

MICROECONOMICS UNIT I

Hypothetico-Deductive Method

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Problem



Ideas to solve the problem



Hypothetico-Deductive Method

- The **hypothetico-deductive** model or **method** is a proposed description of scientific **method**.
- According to it, scientific inquiry proceeds by formulating a hypothesis in a form that could probably be falsified by a test on observable data.

Hypothetico-Deductive Method

- It involves stating some output from theory in specific and then finding conflicting cases using experiments or observations.
- The methodology proposed by **Karl Popper** is commonly known as the hypothetico-deductive method.
- The Growth of Human Knowledge
- Scientific Knowledge, History, and Prediction

Hypothetico-Deductive Method

- One of the 20th century's most influential philosophers of science, Popper is known for his rejection of the classical inductivist views on the scientific method in favour of empirical falsification.
- **Sir Karl Raimund Popper** (28 July 1902 – 17 September 1994) was an Austrian-born British

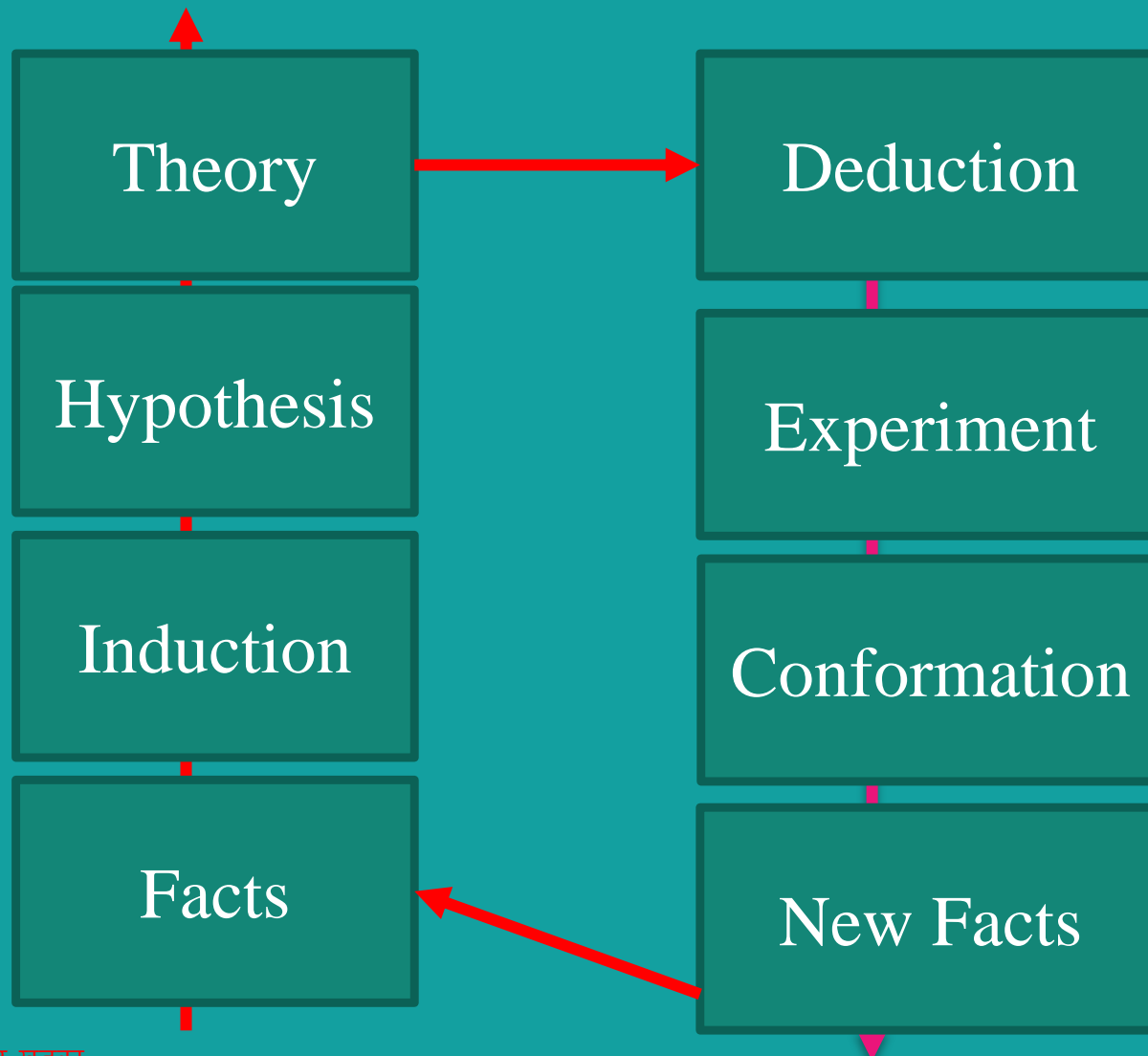
Hypothetico-Deductive Method

- According to Popper, a theory in the empirical sciences can never be proven, but it can be falsified, meaning that it should be analyzed with critical experiments.
- Popper was opposed to the classical justifications account of knowledge, which he replaced with critical rationalism, namely "the first non-justificational philosophy of criticism in the history of philosophy".

Hypothetico-Deductive Method

- Philosopher Karl Popper suggested that it is impossible to prove a scientific theory true by means of induction, because no amount of evidence assures us that different evidence will not be found.
- Karl Popper proposed that proper science is realized by deduction.
- Deduction involves the process of falsification.
- Falsification is a particular specialized aspect of hypothesis testing.

Hypothetico-Deductive Method



Steps of the Hypothetico-Deductive Method

It Is Been Proposed An Austrian Philosopher,
Karl Popper.

It as a Typical Version of Scientific Method.

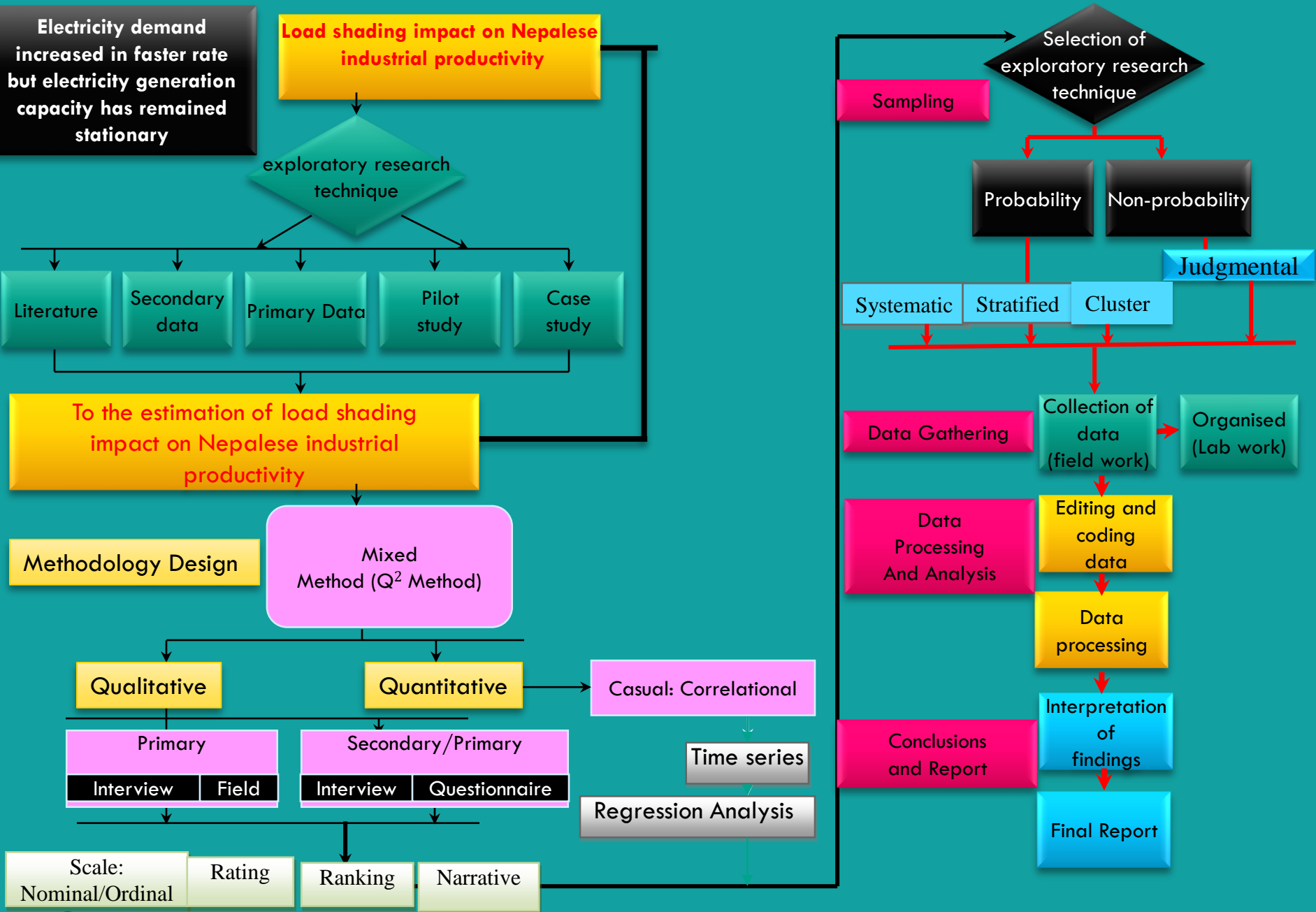
It Has Seven Steps.

- 1. Identify a broad problem area**
- 2. Define the problem statement**
- 3. Develop hypotheses**
- 4. Determine measures**
- 5. Data collection**
- 6. Data analysis**
- 7. Interpretation of data**

1. Identify a broad problem area

- Discover and definition of the problem
- Desktop review
- Theoretical framework

Discover and definition of the problem



2. Identify a broad problem area

- A **problem statement** states the general
- **Scientific research** starts with a definite aim or purpose.
- **Objective of the research**

3. Develop hypotheses

- The hypothesis must be **testable**
- The hypothesis must be **falsifiable**

4. Determine measures

- The variables in the theoretical framework should be:
 - **measurable**
 - in some way
 - Some variables
- **cannot be measure quantitatively,**
- we need to operationalize this variable

5. Data collection

- Data with respect to each variable in the hypothesis need to be obtained.
- There are two types of data:
 - Quantitative data
 - Qualitative data

6. Data analysis

- **the data** gathered are statistically analyzed to see if the hypotheses that were generated have been supported.
- Analyses of both quantitative and qualitative data can be done to determine if certain relations are important

7. Interpretation of data

- Now we must decide whether our hypotheses are supported or not by interpreting the meaning of the results or the data analysis.
- Based on these results, the researcher would make **recommendations** in order to solve the problem in hand

THANK YOU