

Materi 4

Permasalahan Riset



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Define Research Problem

Definition of Research Problem

A problem statement is actually a challenge based on the limitations, which a Researcher identifies in context of a practical or theoretical situation and wants to find a solution for the same. Problem statement formulation is really a challenge in the research domain. In any research, may be engineering, management or medical, the first and important step is to define the research problem in correct words. It should clearly define what type and improvement in the research is going to propose by the researcher. Researchers must examine all the possibilities concerning the problem before defining the research problem.

Following points need to be considered for defining the research problem:

- Available literature need to be studied
- Nature of the problem need to be studied
- An idea is generated after the discussion with colleagues, friends, seniors and experts in the research subject
- The research problem need to be rephrased into a working proposition

Define Research Problem

The following points should be considered by the researcher in selecting the research problem:

- Too narrow or too vague statements for the research problem should be avoided
- Researchers should avoid the selection of controversial subjects for the research problem
- Research subjects that are done by a number of researchers generally avoided for the selection of research problem
- The research problem should be feasible for experimentation/implementation
- Sufficient numbers of publications/materials should be available for finding the limitations/weaknesses of the subject
- The researcher's qualification, the importance of the subject, costs involved for experimentation and time factors should be considered

Select Problem Statement

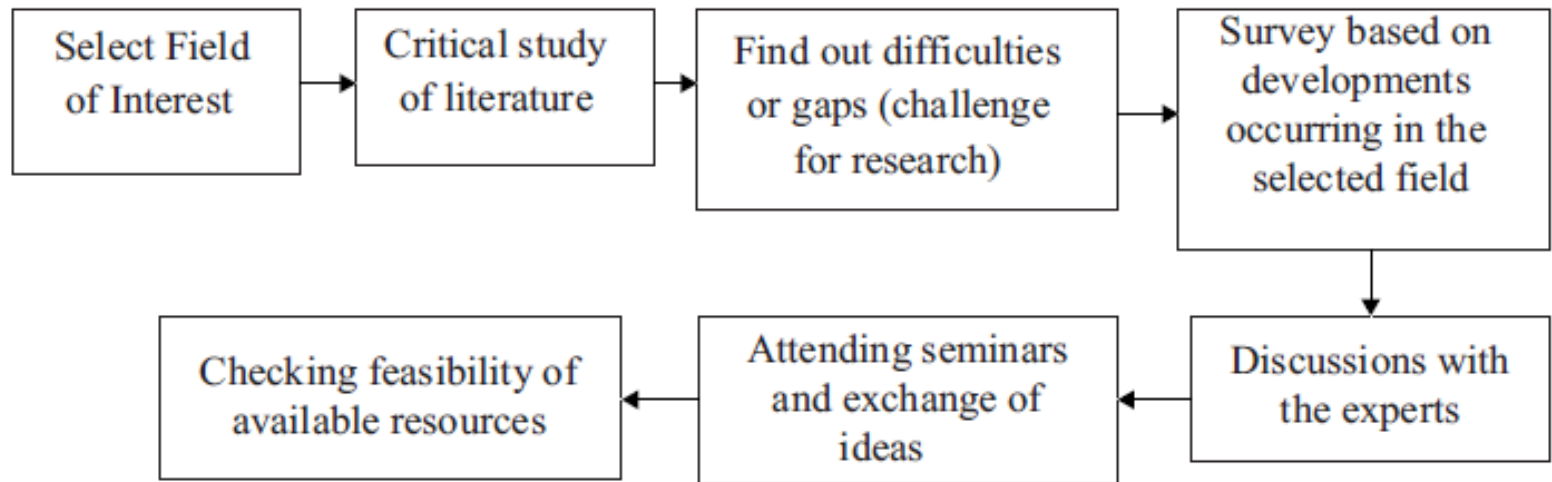


FIGURE 2.5
Sequence for the Selection of Problem Statement

Literature Study for The Problem Statement

All available literature material, which is in hand with the researcher, must necessarily be surveyed and examined before the definition of the research problem. It means that, the researcher is conversant with the relevant theory concerning the subject to be studied. Also, records and findings related to the research topic is studied thoroughly by the researcher. There is always a need to devote sufficient time in revising/reviewing of the research, which has already undertaken by other researchers in related domain.

It also helps to identify, what type of data and material is available for operational purpose. The availability of data helps to narrow down the problem itself. It is also easier to decide the technique/method to be used for the experimentation purpose. Study of available literature survey also helps to identify the gaps in the theories or whether the existing theories applicable to the problem under study. All of these points help the researcher to think about new ideas, which occurs in his mind to take new strides in the field for improving the knowledge. Such type of study also helps the researchers to find out the new lines of approach to the present problem.

Formulate Problem Statement

Rephrasing the problem into analytical or the operational terms is not a difficult task. The following points need to be observed while defining the research problem.

- Assumptions related to the research problem should be clearly stated
- Different technical words, terms and phrases with special meanings, used in the problem statement, should be clearly defined
- Criteria for the selection of problem should be provided
- Sources of data available and the time limit should be taken into consideration
- The environment/circumstances within which the problem is to be studied must be mentioned explicitly in defining a research problem

Defining the research problem the following steps are generally used

- Define problem in a broader sense
- Resolve the ambiguities involved
- Rethinking about the problem statement and redefining

Scope & Significance of the Research Problem

The problem statement should have the following characteristics:

- The problem statement should be based on factual evidence
- The problem statement should be meaningful and testable
- It should be relevant and meaningful
- It should reflect the need for the society
- The problem statement should include research component
- The problem specified in the problem statement should be solvable, achievable and measurable

The problem statement should make it clear about the purpose of the research? The purpose of the research should be clear to you and the reader. The subsequent elaboration of method should be provided for the research.



Thank You!
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