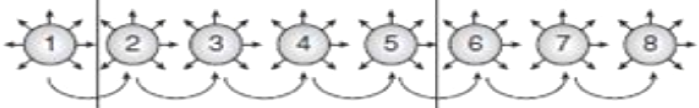
THE RESEARCH PROCESS			
Phase	PHASE I	PHASE II	PHASE III
Main task	*DECIDING* ↓ **WHAT** *(research questions to answer?)*	*PLANNING* ↓ **HOW** *(to gather evidence to answer the research questions)*	*UNDERTAKING* ↓ **COLLECTING** *(the required information)*
Operational steps/research journey			

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Research Process

Before embarking on the details of research methodology and techniques, it seems appropriate to present a brief overview of the research process. Research process consists of series of actions or steps necessary to effectively carry out research and the desired sequencing of these steps.

In this chapter you will learn about:

The eight-step model for carrying out research

Phase 1	Phase 2	Phase 3
Deciding what to research	**Planning a research study**	**Conducting a research study**
Step I Formulating a research problem	Step ii Conceptualizing a research design	Step vi Collecting data
	Step iii Constructing an instrument for data collection	Step vii Processing and displaying data
	Step iv Selecting a sample	Step viii writing a research report
	Step v Writing a research proposal	

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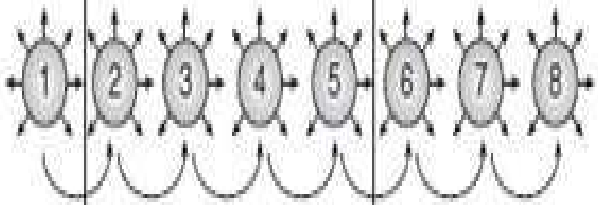
Operational steps/research journey			

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Before you start any form of study, get a clear understanding of what a research problem is and learn to formulate it properly. After defining it, you can start writing your paper. It means that research problems or questions are the fuel driving the entire scientific process and they serve as the foundation of any experimental design or method, from case studies to real experiments.

Why does it matter to researchers? It's an important problem that you state in your research paper to define your specific study area and provide a brief synopsis of how you develop a hypothesis. The quality of a research problem defines your success.

6.1 What is a research problem?

It's a clear and definite statement or expression about your chosen area of concern, a difficulty to eliminate, a condition to improve, or a troubling problem that exists in theory, literature, and practice. A research problem indicates a need for its meaningful investigation. It doesn't state how to do something and a researcher shouldn't present a value question or offer a broad research proposal.

Problem means a question or an issue to be examined.

A research problem is a statement about an area of concern, a condition to be improved, a difficulty to be eliminated, or a troubling question that exists in scholarly literature, in theory, or in practice that points to the need for meaningful understanding and deliberate investigation. In some social science disciplines the research problem is typically posed in the form of a question. A research problem does not state how to do something, offer a vague or broad proposition, or present a value question.

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Research problem refers to some kind of problem which a researcher experiences or observes in the context of either a theoretical or practical situation

The purpose of a problem statement is to introduce the reader to the importance of the topic being studied. The reader is oriented to the significance of the study and the research questions or hypotheses to follow.

Places the problem into a particular context that defines the parameters of what is to be investigated.

Provides the framework for reporting the results and indicates what is probably necessary to conduct the study and explain how the findings will present this information.

What prompts a researcher to take up a problem for research?

6.2 The research problem arise from the following considerations

1. **Contemporary interest**
2. **Own interest**
3. **Gaps in the field**

Contemporary interest

In the routine life, a researcher may come across with various problems which need a scientific study. A research problem may be selected from the burning problems of the time.

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(eg) suppose dowry death are increasing day by day in the society the researcher may be interested to study the extent of increase, reasons for such tendency and the implications of the same on the society. It depends on the skill of the researcher to convert a problem of Contemporary interest into a good topic of research. Thus the researcher can consider various issues of Contemporary nature for a detailed study.

Own interest

A researcher may select a problem for investigation of a given theory in which he/ she has considerable interest. It may be based on his/ her convenience. One may have fascination to study a particular aspect in which he is interested. So we critically study books and articles or go through research reports, we will be attracted by certain areas of a subject. This interest may prompt a researcher to concentrate on that aspect.

Gaps in the field

A researcher can choose a problem for research with a view to identify gaps existing in the field of research. A researcher attracted by a particular subject may survey the field of research conducted in the concerned subject and identify unexplored areas. He may then try to fill this gap. This type of research would be extending and broadening the field of knowledge in that area.

Selection of the Problem

The research problem undertaken for study must be carefully selected. The task is a difficult one, although it may not appear to be so. Help may be taken from a research guide in this connection. Nevertheless, every researcher must find out his own

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salvation for research problems cannot be borrowed. A problem must spring from the researcher's mind like a plant springing from its own seed. If our eyes need glasses, it is not the optician alone who decides about the number of the lens we require. We have to see our self and enable him to prescribe for us the right number by cooperating with him. Thus, a research guide can at the most only help a researcher choose a subject. Inevitably, selecting a problem is somewhat arbitrary, idiosyncratic, and personal. Avoid selecting the first problem that you encounter. Try to select the most interesting and personally satisfying choice from among two or three possibilities. The problem selection should matter to you. You should be eager and enthusiastic.

A good topic should be small enough for a conclusive investigation and large enough to yield interesting results.

6.3 Considerations in selecting a research problem

1. Your genuine enthusiasm for the problem.
2. Controversial subject should not become the choice of an average researcher.
3. The degree to which research on this problem benefits the profession and society.
4. The degree to which research on this problem will assist your professional goals and career objectives.
5. Too narrow or too vague problems should be avoided.
6. The degree to which this research will interest superiors and other leaders in the field.
7. The degree to which the research builds on your experience and knowledge.

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8. Ease of access to the population to be studied and the likelihood that they will be cooperative Affordability.
9. Likelihood of publication.
10. Relationship to theories or accepted generalizations in the field.
11. Degree to which ethical problems are involved.
12. Degree to which research is unique or fills a notable gap in the literature.
13. Degree to which the research builds on and extends existing knowledge before the final selection of a problem is done, a researcher must ask himself the following questions:
    a. Whether he is well equipped in terms of his background to carry out the research?
    b. Whether the study falls within the budget he can afford?
    c. Whether the necessary cooperation can be obtained from those who must participate in research as subjects?

6.4 What are the sources of problem identification?

Research students can adopt the following ways to identify the problems:

1. Research reports already published may be referred to define a specific problem.

2. Assistance of any research organization, which handles a number of projects of the companies, can be sought to identify the problem.

3. Professors working in reputed academic institution can act as guides in problem identification.

4. Company employees and competitors can assist in identifying the problems.

5. Cultural and technological changes can act as a source for research problem identification.

6. Seminars/symposiums/focus groups can act as a useful source.

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6.5 Understanding the Problem

Once the problem has been selected, the same has to be understood thoroughly and then the same has to be reframed into meaningful terms from an analytical point of view. The first step in research is to formulate the problem. A company manufacturing television sets might think that it is losing sales to a foreign company. A brief illustration aptly demonstrates how such problem can be ill-conceived. The management of a company felt, a drop in sales was because of the poor quality of product. Subsequently, research was undertaken with a view to improve the quality of the product. But despite an improvement in quality, sales did not pick up. In this case, we may say that the problem is ill-defined. The actual reason was ineffective sales promotion.

The problem thus needs to be carefully identified. Problem formulation is the key to research process. For a researcher, problem formulation means converting the management problem to a research problem. In order to attain clarity, the manager and researcher must articulate clearly so that perfect understanding of each other's is achieved.

Marketing problem which needs research can be classified into two categories:

1. Difficulty related problems

Did u know?

2. Opportunity related problems, while the first category produces negative results such as, decline in market share or sales, the second category provides benefits. Problem definition might refer to either a real-life situation or it may also refer to a set of opportunities. Market research problems or opportunities will arise under the following circumstances:

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1) Unanticipated change (2) Planned change. Many factors in the environment can create problems or opportunities. Thus, change in the demographics, technological and legal changes affect the marketing function. Now the question is how the company responds to new technology, or product introduced by the competitor or how to cope with the changes in life-styles. It may be a problem and at the same time, it can also be viewed as an opportunity. In order to conduct research, the problem must be defined accurately.

While formulating the problem, Various Aspects of Research Problem clearly defined

6.6 Necessity of Defined Problem

Defining a research problem properly is a prerequisite for any study and is a step of the highest importance. A problem well defined is half solved. Defining the problem is often more essential than its solution because when the problem is formulated, an appropriate technique can be applied to generate alternative solutions. This statement signifies the need for defining a research problem. The problem to be investigated must be defined unambiguously for that will help to discriminate relevant data from the irrelevant ones. When you define a research problem you are trying to reduce the outcome of an answer. The question of course when you speak about "marketing research" is how I can target more customers that I can sell my product to. You are looking for specific answers such as:

"What type of soda does all foreign born males between the ages of 25-35 drink?" This is defining the problem.

Why do you consider foreign born males?

What constitutes soda? etc.

This is important because companies and sales organization attempt to "target" their market instead of taking a shotgun approach. The process is to first make sure any information you obtain is credible and from a reputable organization. Then break down your problem and pick apart any inconsistencies you may see within you research project.

6.7 Defining the problem:

A proper definition of the research problem is a prerequisite for any research study. By defining unambiguously the problem under study it is possible to determine which data is relevant and which is not relevant. Therefore defining problem involves the task of laying down the boundaries within which a researcher shall study the problem with a predetermined objective in view. Much care is to be taken in defining the problem. Otherwise it will cause a lot of problems later on.

6.8 Scope of the problem:

The researchers fix the wall of the study. The researcher must identify which aspect he is trying to prove.

1. Who is the focus?
2. What is the subject-matter of research?
3. To which geographical territory/area the problem refers to?
4. To which period does the study pertains to?

Example: "Why does the upper-middle class of Bangalore shop at Life-style during the Diwali season"?

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Here all the above four aspects are covered. We may be interested in a number of variables due to which shopping is done at a particular place. The characteristic of interest to the researcher may be (1) Variety offered at life-style (2) Discount offered by way of promotion (3) Ambience at the life-style **and (4) Personalized** service offered. In some cases, the cause of the problem is obvious whereas in others the cause is not so obvious. The obvious causes are the products being on the decline. Not so obvious causes could be a bad first experience for the customer.

6.9 Justification of the problem:

Researcher justifies the relevance of the study. In the case of scientific curiosity related problems need urgent solution that must be given preference. It enables the researcher to save money time and effort of the research staff.

6.10 Feasibility of the problem:

It means the possibility of conducting the study successfully. The elements of time, data and cost are to be taken into consideration before selecting the topic for the study. Therefore the research students are required to ponder over these accepts and then take a decision whether or not it is feasible.

6.11 Originality of the problem

There is always a doubt in the minds of the researchers as to the suitability of a particular topic in terms of its originality. Thus the researchers conduct the survey of literature. This proves to be specially important in the physical sciences or natural sciences. But in social sciences, particularly in commerce and management, there is no systematic compilation of the works already done or on hand.

Two people may be doing a work more or less on similar topic. In such situations it is not advisable to continue to work in the same manner. What is

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advisable that, each of them should try to focus on different aspects, so that they could enrich the field of knowledge with their studies.

6.11Steps for defining and formulating a research problem

1. **Stating the problem**
   First of all, the researcher should state the problem in general terms, keeping in view either some practical concern or some scientific or intellectual interest. In the case of social science research, it is advisable to do some field observation or conduct pilot survey. Then the researcher can himself state the problem or he can seek the guidance of the guide or the subject expert in accomplishing this task. From this general term the researcher narrow down the problem and phrase the problem in operational terms. The problems stated generally may contain some ambiguities which must be resolved by proper thinking and rethinking over the problem. There are two ways of stating the problem either (a) By making declarative statements or (b) By way of posing questions
2. **Understanding the nature of the problem**
   For understanding the nature of the problem in a better way, the researcher has to hold discussions with those who have knowledge about the stated problem.
3. **Surveying the available literature**
   This is necessary because only through such a survey, a researcher can understand the relevant theories**.**
4. **Developing the ideas through discussions**
   Through discussions various new ideas can be developed. A researcher must discuss with people having experience can enlighten the researcher on various aspects of his study. It enables the researcher to sharpen his ideas.

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5. **Rephrasing the research problem**
6. **Finally the researcher must rephrase the research problems into** working proposition. Then it may become operationally viable and may help in the development of working hypothesis.

Summary

Problem Formulation

Problem formulation is the key to research process. For a researcher, problem formulation means converting the management problem to a research problem. In order to attain clarity, the MR manager and researcher must articulate clearly so that perfect understanding of each others is achieved.

While problem is being formulated, the following should be taken into account:

1. Determine the objective of the study
2. Consider various environment factors
3. Nature of the problem
4. State the alternative

1. ***Determine the objective:*** Objective may be general or specific. General - Would like to know, how effective was the advertising campaign. The above looks like a statement with objective. In reality, it is far from it. There are two ways of finding out the objectives precisely.

(a) The researcher should clarify with the MR manager "What effective means". Does effective mean, awareness or does it refer to sales increase or does it mean, it has improved the knowledge of the audience, or the perception of audience about the product. In each of the above circumstances, the questions to be asked from audience varies

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(b) Another way to find objectives is to find out from the MR Manager, "What action will be taken, given the specified outcome of the study."

Example: If research finding is that, the previous advertisement by the company was indeed ineffective, what course of action the company intends to take (a) Increase the budget for the next Ad (b) Use different appeal (c) Change the media (d) Go to a new agency.

Caution: If objectives are proper, research questions will be precise. However we should remember that objectives, do undergo a change.

2. ***Consider environmental factors:*** Environmental factors influence the outcome of the research and the decision. Therefore, the researcher must help the client to identify the environmental factors that are relevant.

Example: Assume that the company wants to introduce a new product like Iced tea or frozen green peas or ready to eat chapattis.

The following are the environmental factors to be considered:

(a) Purchasing habit of consumers.

(b) Presently, who are the other competitors in the market with same or similar product?

(c) What is the perception of the people about the other products of the company, with respect to price, image of the company?

(d) Size of the market and target audience.

All the above factors could influence the decision. Therefore researcher must work very closely with his client.

3. ***Nature of the problem:*** By understanding the nature of the problem, the researcher can collect relevant data and help suggesting a suitable solution. Every problem is related to either one or more variable. Before starting the data collection, a

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preliminary investigation of the problem is necessary, for better understanding of the problem. Initial investigation could be, by using focus group of consumers or sales representatives. If focus group is carried out with consumers, some of the following question will help the researcher to understand the problem better:

(a) Did the customer ever included this company's product in his mental map?

(b) If the customer is not buying the companies product, the reasons for the same.

(c) Why did the customer go to the competitor?

(d) Is the researcher contacting the right target audience?

4. ***State the alternatives:*** It is better for the researcher to generate as many alternatives as possible during problem formulation hypothesis.

Example: Whether to introduce a Sachet form of packaging with a view to increase sales. The hypothesis will state that, acceptance of the sachet by the customer will increase the sales by 20%. Thereafter, the test marketing will be conducted before deciding whether to introduce sachet or not. Therefore for every alternative, a hypothesis is to be developed.

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