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# INTRODUCTION

## 1



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# **The Project Management Process**

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Centre for Management Development**

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## **Seminar Outline**

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- |              |  |
|--------------|--|
| <b>Day 1</b> | <b>Introduction<br/>Project Integration<br/>Scope Definition &amp; Control<br/>Quality Control<br/>Time Control</b>                            |
| <b>Day 2</b> | <b>Time Control (cont'd)<br/>The Microcomputer in Project Management<br/>Procurement<br/>Cost Control<br/>Risk Management<br/>Organization</b> |
| <b>Day 3</b> | <b>Communication<br/>Human Relations<br/>Project Negotiation Workshop</b>  |

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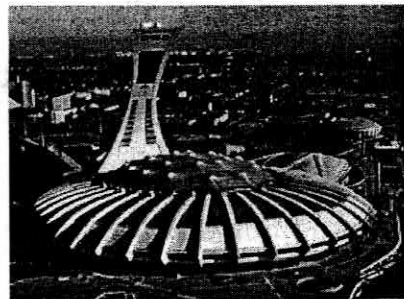
## "Seat of the Pants" Project Management

1. Excitement
2. Disenchantment
3. Confusion
4. Panic!!!
5. Disaster
6. Search for the Guilty
7. Punishment for the Innocent
8. Rewards for Non-Participants



*Budget \$120 million*  
*Cost.*

QuickTime™ and a  
Canyon Movie Toolkit (cvid) decompressor  
are needed to see this picture.



An Unknown Project Manager

Montreal Olympic Stadium

**TAURUS PROJECT (Transfer and Automated  
Registration of Uncertificated Stock)**



## Project Examples

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- Rocket Launch
- Cultural Change *globalization = increased competition.*
- Downsizing
- Merger, Divestiture or Acquisition
- Start-up of New Enterprise
- New Computer System
- Move to New Building
- Introduction of New Product

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## Project Manager

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Complete Responsibility

For  
Managing All Aspects  
of the Project

From Beginning to End

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## Keys to Project Management

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Scope

Time

Cost

Quality

Risk

Communication

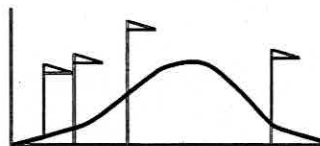
Motivation

→ while doing these, must plan to do the ones on the right

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## 2 Project Integration





# INTEGRATION

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## Project Phases

### Construction

Feasibility

Planning & Design *for planning*

Production *detailed design & construction*

Turnover and Start-up

### Pharmaceuticals

Discovery and Screening

Preclinical Development

Registration(s) Workup of NDA

Postsubmission Activity

### Software Development

Project Definition

Requirements, Analysis & Specification

Development

Test, Acceptance & Release

Production, Implementation,

Conversion or Upgrade



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## Software Development Life Cycle

Evaluate

Identify

Deploy

Operations & Production Support

Construct

Design



*7/11 7/11 1/2  
3/4/95 OT.*

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PMBOK 1996 per Muench





## Project Life Cycle - General

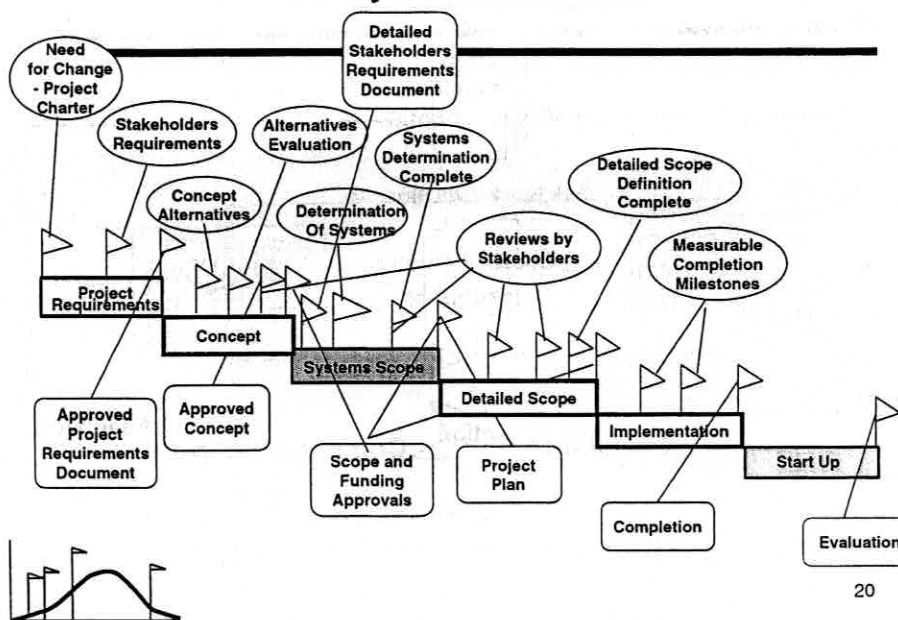
1. Need for Change
2. Opportunity or Problem Definition *affordable*  
Statement of Needs/Requirements of Stakeholders
3. Assessment of Alternatives - Choice *Have 4 alternatives; do nothing, think out of the box.*  
Preliminary Business Case
4. Conceptual Design
5. Definition (Framework, Systems or Components)  
- development of detailed Stakeholder Requirements
6. Detailed Design
7. Implementation Business Case and Project Plan
8. Transfer to Operations
9. Project Closeout
10. Support Systems *to keep it going i.e. training*

- owner  
- end users.

detail what is "NOT" included.

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## Project Milestones



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*Ensure stakeholders see the details.  
Checklist for each milestone that provides details on what that individual milestone actually means.*



## Project Plan

**A Formal, Approved Document - a "contract" with the Stakeholders**

### CONTAINS

- Project Charter
- Project Management Approach, Strategy
- Work Breakdown Structure for Control
- Scope, Cost Estimates, Schedules, Major Milestones
- Organization, Responsibilities
- Risks
- Constraints, Key Assumptions
- Management Plans - Scope, Time, Cost, Risk, Commun.
- Stakeholder Requirements - *add this to the document.*



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*Beyond the concept stage - now planning to implement the project.*

*Include key items NOT included in the scope, i.e. strikes not included, normal weather events.*

## Project Charter

- Project Charter - signed by senior executive / sponsor
  - basis of Project Plan
  - states customers and organization's expectations

### CONTAINS

- Names Project Manager
- Project Scope Information - Customer Needs
  - deliverables, sponsor acceptance criteria
  - organizational goals, reviews & approvals required
- Project Scope Risk - limit for each final deliverable
  - reason for limit
- Project Resources - staff, cost limitations, priority
  - team assignments
- Project Status Reports



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## Powerful Gadgets Inc.

### NEEDS STATEMENT

Our company, a young and dynamic organization in the computer technology industry is now performing most of its work in a large number of relatively small projects. These range from business re-engineering and total quality initiatives, to new product development and facility upgrades, or expansions. This large number of projects has led to a rather bewildering situation of losing control over the performance of the projects.

In response, company executives have decided to introduce a systematic approach to project management into its organization. Although the company executives do not have in-depth knowledge of project management, they have been able to identify a few main requirements.

1. Projects should be performed in a standard manner
2. Projects should satisfy the requirements for which they were undertaken.
3. The strategy for satisfying these requirements should be established and communicated to management.
4. Management needs to be able to approve or cancel a project before too much money has been committed.

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Gerhardt Krugerwartz, V.P. Operations.

date

3 Stakeholders:

1. Management.

2. Project Managers

3. Customers

4. Operational staff

*identify current situation & problem*  
✓ systematic approach.

✓ framework for projects.

- timely/cost effective  
- execution & implementation  
- resources

3 Requirements:

1. Communication process.

2. Step by step process for project management.

3. Measurement/evaluation



**Powerful Gadgets Inc.  
Good Project Management Practices Project**

**PROJECT CHARTER**

**Introduction**

At its last meeting, the company board approved this project "for consideration". It means that the project can proceed into its next phase. The project customers are internal. They have been interviewed and their requirements assessed.

After consulting some experts, we have found a model of "life cycle phases for project management project."

We consider that this project is at the end of the Embryonic Phase in the attached model. Therefore, there are still pockets of resistance to the project within senior management ranks and, particularly amongst functional managers.

You already have the approved Needs Statement

**Purpose**

This document is intended to:

- Outline the key project deliverables
- Appoint the Project Manager
- Specify the Project Manager's key responsibilities and authority

**Key Project Deliverables**

1. New project management methodology
2. Project management training, based on the methodology
3. Creation of a Project Management Office
4. Coaching project managers in the new methodology

We do not believe that we can perform this work in-house.

We realize that the continuous improvement of project management is a never ending process and have decided to charge the new Project Management Office with it. This is outside the scope of work of this project.



## Inspiring Teamwork (cont'd)

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### To Create Openness:

- "Let me see if I understand"
- "So the problem seems to be"
- "If I understand you correctly,.... is that right?"
- "Help me to understand why.....is important"
- "The three key issues I heard you say are..."
- "If I heard you correctly, our key agreement is....."
- "What you want to do is..."
- "What you need from me is..."
- "How can I help you?"
- "How can we solve the problem together?"
- "How can we partner on this to solve the problem?"



PM Network magazine Nov 1993, Openness: The Gateway To Top Performance, by Kostner and Strbiak

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## Inspiring Teamwork (cont'd)

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### Some words instantly close communication

- "No"
- "That idea will never fly"
- "You haven't thought it through"
- "It is not my problem"
- "Your idea just won't work"
- "Excuse me while I answer this call"
- "I don't like it. Do it again and get it right next time"
- "You don't need to know"



PM Network magazine Nov 1993, Openness: The Gateway To Top Performance, by Kostner and Strbiak

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## Making Change Easier

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**Make It A Known** - *present the situation and the facts.*  
- *reduce the unknown.*

**Package**

**Show Needs Satisfaction**

**Timing**

**Participation** - *a large number of people may*  
*need to change.*



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## Conflict - Traditional

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**Caused by Troublemakers**

**Bad**

**Should be Avoided**



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## 5 Ways of Handling Conflict - cont'd

### 3. Compromising

Bargaining

"Acceptable" Agreement

Falls Short of Ideal Solution

Trade-offs

Does Provide Definitive Resolution

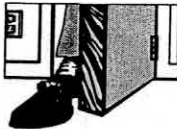
### 4. Forcing

Using Power

Competition

Win - Lose

Hard Feelings - may backfire



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## 5 Ways of Handling Conflict - cont'd

### 5. Problem Solving :

Confronting the Problem

Pinpoint the Problem

Agree on Objective Standards

Separate People from Problem

No Ego behind Position

Options for Mutual Gain

Win - Win

Optimizes

- or. *Interest Based Negotiations*  
- avoid people taking a position.



\* "Getting To Yes" - Fisher, Ury & Patton - Penguin

*Small Book*

- project from Harvard Law School

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### GETTING TO YES

**Problem:**  
Negotiators Perceive a Choice Between Two Problematic Approaches

**Solution:**  
Use a Third Approach

#### Soft Positional

#### Hard Positional

#### Problem Solving

Avoid Conflict

Win

Solve the Problem

Friends

Adversaries

Professionals

Change Your Position Easily

Dig In to Your Position

Focus on Interests, Not Positions

Concede Generously

Concede Stubbornly

Don't Concede, Invent Options

Avoid a Contest of Will

Win a Contest of Will

Use Standards Independent of Will

Make Concessions for Relationship

Demand Concessions to Have Separate People From Problem Relationship

Back Down to Ultimatums

Make Threats

Know Each Side's Best Walkaway Alternative

Commit Early, Draft Late

Commit Early, Draft Late

Draft As You Go, Commit Only at End



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## Video - "Getting to Yes"

1. Interests
2. Options
3. Independent Standards
4. People
5. BATNA

*Best Alternative to a Negotiated Agreement*  
*Quality of preparation is key*

*Plan negotiations ahead of time - understand their interests*



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### Two Ways to Talk about an Issue

**Talk at the other side**

**Talk with them**

**Focus on the past**

**Focus on the future**

**Talk about who is right**

**Talk about what is to be done**

**Blame them for the problem**

**Tackle the problem jointly**

**Score points**

**Clarify interests, Invent options**



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### Examples of Independent Standards

**Market Value**

**Competing Offers**

**Precedent**

**Costs**

**Industry Practice**

**Equal Treatment**

**Law**



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## BATNA

### Best Alternative To a Negotiated Agreement

*— explore alternatives and see if you can improve them.*

The best alternative that satisfies your interests in  
the event of no agreement

*Think about what the other party's BATNA is.  
Perhaps they do not have very many good alternatives  
if they walk away.*



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## Project Management Overview

Scope

Time

Cost

Quality

Risk

Communication

Motivation



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## **Doing Something About It**

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- **9. Build a Project Plan**
- **10. Look “outside the box”**
- **11. Identify pockets of resistance and support**
- **12. Set up a project office**
- **13. Communicate continuously**
- **14. Keep the team small**
- **15. Maintain momentum**



**Powerful Gadgets Inc.  
Good Project Management Practices Project**

**PROJECT CHARTER**

**Project Manager**

We have selected Roger LaFrance to be the Project Manager. He is one of the Section Managers in the Operations Department. He has managed our projects in the past and has taken some project management seminars recently.

**Project Manager's Authority**

This project has been estimated at roughly \$85,000. Therefore, Roger's financial authority will be according to our corporate policy (\$10,000 per decision).

Roger will have no authority over Functional Managers; he will obtain their requirements in terms of this project and negotiated for their participation on the project.

As of this date, Roger will continue my work in managing this project and I will assume the role of Project Sponsor.

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Gerhardt Krugerwartz, V.P. Operations

date

Attachment to Project Charter

## LIFE CYCLE PHASES FOR PROJECT MANAGEMENT MATURITY<sup>1</sup>

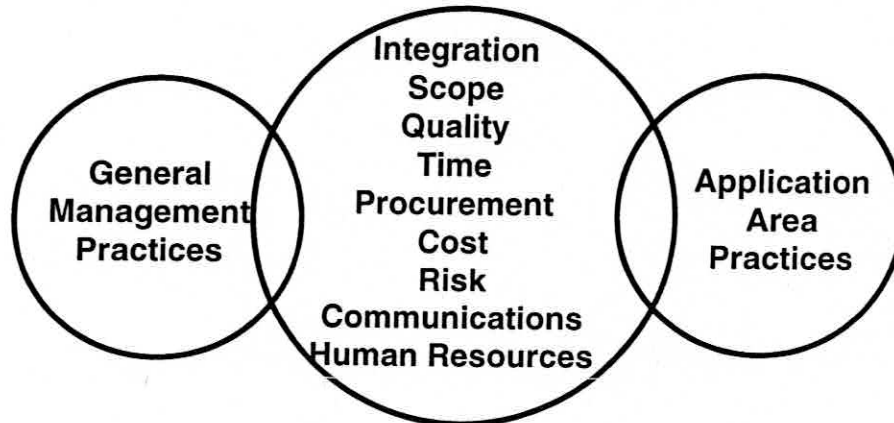
<ul style="list-style-type: none"> <li>• Recognize need</li> <li>• Recognize benefits</li> <li>• Recognize applications</li> <li>• Recognize what must be done</li> </ul>	<ul style="list-style-type: none"> <li>• Visible Executive Support</li> <li>• Executive understanding of Project Management</li> <li>• Project Sponsorship</li> <li>• Willingness to change way of doing business</li> </ul>	<ul style="list-style-type: none"> <li>• Line management support and commitment</li> <li>• Line management education</li> <li>• willingness to release employees for project management training</li> </ul>	<ul style="list-style-type: none"> <li>• Use of life cycle phases</li> <li>• Development of project management methodology</li> <li>• Commitment to planning</li> <li>• Minimization of "Creeping Scope"</li> <li>• Selection of a project tracking system</li> </ul>	<ul style="list-style-type: none"> <li>• Development of management cost/schedule control system</li> <li>• Integrating cost and schedule control</li> <li>• Developing an educational program to enhance project management skills</li> </ul>	<p><b>Embryonic Phase</b></p>	<p><b>Executive Management Acceptance Phase</b></p>	<p><b>Line Management Acceptance Phase</b></p>	<p><b>Growth Phase</b></p>	<p><b>Maturity Phase</b></p>
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<sup>1</sup> Harold Kerzner, Ph.D., *Project Management: A Systems Approach to Planning, Scheduling and Controlling*, Van Nostrand Reinhold, 1998, Page 53



## Project Management Body of Knowledge

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[www.pmi.org](http://www.pmi.org)

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## 3 Scope Definition & Control



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Specifically, project management in construction encompasses a set of objectives which may be accomplished by implementing a series of operations subject to resource constraints. There are potential conflicts between the stated objectives with regard to scope, cost, time and quality, and the constraints imposed on human material and financial resources. These conflicts should be resolved at the onset of a project by making the necessary tradeoffs or creating new alternatives. Subsequently, the functions of project management for construction generally include the following:

1. Specification of project objectives and plans including delineation of scope, budgeting, scheduling, setting performance requirements, and selecting project participants.
2. Maximization of efficient resource utilization through procurement of labor, materials and equipment according to the prescribed schedule and plan.
3. Implementation of various operations through proper coordination and control of planning, design, estimating, contracting and construction in the entire process.
4. Development of effective communications and mechanisms for resolving conflicts among the various participants.

The Project Management Institute focuses on nine distinct areas requiring project manager knowledge and attention:

1. Project integration management to ensure that the various project elements are effectively coordinated.
2. Project scope management to ensure that all the work required (and only the required work) is included.
3. Project time management to provide an effective project schedule.
4. Project cost management to identify needed resources and maintain budget control.
5. Project quality management to ensure functional requirements are met.
6. Project human resource management to development and effectively employ project personnel.
7. Project communications management to ensure effective internal and external communications.
8. Project risk management to analyze and mitigate potential risks.
9. Project procurement management to obtain necessary resources from external sources.



**Powerful Gadgets Inc.  
Good Project Management Practices Project**

**PROJECT PLAN**

**Introduction**

Background  
Need Statement  
Project Charter

**Communications Management Plan**

Communications Matrix  
Document DistributioN  
Reports  
Meetings

**Project Scope**

Scope Statement  
WBS  
Scope Management Plan

**Project Close-out**

Plan to capture Lessons Learned  
Plan to archive project records

**Project Schedule**

Master Schedule  
Schedule Management Plan

**Project Cost**

Cost Estimate  
Cash Flow  
Cost Management Plan

Note that this is a suggested outline of a thorough project plan. The Plan may be formal or informal, highly detailed or broadly framed, based on the needs of the project and management.

**Project Quality**

Quality Attributes - Requirements

**Project Risk**

Risk Management Plan  
- risks and responses

**Project Human Resources**

Project Organization Chart  
Staffing Management Plan  
Responsibility Assignment Matrix  
Factors for Motivation

**Procurement Management Plan**

Contract Packages Breakdown Structure  
Pre-qualification Criteria  
Proposal Evaluation Criteria  
List of RFP documents  
Contracts Administration  
Contracts Close-out  
Standard Forms