

# **Introduction to Project Management**

## **Chapter 1 Introduction**

*Information Systems Project Management: A Process and Team Approach, 1e*  
*Fuller/Valacich/George*

# 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?

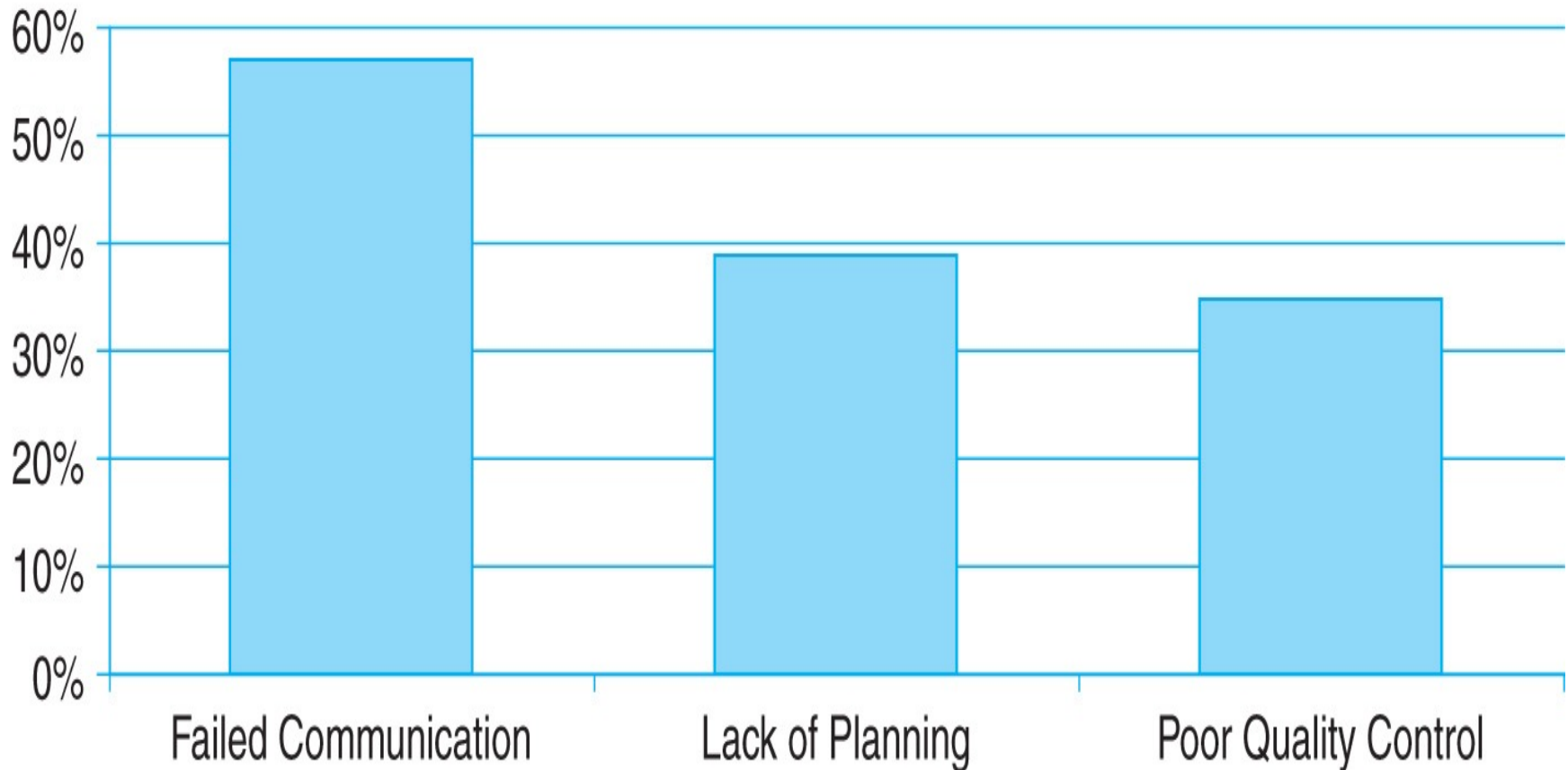
# The Outsourcing/Offshore Options

- 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



# 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

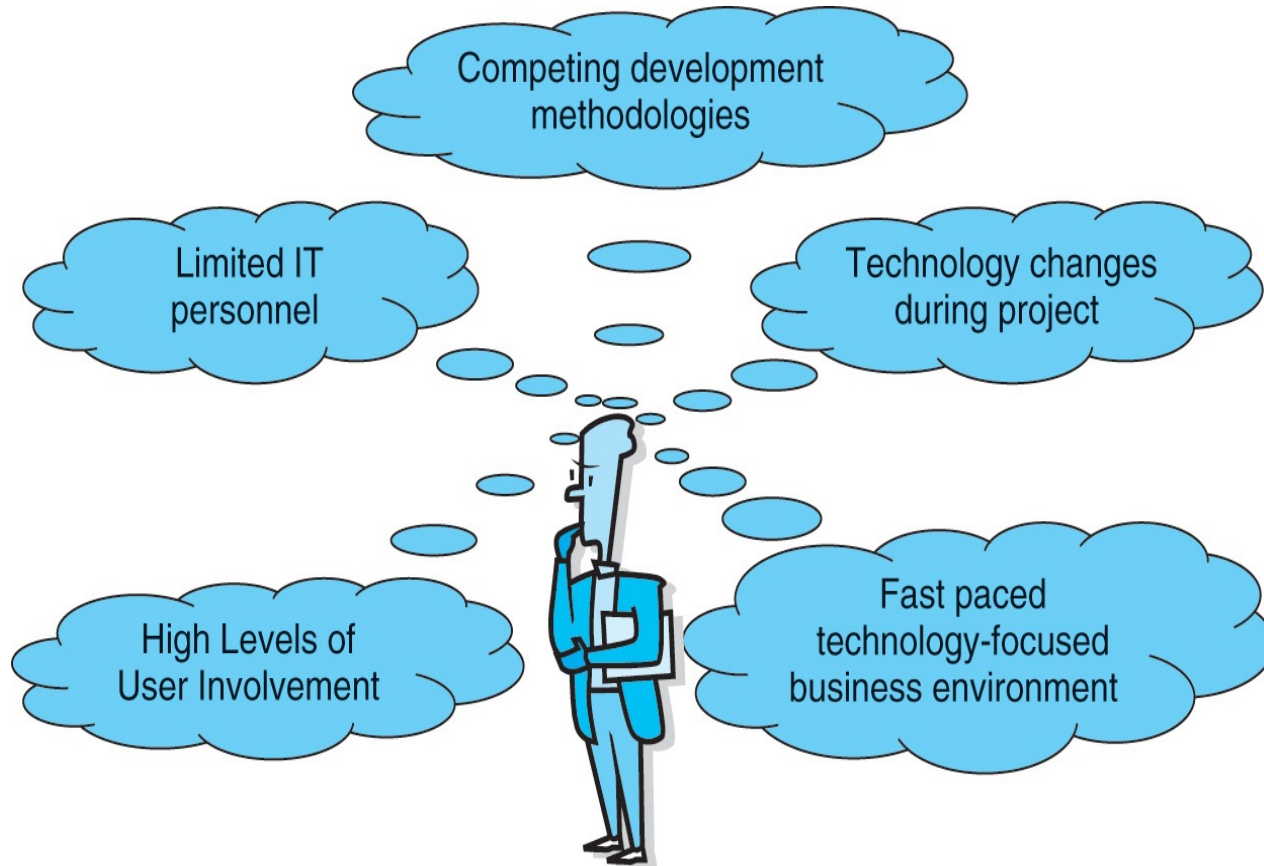
# 2004 Study by Wallace & Keil

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?

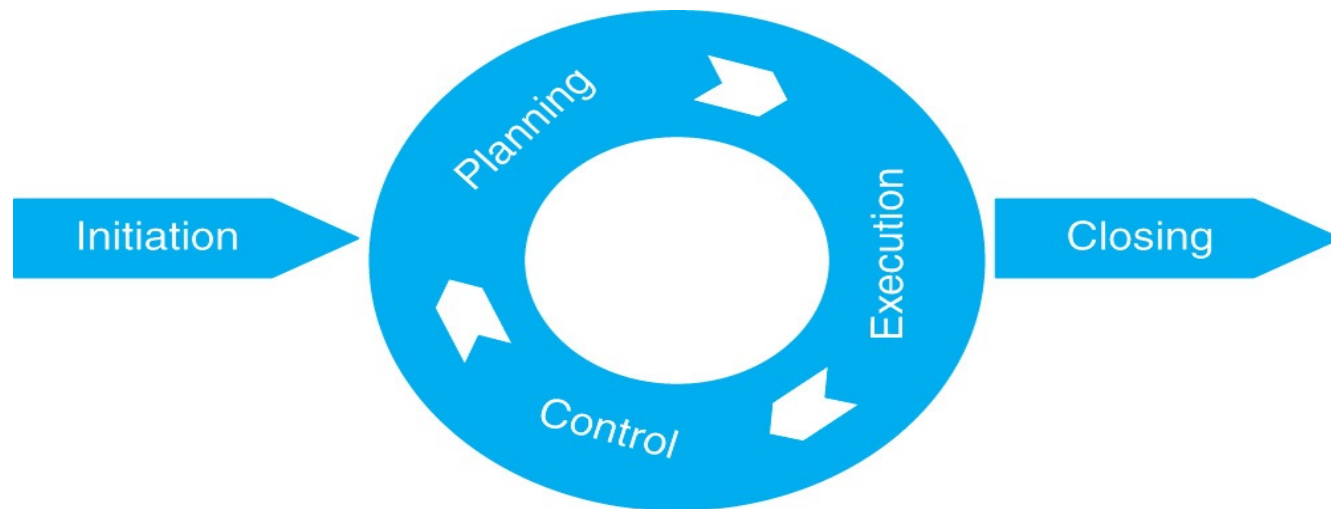
- Constant change in applied technologies within the organization
- Difficulty in finding and keep experienced IT project employees
- Extensive amount of user participation required
- Selecting the appropriate systems development methodology
- Most IT solutions are “one-of-a-kind”
- Specifics of the 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:





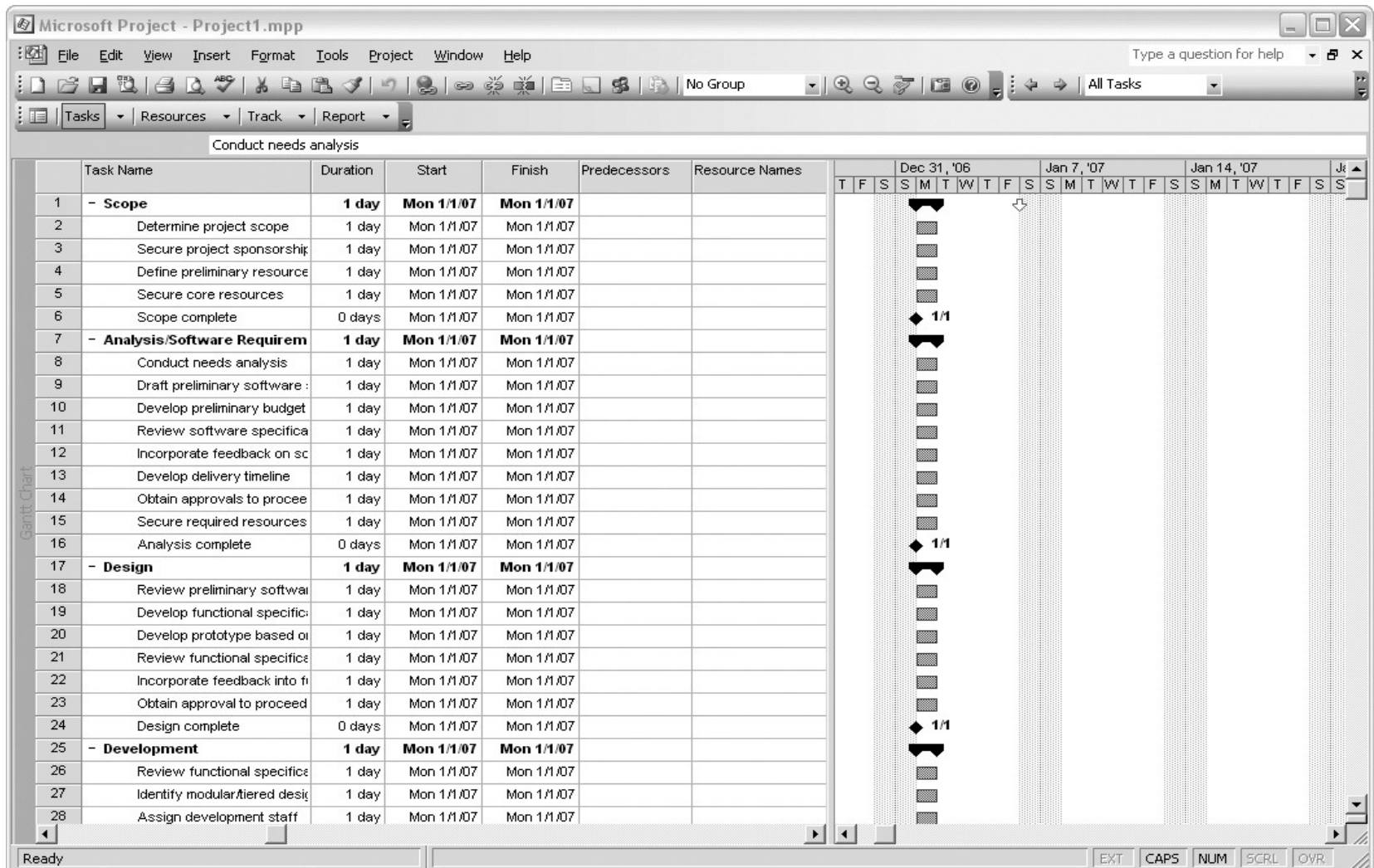
# Project Management Life Cycle

- 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 paper work completed and sign off by all stakeholders

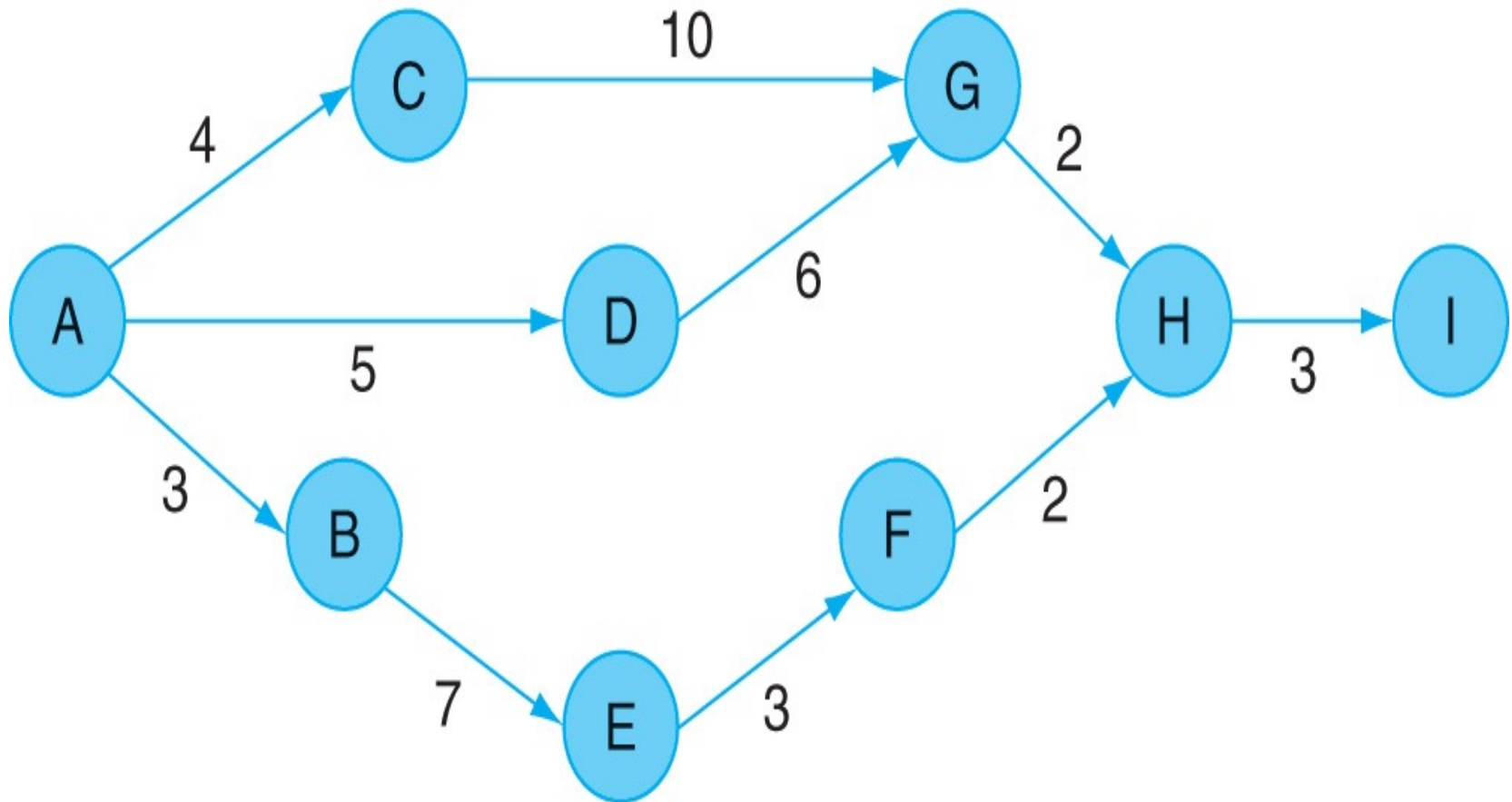
# Various Project Management Tools/Techniques

- 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
  - <http://office.microsoft.com/en-us/project/default.aspx>
- Application Service Provider (ASP) software
  - Web hosted project management software
- Industry-Specific software
  - Software which addresses a specific industry or environment

# Gantt Chart

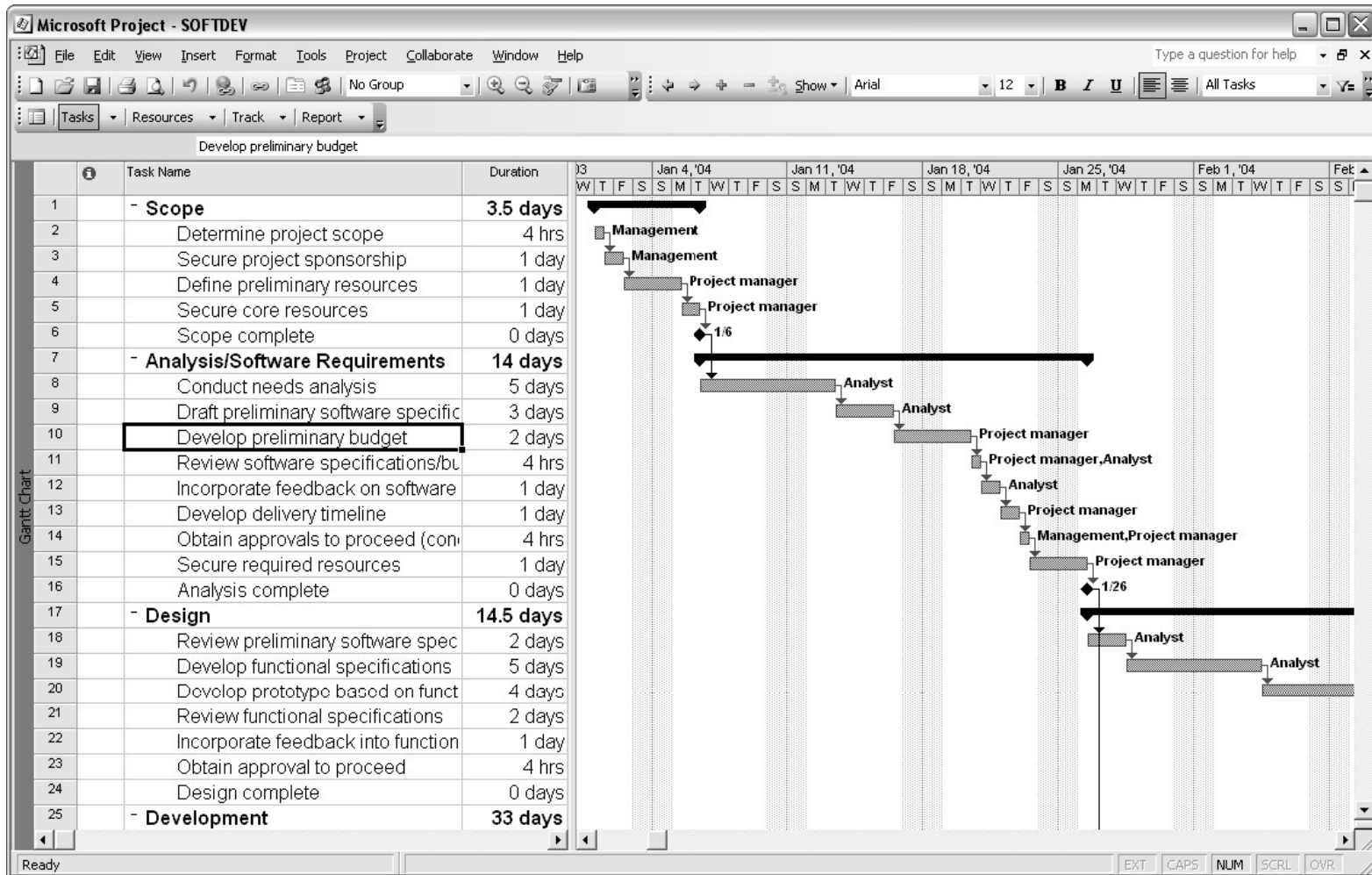


# CPM & PERT



Critical Path = ACGHI (19 days)

# Microsoft Project



# Industry Specific Software

Industry	Software Package
General Purpose	Microsoft Project
Detailers and Fabricators	AbacusPM
Audio/Visual/Multimedia Production	AlterMedia
Construction	Hard Hat Manager
Small Business	4aBetterBusiness
Software Development	DOVICO Track-IT
Manufacturing and Mining	Crest Soft



# 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](http://www.pmi.org)

# PMBOK

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



# PMBOK Knowledge Areas

<b>Project Integration Management</b> <ul style="list-style-type: none"> <li>• Project plan development</li> <li>• Project plan execution</li> <li>• Integrated change control</li> </ul>	<b>Project Scope Management</b> <ul style="list-style-type: none"> <li>• Initiation</li> <li>• Scope planning</li> <li>• Scope definition</li> <li>• Scope Verification</li> <li>• Scope Change Control</li> </ul>	<b>Project Time Management</b> <ul style="list-style-type: none"> <li>• Activity definition</li> <li>• Activity sequencing</li> <li>• Activity duration estimating</li> <li>• Schedule development</li> <li>• Schedule control</li> </ul>
<b>Project Cost Management</b> <ul style="list-style-type: none"> <li>• Resource planning</li> <li>• Cost estimating</li> <li>• Cost budgeting</li> <li>• Cost control</li> </ul>	<b>Project Quality Management</b> <ul style="list-style-type: none"> <li>• Quality planning</li> <li>• Quality assurance</li> <li>• Quality control</li> </ul>	<b>Project Human Resource Management</b> <ul style="list-style-type: none"> <li>• Organizational planning</li> <li>• Staff acquisition</li> <li>• Team development</li> </ul>
<b>Project Communications Management</b> <ul style="list-style-type: none"> <li>• Communications planning</li> <li>• Information distribution</li> <li>• Performance reporting</li> <li>• Administrative closure</li> </ul>	<b>Project Risk Management</b> <ul style="list-style-type: none"> <li>• Risk management planning</li> <li>• Risk identification</li> <li>• Qualitative risk analysis</li> <li>• Quantitative risk analysis</li> <li>• Risk response planning</li> <li>• Risk monitoring and control</li> </ul>	<b>Project Procurement Management</b> <ul style="list-style-type: none"> <li>• Procurement planning</li> <li>• Solicitation planning</li> <li>• Solicitation</li> <li>• Source selection</li> <li>• Contract administration</li> <li>• Contract closeout</li> </ul>

# 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

# Questions?

