

# Research Fundamentals

# Basic reasons for Research ?

- ❑ To discover new things
- ❑ To establish facts
- ❑ To research conclusions

# Meaning of Research

Clifford Woody defines

*'research comprises defining and redefining, formulating hypothesis or suggested solutions; ;collecting, organising and evaluating data ;making deductions and research conclusions; and at least carefully testing the conclusions to determine whether they fit the formulating hypothesis'.*

# Defining Business Research

Research Is the **Systematic** Approach Towards **Purposeful Investigation** Through **Formulation of Hypothesis**, **Collection of Data** on Relevant Variables, **Analysis** and **Interpretation** of Results and Reaching **Conclusion** Either in the Form of a **Solution** or Certain **Generalization**.

*In simple words.....*

**Research is the systematic process of collecting and analyzing information (data) in order to increase our understanding of the phenomenon about which we are concerned or interested.**

**Research is an Attempt to achieve systematically and with the support of data the answer to a question, the resolution to a problem, or the greater understanding of a phenomenon.**

# Motivation to do research

- ❑ Desire to get a research degree/recognition
- ❑ To solve unsolved problems i.e., concern over practical problems results in research
- ❑ Gain an intellectual joy of working creatively
- ❑ Due to societal benefits
- ❑ Consultancy

# Objectives of Research...

1. **To explore-** { domestic company may think of setting up a manufacturing operations abroad... exploratory research on business feasibility }
2. **To describe.....** { to study the voting pattern in a particular state as per demographic classifications }.. Also know as *ex post facto studies*
3. **To diagnose.....** {to find out how a particular event is associated with another event...

..e.g. A fast food chain wishes to open an outlet in a multiplex & wants to find how often people eat their meals outside while planning to watch a movie

#### 4. To establish casual relationship...

{ casual relationship b/w independent and dependent variable...eg. Polio vaccine and Occurrence of polio...}

# Objectives in Research

- ❑ To gain familiarity or to achieve new insights to the Phenomenon (**Exploratory/Formulative Studies**).
- ❑ To portray accurately the characteristics of a particular individual, situation or a group (**Descriptive Studies**).
- ❑ To determine the frequency with which something occurs or with which it is associated with something else (**Diagnostic Studies**).
- ❑ To test a hypothesis of a casual relationship between variables (**Hypothesis testing Studies**)



# Application of Research in Management

- ❖ Marketing
- ❖ Human Resource Management
- ❖ Production
- ❖ Finance and Accounting
- ❖ Information Technology
- ❖ Materials Planning and Production Control
- ❖ Purchasing
- ❖ Advertising and Sales Promotion
- ❖ Social Responsibility Related Issues

Even beyond functional areas, we have scope to do research.

# Why Research ?

- Business Competition
- Business Environment
- Maturing of management
- Explosive growth of the Internet
- Stakeholders demanding greater influence
- More global competition
- More government intervention

# Why Research? (Continued)

- ❑ More complex decisions
- ❑ Lower-cost data collection
- ❑ Better visualization tools
- ❑ Powerful computations
- ❑ Advanced analytical tools
- ❑ New perspectives on established research methodologies

# What's the Difference Between "Method" and "Methodology"?

Method:

- Techniques for gathering evidence
- The various ways of proceeding in gathering information

Methodology:

The underlying theory and analysis of how research does or should proceed, often influenced by discipline

(Sandra Harding)

## Features of A Good Research Study

- ❖ **Objectivity:** It must answer the research question.
- ❖ **Control:** It shall ensure adequate control over independent variable
- ❖ **Generalisability:** It should have same result when applied in identical applications
- ❖ **Free from Personal Bias:** It must be free from personal bias.
- ❖ **Systematic:** It must have various interrelated steps that lead another step.
- ❖ **Reproducible:** It must give approximately the same result when applied to population having similar characteristics.

# Criteria For Good Research

- Purpose Clearly Defined
- Research Process described in detail for further enhancement
- Research Design Thoroughly Planned( Procedure ,sample, Data collection)
- High Ethical Standards Applied
- Limitations frankly revealed
- Sufficient Analysis
- Findings presented unambiguously.
- Conclusion justifies
- Researcher's experience reflected.

## Types of Research Studies

- ❖ **Fundamental or Basic Research:** primarily intended to find out certain basic principles like John Robinson's Imperfect Competition Theory in Economics, Maslow's Hierarchy of Needs Theory etc.
- ❖ **Applied Research:** application of available scientific methods in social science research which helps to contradict, alter or modify any existing theory or theories and helps to formulate policies.
- ❖ **Descriptive Research:** a fact finding approach generalizing a cross-sectional study of the present situation. For example, a study on problems of industrial relations in India with an inter disciplinary approach which is classified under conclusive research.

Cont....

- ❖ **Historical Research** :a research on past social forces which have shaped the present. For example, to study the present state of Indian labor we may research on past historical forces.
- ❖ **Formulative or Exploratory Research**: a research which investigate any problem with suitable hypothesis. It is particularly important for clarification of any concept and throwing new light for further research on principles of developing hypothesis and its testing with statistical tools.
- ❖ **Experimental Research** :a research which enable us to quantify the findings, to apply the statistical and mathematical tools and to measure the results thus quantified. It is also quantified under conclusive research
- ❖ **Ex-Post Facto Research** : an empirical enquiry for situation that have already occurred. For example market failure of a product if studied or researched later may be categorized under ex- post research.



## Types of Research

- ❖ **Case Study Approach:** a research particularly initiated at micro level. For example study of particular industrial unit, study of some banking units etc,
- ❖ **Survey Research:** a research which involve study of population or sample based on some questionnaire to find out intended characteristics
- ❖ **Evaluation Research:** a research which is directed to study or evaluate the performance of any programs/projects that have already been implemented.

# Qualitative and Quantitative Approaches

<b>Qualitative</b>	<b>Quantitative</b>
(Usually) Non-probability based sample	Typically a probability-based sample
Non-generalizable	Generalizable
Answers Why? How?	Answers How many? When? Where?
Formative, earlier phases	Tests hypotheses, latter phases
Data are “rich” and time-consuming to analyze	Data are more efficient, but may miss contextual detail
Design may emerge as study unfolds	Design decided in advance
Researcher IS the instrument	Various tools, instruments employed