

ENTC 4060

# Project Management: An Introduction

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## What is a “Project?”

Harold Kerzner, *Project Management*, pg. 2

◆ A series of activities and tasks that ◆

- Have a specific objective to be completed within certain specifications;
- Have defined start and end dates;
- Have funding limits (if applicable);
- Consume resources (i.e., money, people, & equipment)

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## What is a “Project?”

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- SCOPE
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## What is a “Project?”

A series of activities and tasks that have

- SCOPE
- TIME
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## What is a “Project?”

A series of activities and tasks that have

- SCOPE
- TIME
- RESOURCES

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## The Three Project Constraints:

- SCOPE
- TIME
- RESOURCES

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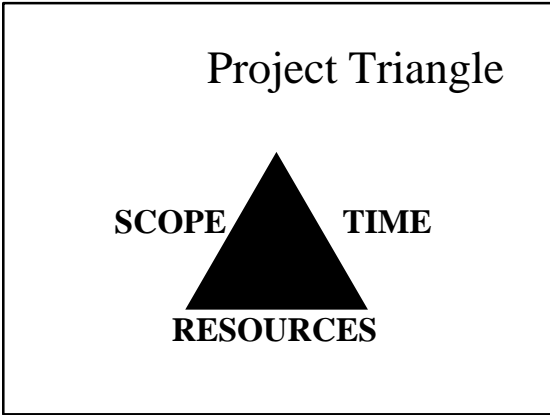
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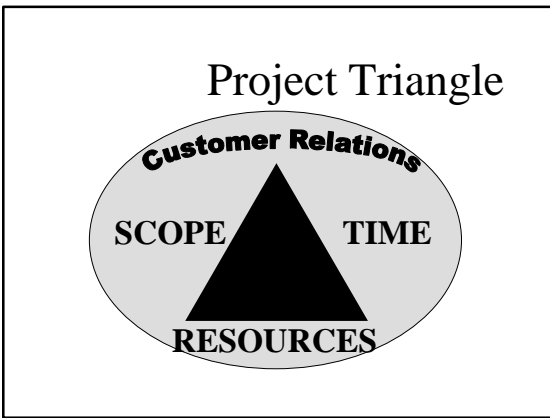
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What is "Project Management?"

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"Project management is the art of creating an illusion that any outcome is the result of a series of predetermined, deliberate acts when, in fact, it was dumb luck."

Harold Kerzner, *Project Management*, pg. 3

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### What is “Project Management?”

“Project management is the planning, organizing, directing, and controlling of company resources for a relatively short term objective that has been established to complete specific goals and objectives.”

Harold Kerzner, *Project Management*, pg. 4

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### Two Main Components

- Planning
  - Creating, then fine tuning, the overall project plan
- Monitoring
  - Tracking & reporting progress

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### Measurements of Project Success

- Within specifications
- Within allotted time period
- Within the budgeted costs
- Accepted by the customer/user
- Minimal and mutual scope changes
- Within corporate culture & without disturbing organizational workflow

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## Project Manager's Role

- Responsible for coordinating and integrating activities across multiple and functional lines
- Understand operations of line organizations
- Familiar with technology
  - Master if in R&D activities

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## What's in the Successful Project Manager's Toolbox?

- Strong communication skills
- Strong interpersonal skills
- Ability to
  - balance technical and managerial functions;
  - overcome organizational constraints;
  - cope with and survive risks

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## Ten Specific Skills

- Team Building
- Leadership
- Conflict Resolution
- Technical Expertise
- Planning

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## Ten Specific Skills

- Organizing
- Entrepreneurship
- Administration
- Management support
- Resource allocation

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## Project Managers Manage

- Engineering
- Procurement
- Construction
- Finance
- Cost engineering

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## Project Managers Manage

- Schedule
- Environmental considerations
- Regulatory requirements and law
- Inflation & cost escalations
- Labor and client relations

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## Management Skills

- Human behavior and interpersonal relationships
  - Psychology
- Organizational behavior
  - Sociology
- Communications

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## Project Manager's Responsibilities

- Planning agent
  - Overall and summary
  - *NOT* detailed planning
    - Functional or line managers
- Resolve conflicts
- Make tradeoffs

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## "Planning Architect" defines

- Complete tasks
- Resource requirements
- Major timetable milestones
- End-item quality and reliability requirements
- Performance measurements

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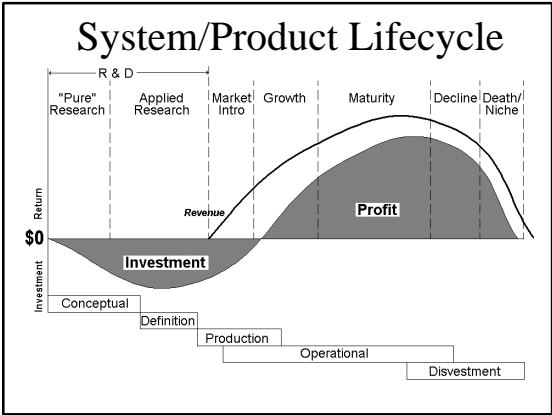
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What would a typical  
“Project Lifecycle” look like?

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