

# SOFTWARE PROJECT MANAGEMENT

Lecture # 34



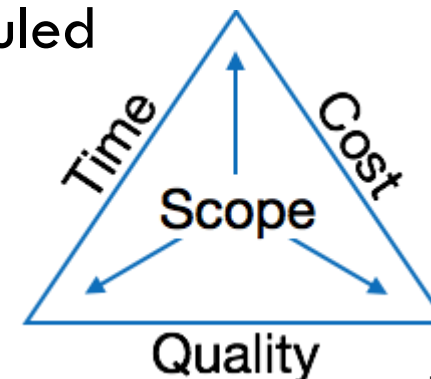
# OBJECTIVES

- When you have read the chapter you will:
  - Understand what is software project management
  - Have knowledge about Four Ps of Project management
  - Learn about W<sup>5</sup>HH Principle



# SOFTWARE PROJECT MANAGEMENT

- Concerned with activities involved in ensuring that software is delivered on time and on schedule and in accordance with the requirements of the organizations developing and procuring the software.
- Project management is needed because software development is always subject to budget and schedule constraints that are set by the organization developing the software.
- The image shows triple constraints for software projects. It is an essential part of software organization to deliver quality product, keeping the cost within client's budget constrain and deliver the project as per scheduled



# SUCCESS CRITERIA

- Deliver the software to the customer at the agreed time.
- Keep overall costs within budget.
- Deliver software that meets the customer's expectations.
- Maintain a happy and well-functioning development team.



# SOFTWARE MANAGEMENT DISTINCTION

- **The product is intangible.**
  - Software cannot be seen or touched. Software project managers cannot see progress by simply looking at the artifact that is being constructed.
- **Many software projects are 'one-off' projects.**
  - Large software projects are usually different in some ways from previous projects. Even managers who have lots of previous experience may find it difficult to anticipate problems.
- **Software processes are variable and organization specific.**
  - We still cannot reliably predict when a particular software process is likely to lead to development problems.



# MANAGEMENT ACTIVITIES

## ➤ Project planning

- Project managers are responsible for planning, estimating and scheduling project development and assigning people to tasks.

## ➤ Reporting

- Project managers are usually responsible for reporting on the progress of a project to customers and to the managers of the company developing the software.

## ➤ Risk management

- Project managers assess the risks that may affect a project, monitor these risks and take action when problems arise.



# MANAGEMENT ACTIVITIES

## ➤ People management

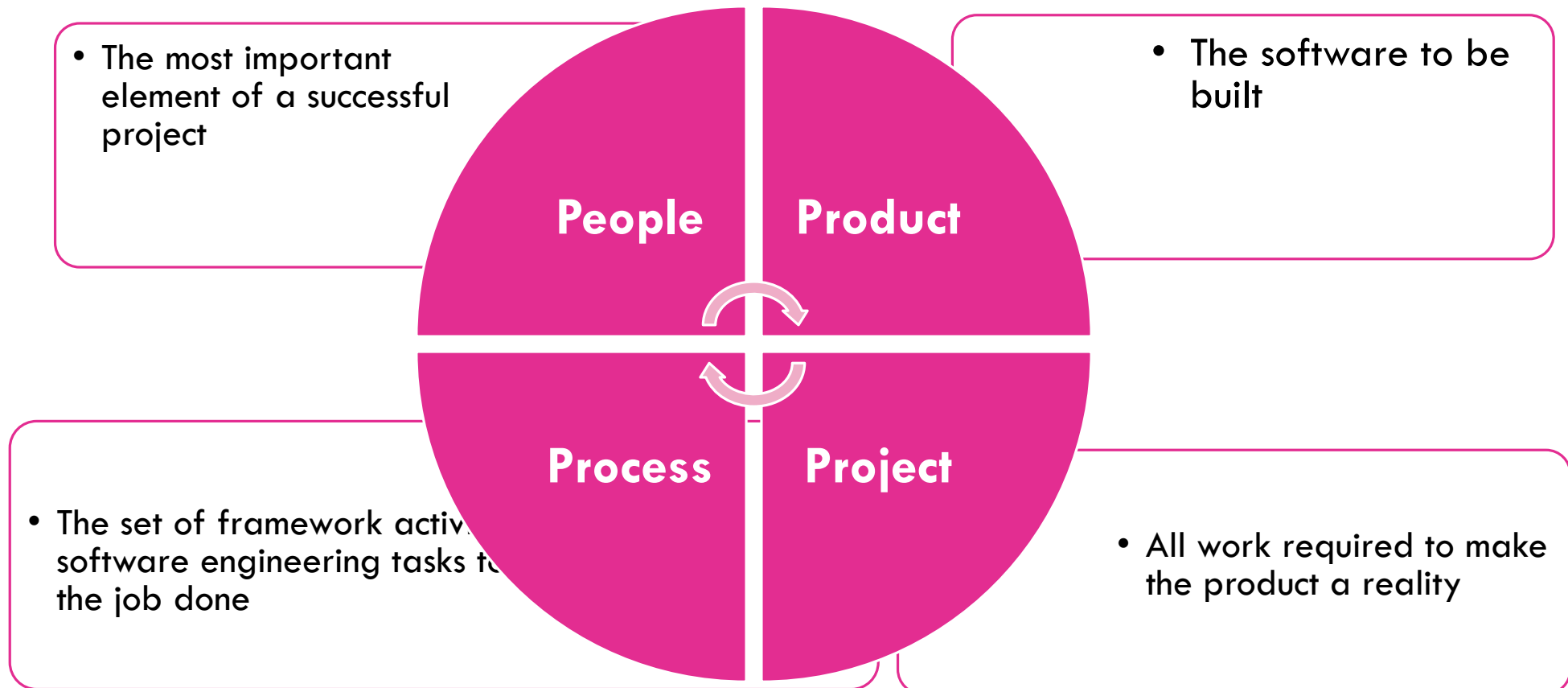
- Project managers have to choose people for their team and establish ways of working that leads to effective team performance

## ➤ Proposal writing

- The first stage in a software project may involve writing a proposal to win a contract to carry out an item of work. The proposal describes the objectives of the project and how it will be carried out.



# THE FOUR P' S





# THE PEOPLE

- People are an organization's most important assets.
- The tasks of a manager are essentially people-oriented. Unless there is some understanding of people, management will be unsuccessful.
- Poor people management is an important contributor to project failure



# PEOPLE MANAGEMENT FACTORS

## ➤ Consistency

- Team members should all be treated in a comparable way without favorites or discrimination.

## ➤ Respect

- Different team members have different skills and these differences should be respected.

## ➤ Inclusion

- Involve all team members and make sure that people's views are considered.

## ➤ Honesty

- You should always be honest about what is going well and what is going badly in a project.



# STAKEHOLDERS

- **Senior managers** who define the business issues that often have significant influence on the project.
- **Project (technical) managers** who must plan, motivate, organize, and control the practitioners who do software work.
- **Practitioners** who deliver the technical skills that are necessary to engineer a product or application.
- **Customers** who specify the requirements for the software to be engineered and other stakeholders who have a peripheral interest in the outcome.
- **End-users** who interact with the software once it is released for production use.

