds Ratio	Significance
Age squared	-0.01	0.99	0.00
Ln (monthly personal income)	0.50	1.64	0.00
Gender	-0.26	0.77	0.04
Walk time to nearest town	-0.03	0.97	0.09
% of phone-owning contacts	1.18	3.26	0.00
Mobile ownership	0.43	1.53	0.02
Secondary education	1.23	3.41	0.00
Tertiary education	2.36	10.59	0.00
Philippines	1.65	5.21	0.00
Thailand	1.93	6.90	0.00
Constant	-6.34	0.00	0.00
n = 483; Nagelkerke R Square: 0.429			

QUALITATIVE APPROACHES

Qualitative research

- In-depth and detailed.
- Helps understand a research problem from the perspective of the ‘affected’ local population.
- Answers the “why question”
- Its never just about what they say, but also what they do.
 - Visual cues as important as verbal cues
- Effective in getting culturally specific information about particular populations:
 - Values, opinions, attitudes, behaviors and social contexts

When do we use qualitative research?

- When we don't know enough about
 - *E.g. What are the information requirements of Micro-entrepreneurs in Myanmar*
 - Could be a precursor to a quantitative study and/or be considered exploratory research
- When we want to know in detail why a certain phenomena occurs?
 - *E.g. Why do people in the ages 20-26 use their phones more when they are at home and you want to know why?*
 - May be the phenomena was discovered during a previous quant study
 - Could be considered as explanatory research
- Purely descriptive
 - *E.g. What are the attitudes of users to having off-peak time start at 7pm.*

Different ways of doing qualitative research

Case studies

Focus groups

Unstructured interviews

Diary/ Journal method

Ethnographic studies

Photo novellas

Case studies

- Focuses on an individual or a **small** group **in-depth**
- Lots of different methods:
 - Unstructured/semi-structured interviews
 - Observations
- Given that it is not sampling research, case selections must be done to maximize learnings, within the study scope

Case studies

- Pros:
 - In-depth and detailed
 - Helps identify variables/ phenomena for further study
 - When it is possible, comparing cases allows for a comprehensive analysis
- Cons:
 - Time consuming
 - Limited breadth
 - Not representative

Ethnographic studies

- Observational field work done in the actual context being studied.
 - Participant observation i.e. “immersion of researcher in actual context”
 - *E.g. trying to understand call behavior at work.*
- A heavy focus on how individuals interrelate in their environment and the influence of this environment on individuals.
 - *E.g. how long is he on the phone when his boss is around?*
 - *E.g. What is his body language when talking on the phone with boss around, in front of colleagues, when no one is around, etc.*

Ethnographic studies

- Pros:
 - Richer understanding of complex social/ cultural actions
- Cons:
 - Difficult to interpret and analyze.
 - Time consuming and expensive.
 - Researcher can influence behavior.

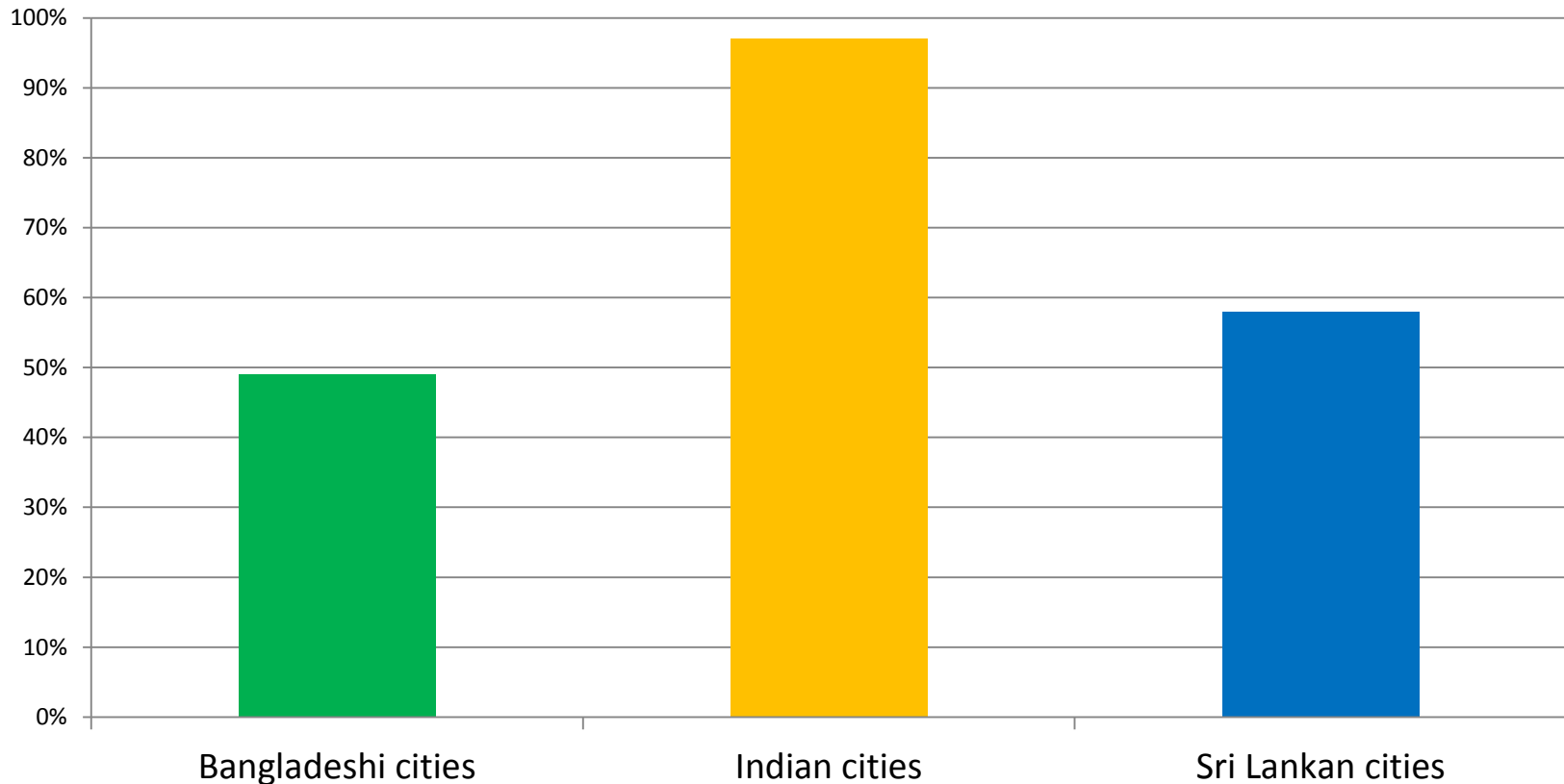
Focus groups

- Aids in understanding audience, group, users.
- Concentrates more on group interactions more than individual responses.
- Pros:
 - Collective discussion gives more data than individual discussions
 - Group discussions can trigger individual memories/recall.
- Cons:
 - Group think
 - Social/ cultural issues can affect how one acts in front of a group

User personas

- It is a profile of a specific type of user/ individual
- Could have been developed using multiple approaches:
 - Ethnographies
 - Case study
 - Photo novella
- Useful in communicating research results to others

58% in LK do not get an advance notice about power cuts



Do you get advance notice about power blackouts? - NO (%BOP MEs who use electricity for business)



Name: Mihiri
Age: 30 years
Education: Secondary
Education
Location: Colombo
Business: Services– Beauty
Parlor
Employees: None
Years of Service: 3



Inside the Beauty Parlour

- Runs her business from rented accommodation
- Has an electricity connection.
- Electricity is essential for her business.
- Unable to serve her clients if there is no electricity.
- Lack of information on power-cuts has an adverse effect on her livelihood.

Ethics of demand side research

- Prevention of deception
 - Why are you doing the study, what you want to talk them about, what you are hoping to achieve.
- Protection of privacy
 - How will what they say or the visual information captured be used (what kind of identifiable information will you use)
 - *E.g. is it ok to take photographs of them, their children or their personal properties; what will the photos be appearing in; will they be identifiable; do the faces need to be blurred out?*
- Obtain informed consent
 - In the case of FGDs this may mean much before the actual event.

Practical lessons for qualitative research

- Is compensation required or not?
 - Depends from situation to situation.
 - If non-monetary then what?
 - *E.g. Giving a farm tool to farmers i.e. it is something he appreciates.*
- Preparatory work is essential:
 - Unstructured interviews **DOES NOT** mean there is no plan
 - Know all the subject areas you want to cover.
 - Have your research tools ready
 - *E.g. charts, tables that you want to fill while following a subject.*
- Sensitivity to cultural/ social/ class issues is very important
 - *E.g. is it ok to accept refreshments from case study participant?*



Practical lessons for qualitative research

- Logistics for an FGD
 - Do I bring them somewhere or do I meet them in their own surroundings?
 - Best to arrange meeting in an environment they are comfortable in.
 - How do I record (writing, audio recording, video recording)
 - Always have a back up plan so do two methods at least
 - How many resource people?
 - Not a great idea to have more resource people than subjects
 - Clearly defined roles for resource people
 - Clearly defined modes of interaction between resource people during the FGD

Practical lessons for qualitative research

- If you are using video recording
 - Focus always on the subject(s)
 - Researcher and resource people should avoid being in the frame
- De-briefing quickly is **VERY** important
 - Do it on the day of the FGD/ interview preferably right after
 - Researcher and resource persons should compare notes, thoughts and collate

Comparison

	Quantitative methods	Qualitative methods
Type of data	Numerical data, use of statistical methods	Non-numerical data that is observed (verbal as well as non-verbal responses/reactions)
Level of understanding of the users	Not necessarily in-depth	In-depth understanding of human behaviour
Method of obtaining data	Surveys, questionnaires	Focus group discussions, key informant interviews, ethnographic story-telling, content analysis

Comparison contd...

	Quantitative methods	Qualitative methods
Sampling technique	Multiple sampling techniques	Purposeful sampling
Generalizability	More generalizable	Less generalizable
Objectivity of the data	More objective: provides observed effects (interpreted by researchers)	More subjective: describes a problem or condition from the point of view of those experiencing it
Purpose of the using the data	Deductive process to test pre-specified concepts, constructs, hypotheses that make up a theory	Can also be an inductive process to formulate a theory.

If demand-side, then what method do I use?

- Depends on research requirements:
 - Research goals/ questions
 - Time and funds
 - Researcher's own skills, beliefs and values