



Software Engineering

هندسة البرمجيات

جامعة بغداد

كلية التربية للعلوم الصرفة/ابن

الهيثم

قسم علوم الحاسبات

المرحلة الثالثة

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Requirements Elicitation and Analysis

Topics covered



- ✧ Identification of need
- ✧ Feasibility study
- ✧ Need for feasibility study
- ✧ Types of feasibility study

Identification of need



- ✧ The analyst (system or software engineer) meets with the customer and the end with intent of understanding the **product's objectives** and to **define goals** required meeting the objectives.
- ✧ The analyst then gathers the additional information likes **technology availability** , **resources required**, **cost**, **schedule**, etc.

Feasibility study



- ✧ In **Software Engineering** is a study to evaluate feasibility of proposed project or system.
- ✧ Feasibility study is one of stage among important four stages of SDLC. As name suggests feasibility study is the feasibility analysis or it is a measure of the software product in terms of **how much beneficial product development** will be for the organization in a practical point of view.
- ✧ Feasibility study is carried out based on many purposes to analyze whether software product **will be right** in terms of development, implantation, contribution of project to the organization etc.

Need for feasibility study



Feasibility study is so important in any project. As after completion of feasibility study it gives a conclusion of whether to **go ahead** with proposed project as it is practically feasible **or to stop** proposed project here as it is not right/feasible to develop or to think/analyze about proposed project again.

Types of feasibility study



The feasibility study mainly concentrates on below five mentioned areas:

➤ Economic feasibility

In Economic Feasibility study **cost and benefit** of the project is analyzed. Means under this feasibility study a detail analysis is carried out what will be cost of the project for development which includes all required cost for final development like hardware and software resource required, design and development cost and operational cost and so on.

After that it is analyzed whether project will be beneficial in terms of finance for organization or not.

Feasibility study



➤ Technical feasibility

In Technical Feasibility current resources both **hardware**, **software** along with **required technology** are analyzed/assessed to develop project.

This technical feasibility study gives report whether there exists correct required resources and technologies which will be used for project development.

Along with this, feasibility study also analyzes **technical skills and capabilities of technical team**, existing technology can be used or not, maintenance and up-gradation is easy or not for chosen technology etc.

Feasibility study



➤ Legal feasibility

In Legal Feasibility study project is analyzed in **legality point of view**. This includes analyzing barriers of legal implementation of project, **data protection** acts or **social media laws**, project certificate, **license**, copyright etc. Overall, it can be said that Legal Feasibility Study is study to know if proposed project conform legal and ethical requirements.

Feasibility study



➤ Schedule feasibility

In Schedule Feasibility Study mainly **timelines/deadlines** is analyzed for proposed project which includes how many times teams will take to complete final project which has a great impact on the organization as purpose of project may fail if it can't be completed on time.

Feasibility study



➤ Operational feasibility

In Operational Feasibility degree of providing service to requirements is analyzed along with how much easy product **will be to operate and maintenance after deployment**. Along with this other operational scopes are determining usability of product, Determining suggested solution by software development team is acceptable or not etc.



Thanks