# RESEARCH METHODOLOGY

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# INTRODUCTION

#### • Meaning of Research:

Research is a sincere, comprehensive, intellectual searching for facts and their significance or inference with reference to the problem under study. Research id considered to be more objective, methodical, welldetermined scientific process of investigation. Research involves a more systematic structure of investigation and finally at the end it results into a systematic report from.

# **DEFINATION:**

• According to the Advanced Learner's Dictionary of Current English ,"Research as a careful investigation or inquiry specially through search for new facts in any branch of knowledge."

• REMAN AND MORY define research as a," systematized effort to gain new knowledge."

# Features of Good Research

- Well defined Problem
- Systematic
- Purposive
- Scientific
- Objectivity
- Observable or empirical
- Solution Seeking
- Clarity in Formulation
- Testable
- Identifying Variables

# **Objectives of Research**

The purpose of research is to discover answers to questions through the application of scientific procedures. The main aim of research is to find out the truth which is hidden and which has not been discovered as yet. Through each research study has its own specific purpose, we may think of research objective as falling into a number of following broad groupings:

- To gain familiarity with a phenomenon or to achieve new insights into it.
- To portray accurately the characteristics of a particular individual, situation or a group

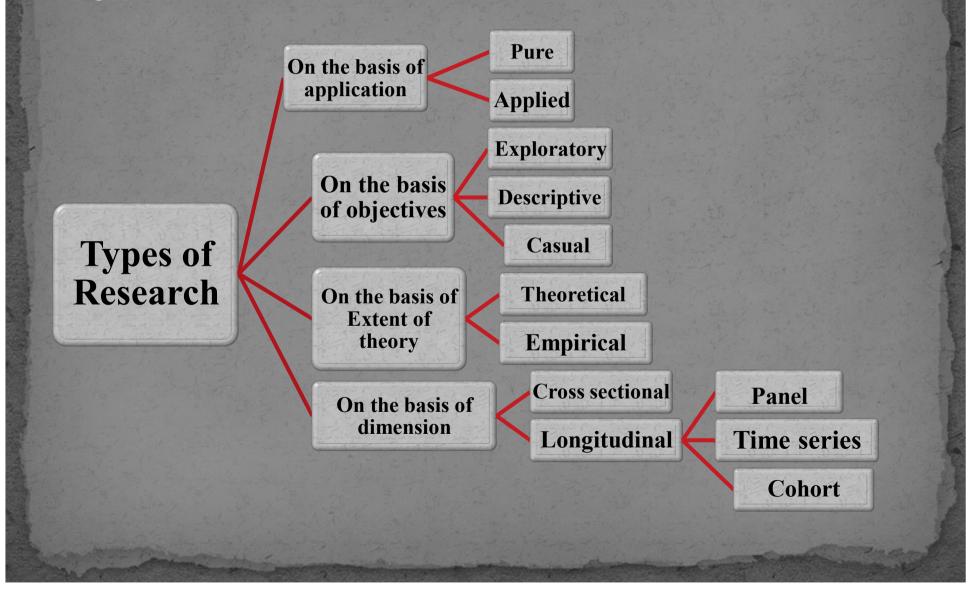
To determine the frequency with which something occurs or with which it is associated with something else.
To test a hypothesis of a casual relationship b/w variables. Application of Research In Various Functions of management

# Accounting & Finance

HR Development & Organisational Behaviour Industrial Research

Marketing Research Organisational Research Production Research

# Types of Research



# On the Basis of Application

#### • Pure/Basic/Fundamental Research:

This research is also called basic research, is concerned with quest for knowledge more about the phenomenon without concern for its particular use and also with developing and testing hypotheses and theories.

- What makes happen
- Why society changes
- Why social relations are in a certain way.

#### • Applied Research:

This research is concern with search for ways of using scientific knowledge to solve practical problems.Horton & Hunt," this research is an investigation for ways of using scientific knowledge to solve practical problems.

# On the Basis of Objective

#### • Exploratory Research:

When the purpose of research is to gain familiarity with a phenomenon or acquire new insights into it in order to formulate a more precise problem or develop hypothesis, the exploratory studies come in handy. If the theory happens to be too general or too specific, a hypothesis cannot be formulated.

#### • **Descriptive Research**:

Descriptive research, also known as statistical research, describes data and characteristics about the population or phenomenon being studied . Descriptive research answers the questions who, what, where, and how. The description is used for frequencies, averages, and other statistical calculations.

#### • Causal/ Experimental Research:

Causal research is primarily possible in areas of physical sciences, with the help of hypothesis, may also be carried out in social sciences if such research us to quantify the findings, to apply the statistical and mathematical tools and to measure the results thus quantified.

# On the Basis of Extent of Theory

#### • Theoretical Research:

Theoretical research generally uses the findings from existing works to develop new ideas through analyzing existing theory and explanations.

#### • Empirical Research:

It is way of gaining knowledge by means of direct observation or experience. Empirical evidence can be analysed quantitatively or qualitatively. Health research mainly follows the empirical approach.

# On the Basis of Dimension

#### • Cross – sectional Research:

In this research, researchers observe at one point in time. It is usually the simplest and least costly alternative. A cross-sectional designs provides a snapshot of the variables included in the study, at one particular point in time. It may reveal how those variables are represented in a cross-section of a population.

#### • Longitudinal Research:

Research using longitudinal research examine features of people or other units at more the one time. It is usually more complex and costly than cross-sectional research, but it is also powerful , especially when researchers seek answer to questions about social change. Descriptive & explanatory researchers uses longitudinal approaches.

- Time series research
- Panel study
- Cohort Study

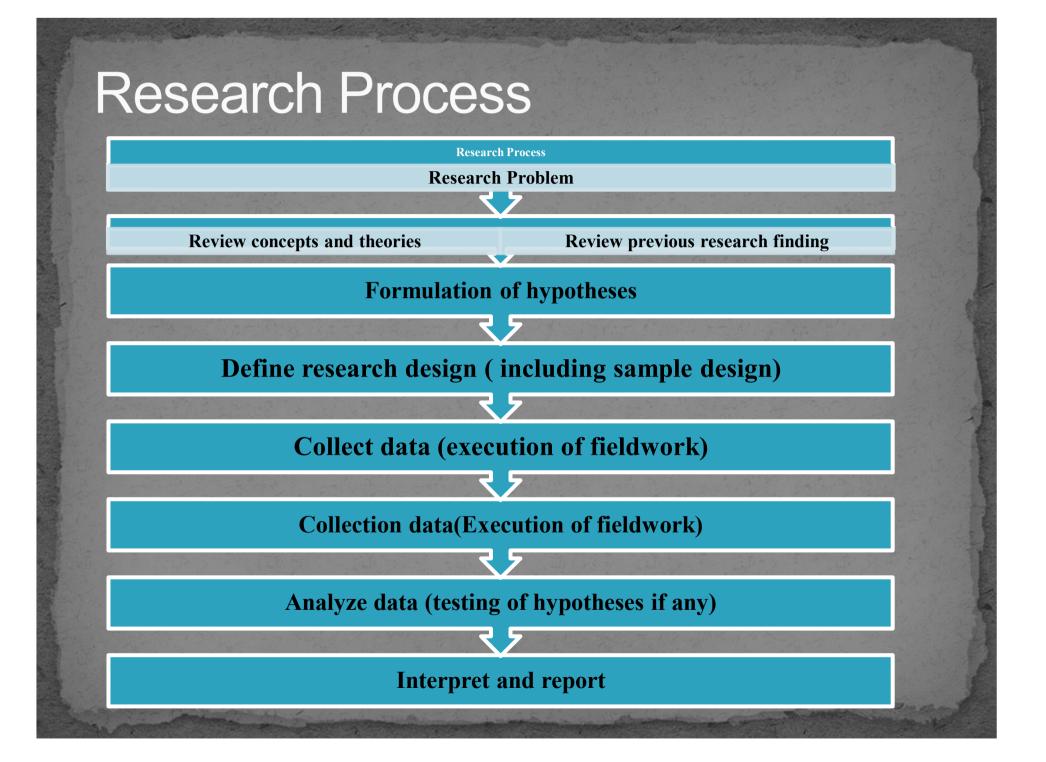
### Problems Encountered by Researchers

- The lack of a scientific training in the methodology of research is a great impediment for researchers in our country.
- There is insufficient interaction b/w the university research departments on one side and business establishments, government department and research institutions on the other side.
- Most of the business units in our country do not have confidence that the material supplied by them to researchers will not be misused and as such they are often reluctant in supplying the need information to research.

- Research studies overlapping one another are undertaken quite often for want of adequate information.
- There does not exist a code of conduct for researchers and inter-university and inter-departmental rivalries are also quite common.
- There may, at time, task place the problem of conceptualization and also problem of relating to the process of data collection and related things.

# <u>MEANING OF RESEARCH</u> <u>PROCESS</u>

 RESEARCH PROCESS CONSIST OF SERIES OF ACTION OR STEPS NECESSARY TO EFFECTIVELY CARRY OUT RESEARCH AND DESIRED SEQUENCING OF THESE STEPS



### 1. <u>RESEARCH PROBLEM</u>

- FIRSTLY RESEARCH PROBLEM SHOULD BE FIND OUT WHICH THE RESEARCHER WANT TO SOLVE
- IT CAN BE SOLVED BY DISCUSSING IT WITH COLLEAGUES
- 2. USING INTERNET, NEWSPAPER
- 3.TAKE HELP FROM THAT PERSON SOLVING SIMILAR PROBLEM

### 2. EXTENSIVE LITERATURE SERVEY

• UNDER THIS A BRIEF SUMMARY OF RESEARCH SHOULD BE WRITTEN DOWN.IT IS COMPULSORY FOR A RESEARCH WORKER WRITING A THESIS FOR A PhD. DEGREE TO WRITE A SYNOPSIS OF THE TOPIC AND SUBMIT IT TO THE NECESSARY COMMITTEE OR THE RESEARCH BOARD FOR APPROVAL .

• FOR THIS WE CAN TAKE HELP OF BOOK,LIABRAY,JOURNALS

### 3. <u>DEVELOPMENT OF WORKING</u> <u>HYPOTHESIS</u>

 WORKING HYPOTHESIS IS TENTATIVE ASSUMPTION MADE IN ORDER TO DRAW OUT AND TESTING ITS LOGICAL CONSEQUENCES
 <u>WE CAN TAKE HELP OF</u>: 1.EXPERTS 2.EXAMINATION OF DATA

AND RECORDS 3.REVIEW THE SIMILAR PROBLEM

### • 4. <u>PREPARING THE RESEARCH</u> <u>DESIGN</u>

- THE PURPOSE OF RESEARCH DESIGN IS TO PROVIDE THE COLLECTION OF RELEVANT EVIDENCE WITH MINIMAL EXPENDITURE OF EFFORT, TIME AND MONEY
- *THINGS TO BE CONSIDERED*:
- . COST OF RESEARCH
- 2. TIME AND SKILL AVAILABLE

#### 5. <u>DETERMINE SAMPLE DESIGN</u>

 PROBABILITY SAMPLE:-EVERY ITEM HAS EQUAL CHANCE TO BE SELECTED AS SAMPLE
 <u>EXAMPLES:-</u> 1.CLUSTER
 2.SIMPLE RANDOM
 3.STRATIFIDE • NON PROBABILITY SAMPLE:- WHICH IS SELECTED BY THE RESEARCHER WITH HIS OWN JUDGMENT <u>EXAMPLES:-</u> 1.JUDGEMENT 2.CONVENIENCE 3.QUOTA

### 6. COLLECTION OF DATA

• <u>PRIMARY DATA</u>:-WHICH IS COLLECTED FIRST TIME AND BY THE RESEARCHER HIMSELF.

> <u>EXAMPLE:-</u> OBSERVATION /PERSONAL AND TELEPHONIC INTERVIEW

• SECONDARY DATA:-WHICH IS NOT COLLECTED BY THE RESEARCHER HIMSELF BUT BY SOMEONE ELSE. EXAMPLE:-CASE STUDY METHOD

### 7. <u>EXECUTION OF THE</u> <u>PROJECT</u>

• IF THE EXECUTION OF PROJECT PROCEEDS ON CORRECT LINE THE DATA TO BE COLLECTED WHOULD BE ADEQUATE . THE RESEARCHER SHOULD SEE THAT THE PROJECT IS EXECUTED IN A SYSTEMATIC MANNER AND IN TIME .IF THE DATA ARE TO BE COLLETED THROUGH ITERVIEWERS, ARRANGEMENT SHOULD BE MADE FOR PROPER SELECTION AND TRAINING OF THE INTERVIEWER

### 8. ANALYSIS OF DATA

 AFTER COLECTING THE DATA IT SHOULD BE ANALYSED SO THAT IT CAN BECOME MORE USEFUL IN RESEARCH. IT CAN BE DONE BY :-1.
 EDITING 2. CODING 3. TABULATION

4. CLASSIFICATION

### 9. HYPOTHESIS TESTING

• HYPOTHESIS TESTING IS REQUIRED FOR TESTING WETHER THE FACTS AND DATA SUPPORT THE HYPOTHESIS OR THEY HAPPEN TO BE CONTRARY ?

### 10. <u>GENERALIZATION AND</u> <u>INTERPRETATION</u>

• IF A HYPOTHESES IS TESTED AND UPHELD SEVERAL TIME IT MAY BE POSSIBLE FOR THE RESEARCHER TO ARRIVE AT GENERALIZATION TO BUILD A THEORY . IF THE RESEARCHER HAD NO HYPOTHESIS TO START WITH, HE MIGHT SEEK TO EXPLAIN HIS FINDING ON THE BASIS OF SOME THEORY. IT IS NONE AS **INTERPREATION** 

#### 11. PREPARATION OF THE REPORT

FINALLY THR RESEARCHER HAS TO PREPARE THE REPORT OF WHAT HAS BEEN DONE BY HIM. WRITING THE REPORT MUST BE DONE WITH GREAT CARE KEEPING IN VIEW THE FOLLOWING POINTS: 1.THE PRELIMINARY PAGE 2.THE MAIN TEXT 3. THE END MATTER "Many of life's failures are people who did not realize how close they were to success when they gave up"

— Thomas Edison



