

## **Feasibility Study**

Feasibility is defined as the practical extent to which a project can be performed successfully. To evaluate feasibility, a feasibility study is performed, which determines whether the solution considered to accomplish the requirements is practical and workable in the software. Information such as resource availability, cost estimation for software development, benefits of the software to the organization after it is developed and cost to be incurred on its maintenance are considered during the feasibility study. The results of the feasibility study should be a report that recommends whether or not it is worth carrying on with the requirements engineering and system development process.

If a system does not support the business objectives, it has no real value to the business. While this may seem obvious, many organisations develop systems which do not contribute to their objectives either because they don't have a clear statement of these objectives, because they fail to define the business requirements for the system or because other political or organisation factors influence the system procurement.

The objective of the feasibility study is to establish the reasons for developing the software that is acceptable to users, adaptable to change and conformable to established standards. Various other objectives of feasibility study are listed below.

- To analyse whether the software will meet organizational requirements
- To determine whether the software can be implemented using the current technology and within the specified budget and schedule
- To determine whether the software can be integrated with other existing software.

The information assessment phase identifies the information that is required to answer the three questions set out above. Once the information has been identified, you should question information sources to discover the answers to these questions. Some examples of possible questions that might ask:

### **Types of Feasibility**

Various types of feasibility that are commonly considered include technical feasibility, operational feasibility, and economic feasibility.

**1. Technical feasibility** assesses the current resources (such as hardware and software) and technology, which are required to accomplish user requirements in the software within the allocated time and budget.

The technology for any defined solution is normally available. The question whether that technology is mature enough to be easily applied to our problems. Some firms like to use state-of-the-art technology, but the cab booking firm prefer to use mature and proven technology. A mature technology has a larger customer base for obtaining advice concerning problems and improvements. All the specified requirements for cab booking in QuickDrop can be implemented using the available hardware and software. In the backend technologies like PHP, MySQL used. The user interface can be designed using HTML, CSS and all. A few machine techniques are also used to implement functionalities such as chatbot recommendation systems etc. It has technical capacity to hold the data required to use the new system. So, the proposed project is technically feasible.

**2. Operational feasibility** assesses the extent to which the required software performs a series of steps to solve business problems and user requirements. This feasibility is dependent on human resources (software development team) and involves visualizing whether the software will operate after it is developed and be operative once it is installed.

For operational feasibility study of cab booking, we appoint a small group of people who are familiar with information system techniques, who understand the parts of the Cabiness that are relevant to the project and are skilled in system analysis and design process. The system provides users and admin with timely, accurate and useful formatted information. Since the system is user friendly users will adapt to a new software. QuickDrop makes maximum use of available resources, including people, time, and flow of form.

**3. Economic feasibility** determines whether the required software is capable of generating financial gains for an organization. It involves the cost incurred on the software development team, estimated cost of hardware and software, cost of performing feasibility study, and so on.

During this feasibility phase, broad alternative solutions for problems in cab booking are examined. For each alternate solution the cost and benefits have to be examined before designing one of the alternatives. The system is cost effective in all aspects as the estimated cost for hardware and software is manageable. A rough estimate of the project schedule is required to determine if it would be feasible to complete the systems project within a

required timeframe. The required timeframe would need to be set by the organization. The proposed project system ensures that the users can book the cab as per their requirements by logging on to the website. It increases the efficiency of the system in offering high-quality services to its customers. So, QuickDrop is economically feasible.