

Fundamentals of Software Project Management (FSPM)

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Week 1



Google Classroom Link

➤ Please Join Using the code:

➤ **V k 4 f t f 7**



Books



- Text Book:

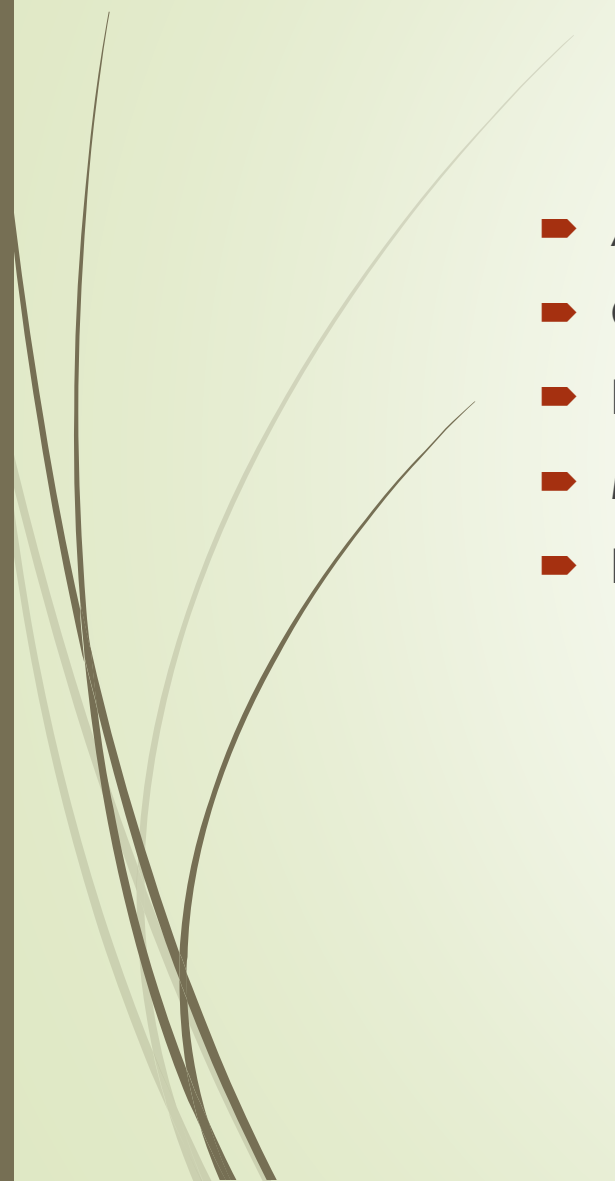
- Software Project Management: A Practitioner's Approach, E. M. Bennatan, ISBN: 978-0077076481, McGraw-Hill Book Company

- Reference Books:

- Applied Software Project Management, Andrew Stellman, Jennifer Greene, ISBN: 978-0596009489, O'Reilly Media.
 - A Guide to the Project Management Body of Knowledge (PMBOK® Guide), 7th edition, Project Management Institute (PMI).
 - Agile Practice Guide, Project Management Institute (PMI).



Marks Distribution



➤ Assignments	10 %
➤ Quizzes	05 %
➤ Report	05 %
➤ Mid Exam	30 % (15% each)
➤ Final Exam	50 %

Course Contents

Week	Topics
1	Initiation Phase. Introduction to Project management
2	Project management in organizations
3	Process Groups
	Integration Management
4	Scope Management
5	Schedule (Time) Management
	MIDTERM EXAM 1
7	Cost Management
8	Quality Management
9	Resource Management
10	Communication Management
11	Risk Management
	MIDTERM EXAM 2
13	Procurement Management
14	Stakeholder Management
15	Professional Management
16	Revision
17	FINAL EXAM



Initiation



- IT professionals (geeks) are qualified and competent Information Technology (IT) professionals into leadership positions.
 - Some Properties:
 - tough minded,
 - open to new ideas, and
 - customer-service orientation
 - The work we do improves lives



Selecting a Geek Leader

- They are promoted .

- Selection Criteria:

1. Does the geek have courage: Leaders need the mental and moral strength to take reasonable risks, persist during difficult times, and endure when situations seem difficult or dangerous.

2. Does the geek communicate well?

3. Is the geek proactive? understand their priorities, take action to obtain realistic goals in a proactive manner

Deming Cycle (Plan, Do, Check, Act)

4. Is the geek capable of establishing and pursuing a unified vision? align their team's tasks with the organization's business objectives

5. Is the geek accountable? (*Document, Train, Measure, Praise*)

6. Does the geek have personal credibility? Leaders need to be believable. They need the respect and trust of their customers, their managers, their peers, and their team members. He must be honest.



Selecting a Geek Leader (cont...)

7. Is the geek trustworthy and reliable?

8. Does the geek manage feelings? Leaders must be emotionally intelligent; they must be aware of their own feelings and their impact on the people around them.

9. Does the geek lead by example?

10. Can the geek manage risk?

11. Is the geek a problem solver?


12. Is the geek capable of continuously improving processes?

13. Does the geek balance work and life priorities?



The Geek Leadership Challenge

“In that day you will be like a man who runs from a lion, only to meet a bear. Escaping from the bear, he leans his hand against a wall in his house and he’s bitten by a snake”



Leadership Attributes

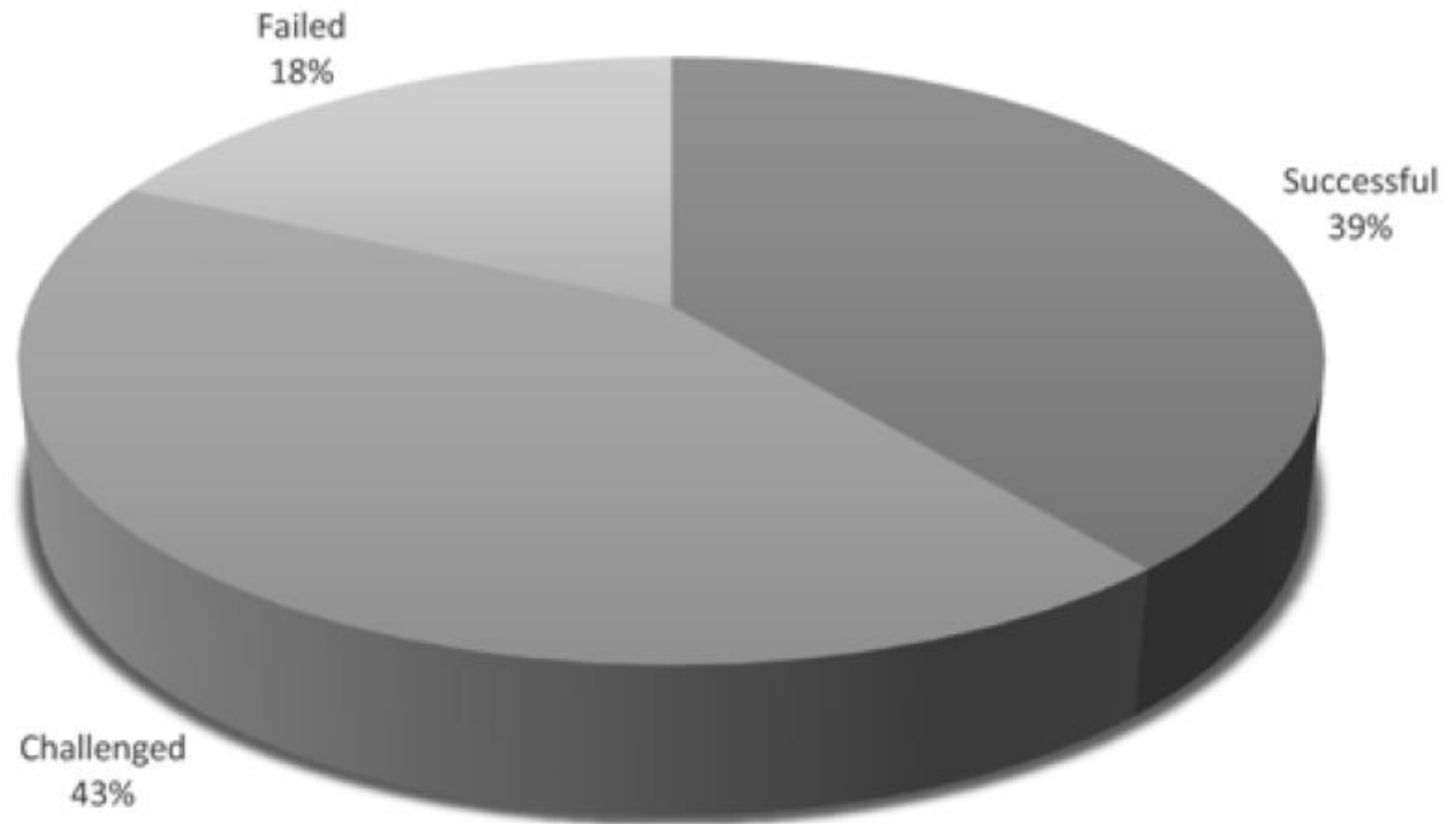
Leaders are:

Team builders
Motivators
Communicators
Influencers
Decision makers
Politically aware
Culturally aware
Negotiators
Trust builders
Conflict managers
Coaches^a

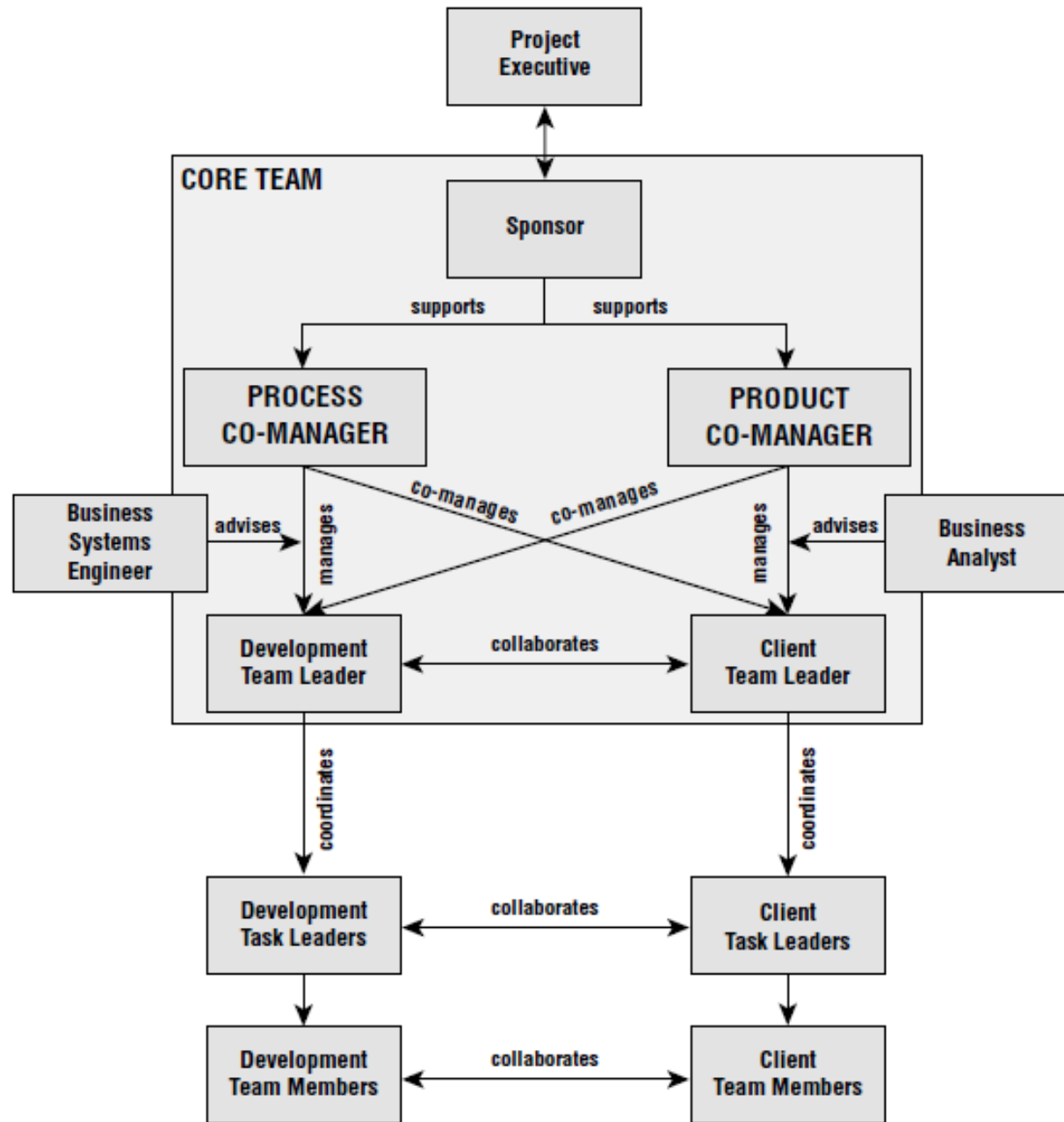
Bold
Risk takers
Planners
Inspiring
Courageous
Listeners
Decisive
Visionaries
Passionate
Motivators
Organizers
Critical thinkers^b

Intelligent
Articulate
Perceptive
Self-confident
Self-assured
Persistent
Determined
Trustworthy
Dependable
Friendly
Outgoing^c

IT Projects outcome

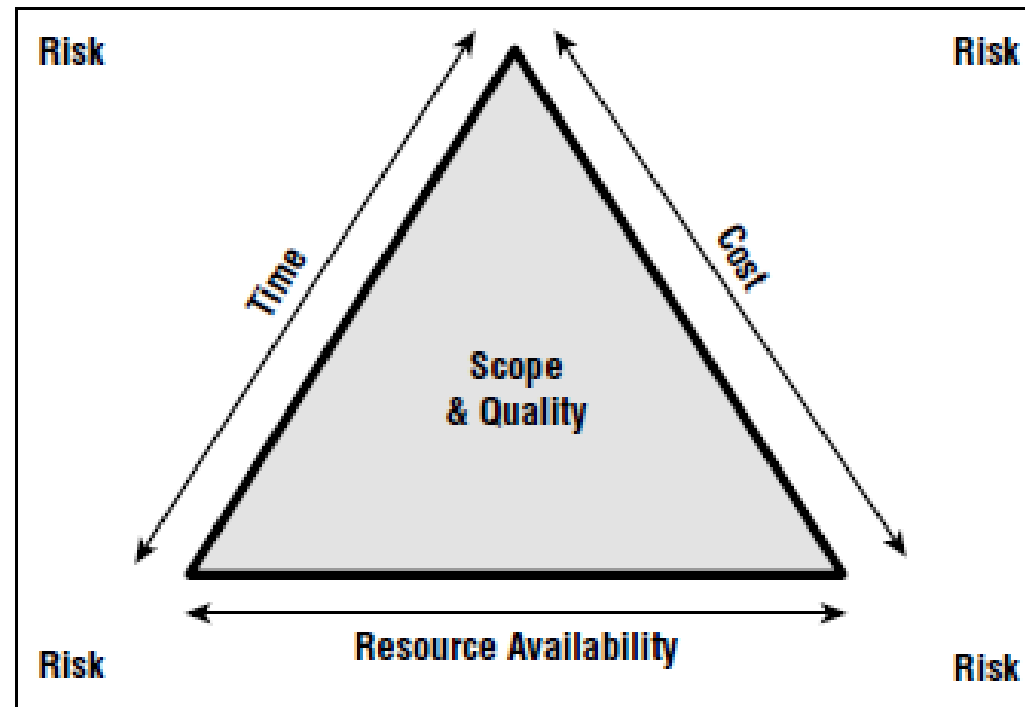


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Scope Triangle





“Tip”

- ➡ **“ Work Smart, not hard”**

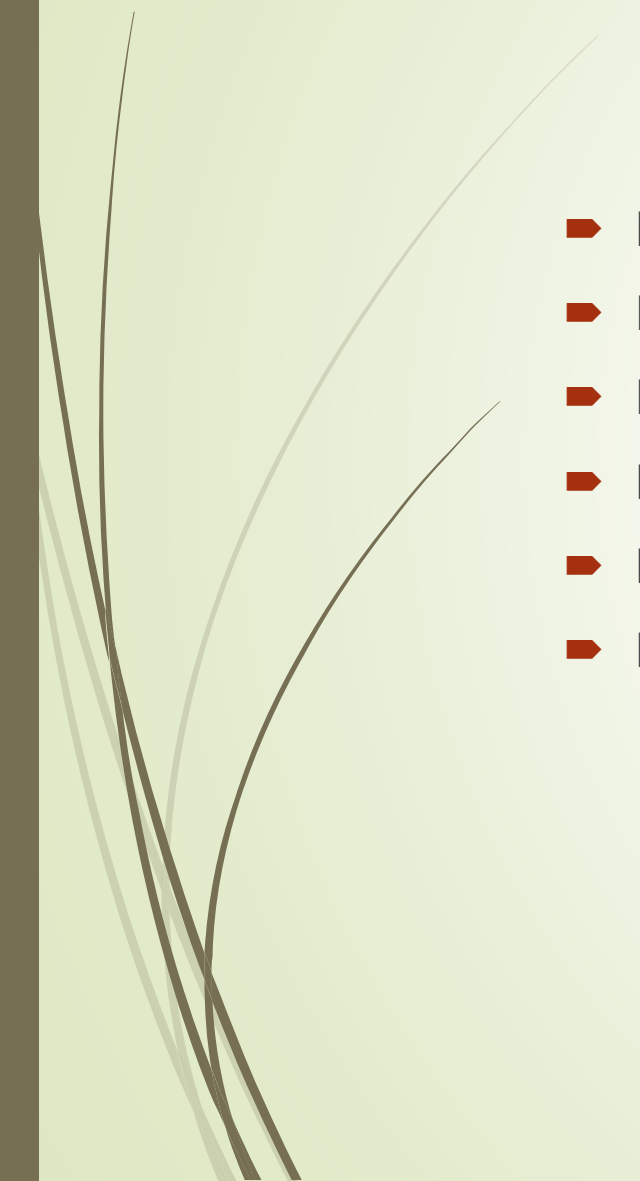


What is SPM?

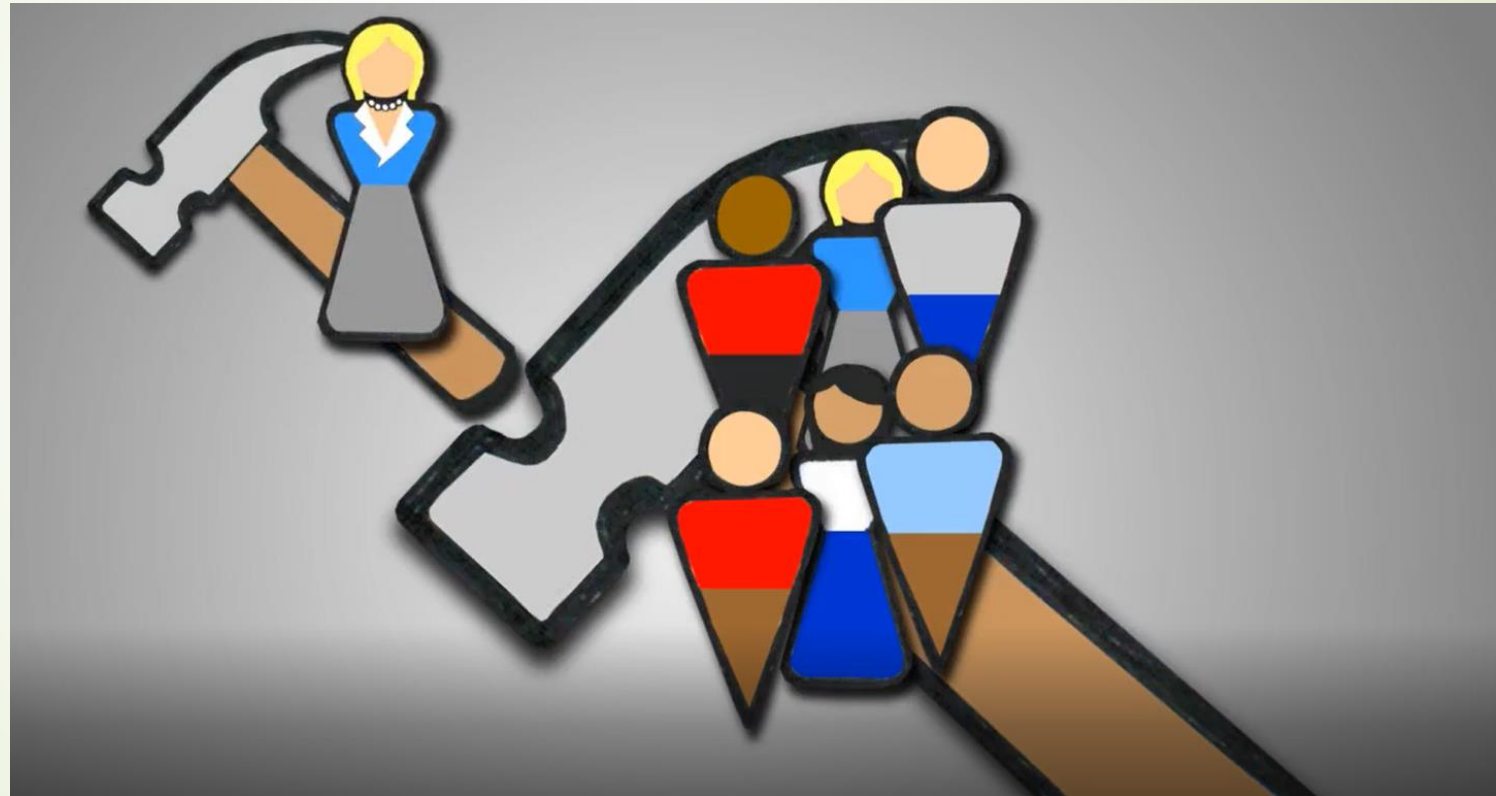
- Maintain flow
- Manage outcomes (Deliverables)
- Use tools and techniques
- Improve operation
- New requirement
- Aim is to achieve all the objectives remaining in its define constraint
 - Time
 - Cost
 - Scope



Project Vs Process (Operation)

- 
- Definite time
 - Resources
 - Budget
 - Deliverable parameters
 - Has an end
 - Need to update an operation (Operation) that result in some deliverable.

People (Resource)



International Business Environment

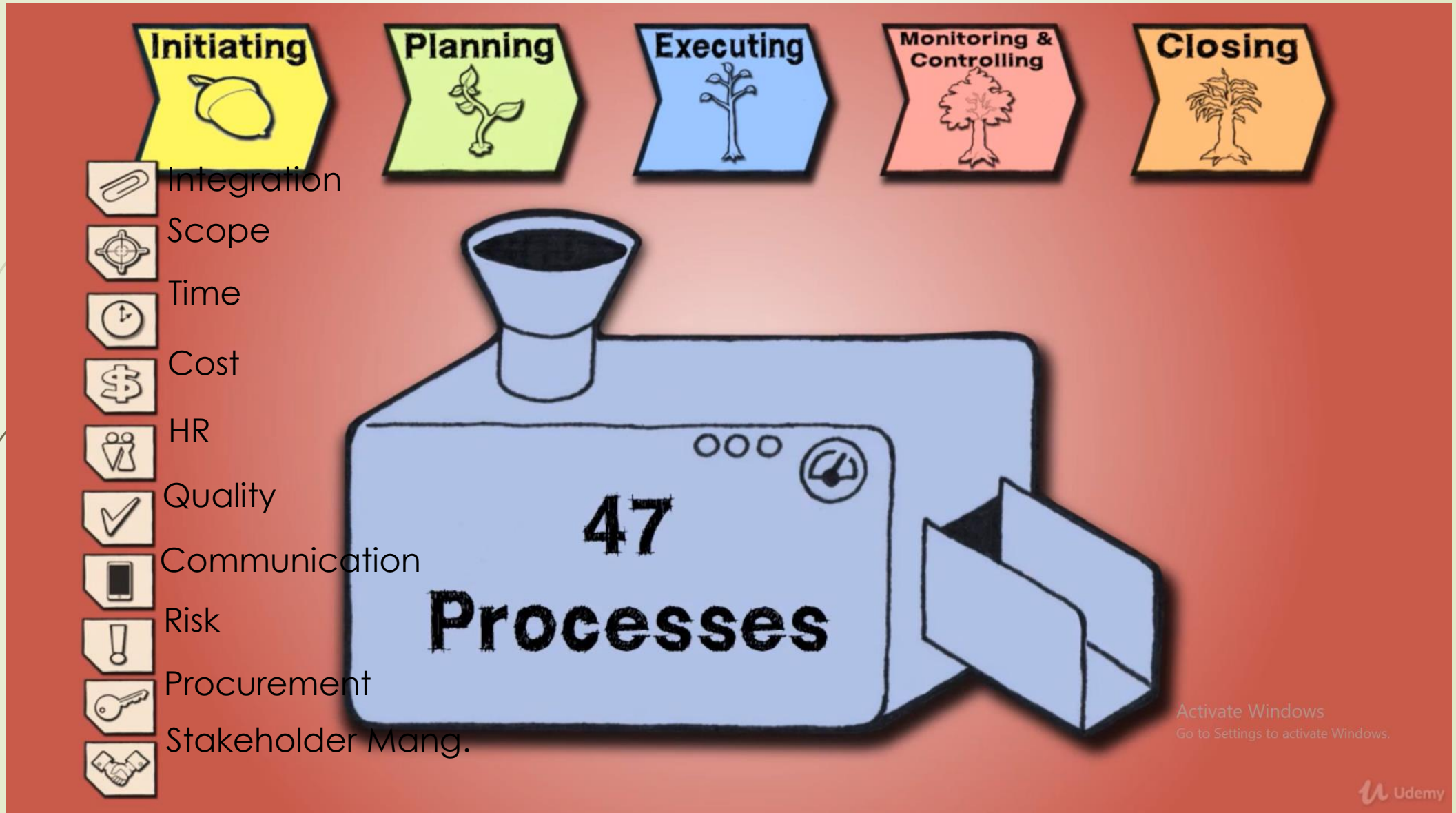




PM Processes

- Initiating Process Group
 - Planning Process Group
 - Executing Process Group
 - Monitoring Process Group
 - Closing Process Group
- 

Project Management Matrix





Portfolio, Program and PM

Portfolio

- Portfolio is a collection of program.
- May or may not be related
- Still part of Organizational goal
- Org. maintains a portfolio of all the programs in order to meet its strategic business goals.
- It handles the governance of Project life cycle
- It maintains the program's standards, document repository and any portfolio management tools.



Program

- Program is a related group of projects.
- They are grouped to achieve a Org. goal.
- Categorized work into smaller sets of related projects.
- May be done sequentially or parallel



Project

- Is temporary
- Produce a deliverable, service or result
- A new work in organization

- Organization combine portfolio, program and project in one umbrella known as :

“Organizational Project Management”



Role of PM

- Leadership
 - Motivation
 - Team building
 - Negotiation
 - Conflict management
- 

Common Challenges

You may not be the business owner so can't make decision on business processes or requirements.

You may not be the budget owner, so can't make decision on budgets.

Individual team members may go on leave, resign, so again you are dealing with lots of uncertainty there.

You may not even be the people manager of team working on the project, so they may not give any concern to your requests or demands.

You are not the one working on actual work like business analyst or programmers, so if they make any mistakes which can cost the project delivery, you still need to perform project management.

So effective techniques of project management are requirement to ensure that project delivery is optimized for better results.

Activate Windows
Go to Settings to activate Windows.



Project life cycle

- Project Life cycle can be predictive or adaptive.
- Predictive= waterfall and adaptive= agile (for practical purpose)
- You also have hybrid life cycles.
- Adaptive life cycles are agile, iterative or incremental.
- Project management decide which approach to use for a given project.



Documenting Phases

Phase, as mentioned earlier, is stage of the project.

In this stage or period, you perform a specific project activity like design, development etc.

All projects will have phases or even sub phases.

You should name a phase appropriately to reflect the activity.

A Phase may be have these attributes- Name, Number, Duration, Criteria, etc.



Project/Phase Gate

Project gate is held at the end of the phase.

- It is like a phase review meeting.
- It is like a performance review where it is compared with the documentation and decided if it is worth to move to phase.
- It's a Go-No GO meeting and even project can be cancelled if the stakeholder decides to.