MEANING OF RESEARCH

Research in common parlance refers to a search for knowledge. The advance Learner's Dictionary of current English lays down the meaning of research as "a careful investigation or enquiry especially through search for new facts in any branch of knowledge."

Redman and Mory define research as a "Systematized efforts to gain new knowledge." Some People consider research as a movement a movement from the known to the unknown. We all possess the vital instinct of inquisitiveness for, when the unknown confronts us, we wonder and attain full and fuller understanding of all knowledge and the method, which man employs for obtaining the knowledge of whatever the unknown can be termed as research.

Research is an academic activity and as such the term should be used in a technical sense. According to Clifford Woody research comprises defining and redefining problems, formulating hypothesis or suggested solutions; collecting, organizing and evaluating data, making deductions and reaching conclusions; and at last carefully testing the conclusions to determine whether they fit the formulating hypothesis.

Research is, thus, an original contribution to the existing stock of knowledge making for its advancement. It is the pursuit of truth with the help of study, observation, Comparison and experiment. In short, the search for knowledge through objective and systematic method of finding solution to a problem is research. The systematic approach concerning generalization and the formation of a theory is also research.

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 yet. Though each research study has its own specific purpose, we may think of research objectives as falling into a number of following broad groupings:

i) To gain familiarity with a phenomenon or to achieves new insight into it (Exploratory or formulative research studies)

ii) To portray accurately the characteristics of a particular individual, situation or a group (Descriptive research studies) iii) To determine the frequency with which something occurs or with which it is associated with something else (diagnostic research studies)

iv) To test a hypothesis of a casual relationship between variables (hypothesis-testing research studies)

What makes people to undertake research?

The possible motives for doing research may be either one or more of the following:

- i) Desire to get a research degree along with its consequential benefits:
- ii) Desire to face the challenge in solving the unsolved problems, i.e., concern over practical problems initiates' research.
- iii) Desire to get intellectual joy of doing some creative work;
- iv) Desire to get respectability.

TYPES OF RESEARCH

I. BY PROCESS

1. Reporting: This type of research provides an account or summary of some data. The task in reporting may be quite simple and data readily available. Some times, the information may be difficult to find and under such circumstance, the assignment calls for knowledge and skill with information sources. Usually there is little inference or conclusion drawing.

Purists claim that this should not be called research even through carefully gathered data can have great value. However, other researchers argue that at least one form, investigative reporting, has a great deal in common with widely accepted qualitative and clinical research.

2. Descriptive: A descriptive study tries to discover answers to the questions of who? What?, When?, Where? And sometimes, how?. At this level researchers attempts to describe or define a subject, often by creating a profile of group of problem, people or events. Such studies may be a single variable frequency distribution or they may involve bivariate or multivariate relationship. They may or may not have potential for drawing powerful inferences. They do not answer the question why?. The descriptive study is popular in business research because of its versatility a cross disciplines. The main

characteristics of this method is that researchers have no control over the variable; he can report only what has happened or what is happening.

3. Explanatory Research

Explanatory study goes beyond description and attempts to explain phenomenon which was only observed in the descriptive study. In this study the researcher uses theories or at least hypothesis to account for the forces that caused a certain phenomenon to occur. The aviation industry may be interested in explaining the radiation risks for flight crews and passengers from the sun and stars. The variables might include attitude, proximity of air routes to the poles, time of year, and aircraft scheduling. The risk variable is exploited by the relations between each of the variables and radiation risk or by combination of the four variables and risk.

4. Predictive Research

This type of research is concerned with foreseeing the occurrence of a phenomenon. In business research. Prediction is found especially in studies conducted to evaluate specific courses of action to forecast current and future values. Control is logical outcome of prediction. Success in this endeavor, however, is largely determined by the complexity of the phenomenon and the adequacy of the theory.

5. Exploratory Research

This is the initial research conducted to clarify and define the nature of the problem. This also provides background information. It may mean to give qualitative scenario or measurement. Three interrelated activities exist in exploratory research.

- a) Diagnose a situation
- b) Scanning the alternatives
- c) Discovering new ideas.

6. Quantitative and Qualitative Research

Quantitative research is based on the measurement of quantity or amount. It is applicable to phenomenon that can be expressed in terms of quantity.

Qualitative research, on the other hand, is concerned with qualitative phenomenon i.e., phenomenon relating to or involving quality or kind.

For instance,, when we are interested in investigating the research for human behavior (i.e., why people think or do certain things), we often talk of qualitative research.

7. Annalistically Research

In analytical research the researcher has to use facts or information already available, and analyze these to make a critical evaluation of the material.

II BY PURPOSE

1. Business Research

A systematic enquiry that provides information to guide business decision to be carried out which is called business research. It is systematic process to find solutions to the business problems.

2. Social Science Research

3. Technique oriented

4. Motivation Research

Motivation research is a new field in research. Behavioral science such as psychology, sociology, cultural anthropology are concerned with the study of human behavior. It require in-depth interviews, which are designed to discover underlying motivation and desires.

III BY OBJECTIVES AND NATURE

. Depending upon the objective and nature of work involved, research nay be 1.

Applied research and 2. Fundamental research

1. Applied Research

Applied research aims at finding a solution for immediate problems facing a society or an industrial/ business organization.

For example, Research to identify social, economic or political trends that may affect particular institution.

2. Fundamental Research

Fundamental research is mainly concerned with generalizations, and with the formulation of a theory. Gathering, knowledge for knowledge's sake is termed as 'pure' or 'basic' research.

Examples,

- Research concerning some natural phenomenon.
- Research relating to pure mathematics.
- Research studies concerning human behavior carried on with a view to make generalizations about human behavior.

3. Conclusion oriented Research and decision oriented research

Scientific research, thought not a type, is a process, method aiming at purposive accurate results. Researches pertaining to this are conclusion oriented and decision oriented researches. **Conclusion oriented research** is a freelance function of picking up a problem, and design the enquiry as he proceeds.

Decision oriented research is confined to the problem assigned. The researcher is not free to go by his inclination. Operation research is an example of decision oriented research.

4. Conceptual or Empirical Research

Conceptual research is that related to some abstract idea(s) or theory. It is generally used by philosophers and thinkers to develop concepts or to reinterpret existing ones. On the Other hand, **empirical research** relies on experience or observation alone, with out due regard for system and theory. It is data based research, coming up with conclusions which are capable of being verified by observation or experiment.

SIGNIFICANCE OR RESEARCH IN BUSINESS

The role and significant of research in business can be highlighted by the following points.

- 1. **Modern Environment:** Business, behavior, social cultural, and economic environment are ever changing and dynamic. Hence, require studying the present, past and future.
- 2. Each area is composed of number of variables:

All the variables are to be analyzed. By carrying out research this can be possible.

- 3. Every body: At one stage or other those who are managing business have to take decisions to obtain better result. For this
 - i) relevant information is necessary
 - ii) Availability of scientific techniques and tools to collect information
 - iii) There would be problem of "information overload" if required discipline (research) is not employed.
- Every Body has access to knowledge/information. Competitive sprit increases. Hence, every body's responses, activities etc, have to be carefully analyzed, understood, and forecasted.

- 5. Economic, social political developments are the results of rigorous research, and their applications
- 6. Aspirations of people's expectations from the business, government, are ever increasing. Hence govt and business activities must promote welfare. Hence lot of forecasting and programming is required. This is possible through research.
- In order to extract meaningful information or knowledge from volumes of data.
 For all this application of research technique is essential
- Data warehousing and storing in electronic form. One must know new techniques of integration of data,. Because of research power and number of tools have increased.
- 9. Communication and measurement techniques with in research have increased. Hence knowledge of research is essential for every body.

All the above can be summarized into:

Research methods are useful in:

- a) Decision making
- b) Understanding the data, and analysis
- c) Understanding earlier research reports, their evaluation and applicability
- d) Evaluating research proposal in case of out sourcing
- e) To develop professionalism and a career in research

Significance of Research

"All progress is born of enquiry. Doubt is often better than overconfidence, for it leads to enquiry and enquiry leads to invention" is a famous **Hudson Maxim** in content of which the significance of research can well be understood. Increased amount of research make progress possible. Significance can be highlighted by the following points.

- 1. Research indicates scientific and indicative thinking
- 2. It promotes the development of logical habits of thinking and organization.
- Research provides the basis for nearly all governmental policies in our economic systems.
- 4. Research has its special significans in solving various operational and planning problems of business and industry.

5. Research is equally important for social scientists in studying social relationships and in seeking answers to various social problems

In addition to what has been stated above, the significans of research can also be understood keeping in view the following points:

- a) To those students who are to write a masters or Ph.D, thesis, research may mean a careerism or a way to attain a high position in the social structure.
- b) To professionals in research methodology, research may mean a source of livelihood;
- c) To philosophers and thinkers, research may mean the outlet for new ideas and insights;
- d) To literary men and women, research may mean the development of new style and creative work

e) To analysts and intellectuals, research may mean the generalizations of new theories. Thus, research is the fountain of knowledge for the sake of knowledge and an important source of providing guidelines for solving different business, governmental and social problems. It is a sort of formal training which enables one to understand the new developments in one's filed in a better way.

Criteria of Good Research

What ever may be the types of research work and studies, one thing that is important is that they all meet on the common ground of scientific method employed by them. One expects scientific research to satisfy the following criteria.

- 1. The purpose of the research should be clearly defined and common concepts be used.
- 2. The research procedure used should be described in sufficient detail to permit another researcher to repeat the research for further advancement, keeping the continuity of what has already been attained.
- The procedural design of the research should be carefully planned to yield results that are as objective as possible,'
- 4. The researchers should report with complete frankness, flaws in procedural design and estimate their effects upon the findings.

- 5. The analysis of data should be sufficiently adequate to reveal its significans and the methods of analysis used should be appropriate. The validity and reliability of the data should be cheeked carefully.
- 6. Conclusions should be confined to those testified by the data of the research and limited to those for which the data provides an adequate basis.
- 7. Greater confidence in research is warranted if the researchers is experienced, has a good reputation in research and is a person of integrity.

In other words, we can state the qualities of a good research as under:

- (i) Good research is systemstic
- (ii) Good research is logical
- (iii) Good research is empirical

(Res. is basically related to one or more aspects of a real situation it deals with concentrate data that provides basis for external validity to res. Result.)

(iv) Good research is replicable

Research Process

Research process consists of series of actions or steps necessary to effectively carry out research and the desired sequencing of these steps. One should remember that the various steps involved in a research process are not mutually exclusive; nor they are separate and distinct. They do not necessarily follow each other in any specific order and the researcher has to be constantly anticipating at each step in the research process the requirements of the subsequent steps. However, the following order concerning various steps provides a useful procedural guideline regarding the research process.

- 1. Formulating the research problem
- 2. Extensive literature survey
- 3. Developing the hypothesis
- 4. Preparing the research design
- 5. Determining the sample design
- 6. Collecting the data
- 7. Execution of the project
- 8. Analysis of data
- 9. Hypothesis testing

- 10. Generalization and interpretation
- 11. Preparation of the report or presentation of the result, i.e., formal write-up of conclusions reached.

