

# Unit #12

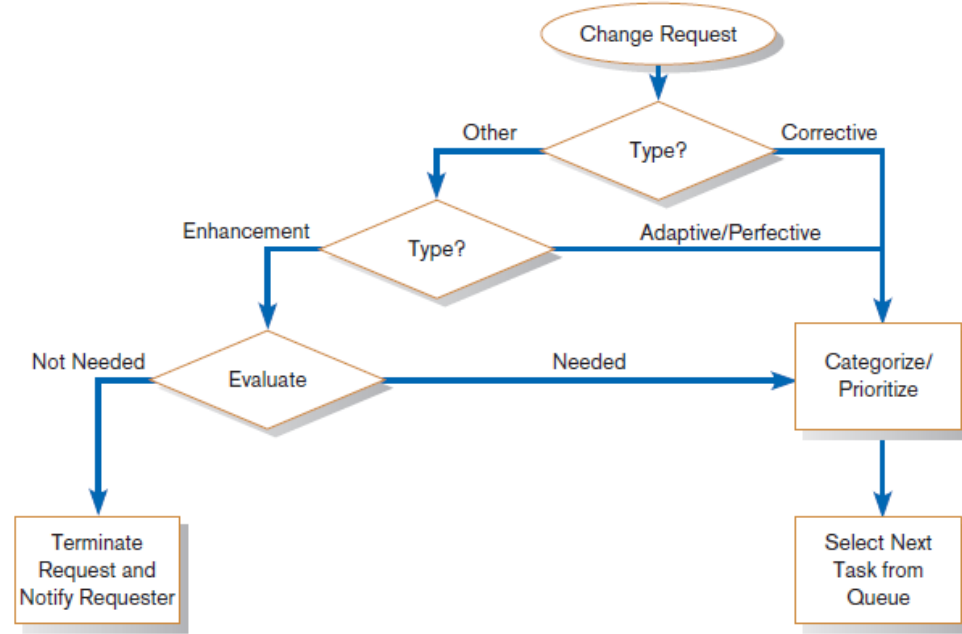
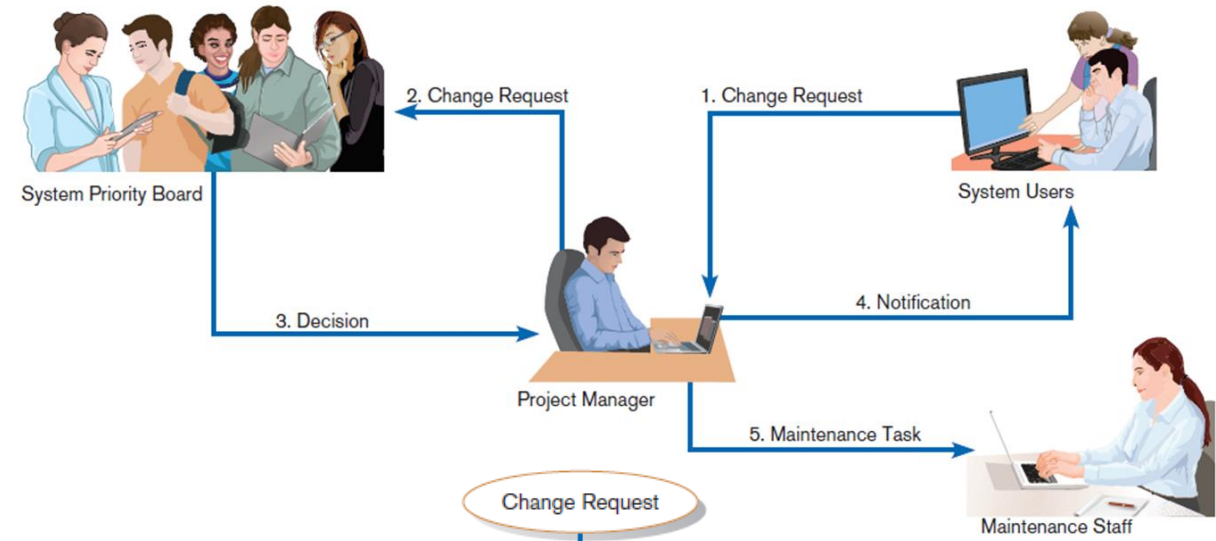
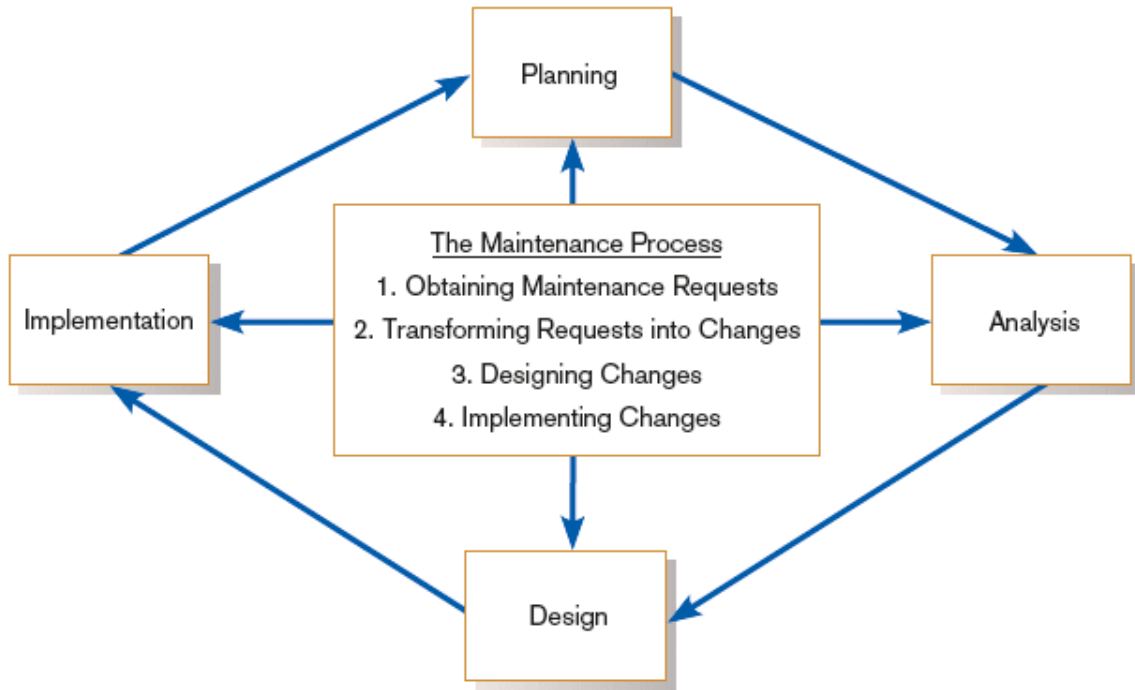
MIS5203

Maintenance and Post Implementation Review

# Agenda

- Maintenance
- Post-implementation review
- Project Team Status reports

# Maintenance – repeats the SDLC to change and improve existing systems

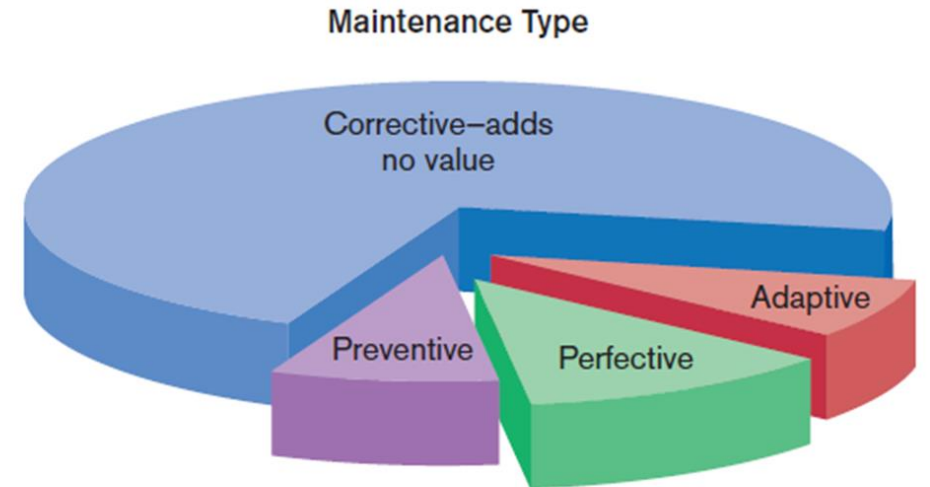


# Maintenance – Program coding standards

- Help maintenance developers read, understand and write code, simply and clearly, without having to refer back to design standards
- Are applied to improve the quality of programming activities and future maintenance capabilities
- Are required for efficient program maintenance and modification

# Maintenance Types

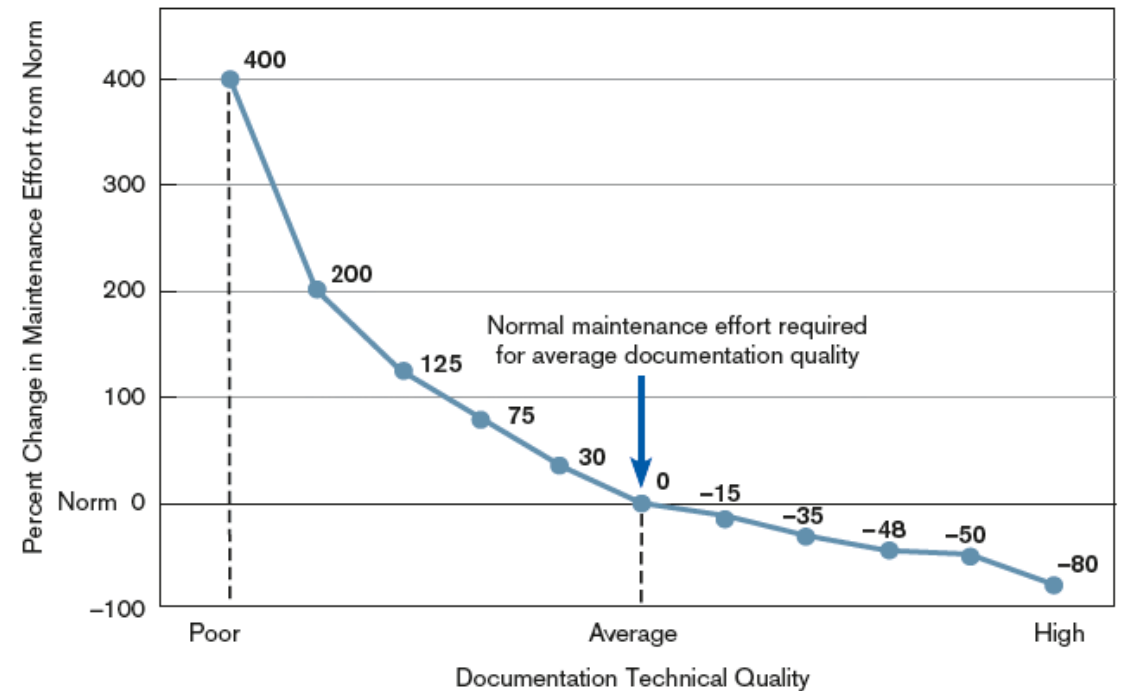
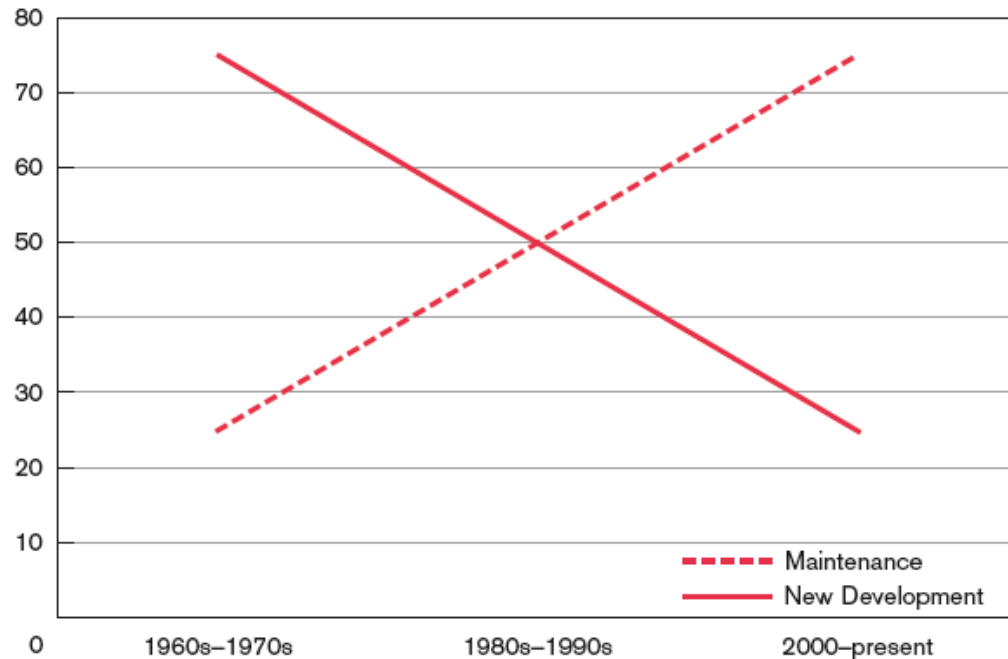
- **Corrective maintenance:** changes made to a system to repair flaws in its design, coding, or implementation
- **Adaptive maintenance:** changes made to a system to evolve its functionality to changing business needs or technologies
- **Perfective maintenance:** changes made to a system to add new features or to improve performance
- **Preventive maintenance:** changes made to a system to avoid possible future problems



(Sources: From Valacich MSAD, Based on Andrews and Leventhal, 1993; Pressman, 2005.)

# Maintenance cost:

Many organizations allocate 60-80% of information systems budget to maintenance.



# Post-implementation

The overall organizational environment has a significant impact on the success of application system implementation, this includes:

- Alignment between IT and the business
- Maturity of the development process
- Use of change control and other project management tools

# Post-implementation review

- During post-implementation review the Project Manager gains feedback about project deliverables and business needs
- Primary purpose of a post-implementation review is to determine if the project objectives have been met
  - Answers the question:
    - *Does the project's deliverables meet business needs and risk acceptance criteria?*
- Evaluates projected cost-benefits, i.e. return on investment (ROI) to verify that the original business case benefits are delivered



# Post-implementation review

- **Volume testing** evaluates the impact of incremental volume of records (not users) on a system
- **Stress testing** determines the capacity of the system to cope with an abnormally large number of users or simultaneous operations
- **Load testing** evaluates performance of the system under normal and peak conditions
- **Recovery testing** evaluates the ability of the system to recover after failure
- **Lessons learned** for future projects – a project team has something to learn from each project. It is important for the organization to accumulate lessons learned and integrate them into future projects

# Agenda

- ✓ Maintenance
- ✓ Post-implementation review
- **Project Team Status reports**