What is Project Management?

Week 2
Last Week
What is a project?

• Characteristics: Temporary, Unique Product, Progressive Elaboration

• Operations vs. Projects

• Constraints of a Project
This Week

• What is Project Management?

• Stakeholder Management

• Organizing the Project
What is Project Management?

• “Project Management is the application of knowledge, skills, tools and techniques to project activities to meet project requirements. “ PMI (2000, pg. 6)
Turner (1999, pg. 8) Five Functions of Project-Based Management

PURPOSE (Benefical Change)

SCOPE

ORGANISATION

TIME

QUALITY

COST
Nine Knowledge Areas
PMI (2000, pg. 7)

1. Project Integration
2. Project Scope Management
3. Project Time Management
4. Project Cost Management
5. Project Quality Management
6. Project Human Resource Management
7. Project Communications Management
8. Project Risk Management
9. Project Procurement Management
Tools and Techniques

- **Scope:** Product breakdown, Work breakdown, Change Mgt, Milestone plans, Activity schedules
- **Organization:** Organization breakdown, responsibility charts, Project Support Office
- **Quality:** Quality Assurance/Control, Quality Plans, Procedure manuals/audit, TQM
- **Cost:** Estimating techniques, earned value analysis, S curves
- **Time:** PERT/CPA, Gantt Charts
- **Risk:** Risk Identification, Risk Analysis, Contingency Plans
“Project Management is accomplished through the use of processes such as initiating, planning, executing, controlling and closing” PMI (2000)

“Project Management is the art and science of converting vision into reality” Jain (1995)
Project Lifecycle–
‘from vision to reality’

• Turner (1999, pg 11)
Define It

Process and Product Knowledge

The Brief

Define It

The Outcomes

The Proposal/PID

Define It

Define It

Define It

Maylor (2010, pg 32) 4 D’s
Lifecycle Characteristics

• **Resources** - consumption begins low during initiation, gains pace during planning, full throttle during execution

• **Predictability of outcome** - lowest at start, gets progressively higher as project continues

• **Opportunity to Influence** - (without increasing cost) highest at start but gets progressively lower
<table>
<thead>
<tr>
<th>PHASE</th>
<th>KEY ISSUES</th>
<th>PROCESS</th>
<th>FUNDAMENTAL QUESTIONS</th>
<th>OUTPUTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposal and Initiation</td>
<td>• Project Strategy • Goal Definition • Initial Estimates</td>
<td>• Develop proposals • Conduct Feasibility • Project Definition • Project Organization</td>
<td>• What is to be done? • Why is it to be done?</td>
<td>• Proposal • Project Definition Report • Feasibility Report • PID • Project Charter</td>
</tr>
<tr>
<td>Design</td>
<td>• Planning • Solution • Estimates • Contracts</td>
<td>• Develop Design • Scope Planning • Costing / Budgeting • Project Planning • Award Contract</td>
<td>• How it will be done? • Who will be involved? • When can it start and Finish</td>
<td>• Detailed Design • Project Budget / Estimates • Master Plan / Schedule • Contract Terms and Conditions</td>
</tr>
<tr>
<td>Execution and Control</td>
<td>• Doing Work / Progress • Control • Decision Making • Problem Solving</td>
<td>• Project Monitoring and Control • Risk Management • Quality Management • Change Control</td>
<td>• How should the project be managed on a day to day basis?</td>
<td>• Progress Reports • Change Documents • Project Board Meetings</td>
</tr>
<tr>
<td>Close Out</td>
<td>• Assessment of process • Outcomes of project • Evaluation</td>
<td>• Finish work • Transferring the Product • Commissioning • Disband Team • Project Audit • Terminate Contracts • Release Resources</td>
<td>• How can the process be continually improved?</td>
<td>• Sign Off • LLR • PIR</td>
</tr>
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</table>
An Integrated model of Project Management
Pitfalls of Project Management

• Pitfalls in Establishing the Project
  – Project plans are not aligned with business plans
  – Priorities are not communicated to parties involved
  – There is no shared vision

• Pitfalls in Planning
  – Project plans developed on a single level
  – Using cumbersome tools
  – Creativity discouraged
  – Unrealistic estimates
• Pitfalls in Organizing and Implementing
  – Lack of cooperation
  – Resource providers not committed
  – Resources not available when required
  – Poor communication

• Pitfalls in Control
  – Progress not monitored
  – Ineffective review meetings
  – No reporting protocols
  – No corrective action
Videos in Practice

- Dubai Part 1
- Dubai Part 2
Project Definition

• Project definition starts when the idea of a project is first conceived and it does not end until all information has been gathered to describe the project in its finished condition.

• Project initiation and definition are about doing the right things in the early stages of a project.

• Initiation is the process of formally authorizing a new project.
Importance of Initial Project Definition

• The project will be defined as accurately and fully as possible before it is allowed to start
• The project requirements must be clearly established, documented and understood
• The investor will know how the money will be spent and what benefits can be expected in return
• The contractor will know what it is bidding for and what its commitments would be
Safeguards for ill-defined projects

- Stage-Gating- releasing resources in controlled amounts (tranches) so that risks can be kept within defined bounds.

- Avoidance of Fixed Price Contracts

- Provisional Cost Items in Fixed Price Contracts
Contents of the Project Definition Report

• Management Summary
• Background: sets the context within which the project exists
• Purpose, scope and objectives: the reasons, expected returns, work needed, product outcome, deliverables
• Project organization
• Project management system: defines the tools and techniques for planning and controlling
Project Definition Report Cont’d

• Risks and Assumptions
• Project Budgets: the initial estimates and statement of max amount which can be spent to justify the expected benefits
• Project Justification: an investment appraisal performed
• Appendices: any preliminary plans

• Project Charter Report
• Project Initiation Checklist
Project Stakeholders

• A Stakeholder is any individual, group or organization:
  – that shares a stake in the project
  – that can influence or be influenced by the project.
  – who have an interest in the project process or outcome
  – whose interest may be positively or negatively affected as a result of the execution and outcome
  – who are actively involved in the project
Categorization of Stakeholders

• Internal Stakeholders
  – Usually play a supportive role
  – Project Manager has some degree of authority and influence
  – Should be kept well informed about project’s status

• External Stakeholders
  – May not be supportive but rather adverse
  – Not usually subject to the legal authority of the project manager
  – Information should be provided on a “need-to-know” basis
  – But keep communication channels open
Key Stakeholders

• **Owner/Customer/Client**- is the person/group who will own the product
• Sponsor- is the person/group who provides the financial resources
• Champion- is a senior user representative
• Users- the group who will operate the product
• **Project Manager**- the individual responsible for managing the project
Key Stakeholder’s Cont’d

• **Project team** - the group that is performing the work

• Integrators - are responsible for ensuring the transient teams of people are able to work together

• Steering Committee - a representative of sponsor, users, project manager, champion

• **Contractors** - the person or group who consume resources to deliver project outcomes
The Owner/Contractor Model
Turner (1999, pg.50)

OBJECTIVES:
OWNER
SPONSOR
Optimum solution
Value for money

CHAMPION
Requirements

MANAGER

RESULTS

INTEGRATORS
CONTRACTOR

OBJECTIVES:
CONTRACTOR
Maximum Profit
Satisfied Client
Stakeholder Management

• S M assumes that success depends on taking into account the potential impact of project decisions on all stakeholders during the entire life of the project

• Project managers must consider how the achievements of the project’s goals and objectives will affect or be affected by stakeholders
The Challenge

- If a Project Manager, team and other stakeholders agree before they start how they are going to judge success, then they can maximize their chance of success.
Stakeholder Management Process

1. Identification of Stakeholders
2. Determine their requirements
3. Predict their behaviour (gaze into a crystal ball)
4. Manage and influence those requirements and perspectives by implementing a strategy
Objective of Stakeholder Mgt

• To curtail stakeholder activities that might adversely affect the project
• To integrate stakeholder perspective into the project’s formulation process
• To facilitate the project team’s ability to take advantage of opportunities
• To encourage stakeholder support for project purposes
The Position/Importance Matrix
Nutt and Backoff (1992) and Bryson (1995)

Least Importance

Oppose

Problematic

Antagonistic

Support

Low Priority

Supporter
Power : Interest Stakeholder Map
Maylor (2010, pg. 83)

- **Keep Satisfied**
  - Moderate priority group
  - Keep involved

- **Manage Closely**
  - Highest priority
  - Active engagement

- **Monitor Only**
  - Lowest priority
  - Low communication

- **Keep Informed**
  - Moderate Priority
  - Sustain their interest
Bottom Line

• Failing to recognize or cooperate with stakeholders whether supportive or adverse may well hinder a successful project outcome.

• Stakeholder Mgt is thus a necessity, allowing the project manager to maintain better control.
Establishing Communication Links as a Project Manager

• You will probably spend more than half your time talking to people

• It is your critical responsibility for maintaining all communication links within and outside to the project to ensure integration

• You must serve as a bridge to make sure that communication barriers do not occur

• You are probably the one person in a position to expedite communication linkages

‘The key- Project Organization’
Project Organization

• “to marshal adequate resources (human, material and financial) of an appropriate type to undertake the work of the project, so as to deliver its objectives successfully”. Turner (1999, pg. 124)

• “is about structuring and integrating the internal environment through careful planning and organization design”. Gardiner (2005, pg. 126)
Functional/Traditional Structure

CEO

FUNCTIONAL MGR

FUNCTIONAL MGR

FUNCTIONAL MGR

STAFF

STAFF

STAFF

STAFF

STAFF

Project Coordination
Weak Matrix

CEO

FUNCTIONAL MGR

FUNCTIONAL MGR

FUNCTIONAL MGR

STAFF

STAFF

STAFF

STAFF

STAFF

STAFF
Balanced Matrix
Strong Matrix

CEO

FUNCTIONAL MGR
  |
  V
STAFF

FUNCTIONAL MGR
  |
  V
STAFF

MGR OF PRO MGRS
  |
  V
PRO MGR

MGR OF PRO MGRS
  |
  V
PRO MGR

MGR OF PRO MGRS
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  V
PRO MGR
<table>
<thead>
<tr>
<th>Project Characteristics</th>
<th>Functional</th>
<th>Weak Matrix</th>
<th>Balanced Matrix</th>
<th>Strong Matrix</th>
<th>Projectised</th>
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</thead>
<tbody>
<tr>
<td>Pro Mgr’s Authority</td>
<td>Little or None</td>
<td>Limited</td>
<td>Low to Moderate</td>
<td>Moderate to High</td>
<td>High to Total</td>
</tr>
<tr>
<td>% personnel</td>
<td>Virtually none</td>
<td>0-25%</td>
<td>15-60%</td>
<td>50-95%</td>
<td>85-100%</td>
</tr>
<tr>
<td>Pro Mgr’s role</td>
<td>Part Time</td>
<td>Part Time</td>
<td>Full Time</td>
<td>Full Time</td>
<td>Full Time</td>
</tr>
<tr>
<td>Common Title for Pro Mgr’s role</td>
<td>Project Coordinator</td>
<td>Project Coordinator</td>
<td>Project Mgr/Pro Officer</td>
<td>Project/Programme Mgr</td>
<td>Project/Programme Mgr</td>
</tr>
<tr>
<td>Pro Mgt Admin Staff</td>
<td>Part Time</td>
<td>Part Time</td>
<td>Part Time</td>
<td>Full Time</td>
<td>Full Time</td>
</tr>
</tbody>
</table>
Responsibility Charts

- Milestones/Deliverables are shown as rows
- Human Resources i.e. Organizational units are shown as columns
- Integration of Product Breakdown Structure (PBS), Work Breakdown Structure (WBS) and Organizational Breakdown Structure (OBS). Discussed in more detailed in next lecture.
Project Support Office (PSO)

• Provides a central facility with skills and knowledge of how to run project process

• Provides key project staff- project managers, project planners, administrators, cost controllers, procurement clerks, contract administrator
Role of PSO

PROVIDING SUPPORT TO PROJECT MANAGERS

RESPONSIBLE FOR RESULTS OF THE PROJECT
Duties of PSO

• Maintaining the Master Project Plans
• Maintaining Resource Plan
• Facilitating the Control Process
• Issuing progress reports
• Operating Document Control
• Change Control
• Purchasing and administration of contracts
• Maintaining client interface
Importance of PSO

• The most effective means of improving communication and deploying common project management processes
• Major functions are the development, execution and administration of project management processes, tools, templates, procedures and guidelines

Gardiner (2005, pg. 64)
References