

CHAPTER-3

FEASIBILITY STUDY

AUTOMATED ATTENDANCE SYSTEM THROUGH FACIAL RECOGNITION AND DETECTION IN MACHINE LEARNING

3. Feasibility Study:

The feasibility study is a major factor which contributes to the analysis and development of the system. The decision of the system analyst whether to design a particular system or not depends on its feasibility study.

Study of requirement analysis is done through different feasibility study. Feasibility study is undertaken whenever a possibility of probability of improving the existing system or designing new system. Feasibility study helps to meet user requirements.

It enables us to determine the potential of existing system and improving it. It helps to develop a technically and economically feasible system. It helps to know what should be embedded in the system. It also helps to develop a cost-effective system. We can make better utilization of available resources.

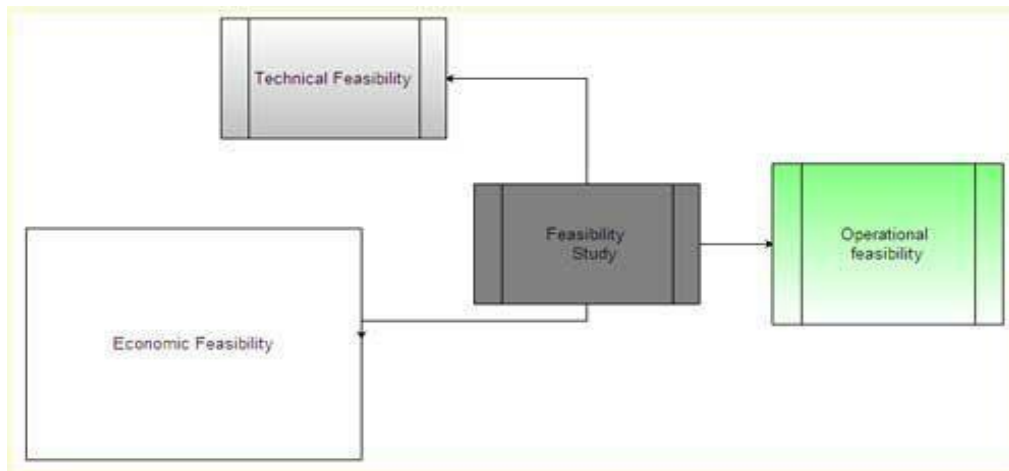
The project concept is feasible because of the following:

3.1 Technical Feasibility

3.2 Economical Feasibility

3.3 Operational Feasibility

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3.1 Technical Feasibility:

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. For this, the software development team ascertains whether the current resources and technology can be upgraded or added in the software to accomplish specified user requirements. Technical feasibility also performs the following tasks.

- Analyzes the technical skills and capabilities of the software development team members
- Determines whether the relevant technology is stable and established
- Ascertains that the technology chosen for software development has a large number of users so that they can be consulted when problems arise or improvements are required.

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3.2 Economical Feasibility:

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. For this, it is essential to consider expenses made on purchases (such as hardware purchase) and activities required to carry out software development. In addition, it is necessary to consider the benefits that can be achieved by developing the software. Software is said to be economically feasible if it focuses on the issues listed below.

- Cost incurred on software development to produce long-term gains for an organization
- Cost required to conduct full software investigation (such as requirements elicitation and requirements analysis)
- Cost of hardware, software, development team, and training.

2.3 Operational Feasibility:

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. Operational feasibility also performs the following tasks.

It is a measure of how well the system will work in the organization. It is also a measure of how people feel about the system/project. In this project the user feels that the system

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is very user friendly. This project developed is worth and solutions to the problem will work successfully.

- Determines whether the problems anticipated in user requirements are of high priority
- Determines whether the solution suggested by the software development team is acceptable
- Analyzes whether users will adapt to a new software
- Determines whether the organization is satisfied by the alternative solutions proposed by the software development team.