



*Empowerment – By Stephen Broadbent  
Photograph by Brian Mossemeneer*

# Introduction to Project Management E-Learning Summary

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## Overview of Project Management

S/N	Terminologies & Concepts	Definition & Key Pointers
1.	Project Definition	A temporary endeavor undertaken to create a unique product, service, or result
2.	PMBOK Guide Overview	<ul style="list-style-type: none"> <li>• <u>Common vocabulary</u>: Provides a common vocabulary for the project management community (internal &amp; external)</li> <li>• <u>Standard</u>: Good practices for most projects most of the time</li> <li>• <u>Tailoring considerations</u>: Can be used to tailored to the project needs. Examples: internal and external project, project constraints &amp; project environment</li> <li>• <u>Methodology</u>: A system of practices, techniques, procedures, and rules by those who work in a discipline</li> </ul>
3.	Process Groups	Five (5) process groups <ul style="list-style-type: none"> <li>• Initiating</li> <li>• Planning</li> <li>• Executing</li> <li>• Monitoring &amp; Controlling</li> <li>• Closing</li> </ul>
4.	Knowledge Areas	Ten (10) knowledge areas <ul style="list-style-type: none"> <li>• Project Integration Management</li> <li>• Project Scope Management</li> <li>• Project Schedule Management</li> <li>• Project Cost Management</li> <li>• Project Quality Management</li> <li>• Project Resource Management</li> <li>• Project Communications Management</li> <li>• Project Risk Management</li> <li>• Project Procurement Management</li> <li>• Project Stakeholder Management</li> </ul>

S/N	Terminologies & Concepts	Definition & Key Pointers
5.	Triple Constraints	Consists of <ul style="list-style-type: none"> <li>• Scope</li> <li>• Schedule</li> <li>• Cost</li> </ul>
6.	Project Constraints	Consist of <ul style="list-style-type: none"> <li>• Scope</li> <li>• Schedule</li> <li>• Cost</li> <li>• Quality</li> <li>• Resource</li> <li>• Risk</li> </ul>
7.	Other Project Key Concepts	<ul style="list-style-type: none"> <li>• Project drive change to move the organization from current state to future state</li> <li>• Project create tangible (e.g. cash, equipment) and intangible (e.g. reputation, trademark) business value</li> </ul>
8.	Importance of Project Management	<ul style="list-style-type: none"> <li>• Project management is defined as application of knowledge, skills, tools, and techniques to project activities to meet project requirements</li> <li>• Project management is a strategic competency in many organizations</li> <li>• Project management can be used to manage day-to-day operations</li> </ul>
9.	Project Management & Operations	<ul style="list-style-type: none"> <li>• Projects are not ongoing</li> <li>• Project can intersect with operations</li> </ul>

## **Portfolio and Program**

<b>S/N</b>	<b>Terminologies</b>	<b>Definition &amp; Key Pointers</b>
1.	Portfolio definition	Defined as projects, programs, subsidiary portfolios, and operations managed as a group to achieve strategic objectives
2.	Program definition	Defined as a group of related projects, subsidiary programs, and program activities managed in a coordinated manner to obtain benefits not available from managing them individually

## Elements to Increase Project Success (1) Pre-Project Work

Quantitative Methods or Financial Measures		Qualitative Methods or Non-Financial Measures
<b>Project Selection Methods</b>	<b>Project Success Measures</b>	Examples: <ul style="list-style-type: none"> <li>• Improve employee morale</li> <li>• Improve teamwork</li> </ul>
• Benefits-cost Ratio (BCR)		
• Payback Period (PBP)		
• Net Present Value (NPV)		
• Return of Investment (ROI)		
• Internal Rate of Return (ROI)		
• Weight-score Model	NA	

<b>Benefit-Cost Ratio (BCR):</b>	$\frac{\text{Expected Revenue or Benefits}}{\text{Total Cost}}$ <p>BCR &gt; 1 benefits more than costs</p>
<b>Net Present Value (NPV):</b>	<p>(PV's of all Revenue or Benefits) – (PV's of all Costs) Where PV is Present Value</p> <p><b>Present Value (PV):</b></p> $= \frac{\text{Future Value}}{(1 + r)^n}$ <p>where r is interest rate or inflation rate n is number of time periods</p>
<b>Return of Investment (ROI)</b>	$\frac{\text{Benefits or Profit of Investment or Project}}{\text{Cost of Investment or Project}}$ <p>(ROI is expressed as a percentage or ratio)</p>
<b>Internal Rate of Return (IRR)</b>	<p>If project IRR exceed company required rate of return (or hurdle rate) – project is desirable</p>

**Weight-score Model Example**

The weighted scoring model is an objective technique that provides a systematic approach for selecting projects based on predefined scoring criteria. Often the scoring criteria fit the company's strategic direction and business needs.

Selection Criteria Examples	Weighting	Project A		Project B		Project C	
		Score	Weighted-Score	Score	Weighted-Score	Score	Weighted-Score
Competitiveness	0.12	4	0.48	3	0.36	2	0.24
Return on Investment	0.35	3	1.05	4	1.40	3	1.05
Branding & Reputation	0.25	5	1.25	3	0.75	2	0.50
Support & Maintenance	0.18	2	0.36	3	0.54	2	0.36
Future Growth	0.10	3	0.30	2	0.20	1	0.10
<b>Total Weighted Score</b>			<b>3.44</b>		3.25		2.25

## **Elements to Increase Project Success (3) People**

- Project manager is a critical leadership in projects
- Increasing need for project manager to have technical, leadership, strategic business management knowledge and skills to support organization various types of projects including strategic projects
- Project manager needs to have political acumen and apply appropriate power (e.g. formal, reward, relational) to influence and negotiate to get things done
- Project manager needs to both leadership and management and apply appropriate leadership style to be successful

## Elements to Increase Project Success (4) Project Governance

S/N	Terminologies	Definition & Key Pointers
1.	Project Management Office (PMO)	<p>PMO is an organization structure that standardizes the project-related governance processes.</p> <p>Three (3) Types of PMO Structures:</p> <ul style="list-style-type: none"> <li>• Supportive (consulting role)</li> <li>• Controlling (requires compliance for projects)</li> <li>• Directive (takes control of projects directly)</li> </ul>
2.	Project Life Cycle Definition	<p>Project Life Cycle is a series of phases, that a project passes through from project start to completion. It provides basic framework for managing project.</p>
3.	Product Life Cycle	<p>Product Life Cycle is a series of phases that represent the revolution of a product, from concept through delivery, growth, maturity and to retirement.</p>
4.	Project & Development Life Cycle	<ul style="list-style-type: none"> <li>• Predictive (with known requirements)</li> <li>• Adaptive               <ul style="list-style-type: none"> <li>○ Iterative</li> <li>○ Incremental</li> <li>○ Agile (both iterative &amp; incremental)</li> </ul> </li> <li>• Hybrid (combines predictive &amp; adaptive)</li> </ul> <p><u>Iterative</u> Allow feedback on partially completed or unfinished work to improve and modifications</p> <p><u>Incremental</u> Provide finished deliverables that customer maybe able to use immediately</p>



## **Elements to Increase Project Success (5) Continual Improvements**

Obtain inputs from various sources for continual improvements such as:

- Internal and external stakeholders
- Audits
- Lessons learned
- Benchmark

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