

# PROCESS TECHNOLOGY





- One or more of the process models discussed in the preceding section must be adapted for use by software team.
- To accomplish this process technology tools have been developed to help software organization analyze their current process, organize work tasks, control and monitor progress and manage technical quality.





- Process technology tools allows a software organization to build an automated process model, task set and umbrella activities.
- Each member of software team can use such tools to develop:
  - Check list of work task to be performed.
  - Work product to be produced.
  - Quality assurance activities to be conducted.



# Project Management Concepts



- **What is project?**
- **What is project management?**



# Four P's of Project Management



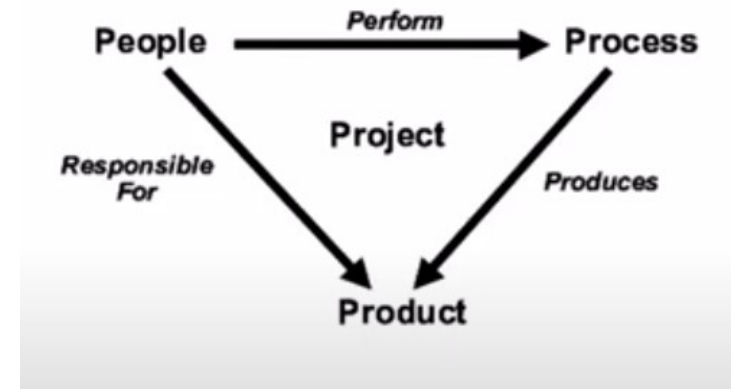
The management of software project is mainly dependent on following four factors:

**People:** most important factor of successful project

**Product:** the software to be built.

**Process:** The set of framework activities and software engineering task to get the job done.

**Project:** all the works required to make the product a reality.



**Software development is a people centric activity so success of the project is on the shoulders of the people who are involved in the development**

# People



- **Senior manager:** define the business issues
- **Project manager:** manages the various activities involved in software development.
- **Designers:** design the database, GUI, algorithms, problem solution etc.
- **Tester :** verifies and validates the product.
- **Developers/programmers**
- **customers/end users**



# Product



- What do we want to deliver to the customer?
- To develop a successful product the product objectives and scope should be identified, plan about the various possible solutions and choose the best solution.
- Identify the various technical and managerial constraints.
- with the above data, break down the task into simpler tasks, estimate the cost economically.
- Identify the probable risks during development and plan the risk resolution or minimization strategies.
- Schedule the project and define the scope of product.
- A software project scope must be unambiguous and understable at the management and technical levels.



# Process



- Is the way in which we develop the software.
- Various scheduling and project management models are followed.eg gannt chart,pert chart
- Various tools (CASE tools) are used for automating various development activities.
- Quality management process models like ISO,CMM,six sigma standard are defined and followed.





# Project



- all the works required to make the product a reality.



# Project plan



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- Why is this system being developed? defines business motive
- What will be done? determines s/w function
- When will it be done? establishes schedule
- Who is responsible for what? identifies roles
- Where are they organizationally located? clarifies relationships
- How will the job be accomplished? addresses technical and managerial details
- How much of each resource is needed? initiates estimates
- What can go wrong? considers risks
- How do I know things are going right? tracks and controls

