**Project Management**

**An Introduction**

**Projects versus Operations**

*Organizations perform work - either*
  - Operations, or
  - Projects

*Shared characteristics of projects and operations*
  - Performed by people
  - Constrained by limited resources
  - Planned, executed and controlled

**Operations and projects differ:**

- **Operations are ongoing and repetitive**
- **Projects are temporary and unique**
- "A project is a temporary endeavor undertaken to create a unique product or service."
  - *temporary - definite beginning and end*
  - *unique - different in some distinguishing characteristic*

**Examples of projects**

- Developing a new product or service
- Effecting a change in structure, staffing, or style of an organization
- Designing a new transportation vehicle
- Constructing a building or facility
- Running a campaign for political office
- Implementing a new business procedure or process
What is Project Management

Project management is the application of knowledge, skills, tools, and techniques to project activities in order to meet or exceed stakeholder needs and expectations from a project.

The Project Management Challenge

Meeting or exceeding stakeholder needs and expectations invariably involves balancing competing demands among:

- Scope, time, cost, and quality
- Stakeholders with differing needs and expectations
- Identified needs and unidentified expectations - “client relations challenge”

Project Management Knowledge Areas (PMBOK)

- Scope Management
- Cost Management
- Communications Management
- Human Resources Management
- Time Management
- Quality Management
- Risk Management
- Procurement Management

Relationship to other disciplines - similarities

- General management encompasses:
  - Planning
  - Organizing
  - Staffing
  - Directing
  - Controlling
- PM management functions overlap
**Function overlap**

*Planning* the work, schedule and budget

*Organizing* and *staffing* a team to implement the work

*Controlling* the project through tracking and monitoring progress against the plan

*Directing* people and resources so the plan is adjusted and implemented as smoothly as possible

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**Relationship to other disciplines - differences**

*Much of the knowledge needed to manage projects is unique or nearly unique to project management, e.g.*

- Critical path analysis, and
- Work breakdown structures

*Primary differences between general management and PM found in the use of specialized tools and techniques.*

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**Relationship to other disciplines**

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**Why do you need project management techniques?**

*The reason for organizing an assignment as a project is to FOCUS the responsibility, authority, and scheduling of the project in order to meet defined goals.*

- Schedule
- Cost
- Performance (quality)
Other major reasons to use PM techniques

- Clear work descriptions minimize surprises and conflicts
- Responsibilities and assignments for specific tasks are easily identified
- Reduces need for continuous reporting
- Progress can be measured against a plan
- Time limits for task completion are more easily specified

The two types of project management activities

- Project planning and definition activities
- Project implementation and control activities
- More simply
  - Deciding, and
  - Doing

Planning and definition activities

- Definition of project goals and objectives
- Definition of work requirements
- Definition of quantity of work
- Definition of quality of work
- Definition of required resources
- Definition of organization structure
- Planning of task sequencing and schedule
- Planning of the budget

Implementation and control activities

- Initiating work
- Monitoring and tracking progress
- Comparing schedules and budgets to plans
- Analyzing impact of changes and progress
- Coordinating activities and people
- Making adjustments to the plan as required
- Completing the project
- Assessing project results
**Success factors in project management**

- Appropriately skilled project manager
- Clear authority for the PM to act
- Commitment to the PM methodology
- A skilled PM team agreed to the project goals
- A complete project plan that is understood by all participants
- Objectives that contribute to the larger goals of the organization
- Workable tracking and monitoring methods

**Bottom line**

- What project management will do is provide a system for planning, documenting, organizing, and communicating.
- It provides a basis for better decisions
- Ultimately, it is the people who will make things happen and make things work, not the methodology