CHOOSING TECHNOLOGIES

Choosing Technologies

- An outcome of project analysis will be the selection of the most appropriate methodologies and technologies.
- The chosen technology will affect:-

1. The training requirements for development staff
2. The types of staff to be recruited
3. The development environment – both hardware and software
4. System maintenance arrangements

Steps of project analysis

- Identify project as either objectives-driven or product-driven.
- Analyse other project characteristics

1. Is a data-oriented system to be implemented?
2. Will the software that is to be produced be a general tool or application specific?
3. Are there specific tools available for implementing the particular type of application?
4. Is the system to be created safety critical?
5. Is the system designed primarily to carry out predefined services or to be engaging and entertaining?
6. What is the nature of the hardware/software environment in which the system will operate

Steps of project analysis Cont'd

- Identify high-level project risks

1. The greater the uncertainties at the beginning, the greater the risk that the project will be unsuccessful.
2. Uncertainties can be associated with the products, processes or resources of a project.
3. Product uncertainties – How well the requirements are understood?
4. Process uncertainties – The project under the consideration might be the first where an organization is using an approach like extreme programming or a new application-building tool.
5. Resource uncertainties – the availability of staff of the right ability and experience.

Steps of project analysis Cont'd

- Take into account the user requirements concerning implementation.
- Select general life-cycle approach

1. Control systems
2. Information systems
3. General tools
4. Specialized techniques
5. Hardware environment
6. Safety-critical systems
7. Imprecise requirements