Writing a Research Proposal

**General comments**
- Choosing a research topic and presenting it in the form of a viable research proposal is often the first stumbling block for any researcher. Some of you might have already formulated a research proposal while others are still struggling.
- However, usually a research proposal is submitted in a particular format and it is designed such that when a researcher is able to submit it in the proper format, it may be assumed that he has already acquired some knowledge about the problem and an understanding of the extent of work required.
- Let’s take a look at such a format with a simple illustration. Note that this is just an example, not an actual proposal; so do not submit it as a research proposal without further thought.

**An Example**
Research Topic: Say, a researcher is going to evaluate the effectiveness of OPAC interfaces (taking say, the NTU or NLB OPAC as a case).

Usually a research proposal is submitted in a format that includes the following points. Each point here is illustrated with the chosen research topic in order to show you how a research proposal is built step-by-step:

1. **Introduction and background information**
   Here the researcher provides an introduction to the area/topic of research and provides some background information. The researcher in our example, has to briefly talk about OPAC, what it is, the OPAC interface, etc., what is meant by effectiveness, what is evaluation, and so on. He will also have to provide some background information on the domain/environment viz. NTU or NLB, including its nature, objective, and so on, as well as something about the particular OPAC: what it is, when it came in to being with what mission or objective, and so on. In order to accomplish these tasks the researcher needs to have some background reading with a view to setting up the ground for the research.

2. **Statement of the problem and justification**
   Here the researcher aims to state what exactly the problem is that will be tackled by the present research. This will be based on the background information gathered in step 1. In fact, this is a crucial stage and here the researcher has first to come up with a broader or general objective of study which could further be broken down to specific objectives. In our example, the general objective could be stated something like the following:

   The general objective of this research is to find out how effective and friendly is the OPAC interface of NTU or NLB (as the case may be), from end-users' point of view, with a view to coming up with suggestions for modifications, improvements, etc., if any.

   So, the major problem to be tackled in course of this study has been stated, and this could be sub-divided into sub-problems. In this case, one could write
them as follows:

The specific objectives of this study are:

- To assess how far the OPAC is used as a tool for finding information by the end-users of NTU or NLB;
- To assess how friendly is the interface from the end-user point of view;
- To assess how effective is the OPAC i.e., how far it can retrieve the required information;
- To identify the problems faced by the end-users in searching the OPAC;
- To propose areas of improvement;

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The researcher has also to justify the problem in the light of the stated objectives and the background information gathered and presented in Step 1.

3. **Scope of the Research**
   This is a place where the exact scope of the research is mentioned. This is basically setting the boundary of your work. This will help one to assess whether the research is feasible or not and also gives an idea of what is expected. For example, in the research mentioned above one can specify the scope by saying that:
   - The research only considers students (postgraduate and/or undergraduate) as end-users;
   - The study will be conducted within a specified time-period, just in one semester or in one month, say;
   - The study only considers the OPAC interface available on the NTU Intranet; and so on.

   The scope of a research could depend on a number of factors, such as resources – time, fund, manpower, and so on; accessibility to the information, subject, and so on.

4. **Implications/Benefit**
   Here, the researcher will have to specify the implications of the research. In other words, he has to indicate what benefit it is likely to bring. For example, in this case, one could say that such a study would enable user to identify the major weaknesses, if any, of the OPAC with recommendations for improvement. Thus, in the long run this research would help the library authority improve the OPAC and thus to improve the quality of information service. This is the short-term benefit. The long term one could be, say, identification of some common features, both strengths and weaknesses, of the OPAC and the underlying software in general which could be used in assessing any other OPAC that is built on the same software. Some of the results could even be used in other areas of information retrieval, and so on.

5. **Proposed Methodology**
   Once, the researcher knows what the problems are, what the scope of the study is, and so on, he will be able to choose an appropriate methodology to accomplish the work. A research proposal should indicate the methodology that will be followed. This could be just one research method or a
combination of methods. In our chosen research topic, the researcher could use different methodologies -- a survey in the real-life situation qualitatively or quantitatively, a laboratory type experiment with some selected end-users and a set of pre-set queries, Delphi method with a small selected group of users and interacting with them repetitively, and so on.

One may argue that in a long-term research project for a period of 4/5 years, say, it is difficult to specify exactly what method(s) would be used for data collection, and indeed, a chosen method may not prove to be successful and this could be learnt only after beginning to work, or even a better method could be identified through literature review. Thus, specifying exactly what methodology is and adhering to it may not always be possible. Nevertheless, the researcher should have an idea about the methodology to be used in course of the research. Otherwise, it may be difficult to plan the work and specify the resource requirements.

6. Resource Requirements
In your case, you may not have to specify this, but in any other research project, you will have to specify the resources – fund, time, manpower, equipment, and so on. However, for your research, you need to prepare a schedule or time-table that will help you proceed systematically with your work. This will involve breaking down the whole project into different phases and allocating estimated time for each. At times, a particular phase may take little more or little less time, but the time table should be followed as strictly as possible. In other types of research this is extremely important as the resources will be allocated and progress will be monitored based on this time table.

7. References
Here, the researcher should be able to indicate that he has read at least some authoritative sources to collect the background information, the problem, etc., presented in the proposal.