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About Me - Indike Manthilake

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MBA Msc Bsc in MIS



Certified Scrum Master



Agile Certified Practitioner Background

Project Management Institute (PMI)

Building Professional in Project Management

- Established in 1969 and headquartered in USA , the Project Management Institute (PMI) is the world's leading non-for-profit organization
- PMI has over 400,000 members in 185 countries and more than 600,000 credential-holders worldwide.
 - Certified Associate in Project Management (CAPM)[®]
 - Project Management Professional (PMP)[®]
 - Program Management Professional (PgMP)[®]
 - PMI Agile Certified Practitioner (PMI-ACP)®
 - PMI Risk Management Professional (PMI-RMP)[®]
 - PMI Scheduling Professional (PMI-SP)[®]



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Lesson 1 - Introduction

Agenda

- Define a Project
- History of Project
- Need for a Project
- Categories of Project
- The Project Management Life Cycle
- The Role of the Project Manager

All projects have a beginning, a middle and an end.



A definition:

"A temporary endeavor undertaken to produce a unique product, service or a result"

What is a Project?

Give few examples for projects:

1.

- 2.
- 3.
- 4.
- 5.
- 6.
- 7.

Examples for projects







Examples for projects





Examples for projects

- Northwest Airlines developed a new reservation system-ResNet
- Building the parliament building
- Building the southern highway
- Building Hambanthota harbor
- Organizing a Annual conference
- Planning a training program
- Constructing a Bridge
- Planning a marketing campaign for a new product launch



History of Projects

Some people argue that building the Egyptian pyramids was a project, as was building the Great Wall of China



Projects vs Operations



Need for a Project

Why do organizations need Project?:

- 1.
- 2.
- 3.
- -
- 4.
- 5.
- 6.
- 7∙

Need for a Project



Categories of Project

Catrgories	Examples
Aerospace/Defense Projects	New weapon system. Satellite development/launch. Space station.
Business & Organization Change Projects - Acquisition/Merger - Process improvement - New business venture	Acquire and integrate competing company. Major improvement in project management. Form and launch new company. Consolidate divisions and downsize company.
Information Technology Projects	Information system deployements. ERP system deployment. Network communications systems. Web Site development.
Event Projects - International events - National events	Olympics World Cup Match. Super Bowl.
Media & Entertainment Projects	Motion picture TV segment Live play or music event

What is Project Management?

- 'At its most fundamental, project management is about people getting things done,'
 - Dr Martin Barnes
- Balancing Scope, Time and Cost
- Application of knowledge, skills, tools and techniques
- A coordinated and controlled activity
- Project management is the discipline of planning, organizing, and managing resources to bring about the successful completion of specific project goals and objectives.

Projects, Program and Portfolio Management



Portfolio - A suite of Programs, Projects & operations managed to optimize Enterprise Value

Program - A structured/related grouping of projects designed to produce clearly identified business value

Project – A structured set of activities undertaken to deliver a defined capability based on an agreed schedule and budget

Projects, Program and Portfolio Management

	Projects	Programs	Portfolios
Scope	Have defined objectives.	Programs have larger	Have business scope that
	Scope is progressively	scope and provide more	changes with strategic
	elaborated.	significant benefits	goals of organization
Change	Project Managers expect	Program Manager must	Portfolio managers
	change and implement	expect change from both	continually monitor
	processes to keep change	inside and outside the	changes in the broad
	managed and controlled	program and be prepared	environment
		to manage it	
Planning	Project Managers	Program Managers	Portfolio Managers create
	progressively elaborate	develop the overall	and maintain necessary
	high-level information into	program plan and create	processes and
	detailed plans throughout	high-level plans to guide	communication relative to
	the project life cycle	detailed planning at the	the aggregate portfolio
		component level	

Projects, Program and Portfolio Management

	Projects	Programs	Portfolios
Management	Project Managers	Program Managers manage the	Portfolio managers
	manage the project	program staff and the project	may manage or
	team to meet the	managers; they provide vision	coordinate portfolio
	project objectives	and overall leadership	management staff
Success	Success is measured	Success is measured by degree	Success is measured in
	by product and project	to which program satisfies the	terms of aggregate
	quality, timeliness,	needs and benefits for which it	performance of
	cost effectiveness and	was undertaken	portfolio components
	degree of customer		
	satisfaction		
Monitoring	Monitoring and	Program Managers monitor	Portfolio Managers
	Controlling of the	progress of program	monitor aggregate
	work of producing the	components to ensure overall	performance and
	project's products,	goals, schedules, budget and	value indicators
	services or results	benefits of the program will be	
		met	

Subprojects

- Projects are frequently divided into more manageable components or subprojects.
 - Subproject are often contracted to an external enterprise or to another functional unit in the performing organization.
 - Sub projects can be referred to as projects and managed as such.

Organizational Structures

- Functional
 - Engineering, Marketing, Design, etc
 - P&L from production
- Projectized
 - Project A, Project B
 - Income from projects
 - PM has P&L responsibility
- Matrix
 - Functional and Project based
 - Program Mgmt. Model
 - Shorter cycles, need for rapid development process

Functional Organization



Pros

- Clear definition of authority
- Eliminates duplication
- Encourages specialization
- Clear career paths

Cons

- "Walls": can lack customer orientation
- "Silos" create longer decisions cycles
- Conflicts across functional areas
- Project leaders have little power

Projectized Organization



Pros

- Unity of command
- Effective inter-project communication

Cons

- Duplication of facilities
- Career path

Examples: defense, construction

Matrix Organization



Pros

 Project integration across functional lines

- -Efficient use of resources
- -Retains functional teams

Cons

- Two bosses for personnel
- Complexity
- Resource & priority conflicts

Challengers in Projects

- Now that we have learnt Projects & Project Management, name few challengers you might face in project execution:
- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Challengers in Projects

- Now that we have learnt Projects & Project Management, name few challengers you might face in project execution:
- 1. Objectives not properly defined
- 2. Insufficient planning and coordination
- 3. Poor estimation of duration and cost
- 4. Lack of communication
- 5. Lack of risk analysis
- 6. Incomplete, unrealistic and outdated plans

Which of the following is not a common cause for project failure.

- 1. Objectives not properly defined
- 2. Insufficient planning and coordination of resources
- 3. Poor estimation of duration and budget
- 4. Use of a consistent methodology

What is a challenge in projects?

- 1. Lack of accountability
- 2. Limited Funds
- Deal with extremely complex social, economic, and political factors
- 4. All of the above

The Project Management Life Cycle

- All projects are divided into phases
- All phases together are known as the Project Life Cycle
- Each phase is marked by completion of Deliverables



Adapted from PMBOK

Time

What is a project life cycle?

- Risk of failure is greatest at start of project when the level of uncertainty is highest
- Stakeholder influence over project product decreases as project continues
- Project life cycles define:
 - Technical work to be done in each phase
 - When deliverables are to be generated in each phase
 - How each deliverable is reviewed, verified, and validated
 - Who is involved in each phase
 - How to control each phase
 - How to approve each phase

Phases in project life cycle



Challengers in Projects

- So what is the role of a "Project Manager"?
- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- _
- 7∙

The Role of the Project Manager

The Project Manager is the person responsible for accomplishing the project objectives.

- Managing a project includes:
 - Identifying requirements.
 - Establishing clear and achievable objectives.
 - Balancing the competing demand of scope, time and cost.
 - Adapting the specifications, plans, and approach to the different concerns and expectations of the various stakeholders.

Project Manager is the person responsible for making things happen.

Cost:

This is the estimation of the amount of money that will be required to complete the project. Cost itself encompasses various things, such as: resources, labor rates for contractors, risk estimates, bills of materials, et cetera. All aspects of the project that have a monetary component are made part of the overall cost structure.

Time (Schedule):

This refers to the actual time required to produce a deliverable. Which in this case, would be the end result of the project. Naturally, the amount of time required to produce the deliverable will be directly related to the amount of requirements that are part of the end result (scope) along with the amount of resources allocated to the project (cost)

Scope:

These are the functional elements that, when completed, make up the end deliverable for the project. The scope itself is generally identified up front so as to give the project the best chance of success. (Although scope can potentially change during the project life-cycle, a concept known as 'scope creep') Note that the common success measure for the scope aspect of a project is its inherent quality upon delivery.

The triple constraint is about balancing each constraint to reach a successful conclusion. As the project progresses, the project manager may find that any changes impact one or more of the constraints. What might happen? Here are some examples:

During an automotive engineering project, an unexpected budget cut is imposed on your project after the company posts poorer than expected 4th quarter financial results.

Impact*:*

Scope is cut, quality is reduced, and the schedule is pushed back so that cheaper resources can be found. The most significant constraint, in this case, is the cost (the money the company is willing to spend). During a project to create a new mobile phone handset, your customer asks that the launch date is brought forward two weeks to coincide with a major industry show.

Impact:

Costs increase as more people are added to meet the new deadline. Some features of the product are removed and put into a phase two release to reduce delivery time and meet the new launch date. The most significant constraint, in this case, is time (project schedule).

During a software development project, your customer increases the scope. The client asks that new features be added to the software after learning that a competitor's product will be in direct competition with their own. It is important the product includes these new features if it is to compete successfully. Impact:

The budget and schedule increase as a result of pushing up the final delivery date. More people are added to minimize disruption to the project schedule, thereby increasing the project's overall cost. The most significant constraint, in this case, is scope (features of the product).

Take home work

A briefing on the "Triple Constraints" by each student...

Next Week

Lesson 2 – Project Initiation

Agenda

- Different Approaches
- Documenting Project Initiation with Project Charter
- Identifying Project Stakeholders