INTRODUCTION TO
PROJECT MANAGEMENT
OVERVIEW

The purpose of presentation is to provide leaders and team members of projects, committees or task forces with advanced techniques and practical skills for initiating, planning, tracking, controlling and evaluating any kind or size of project.
- On time
- On budget
- Meeting the goals that have been agreed upon
Project Management

Evaluate  Design
Analyze   Develop
WHAT IS A PROJECT?

• A project is an activity that:
  • is temporary having a start and end date
  • is unique
  • brings about change
  • has unknown elements, which therefore create risk
• Generally projects are formed to **solve a problem** or take advantage of an opportunity.

• **Business** as usual activities can often be **mistaken for projects**.

• Generally it is the **uniqueness** of the activity that is the deciding factor – *do we do this every year?* If so, then it is not truly a project – although you can use project methods to get it done.
QUIZ – ARE THESE PROJECTS?

- Building a deck                  Yes  No
- Implementing a new system        Yes  No
- Mowing the lawn                   Yes  No
- Planning a wedding                Yes  No
- Planning a fundraiser             Yes  No
- Planning a student graduation     Yes  No
COMMON PROJECT TERMS

• **Deliverables**: Tangible ‘things’ that the project produces
• **Milestones**: Dates by which major activities are performed.
• **Tasks**: Also called Actions. Activities undertaken during the project
• **Risks**: Potential problems that may arise
• **Issues**: Risks that have happened
• **Gantt Chart**: A specific type of chart showing time and tasks. Usually created by a Project Management program like MS Project.
• **Stakeholder**: Any person or group of people who may be affected by your project
EXAMPLE: Building a deck

- **Deliverables:** A plan, a consent form, the deck

- **Milestones:**

<table>
<thead>
<tr>
<th>Task</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan drafted</td>
<td>1 Jun</td>
</tr>
<tr>
<td>Plan approved</td>
<td>15 Jun</td>
</tr>
<tr>
<td>Plan submitted</td>
<td>16 Jun</td>
</tr>
<tr>
<td>Plan approved</td>
<td>19 Jun</td>
</tr>
<tr>
<td>Materials purchased</td>
<td>16 Jul</td>
</tr>
<tr>
<td>Resources booked</td>
<td>16 Jul</td>
</tr>
<tr>
<td>Equipment identified</td>
<td>16 Jul</td>
</tr>
<tr>
<td>Deck constructed</td>
<td>20 Jul</td>
</tr>
<tr>
<td>Deck tested</td>
<td>24 Jul</td>
</tr>
<tr>
<td>Deck quality approved</td>
<td>24 Jul</td>
</tr>
<tr>
<td>“Deck warming” completed</td>
<td>28 Jul</td>
</tr>
</tbody>
</table>

- **tasks**

<table>
<thead>
<tr>
<th>Plan drafted</th>
<th>Subtasks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requirement gathered</td>
<td></td>
</tr>
<tr>
<td>Best practice researched</td>
<td></td>
</tr>
<tr>
<td>Draft 1 prepared</td>
<td></td>
</tr>
<tr>
<td>Distributed to stakeholders</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Plan approved</th>
<th>Subtasks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feedback gathered</td>
<td></td>
</tr>
<tr>
<td>Amendments made</td>
<td></td>
</tr>
<tr>
<td>Final plan prepared</td>
<td></td>
</tr>
<tr>
<td>Distributed to stakeholders</td>
<td></td>
</tr>
<tr>
<td>Sign-off obtained</td>
<td></td>
</tr>
</tbody>
</table>
WORK-BREAKDOWN STRUCTURE

- **WBS**
  - Hierarchy of tasks required to complete project
  - Each task is broken into smaller tasks that can be managed and estimated
  - Define task dependencies
    - Some tasks must begin at the same time, some must end at the same time and some cannot start until the other tasks have finished.
  - Estimate task durations and cost
  - May be inputted into project management software
- Final WBS plan is called **baseline WBS**
• **Risks:**
  - Plan is not approved after first round of feedback
  - Resources are not available at the required time
  - Plan is not given consent
  - For each of the above, you should have a contingency plan, or do some activity that may prevent it happening in the first place.

• **Issues:**
  - If any of the above actually happens, then it becomes an issue to solve.

• **Gantt Chart:**

<table>
<thead>
<tr>
<th></th>
<th>Task</th>
<th>Start</th>
<th>Days</th>
<th>Finish</th>
<th>Owner(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Research</td>
<td>25-Jun</td>
<td>2</td>
<td>26-Jun</td>
<td>Mike</td>
</tr>
<tr>
<td>2</td>
<td>Design</td>
<td>25-Jun</td>
<td>3</td>
<td>28-Jun</td>
<td>Bill</td>
</tr>
<tr>
<td>3</td>
<td>Build</td>
<td>25-Jun</td>
<td>5</td>
<td>2-Jul</td>
<td>Joan</td>
</tr>
<tr>
<td>4</td>
<td>Test</td>
<td>3-Jul</td>
<td>2</td>
<td>4-Jul</td>
<td>Tina &amp; Lisa</td>
</tr>
<tr>
<td>5</td>
<td>Document</td>
<td>25-Jun</td>
<td>12</td>
<td>6-Jul</td>
<td>Lisa</td>
</tr>
</tbody>
</table>

• **Stakeholder:**
  - House owner, Builder, Council, ????
A successful **Project Manager** must simultaneously manage the four basic elements of a project: *resources, time, money, and most importantly, scope.*

All these elements are interrelated. Each must be managed effectively. All must be managed together if the project is to be a success. The resource that can be leveraged to the greatest extent in all projects is the people involved.
INTEGRATED PROJECT MANAGEMENT

- Business Needs
- Project Goals
- Stakeholders
- Resources and Budget
- Critical Decisions
- The Team
- Issues and Risks
- Workplan and Timings

COMMUNICATIONS
THE 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.
Project Managers are essentially jugglers. They must make sure that everything keeps to task, that potential issues are quickly eliminated and the project is delivered on time, all the while making sure everyone knows what is happening and the project quality and budget are acceptable. Specifically they:

- direct all activities required to successfully meet the project objectives
- manage risk – scanning ahead for potential issues and resolving them before they become a problem
- solve problems - recommending alternative approaches to problems that arise and providing guidance to the Project Sponsor
- track and report project progress
- communicate to all stakeholders in the project
• Ultimately responsible for the Project’s Success
• Plan and Act
• Focus on the project’s end
• Be a manager & leader
The Initiation phase of the project is the most important phase. The success of the entire project depends on how clearly and completely the Terms of References are established.

- Project Sponsor
- Lines of Authority
- Participants
- Objectives
PROJECT INITIATION con’t

- Constraints
- Costs/Budget
- Resources
- Deliverables
- Phases & Time Scales
- Strategy
- Risks
- Roles & Responsibilities
CHARACTERISTICS OF PROJECTS

• A project contains a **well defined objective**. The project objective is defined in terms of **scope** (or requirements), **schedule**, and **cost**.

• A project is carried out via a set of **interdependent tasks**.

• A project uses **various resources** to carry out these tasks.
• A project has a **definite start date** and an **expected completion date**. The actual completion date may not always be the same as the expected date.

• A project is a **one time or unique endeavor**.

• A project has a customer.

• **So why do projects fail?**
Causes of Project Failure as Reported by Top 100 Managers

- Failed Communication: 60%
- Lack of Planning: 40%
- Poor Quality Control: 30%
WHY DO PROJECTS FAIL?

1. Poor project and program management discipline
2. Lack of executive-level support
3. Wrong team members
4. Poor communication
5. No measures for evaluating the success of the project
6. No risk management
7. Inability to manage change
A project has a degree of UNCERTAINTY. In project planning many assumptions are made regarding:

- access to resources.
- resource capability.
- impact of environmental factors.

- These assumptions are not always accurate.
- Requires project managers to re-assess and trade-offs between requirements, costs, and time. Above all, be PRO-ACTIVE.
MEASURING PROJECT SUCCESS

We measure the success of a project using 4 major project constraints, specifically:

– Scope.
– Cost.
– Schedule (Time).
– Customer satisfaction (quality and performance).
PROJECT CONSTRAINTS

• Project scope – Have all the project requirements (i.e., deliverables) been completed?

• Project cost – Is the cost of the project close to the amount the customer has agreed to pay?

• Schedule – Was the project completed on time?

• Customer satisfaction – Is the customer happy with the quality of the project?
PROJECT SUCCESS – 12 Golden Rules

- Rule #1
  *Thou shalt gain consensus on project outcome.*

- Rule #2
  *Thou shalt build the best team possible.*

- Rule #3
  *Thou shalt develop a comprehensive, viable plan and keep it up-to-date.*

- Rule #4
  *Thou shalt determine how much stuff you really need to get things done.*
Rule #5
*Thou shalt have a realistic schedule.*

Rule #6
*Thou won’t try to do more than can be done.*

Rule #7
*Thou will remember that people count.*

Rule #8
*Thou will gain the formal and ongoing support of management and stakeholders.*
- Rule #9
  Thou must be willing to change.

- Rule #10
  Thou must keep others informed of what you’re up to.

- Rule #11
  Thou must be willing to try new things.

- Rule #12
  Thou must become a leader.