Introduction to Project Management
University Business Institute

Amir Dabirian
Vice President for Information Technology/CIO
March 21st, 2012
I hired all of you because the project will take 300 man days to complete.

There are 300 of you, so I want you to finish by five o'clock and clean out your desks. You're all fired.

If it takes more than one meeting to manage a project, I lose interest.
Men and months are interchangeable commodities only when a task can be partitioned among many workers with no communication among them.
Time versus number of workers is an unpartitionable task.
The Man Month

Time versus the number of workers is a partitionable task requiring communication
The Man Month

Time versus the number of workers is a partitionable task requiring complex communication.
What is Project Management?

*Project management* is the discipline of planning, organizing, securing, and managing resources to achieve specific goals.

A *project* is a *temporary* endeavor with a defined beginning and end (usually time-constrained, and often constrained by funding or deliverables), undertaken to meet unique goals and objectives, typically to bring about beneficial change or added value.
Project Management

Project Management Triangle

Resources
Scope
Time

SCOPE
QUALITY
COST
SCHEDULE
Components of a Project

What is Missing?
Scope Budget Deliverables Constraints!

Schedule Resources Communication Issues and Risk

Change Management!
## Project Management Overview

<table>
<thead>
<tr>
<th>Why Projects Fail</th>
<th>Why Projects Succeed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vision and goals not defined</td>
<td>Vision, objectives and scope well defined and approved</td>
</tr>
<tr>
<td>Customer/end users not engaged</td>
<td>Strong sponsorship</td>
</tr>
<tr>
<td>Lack of accountability</td>
<td>Risk is managed</td>
</tr>
<tr>
<td>Insufficient team skills</td>
<td>Project plan is realistic, achievable and approved</td>
</tr>
<tr>
<td>Failure to manage risk</td>
<td>Scope (change) is managed</td>
</tr>
<tr>
<td>Uncertain dependencies</td>
<td>Good stakeholder communication</td>
</tr>
<tr>
<td>Resource competition</td>
<td>Competent Project Manager</td>
</tr>
<tr>
<td>Scope changes</td>
<td>Project management methodology</td>
</tr>
<tr>
<td>Lack of good communication</td>
<td></td>
</tr>
<tr>
<td>Unrealistic deadlines</td>
<td></td>
</tr>
</tbody>
</table>
Critical Success Factors

• **Decision-Making Process**
  – A well-defined decision-making process will minimize a number of issues related to scope, efficiency, and productivity throughout the project implementation cycle.

• **Project Scope**
  – Scope defines what needs to be delivered by the project, and a changing scope means the project will have difficulty in achieving project goals.

• **Teamwork**
  – Project teams are assembled by bringing together staff from the existing organization, new hires, and possible external consultants and they need to work together for a common goal.
Critical Success Factors

• **Change Management**
  - It is up to the project manager to communicate the importance and significance of the project to the entire organization, top to bottom, through effective communication and training.

• **Implementation Team and Executive Team**
  - The program manager and project manager are critical to a successful implementation.
  - Executive management support and commitment throughout the project is essential.
Project Leadership

• To be successful, the PMO must manage the risks involved in a project implementation.

• PMO will likely need to monitor or address the following during a project implementation
  – Project start-up (Hiring the right staff and initial setup)
  – Interaction or goals between technical and functional staff
  – Commitment of senior management for the length of the project
  – Staff and professional consultant turnover
  – Second guessing project decisions
  – Passive–aggressive staff and users
Systems Development Life Cycle (SDLC)

Life-Cycle Phases

**Initiation**
- Begins when a sponsor identifies a need or an opportunity.
- Concept Proposal is created.

**System Concept Development**
- Defines the scope or boundary of the concepts.

**Planning**
- Develops a Project Management Plan and other planning documents.
- Provides the basis for acquiring the resources needed to achieve a solution.

**Requirements Analysis**
- Analyses user needs and develops user requirements.
- Create a detailed Functional Requirements Document.

**Design**
- Transforms detailed requirements into complete, detailed Systems Design Document.
- Focuses on how to deliver the required functionality.

**Development**
- Converts a design into a complete information system.
- Includes acquiring and installing systems environment; creating and testing databases; preparing test case procedures; preparing test files, coding, compiling, refining programs; performing test readiness review and procurement activities.

**Integration and Test**
- Demonstrates that developed system conforms to requirements as specified in the Functional Requirements Document.
- Conducted by Quality Assurance staff and users.
- Produces Test Analysis Reports.

**Implementation**
- Includes implementation preparation, implementation of the system into a production environment, and resolution of problems identified in the Integration and Test Phases.
- Conducted by Quality Assurance staff and users.

**Operations & Maintenance**
- Describes tasks to operate and maintain information systems in a production environment.
- Includes Post-Implementation and In-Process Reviews.

**Disposition**
- Describes end-of-system activities, emphasis is given to proper preparation of data.
Project Management Life Cycle and Methodology

1. Initiate the Project
2. Plan the Project
3. Execute the Project
4. Control the Project
5. Close the Project

Project Management Methodology
Project Management Life Cycle and Methodology

Initiation → Planning and Design → Executing → Monitoring and Controlling → Closing
Project Lifecycle – Activity Levels

- Initiating Processes
- Planning Processes
- Executing Processes
- Controlling Processes
- Closing Processes
- Retired
Project Request

- Request description
- Sponsor
- Business justification
- Primary stakeholders
- High level cost estimates
- Identify project size or category
  - Small/Medium/Large
Project Charter

- Appropriate for large projects
- Project objectives
- High level project deliverables
- High level constraints and assumptions
- High level cross functional impacts
- High level resource needs
- Approved Charter authorizes the project
Project Management Life Cycle and Methodology

- Project Schedule
  - Developed with the team and SMEs
  - Work Breakdown Structure (WBS)
  - Tasks and durations defined and sequenced
  - Predecessors identified
  - Resources assigned to tasks
  - Critical path
  - Approved by sponsor
  - Baseline
Plan the Project

Project Management Life Cycle and Methodology

- Gantt Chart

<table>
<thead>
<tr>
<th>ID</th>
<th>Task Name</th>
<th>Predecessors</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Start</td>
<td></td>
<td>0 days</td>
</tr>
<tr>
<td>2</td>
<td>a</td>
<td>1</td>
<td>4 days</td>
</tr>
<tr>
<td>3</td>
<td>b</td>
<td>1</td>
<td>5.33 days</td>
</tr>
<tr>
<td>4</td>
<td>c</td>
<td>2</td>
<td>5.17 days</td>
</tr>
<tr>
<td>5</td>
<td>d</td>
<td>2</td>
<td>6.33 days</td>
</tr>
<tr>
<td>6</td>
<td>e</td>
<td>3, 4</td>
<td>5.17 days</td>
</tr>
<tr>
<td>7</td>
<td>f</td>
<td>5</td>
<td>4.5 days</td>
</tr>
<tr>
<td>8</td>
<td>g</td>
<td>6</td>
<td>5.17 days</td>
</tr>
<tr>
<td>9</td>
<td>Finish</td>
<td>7, 8</td>
<td>0 days</td>
</tr>
</tbody>
</table>
Project Management Life Cycle and Methodology

- Pert (Program (or Project) Evaluation and Review Technique) Chart

Plan the Project
Other Planning Activities

- Project management tools and infrastructure
- Stakeholder communication plan
- Scope change management
- Deliverables acceptance
- Issues management
- Risks and cross functional impacts
- Work estimates and project plan development
- Project Kick-Off Meeting
Project Management Life Cycle and Methodology

- Use the project plan to manage the project
- Conduct regular status meetings
- Create & distribute regular status reports
- Track planned vs actual and update project plan
- Keep the project plan current
- Track and escalate issues and risks
- Quality assurance
- Track Lessons Learned
Project Management Life Cycle and Methodology

Where we are?
(measurement)

Where we planned to be?
(evaluation)

How can we get on track again?
(correction)

Control the Project
Ensure appropriate approvals of deliverables occur

Conduct performance review checkpoints (quality, time, budget, lessons learned)

Take required corrective action

Issue change requests

Make changes and adjust the baseline

Implement contingency plans
Project Management Life Cycle and Methodology

- Distribute final status report
- Collect and compile lessons learned from team
- Facilitate a Post Project Review Meeting
- Ensure appropriate final acceptance approvals occur
- Finalize project documentation and file in project archives
## Core Project Management Deliverables

<table>
<thead>
<tr>
<th>Process</th>
<th>Deliverable</th>
</tr>
</thead>
</table>
| Initiate   | Project Request  
              Project Charter                      |
| Plan       | Project Scope  
              Project Schedule  
              Project Organization Chart  
              Communications Plan          |
| Execute    | Status Reports  
              Meeting Summaries  
              Issue Log                       |
| Control    | Contingency Plans  
              Change Requests  
              Performance Review Checkpoints |
| Close      | Lessons Learned  
              Post Project Review              |
Core Project Management Deliverables

• Project Status Meetings
  – Schedule at regular intervals
  – Have a clear meeting objective
  – Distribute agenda and document ahead of time
  – Capture key discussion, decisions, issues, risks, and action items
  – Facilitate discussion – keep to agenda; take off-line where appropriate
  – Parking lot
  – Brainstorm
Core Project Management Deliverables

• Effective Project Meetings
  – *PMO is in charge*
  – Are all of the key participants present? If not, follow up is necessary
  – Record, status and review Action Items
  – Capture and track issues
  – Recap Next Steps. Confirm owners and due dates.
  – Schedule and facilitate off-line meetings to resolve complex issues
  – Publish minutes and actions quickly
Tracking Project Progress

- Status meeting
- Update project schedule
- Issues tracking and escalation
- Status reporting
- Risk management and contingency plan
- Leading teams
- Time management tips
Project Infrastructure and Tools

• Define during Planning
  – Meeting schedule and calendar
  – Templates, logos
  – Contact list
  – SharePoint or other project site/document repository
  – Listservs, distribution lists
  – Team training
Effective Project Management Applications

• MS Project
  – Project Plan
• Excel
• Word
• Project Disk Repository
• Communication tools
  – Project Website
  – Email Account
  – Collaboration
  – Facebook/Twitter
  – Youtube
  – Web Conferencing
QUESTIONS