What is a Project?

"A planned undertaking of related activities to reach an objective that has a beginning and an end."

Project Management Institute

Project Management Institute (PMI)

- An association designed to bring together project management professionals and systematically capture project management knowledge
- Publishes the Project Management Body of Knowledge (PMBOK)
  - The PMBOK is a collection of processes and knowledge areas generally accepted as best practice within the project management discipline
**Project Environment**

- One to many individuals involved
- Time to completion can range from days to years

**Projects**

- Temporary (have a specific beginning and end)
- Organizational projects are prioritized for consideration and selection
- Projects require senior management support
- Projects are lead by a project manager
- Project members often come and go

**Stakeholders of a Project**

- **Project Sponsor**
  - Provides executive support
- **Project Manager**
  - Leads and manages the project
- **Project Team Members**
  - Provide technical and support expertise
- **Organization Employees**
  - Those that are directly or indirectly affected by the proposed project
- **Community**
  - Competitors and business partners impacted by the project outcome
Project Manager

A person with a diverse set of skills — management, leadership, technical, conflict management, and customer relationship — who is responsible for initiating, planning, executing, controlling, monitoring, and closing down a project.

Why Undertake a Project?

• To take advantage of a business opportunity
• To solve a business problem

Feasibility Study

• Do you have the:
  – Time?
  – Financial resources?
  – Technical resources?
The Outsourcing/Offshore Options

- India is the largest supplier
- By 2008 U.S. companies are projected to spend $31 billion dollars on the outsourcing of software and services

Project Failure
(French Study)
Causes of Project Failure as Reported by Top 100 Managers

- Failed Communication
- Lack of Planning
- Poor Quality Control

Top Five Causes of Project Failure
(OASIG Study)
1. Lack of attention to human and organizational factors
2. Poor project management
3. Poor articulation of user requirements
4. Inadequate attention to business needs and goals
5. Failure to involve users appropriately
2004 Study by Wallace & Keil

1. Lack of executive support
2. Lack of user involvement
3. Inexperienced project manager
4. Inexperienced team members
5. Unclear business objectives
6. Unreliable estimates
7. Lack of effective project management methodology
8. New software infrastructure
9. Unstable organizational environment
10. Unreliable outside suppliers

What is Unique About IT Projects?

• Constant change in applied technologies within the organization
• Difficulty in finding and keep experienced IT project employees
• Extensive amount of user participation required
• Selecting the appropriate systems development methodology
• Most IT solutions are “one-of-a-kind”
• Specifics of the project likely to change during the life of the project
• Technology changes may change the project itself

IS Project Complexities
What is Project Management?

- The application of knowledge, skills, tools, and techniques to project activities in order to meet project requirements.
- Involves five process groups:

Project Management Life Cycle

- Initiate – potential projects are identified and evaluated in terms of importance to the organization
- Plan – scope, time, cost and risk management planning takes place
- Execute – project plan is followed
- Control – project performance is measured against the project plan
- Close – final paperwork completed and sign off by all stakeholders

Various Project Management Tools/Techniques

- Gantt Chart
  - Tool that can be used to plan and track project activities
- Critical Path Method (CPM)
  - A method used for determining the sequence of task activities that directly affect the completion of a project
- Program Evaluation and Review Technique (PERT)
  - A technique that uses optimistic, pessimistic, and realistic time to calculate the expected time for a particular task
- Microsoft Project
  - Most widely used project management software
- Application Service Provider (ASP) software
  - Web-hosted project management software
- Industry-Specific software
  - Software which addresses a specific industry or environment
Industry Specific Software

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<th>Industry</th>
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<td>Microsoft Project</td>
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<td>Detailers and Fabricators</td>
<td>AbacusPM</td>
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<td>Manufacturing and Mining</td>
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Project Management Institute (PMI)

- Professional organization for project managers
- Over 214,000 members from 159 countries (2006)
- Provides professional literature on project management
- Develops and maintains the PMBOK
- Sponsors the PMP Certification
- www.pmi.org

PMBOK

- Project Management Body of Knowledge
- A repository of the key project management knowledge areas
PMBOK Knowledge Areas

Major Project Management Achievements

• Great pyramids of Egypt
• Pacific Railroad
• Hoover Dam
• Manhattan Project
• Space program

The Approach to Learning Project Management

• Process Focus
• Team Focus
• Technology Focus
• PM Software
• Group Support Technologies
• Knowledge Management and Organizational Memory Systems
• Global Focus
• PM Professional Focus