

Feasibility study

The main aim of the feasibility study activity is to determine whether it would be financially and technically feasible to develop the product. The feasibility study activity involves analysis of the problem and collection of all relevant information relating to the product such as the different data items which would be input to the system, the processing required to be carried out on these data, the output data required to be produced by the system, as well as various constraints on the behaviour of the system. These collected data are analyzed to arrive at the following:

1. **An abstract problem definition:** Only the important requirements of the customer are captured and the details of the requirements are ignored.
2. **Formulation of the different strategies for solving the problem:** All the different ways in which the problem can be solved are identified.
3. **Evaluation of the different solution strategies:** The different solution strategies are analyzed to examine their benefits and shortcomings. This analysis usually requires making approximate estimates of the resources required, cost of development, and development time required for each of the alternate solutions. These estimates are used as the basis for comparing the different solutions. Once the best solution is identified, all later phases of development

are carried out to as per this solution. In other words, we can say that during the feasibility study, very high-level decisions regarding the exact solution strategy to be adopted are made. Therefore, feasibility study is considered to be a very important stage. At this stage, it may also be determined that none of the solutions is feasible due to high cost, resource constraints, or some technical reasons. This scenario would, of course, require the project to be abandoned.

The following case study is an example of a feasibility study undertaken by an organization. It is intended to give you a feel of the activities and issues involved in the feasibility study phase of a typical software project.