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IT Project Management

Topic 1

INTRODUCTION

What is it and why is it so important?

READING

Schwalbe Chapters 1-3

TODAY'S SESSION IS IN 3 PARTS

INTRODUCTION
(WHAT IS PM & WHY IS PM IMPORTANT)

PROJECT MANAGEMENT IN CONTEXT

PROJECT MANAGEMENT PROCESS GROUPS

INTRODUCTION

INTRODUCTION (WHAT IS PM & WHY IS PM IMPORTANT)

PROJECT MANAGEMENT IN CONTEXT

PROJECT MANAGEMENT PROCESS GROUPS

READING

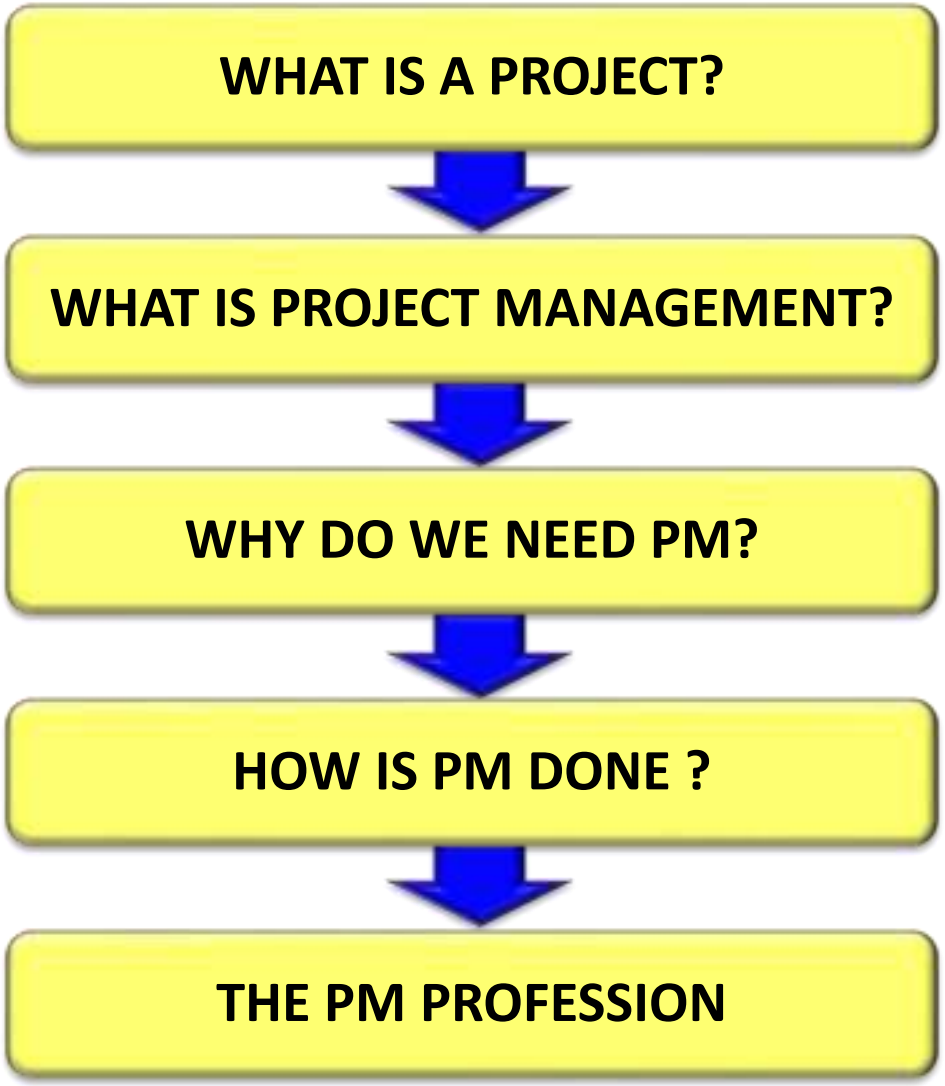
Schwalbe Chapter 1

LEARNING OBJECTIVES

At the end of this topic you should be able to:

- ✓ **Explain** what a project is and provide examples of information technology projects
- ✓ **Describe** what project management is and discuss key elements of the project management framework
- ✓ **Discuss** the growing need for better project management, especially for information technology projects
- ✓ **Describe** some key aspects of the project management profession

HOW WILL WE DO THIS?



What is it and why is it important to you?

To give you some context

And particularly PM for ICT

What are the key elements needed?

A quick focus on the PM profession

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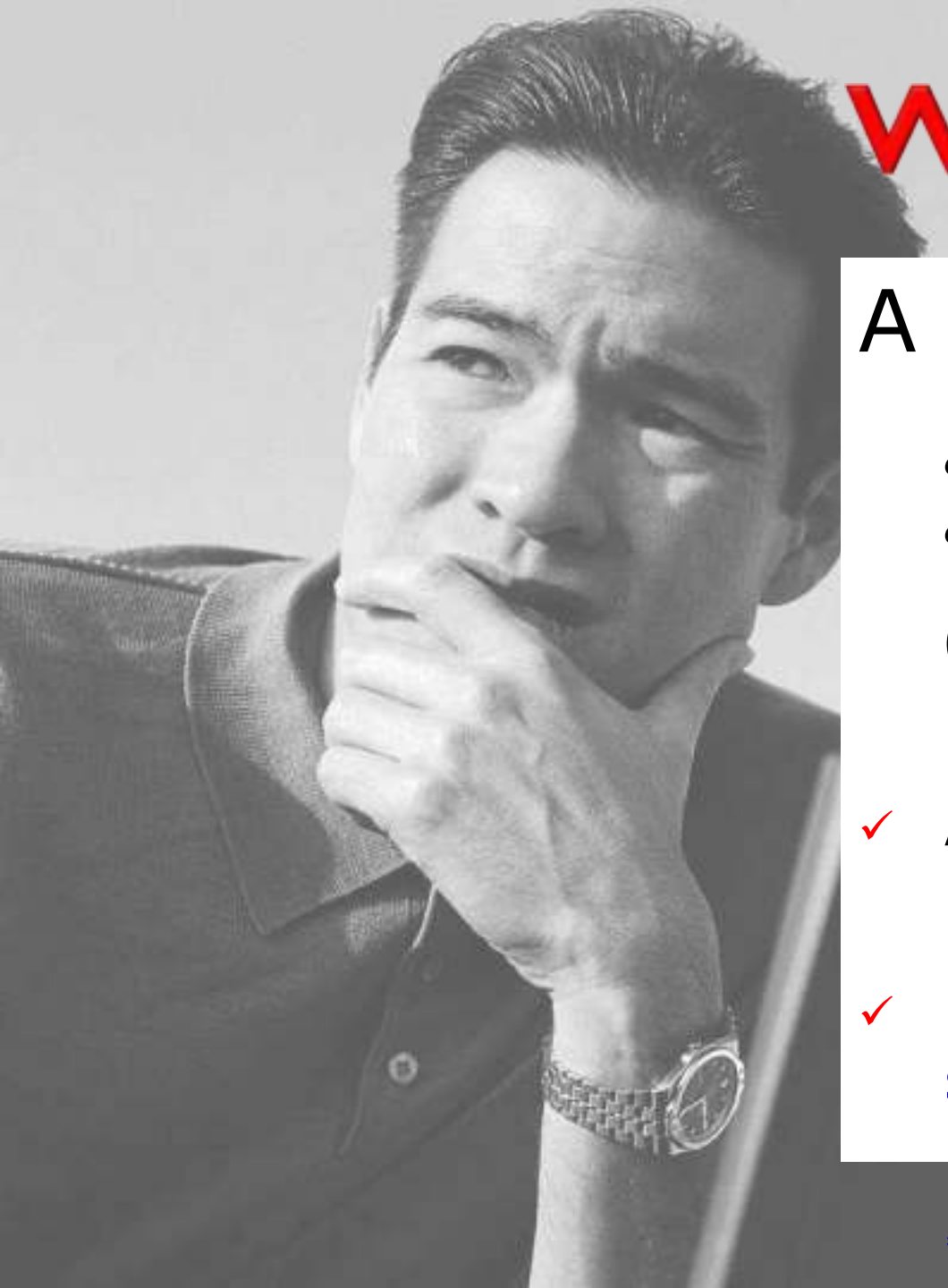
- **WHAT IS A PROJECT?**
- WHAT IS PROJECT MANAGEMENT?
- WHY DO WE NEED PM?
- HOW IS PM DONE ?
- THE PM PROFESSION

WHAT IS A PROJECT ?



WHAT IS A PROJECT?

A **project** is…

*a temporary endeavour undertaken to create a unique product, service, or result**

(NOT) operations which is work done to sustain the business

- ✓ A project ends when its objectives have been reached, or the project has been terminated
- ✓ Projects can be large or small and take a short or long time to complete

*PMI, *A Guide to the Project Management Body of Knowledge* (2018) 6th Ed.

PROJECT ATTRIBUTES

- ✓ A project has the following attributes…
  - has a unique purpose
  - is a relatively temporary activity
  - is developed using progressive elaboration
  - requires resources, often from various areas
  - should have a primary customer or sponsor
  - the Project Sponsor usually provides/coordinates the strategic direction and funding for the project
  - involves uncertainty/risk.

WHAT IS SPECIAL ABOUT ICT PROJECTS?

- ✓ A unique combination of software, hardware and network/communications **(risk & complexity)**
- ✓ Often based on imprecise requirements **(risk)**
- ✓ Speed of technology change, making past experience less useful than in many other disciplines **(risk)**
- ✓ Immaturity of the discipline of ICT Engineering **(risk)**
- ✓ Lack of experienced ICT project managers **(risk)**

IS THIS AN ICT PROJECT?

A System Admin worker replaces some laptops for a small department as a part of a standard operational refresh sequence at a large ICT business

Has a unique purpose	It is a temporary activity	Uses progressive elaboration
?	✓	?
It requires resources	**There's uncertainty or risk**	**Not a part of normal operations**
✓	?	✗

Classification if this is a project (size, cost, schedule, internal/external, development (e.g. COTS), risk)**?**
Small scope, Low cost, Short timeframe, Internal, Low development (COTS), Low Risk

IS THIS AN ICT PROJECT?

A small team of software development contractors adds a new feature to an internally developed software application and this is done as a stand alone task

Has a unique purpose	It is a temporary activity	Uses progressive elaboration
✓	✓	✓
It requires resources	**There's uncertainty or risk**	**Not a part of normal operations**
✓	✓	✓

Classification if this is a project (size, cost, schedule, internal/external, development (e.g. COTS), risk)?
Small scope?, Low cost?, Short timeframe?, External, Small development?, Low Risk?

IS THIS AN ICT PROJECT?

A university campus implements a complete refit and upgrade of its technology infrastructure to provide wireless networking and more effective Internet access

Has a unique purpose	It is a temporary activity	Uses progressive elaboration
✓	✓	✓
It requires resources	**There's uncertainty or risk**	**Not a part of normal operations**
✓	✓	✓

Classification if this is a project (size, cost, schedule, internal/external, development (e.g. COTS), risk)**?**
Moderate scope, Moderate cost, Medium timeframe, Internal, COTS integration, Moderate Risk

IS THIS AN ICT PROJECT?

A cross-functional Task Force in an organisation investigates and determines the most appropriate COTS software option to be implemented

Has a unique purpose	It is a temporary activity	Uses progressive elaboration
✓	✓	✓
It requires resources	**There's uncertainty or risk**	**Not a part of normal operations**
✓	✓	✓

Classification if this is a project (size, cost, schedule, internal/external, development (e.g. COTS), risk)?
Small scope, Small cost, Short timeframe?, Internal, no development?, Low/Moderate Risk

IS THIS AN ICT PROJECT?

An ICT company is engaged by the Government to develop and implement a country-wide Database for managing every citizens' health records

Has a unique purpose	It is a temporary activity	Uses progressive elaboration
✓	✓	✓
It requires resources	**There's uncertainty or risk**	**Not a part of normal operations**
✓	✓	✓

Classification if this is a project (size, cost, schedule, internal/external, development (e.g. COTS), risk)?
Large scope, Large cost, Long timeframe?, External, Large development, High Risk

THERE ARE MANY DIFFERENT TYPES OF ICT PROJECT

- ✓ ***Scope:*** Small to Large
- ✓ ***Cost:*** Small to Large
- ✓ ***Schedule:*** Short to Long
- ✓ ***Stakeholders Involved:*** Internal/External/Mixed
- ✓ ***Development Type:*** COTS to full
- ✓ ***Risk:*** Low to High

We need to cope with all of these variations

(Which is why PM is so important)

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WHAT IS A PROJECT?

WHAT IS PROJECT MANAGEMENT?

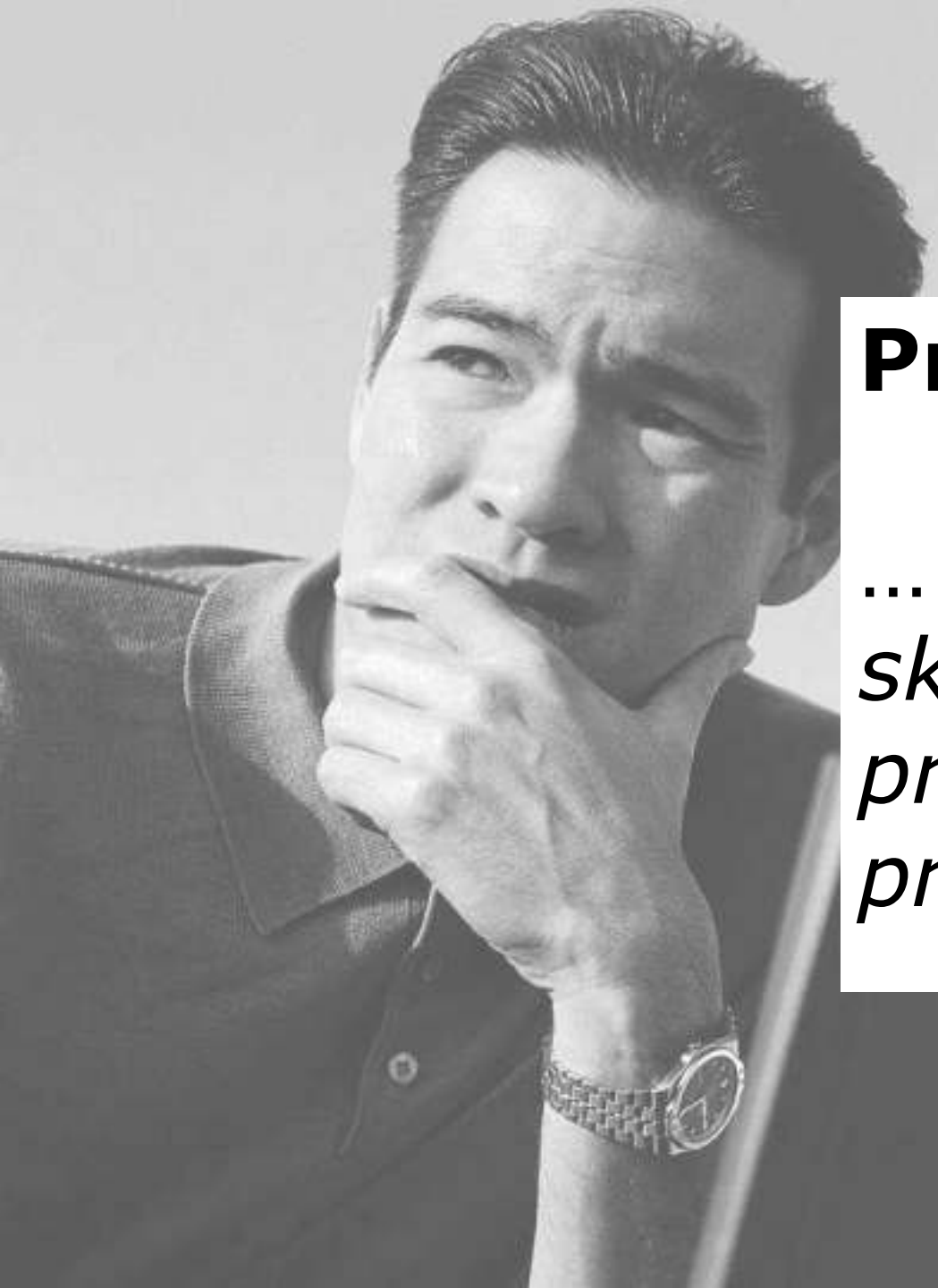
WHY DO WE NEED PM?

HOW IS PM DONE ?

THE PM PROFESSION

WHAT IS PROJECT MANAGEMENT?

DISCOVERERS WELCOME



WHAT IS PM ?

Project management is…

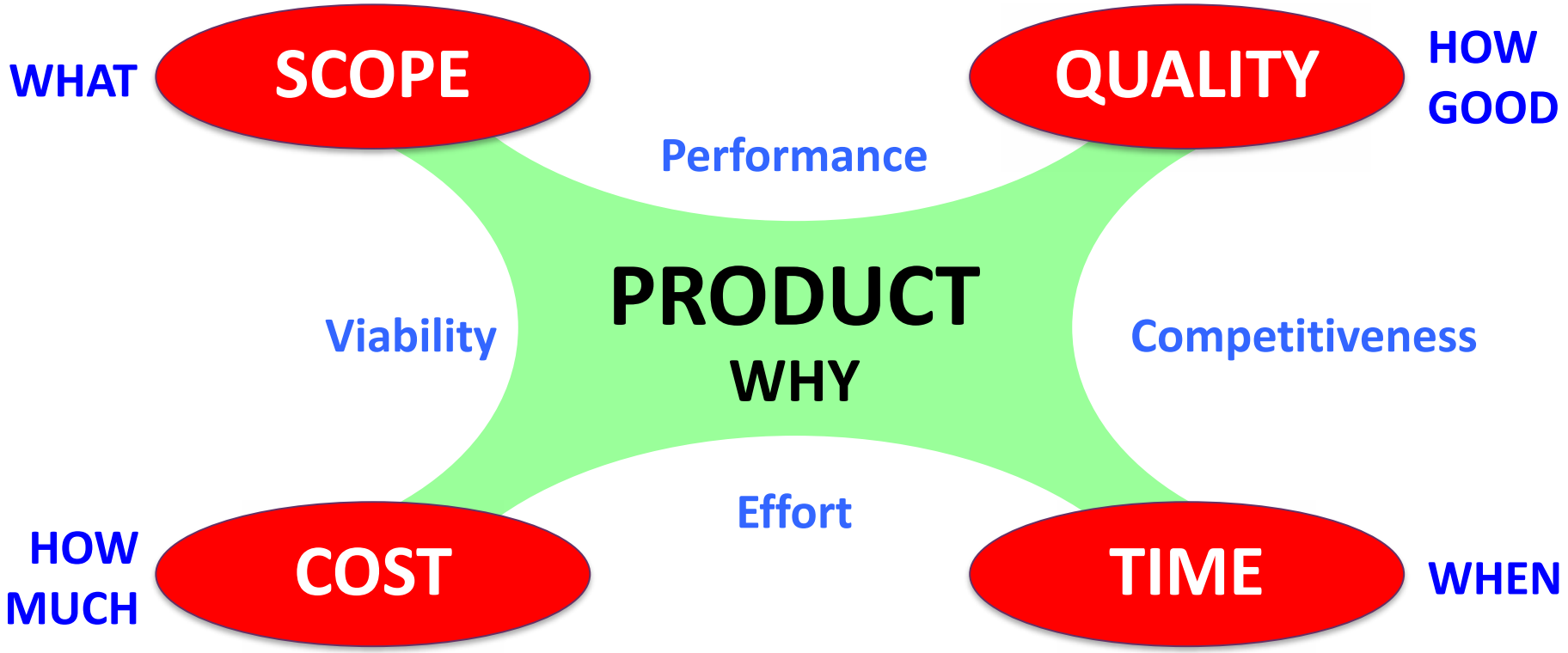
*… the application of knowledge, skills, tools and techniques to project activities to meet project requirements**

*PMI, *A Guide to the Project Management Body of Knowledge* (2018) 6th Ed.

PM OBJECTIVES

- ✓ Deliver the project …
  - ➢ on **time** **(hard wall/soft wall)**
  - ➢ on **budget** **(hard wall/soft wall)**
  - ➢ within **scope** **(explicit and tacit)**
  - ➢ of sufficient **quality** **(meet client / user expectations)**
- ✓ Manage competing requirements **(different stakeholders, different demands)**

MANAGING THE PROJECT SEE-SAW



Source: http://www.maxwideman.com/papers/future/craft.htm

ADVANTAGES OF PM

- ✓ Better control of financial, physical, and human resources
- ✓ Improved client relations **(clients know what's going on)**
- ✓ Better internal coordination **(team knows what's going on)**
- ✓ Improved productivity **(better focus on objectives)**
- ✓ Shorter development times **(less wasted time)**
- ✓ Higher quality and increased reliability **(common QA)**
- ✓ Lower costs **(time/effort is money)**
- ✓ Higher profit margins **(more business/more work)**
- ✓ Higher worker morale **(less stress)**

- WHAT IS A PROJECT?
- WHAT IS PROJECT MANAGEMENT?
- **WHY DO WE NEED PM?**
- HOW IS PM DONE ?
- THE PM PROFESSION

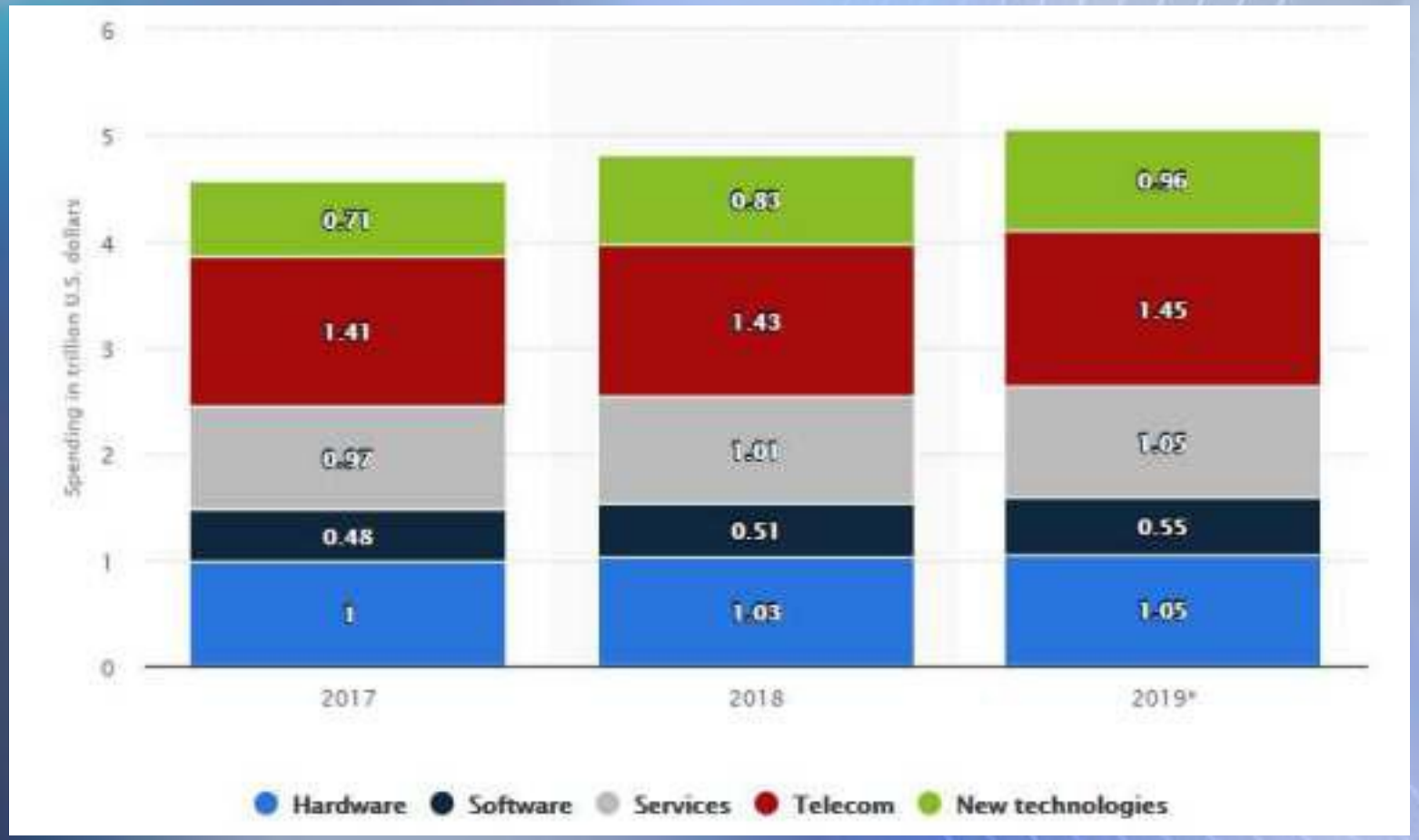
WHY DO WE NEED PM?

Why is it becoming more important?

INCREASING SIZE, COST & COMPLEXITY OF ICT SYSTEMS

LET'S BEGIN WITH COST/SPEND

- ✓ Global ICT projects/spending/usage is increasing



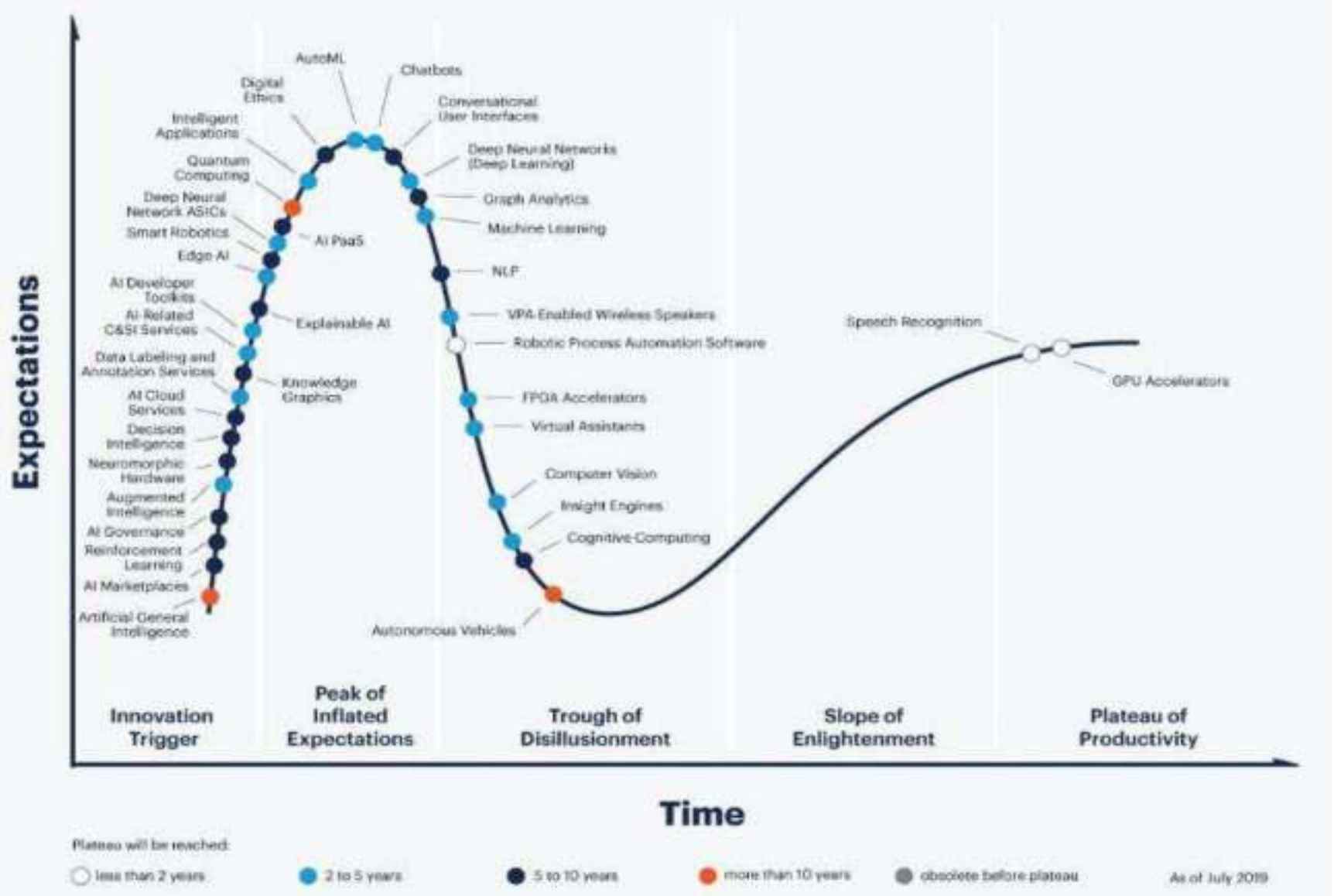
3 TRILLION (2010)

4.81 TRILLION (2018)

~ 9 TRILLION (2025)

https://www.statista.com/statistics/946808/worldwide-ict-spending-by-category/

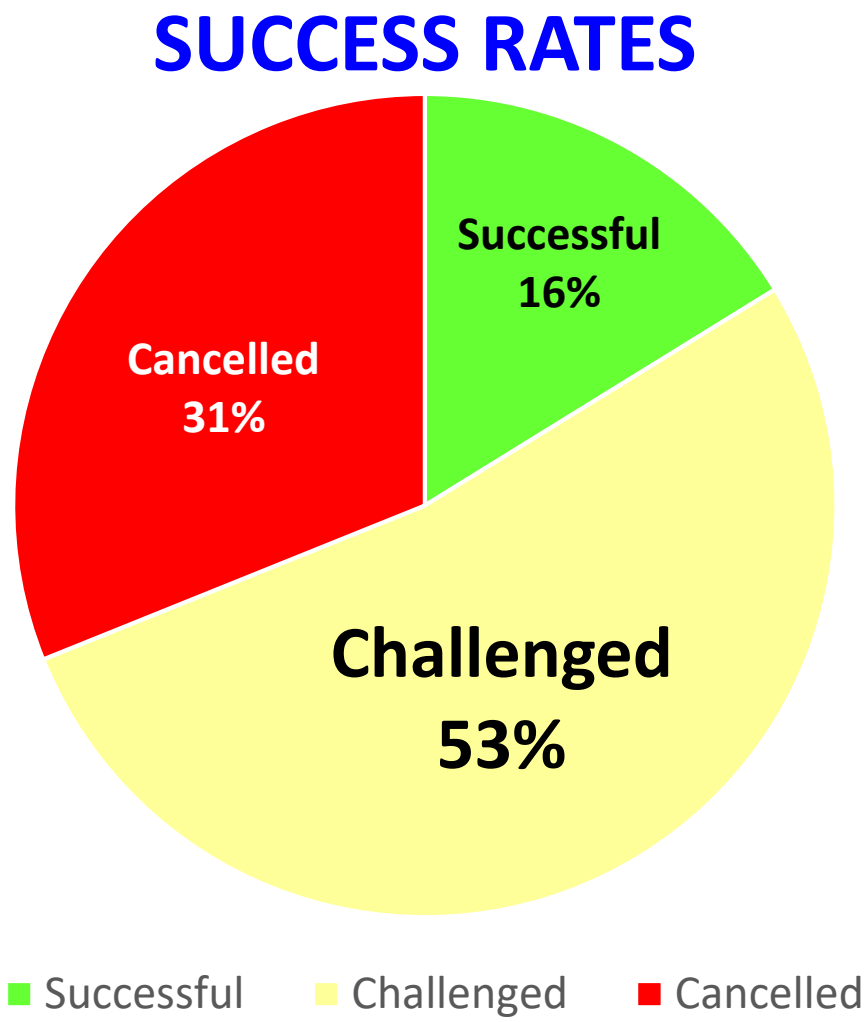
↑ TECHNOLOGY COMPLEXITY



GARTNER HYPE CYCLE 2019

*https://www.smartinsights.com/managing-digital-marketing/managing-marketing-technology/gartner-hype-cycle-2019-most-emerging-technologies-are-5-10-years-away/

MANY DEVELOPMENTS FAIL

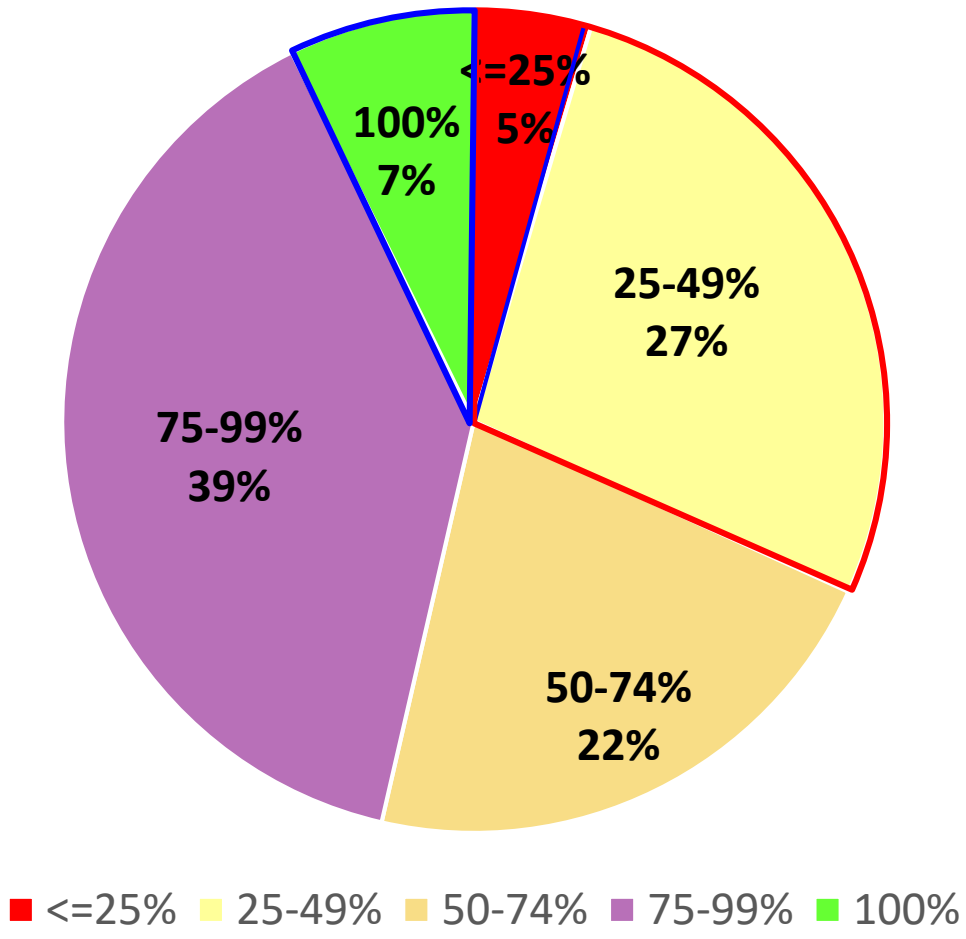


- Data from 365 companies covering 8380 projects
- Only ~ 16.2% were completely successful
- ~31.1% were cancelled due to significant problems
- for ~52.7% of projects there were significant challenges (cost, time, functionality, etc.)

Source: The Standish Group, CHAOS Report (2018)

FOR THE CHALLENGED PROJECTS...

% FEATURES/FUNCTIONS DELIVERED ON TIME



- ~5% delivered less than ¼ of the required features
- Nearly a third delivered less than 50% of the functionality
- Only ~7% of projects delivered all of the required functionality on time and in a stable condition

Source: The Standish Group, CHAOS Report (2018)

THIS IS A BIG PROBLEM !

Why do projects fail ?

Why do projects fail ?

- Only the project team is interested in the end result
- No one is in charge
- The project lacks structure/detail
- Insufficient resources are allocated
- The project is not tracked against its plan
- The project team is not communicating
- The project strays from its original goals
- Solving the wrong problem
- Poor problem definition and analysis
- Project too ambitious
- Lack of management support/management & user involvement
- Inadequate design/testing/implementation
- Users can’t use system effectively


Why do
projects
succeed?

FOCUS ON SUCCESS MEASURES

Source: https://www.wrike.com/blog/complete-collection-project-management-statistics-2015/

KEYS TO SUCCESS

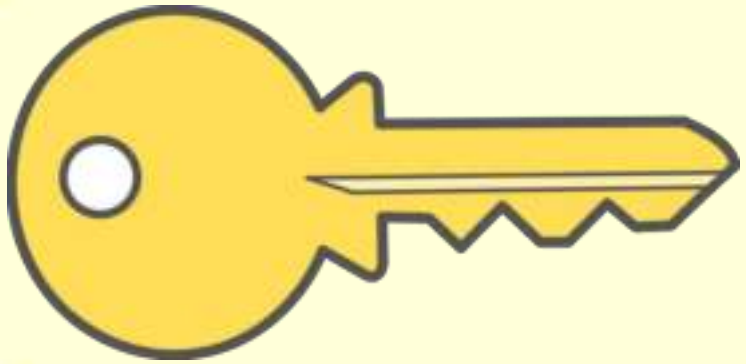
1. **Project management expertise**
2. User involvement
3. Executive support
4. Clear business objectives
5. Emotional maturity
6. Optimising scope
7. Agile process
8. Skilled resources
9. Execution
10. Tools and infrastructure

The Standish Group, “CHAOS Activity News” (August 2011)

KEYS TO SUCCESS

The reasons for the increase in successful projects vary. First, the average cost of a project has been more than cut in half. Better tools have been created to monitor and control progress and ***better skilled project managers with better management processes*** *are being used. The fact that there are processes is significant in itself**

The Standish Group, "CHAOS Activity News" (August 2011)



The key is project management

KEYS TO SUCCESS

"As Project Manager, juggling all of the balls is important, but keeping your eye on the right ball is the key to delivering truly successful projects"

This requires a sound method

Source: http://calleam.com/WTPF/?p=3501

WHAT IS A PROJECT?

WHAT IS PROJECT MANAGEMENT?

WHY DO WE NEED PM?

HOW IS PM DONE ?

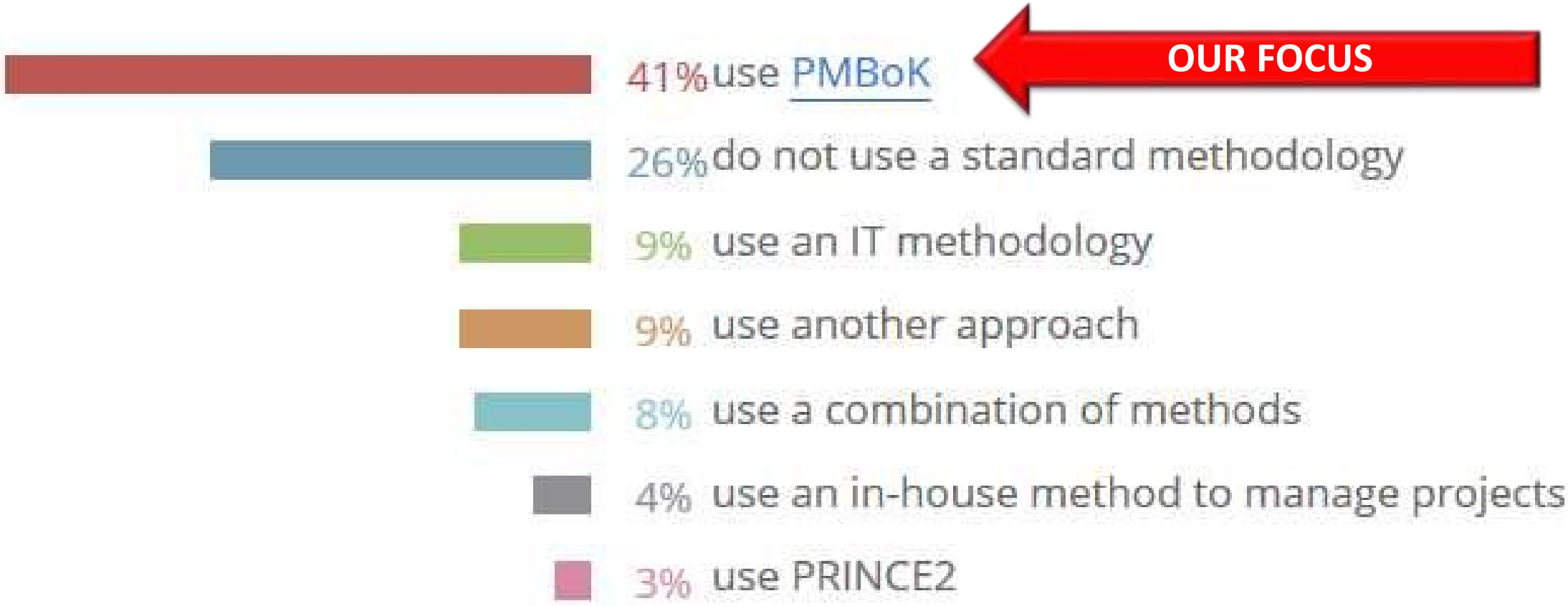
THE PM PROFESSION

HOW IS PM DONE?

What is the Method

THERE ARE DIFFERENT METHODS

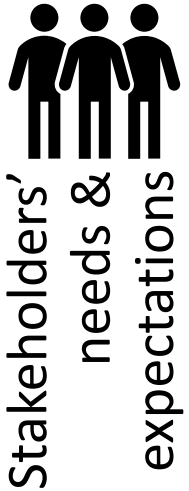
Popular Methodologies:



Source: https://www.wrike.com/blog/complete-collection-project-management-statistics-2015/

OVERVIEW - PMBOK APPROACH

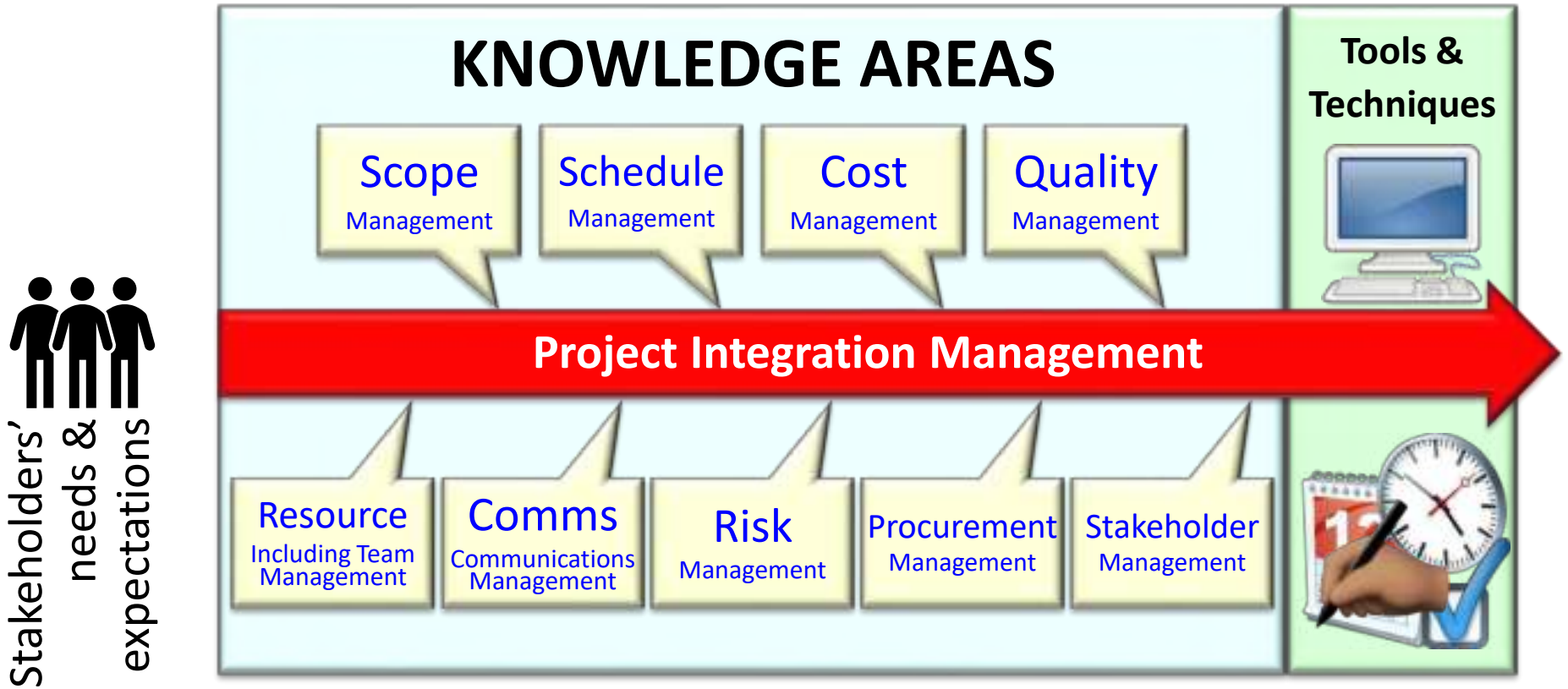
- ✓ **Stakeholders** are the people involved in or affected by project activities.
- ✓ Stakeholders include:
  - Project sponsor
  - Project manager
  - Project team
  - Support staff
  - Customers/clients
  - Users
  - Suppliers
  - (Opponents to the project)



Their needs & expectations drive projects!

Source: Schwalbe (2018) p. 10

OVERVIEW - PMBOK APPROACH

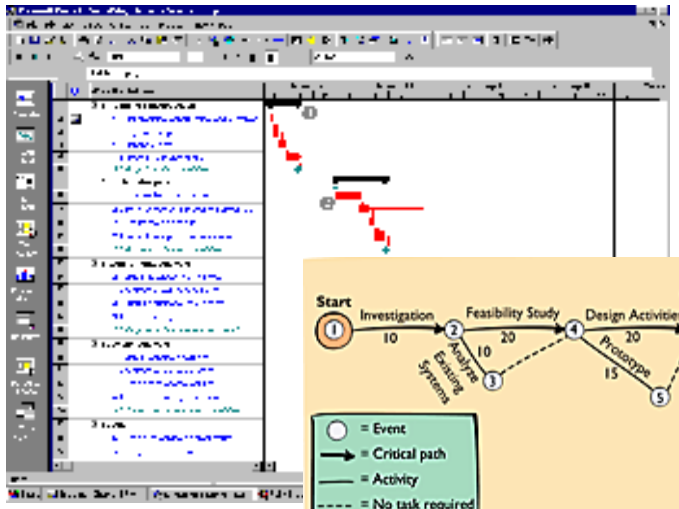


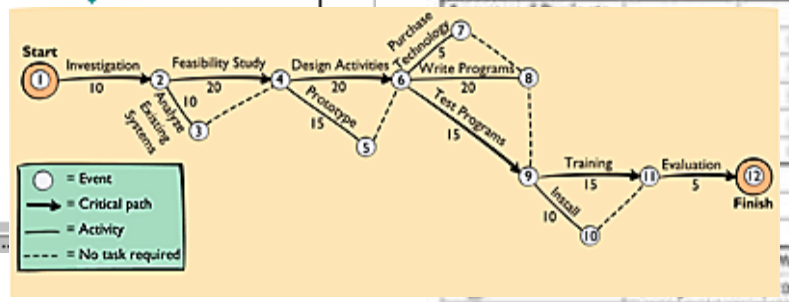
Source: Schwalbe (2018) p. 10

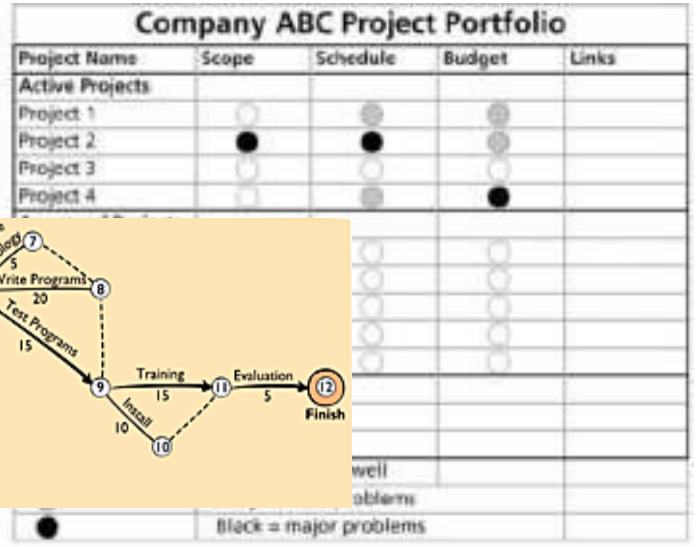
OVERVIEW - PMBOK APPROACH

There are many different tools and techniques

We will touch on some of the common ones in this unit





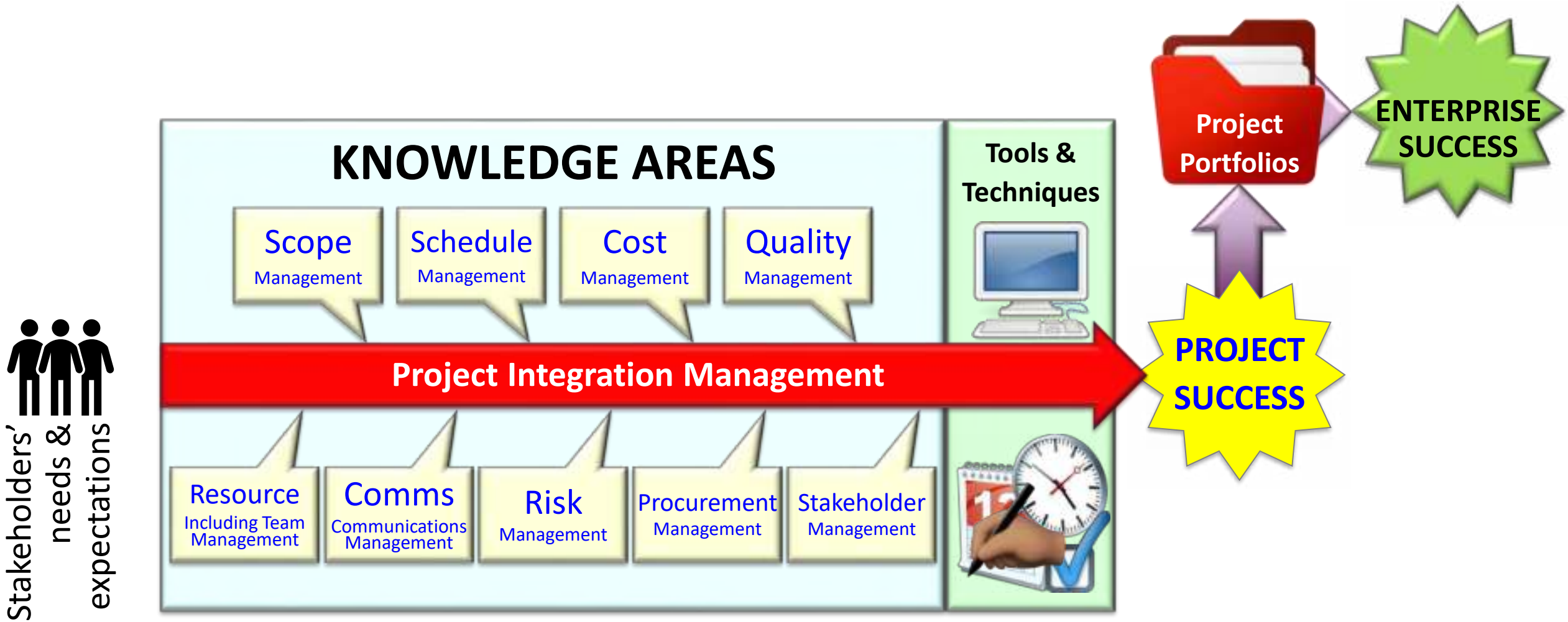


Company ABC Project Portfolio

Project Name	Scope	Schedule	Budget	Links
Active Projects				
Project 1	○	●	●	
Project 2	●	●	●	
Project 3	○	○	○	
Project 4	○	●	●	
		well		
		oblems		
●	Black = major problems			

Source: Schwalbe (2018) p. 10

OVERVIEW - PMBOK APPROACH



WHAT IS A PROJECT?

WHAT IS PROJECT MANAGEMENT?

WHY DO WE NEED PM?

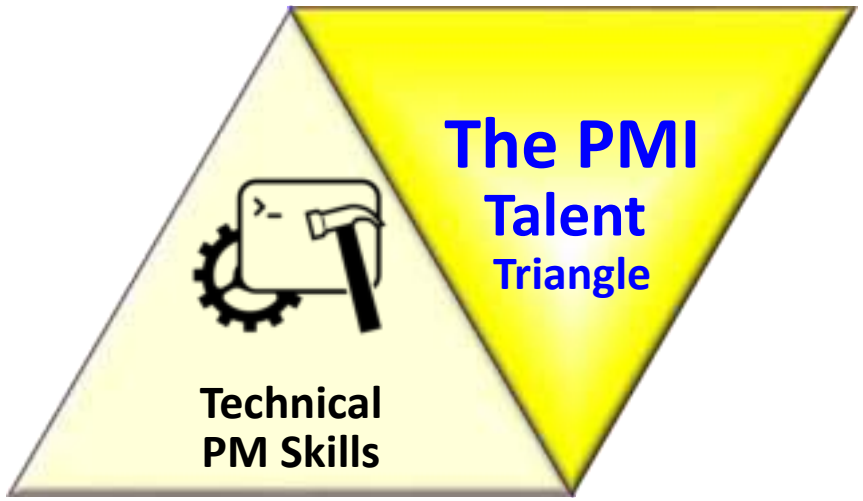
HOW IS PM DONE ?

THE PM PROFESSION

THE PM PROFESSION

This is a very special profession

THE PMI TALENT TRIANGLE



TECHNICAL: DOMAIN EXPERTISE (Certified & Non-Certified)

- ✓ Risk, Schedule, Scope & Cost Management
- ✓ Data gathering & modelling
- ✓ Requirements & Traceability management
- ✓ Governance (project, program, portfolio)
- ✓ Lifecycle management
- ✓ Performance management
- ✓ Earned Value Management
- ✓ Agile practices

Source: Section 3: PMBoK 6th Edition

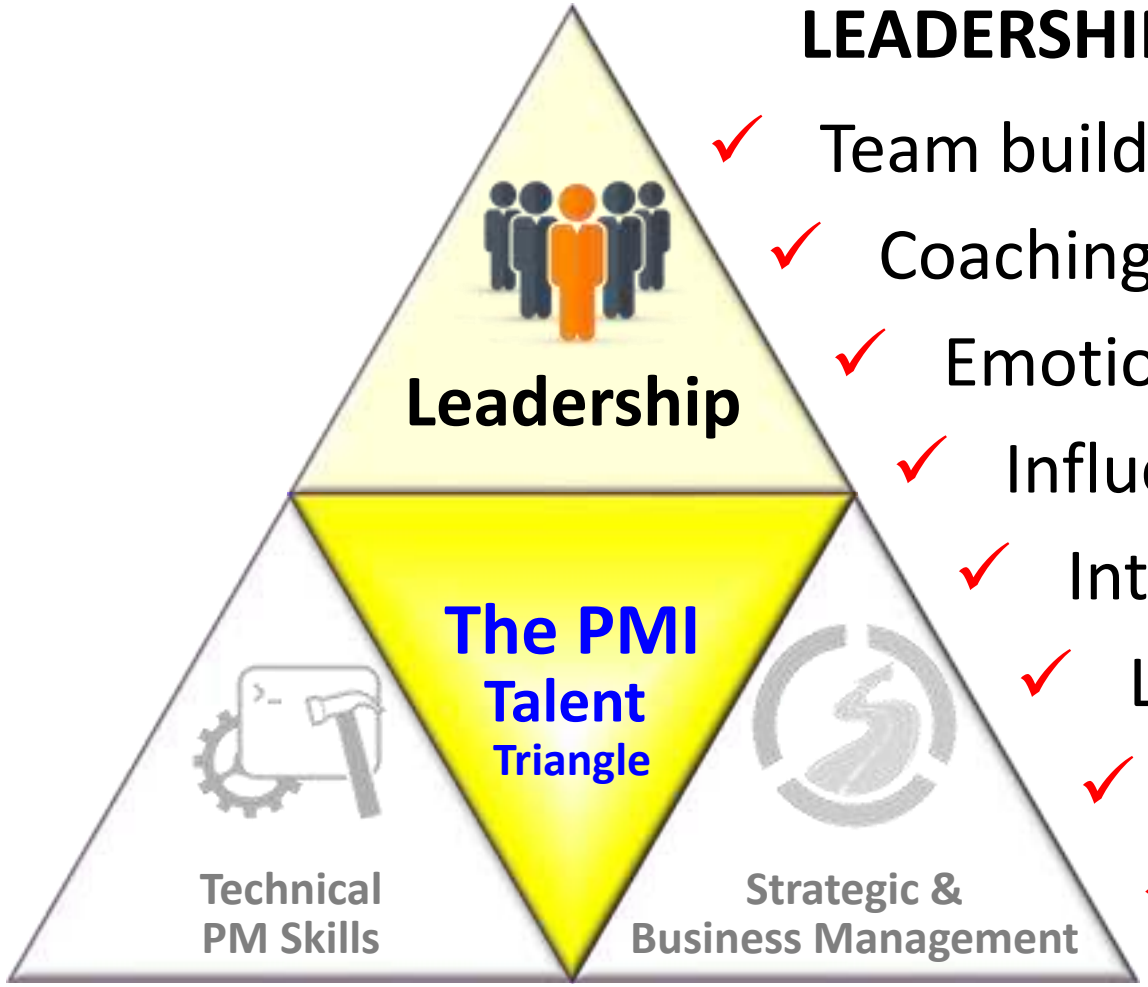
THE PMI TALENT TRIANGLE

STRATEGIC & BUSINESS MANAGEMENT

- ✓ Business acumen **(model, structure, practical)**
- ✓ Benefits management & realisation
- ✓ Customer relationships & satisfaction
- ✓ Legal & regulatory compliance
- ✓ Operational functions (finance, marketing, etc.)
- ✓ Strategic planning analysis & alignment
- ✓ Market & Business awareness
- ✓ Competitive analysis

Source: Section 3: PMBoK 6th Edition

THE PMI TALENT TRIANGLE



LEADERSHIP: ***MONITORING, GUIDING & MOTIVATING***

- ✓ Team building
- ✓ Coaching and Mentoring
- ✓ Emotional Intelligence
- ✓ Influencing
- ✓ Interpersonal skills
- ✓ Listening **(active listening)**
- ✓ Negotiation
- ✓ Problem solving

And most Importantly…

Source: Section 3: PMBoK 6th Edition

YOU MUST LOOK AT THE BIGGER PICTURE

KEY CHARACTERISTICS

- ✓ Be flexible and focused
- ✓ Be comfortable with change
- ✓ Understand the technologies, tools & processes **(Hard Skills)**
- ✓ Understand the organisations they work in and with **(politics, business imperatives, etc.)**
- ✓ Be able to work with other people **(Soft Skills)** **(ICT work is not a solitary activity)**

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TOPIC SUMMARY

- WHAT IS A PROJECT?
- WHAT IS PROJECT MANAGEMENT?
- WHY DO WE NEED PM?
- HOW IS PM DONE ?
- THE PM PROFESSION

TOPIC SUMMARY

- ✓ A project has several attributes **(unique purpose, temporary, progressive elaboration, needs resources, risk, not normal operations)**
- ✓ As the number and complexity of projects continue to grow, it is becoming even more important to have good PMs and practice good project management
- ✓ A framework for project management includes stakeholders, Knowledge Areas, tools and techniques (can be aggregated into project portfolios) to **ensure enterprise success**
- ✓ Successful Project Managers (and team members) must possess and develop many skills (technical, business & leadership) & characteristics

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PM IN CONTEXT

INTRODUCTION
(WHAT IS PM & WHY IS PM IMPORTANT)

PROJECT MANAGEMENT IN CONTEXT

PROJECT MANAGEMENT PROCESS GROUPS

DISCOVERERS WELCOME

READING

Schwalbe Chapter 2

LEARNING OBJECTIVES

At the end of this topic you should be able to:

- ✓ **Write** about project management within an **organisational context**
- ✓ **Explain** how the '**Three Sphere**' approach and '**Four Organisational Frames**' impact on project management
- ✓ **Discuss** the **four generic project phases**
- ✓ **Describe** - with advantages and disadvantages - the **major Systems Life Cycle paradigms**

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ORGANISATIONAL CONTEXT

DISCOVERERS WELCOME

ORGANISATIONAL CONTEXT

- ✓ Projects must operate in a broad organisational environment *(we don't operate in a bubble)*
- ✓ Senior managers must ensure projects continue to support current/evolving business needs
- ✓ Project Managers need to use systems thinking: *(Taking a holistic view of a project & how it relates to the organisation – Three Spheres & Four Frames)*

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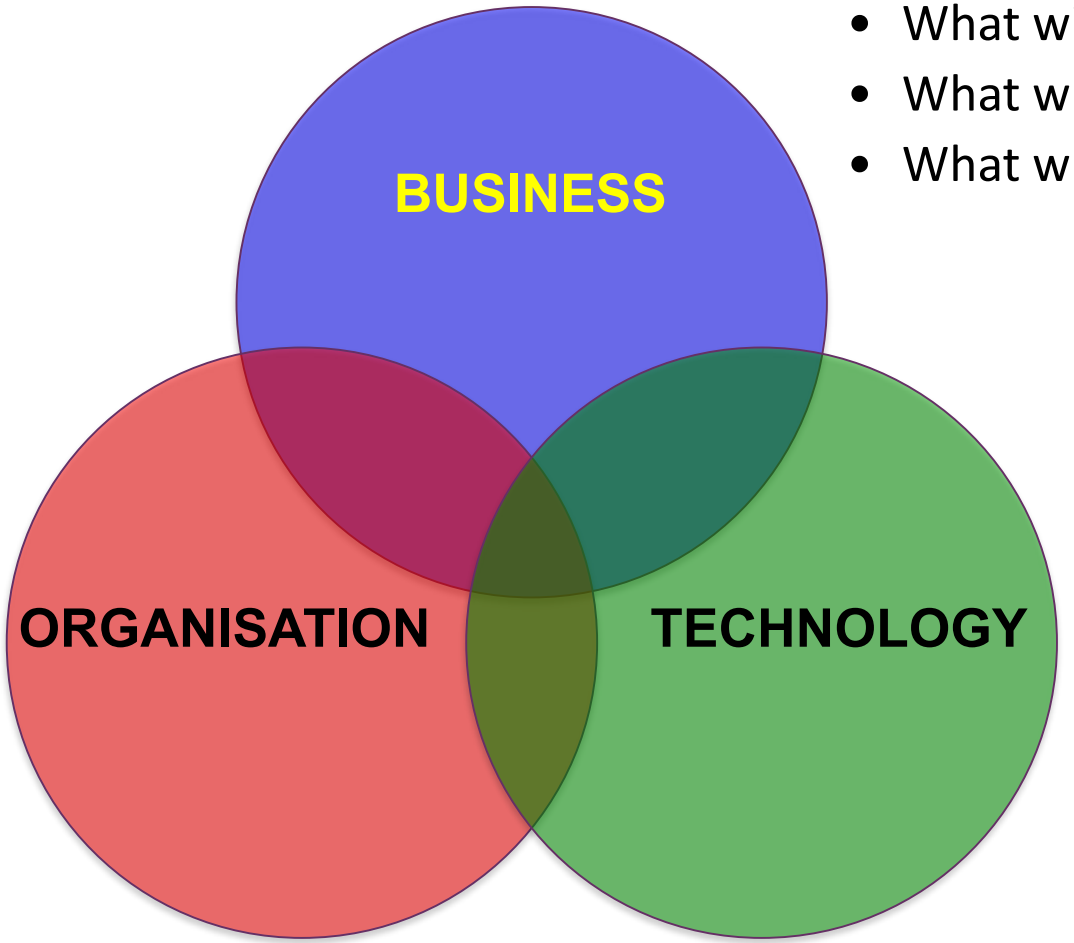
THE THREE SPHERES

(A THOUGHT MODEL FOR SYSTEMS THINKING)

DISCOVERERS WELCOME

The *Three Sphere* model for systems management



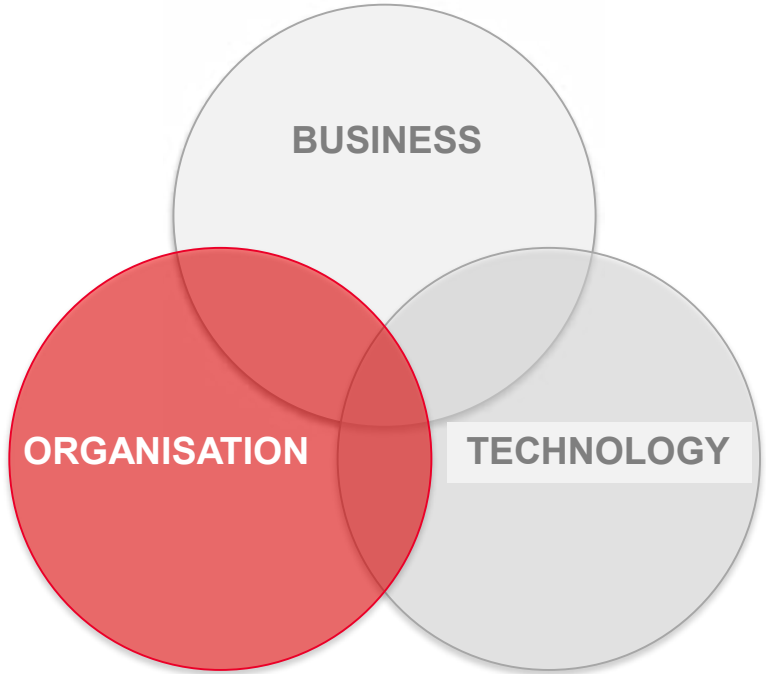
- What will it cost the college?
- What will it cost individuals?
- What will the support costs be?
- What will be the impact on enrolment?

- Which stakeholders will this affect?
- How will this affect people with laptops already?
- Who will train the stakeholders?
- Who will administer and support the distribution and training?

- Should they be Windows or Mac?
- What applications will be needed?
- What are the hardware specifications?
- What are the network implications

THE FOUR ORGANISATIONAL FRAMES

TO HELP ADDRESS



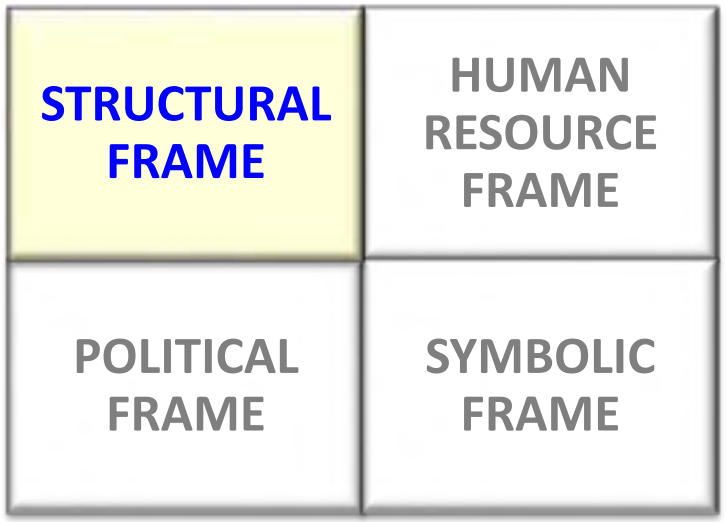
THE *4 FRAMES* OF ORGANISATIONS

STRUCTURAL FRAME (Roles, responsibilities, coordination & control. **Organisation chart** helps to define this frame.)	**HUMAN RESOURCE FRAME** (Providing harmony between **needs of the organisation & the needs of people**)
POLITICAL FRAME (Assumes organisations are coalitions composed of individuals and interest groups. **Conflict & power** are key issues)	**SYMBOLIC FRAME** (Focus on **symbols and meanings to events**. Culture is important)

OVERVIEW - 4 FRAMES CONCEPTS

	Structural	Human Resource	Political	Symbolic
Metaphor for organisation	Factory or machine	Family	Jungle	Carnival, temple, theatre
Central Concepts	Rules, roles, goals, policies, technology, environment	Needs, skills, relationships	Power, conflict, competition, organisational policy	Culture, meaning, metaphor, ritual, ceremony, stories, heroes
Image of Leadership	Social architecture	Empowerment	Advocacy	Inspiration
Basic Leadership Challenge	Attune structure to the task, technology, environment	Align organisation and human needs	Develop agenda and power base	Create faith, beauty, meaning
Organisational Ethic	Excellence	Caring	Justice	Faith
Leadership Contribution	Authorship	Love	Power	Significance

Source: http://www.slideshare.net/PhilVincent1/fourframe-model



STRUCTURAL FRAME

- ✓ Controls through standard organisational structures (and associated rules/systems)
- ✓ Often changed to support projects

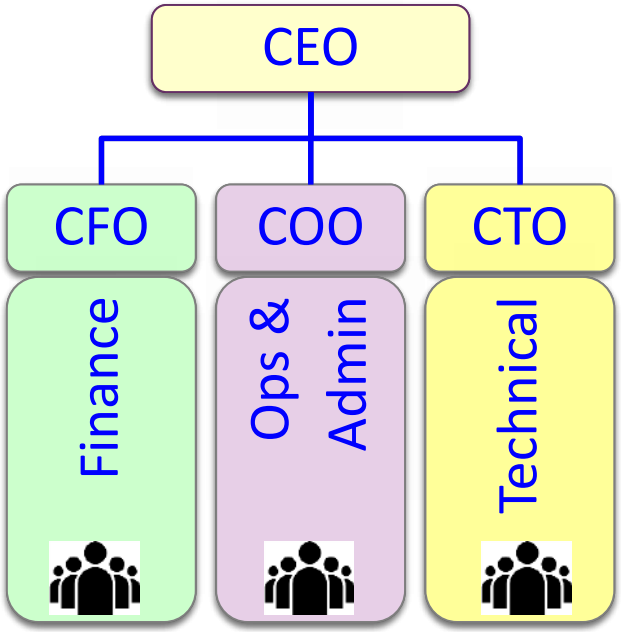
- ✓ Three basic organisational structures:
  - ➢ **Functional**: Functional managers report to the CEO
  - ➢ **Project**: Program managers/sponsors report to the CEO
  - ➢ **Matrix**: Middle ground between functional and project structures; personnel often report to two or more bosses; structure can be a weak, balanced, or strong matrix.

STRUCTURAL FRAME	HUMAN RESOURCE FRAME
POLITICAL FRAME	SYMBOLIC FRAME

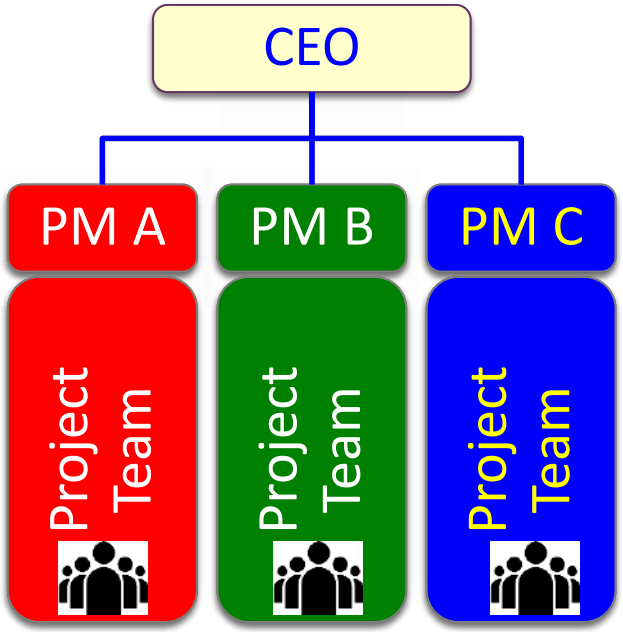
STRUCTURAL FRAME

The 3 common types of Structure

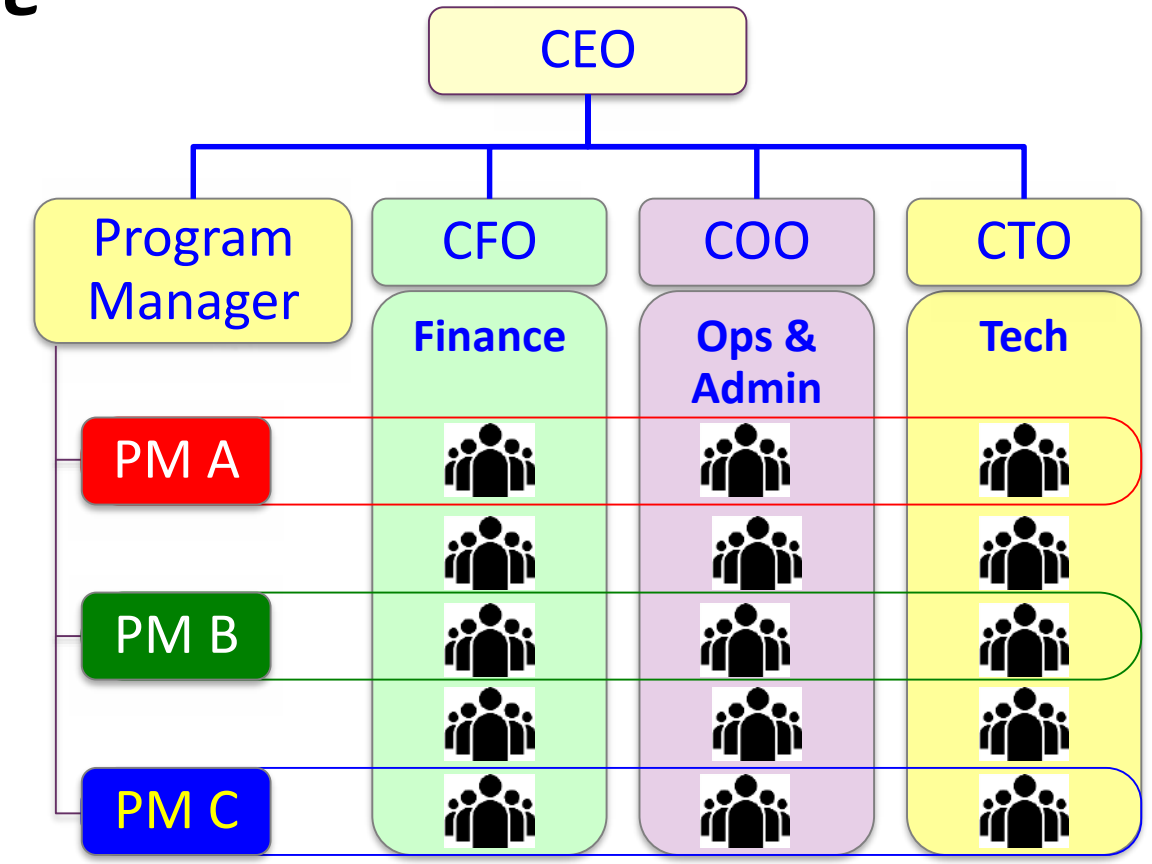
FUNCTIONAL

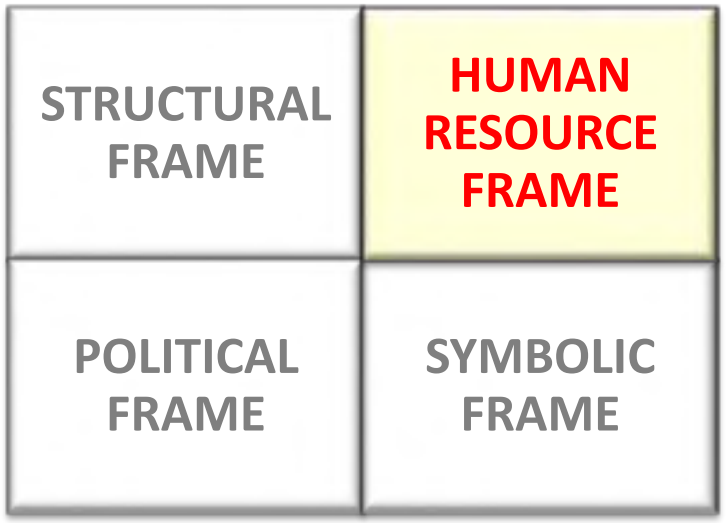


PROJECT



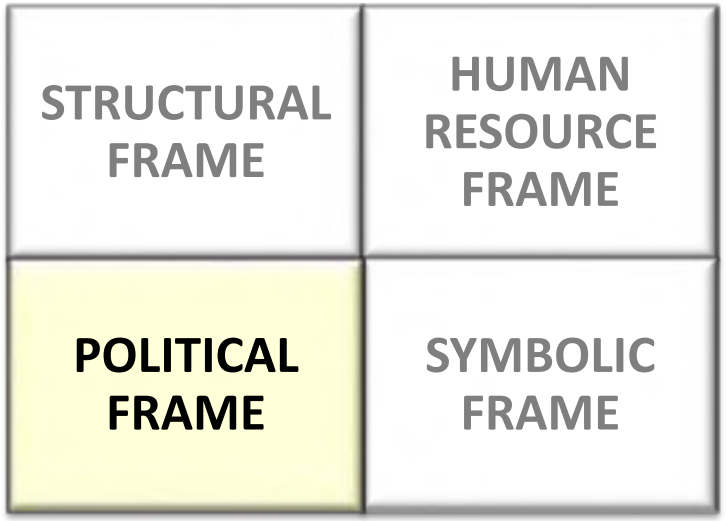
MATRIX





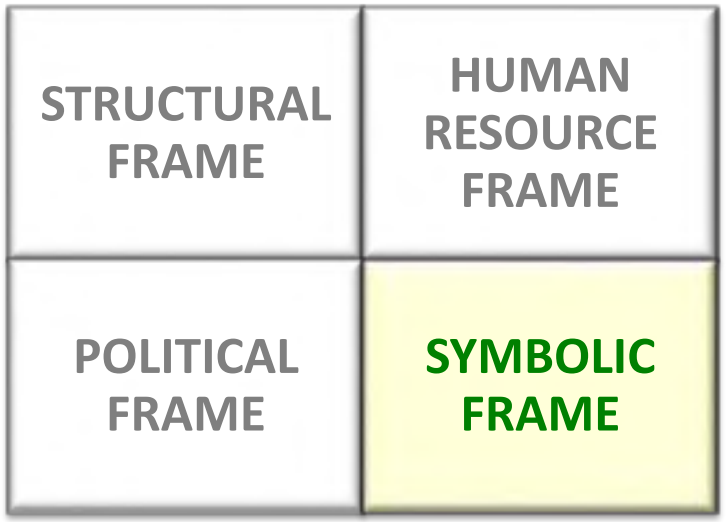
HUMAN RESOURCE FRAME

- ✓ People are important
- ✓ Good PMs take time to identify, understand, and manage relationships with all project stakeholders (above & below)
- ✓ Think about this in your planning and implementation



POLITICAL FRAME

- Top management commitment can be a key success factor (resourcing, support, avoiding obstruction, driving cooperation, etc.)
- Projects can also fail due to other political problems (lack of stakeholder support, push back on change, sniping, influencer activities)
- ICT buy in is essential:
  - Get top cover (CIO, CEO, CFO, etc.)
  - Understand fears and frictions
  - Communicate effectively (allay fears and reduce friction)



SYMBOLIC FRAME

- ✓ Organisations have tangible (e.g. rules & formal systems) & intangible (culture, unwritten rules) symbols

- ✓ PMs need to understand these, and manage them in their:
  - ➢ Stakeholder management
  - ➢ Change management
  - ➢ Communications management

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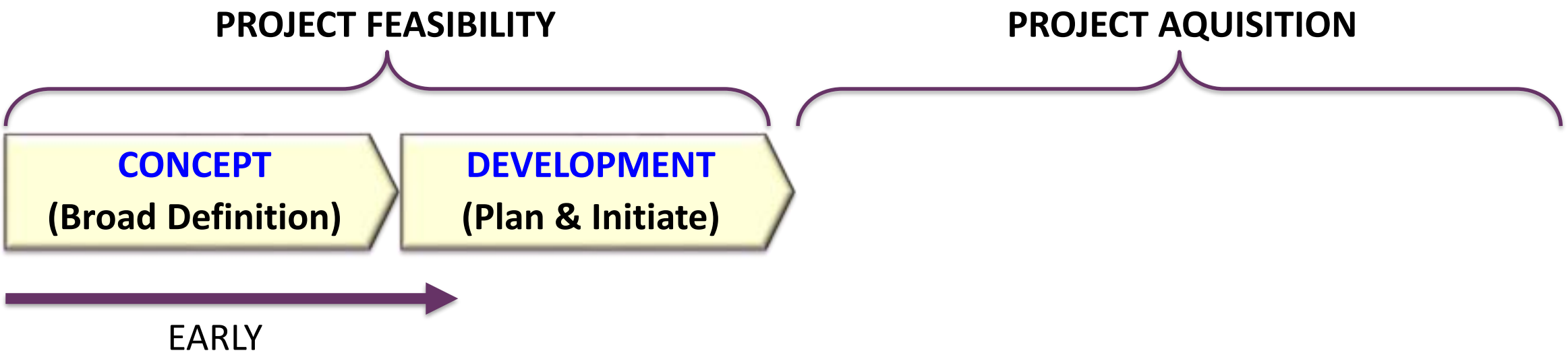
THE FOUR GENERIC PROJECT PHASES

PROJECT LIFECYCLE

SOME KEY TERMS

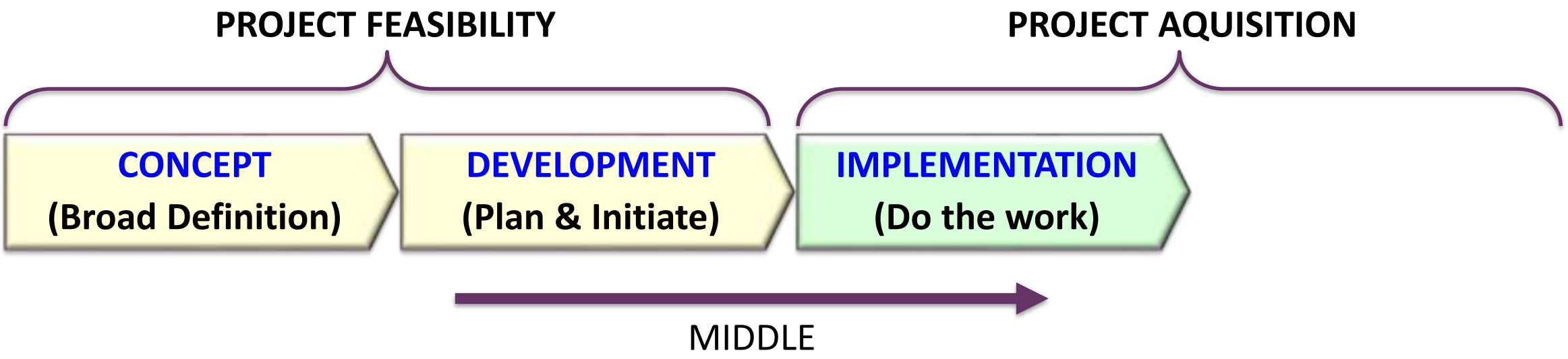
- ✓ A **Project Life Cycle** is a collection of project phases that defines:
  - What work will be performed in each phase
  - What deliverables will be produced and when
  - Who is involved in each phase
  - How management will control and approve work produced in each phase.
- ✓ A **deliverable** is a product or service produced or provided as part of a project

PROJECT PHASES



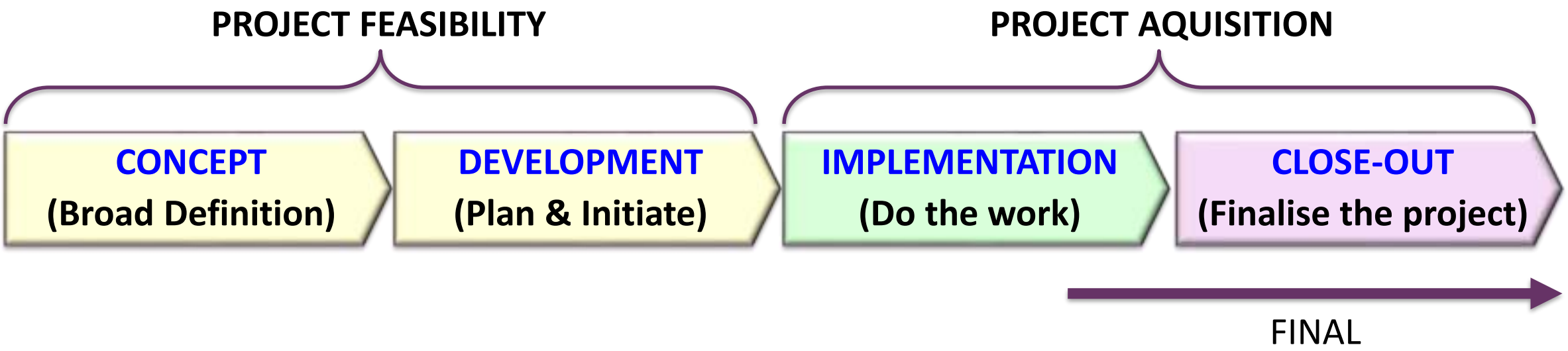
- ✓ In the early phases of a project life cycle:
  - Resource needs are usually lowest
  - The level of uncertainty (risk) is highest
  - Project stakeholders have the greatest opportunity to influence the project

PROJECT PHASES



- ✓ In the middle phases of a project life cycle:
  - The certainty of completing a project increases
  - More resources are needed

PROJECT PHASES



- ✓ In the final phase of a project life cycle:
  - ➢ The focus is on ensuring that project requirements were met
  - ➢ The sponsor approves completion of the project

PM PROJECT DELIVERABLES

PROJECT FEASIBILITY | **PROJECT AQUISITION**

CONCEPT (Broad Definition)	DEVELOPMENT (Plan & Initiate)	IMPLEMENTATION (Do the work)	CLOSE-OUT (Finalise the project)
• Management Plan • Preliminary cost estimates • Outline WBS • Management Reviews • Kill/Modify/Exit Decisions	• Project Planning • Budgetary cost estimates • Detailed WBS • Management Reviews • Modifications/Exit Decisions	• Do work packages • Definitive cost estimate • Performance Reports • Confirmation of success parameters	• Complete work packages • Lessons Learned • Stakeholder Acceptance

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MAJOR SYSTEM LIFE CYCLE PARADIGMS

(ADVANTAGES & DISADVANTAGES)

DISCOVERERS WELCOME

INTRODUCING LIFECYCLE MODELS

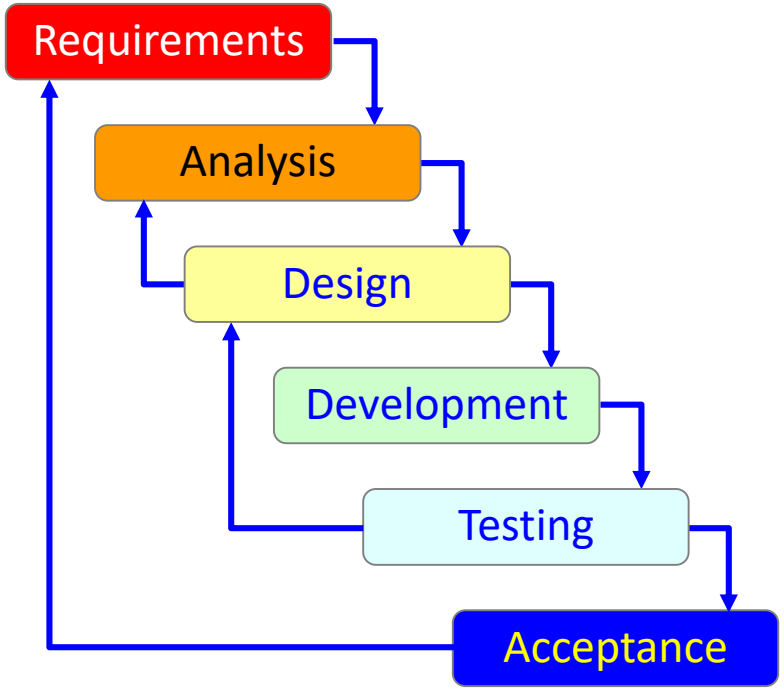
- A **Systems Development Lifecycle (SDLC)** is a framework for describing the phases involved in developing information systems
- Systems development projects can follow:
  - **Predictive Lifecycle (PLC)**: The scope of the project can be clearly articulated and the schedule and cost can be predicted
  - **Iterative Lifecycle (ILC):** The scope is only determined ahead of time to a detailed level up to the end of the next phase/iteration
  - **Adaptive Software Development (ASD) Lifecycle (Agile)**: Projects are mission driven and component based, and use time-based cycles (2-4 weeks) to meet target dates

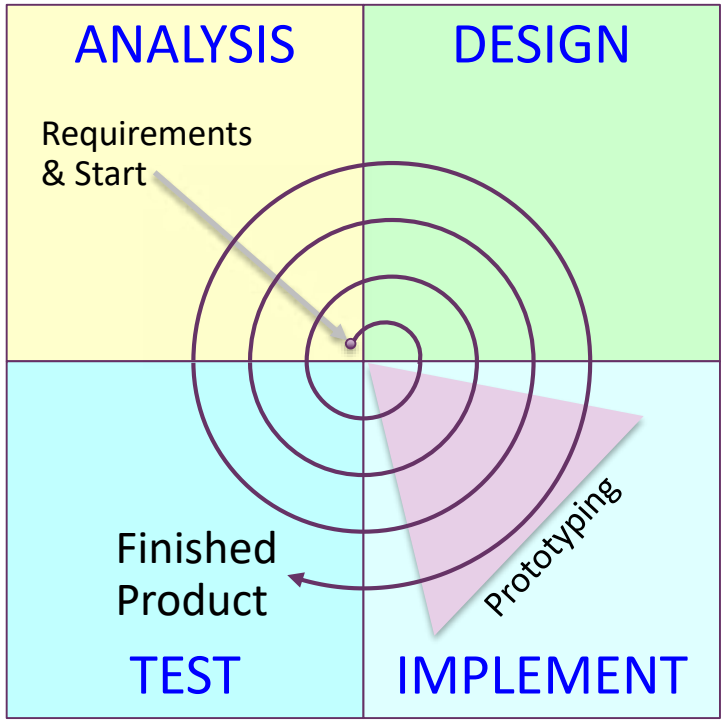
INTRODUCING LIFECYCLE MODELS

TOPIC	PREDICTIVE (PLC)	ITERATIVE (ILC)	ADAPTIVE (NOW AGILE)
Phases	Sequential/Overlapping	Sequential/Overlapping	Sequential/Overlapping/ Parallel
High Level Scope	Yes	Yes	Yes
Detailed Scope	At beginning of project	Only for each phase	Only for each phase or iteration
High-Level Planning	Yes	Yes	Yes
Detailed Planning	At beginning of project or rolling wave	Only for each phase	Only for each phase or iteration
When used	End product is well understood	Large and complex projects	Product is not well understood, rapidly changing environment
Customer involvement	When scope changes & project ends	Periodic	Continuous

PREDICTIVE SDLC MODELS

- **Waterfall** : Has well-defined, linear stages of systems development and support

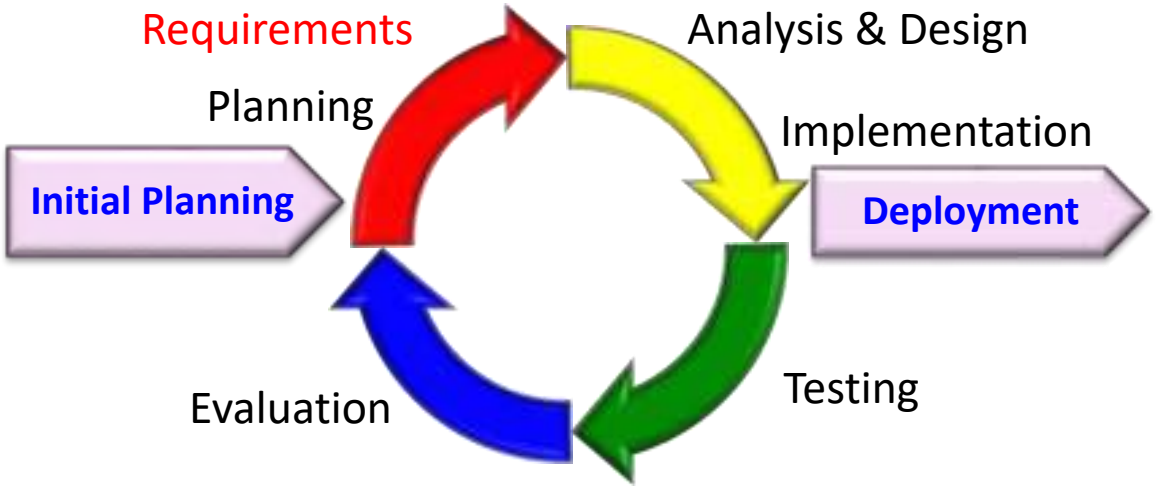


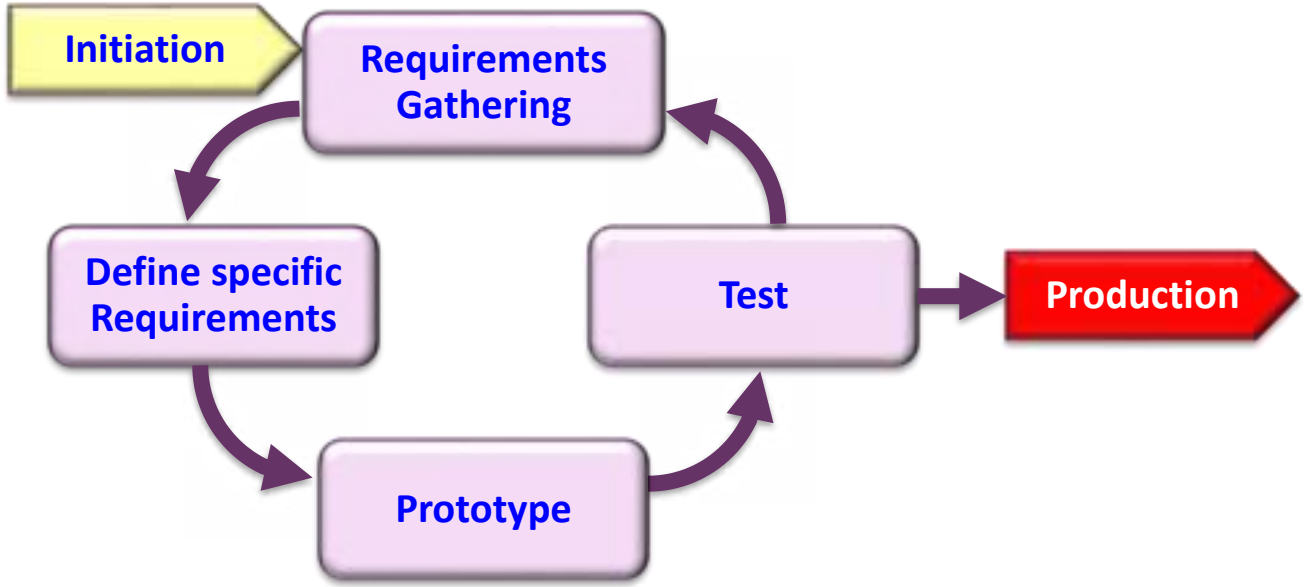


- **Spiral**: Shows that software is developed using an iterative or spiral approach rather than a linear approach **(typically based on a iterative prototyping)**

PREDICTIVE SDLC MODELS

- **Incremental build**: Cyclical iterative builds (often used for software)

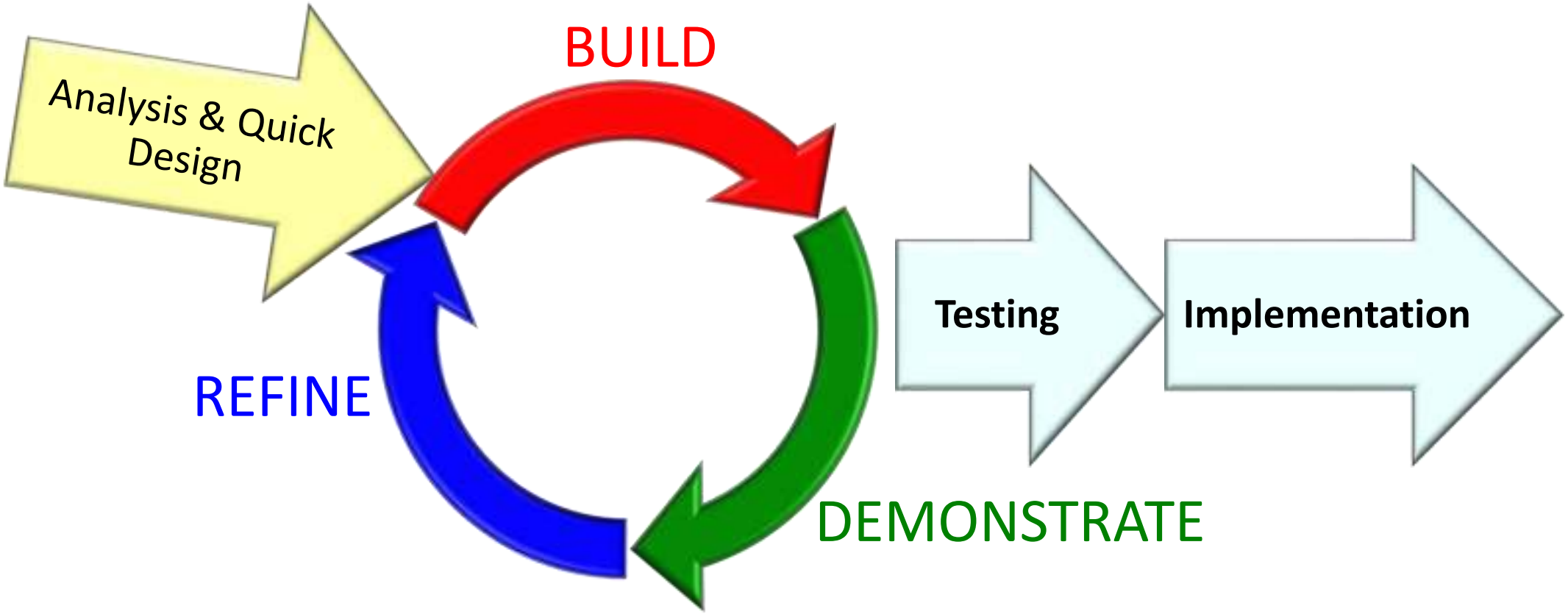




- **Prototyping**: Used for developing prototypes to clarify user requirements

PREDICTIVE SDLC MODELS

- **Rapid Application Development (RAD)**: Develops a system from an evolving prototype



AGILE SDLC MODELS

- Main principles:
  - Satisfy the customer through early and continuous delivery of valuable application/capability
  - Welcome changing requirements, even late in development
  - Agile processes harness change for the customer's competitive advantage
  - Users and developers work together consistently throughout the project
  - Deliver working applications frequently

AGILE SDLC MODELS

- **Extreme programming (XP)**: Developers program in pairs and must design, write and test their own code. XP teams include developers, managers, and users

- **Scrum**: Iterative development in which:
  - Repetitions are referred to as **sprints**, which normally last thirty days.
  - Teams often meet each day for a short meeting, called a *scrum*, to decide what to accomplish that day.
  - Works best for object-oriented technology projects and requires strong leadership to coordinate the work

AN EXAMPLE SCRUM APPROACH

SPRINTS

(DAILY & 2-4 WK SCRUMS)

PRODUCT BACKLOG

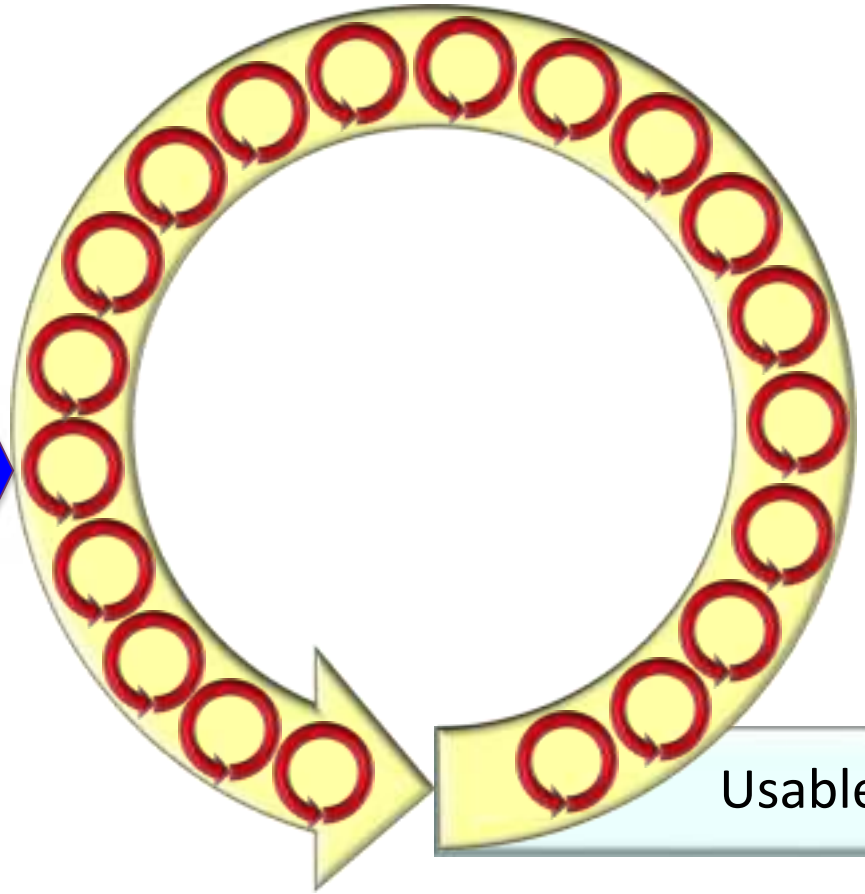
(PRIORITISING)

Prioritised list of all identified scope items/ deliverables

SPRINT BACKLOG

(PLANNING)

Select high priority items & identify likely solutions



Sprint planning, execution, reviews, testing/retrospective

Usable Product

Sprint Review

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TOPIC SUMMARY

DISCOVERERS WELCOME

TOPIC SUMMARY

- ✓ Project managers need to **take a systems approach** when working on projects **(3 Spheres – Business, Tech, Org)**
- ✓ Organisations have four different frames: structural, human resources, political, and symbolic
- ✓ The structure and culture of an organisation have strong implications for Project Managers
- ✓ Projects must successfully pass through each phase of the project life cycle
- ✓ Project managers need to consider many factors due to the unique context of information technology projects.

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PROCESS GROUPS

INTRODUCTION (WHAT IS PM & WHY IS PM IMPORTANT)

PROJECT MANAGEMENT IN CONTEXT

PROJECT MANAGEMENT PROCESS GROUPS

DISCOVERERS WELCOME

READING

Schwalbe Chapter 3

LEARNING OBJECTIVES

At the end of this topic you should be able to:

- ✓ **Describe** the five project management process groups, the typical level of activity for each, and the interactions among them

- ✓ **Understand** the contribution that effective project initiation, project planning, project execution, project monitoring and control, and project closing makes to project success

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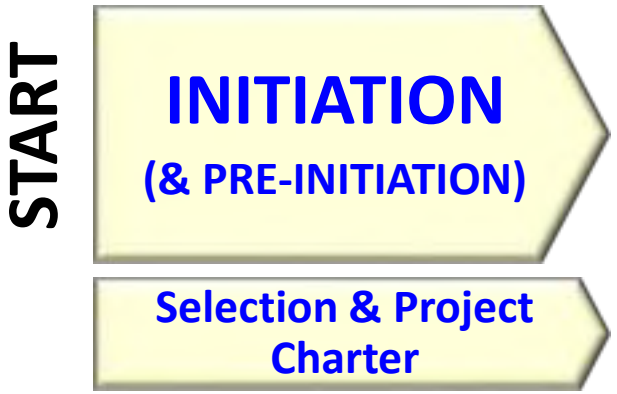
INTRODUCING THE PROCESS GROUPS

DISCOVERERS WELCOME

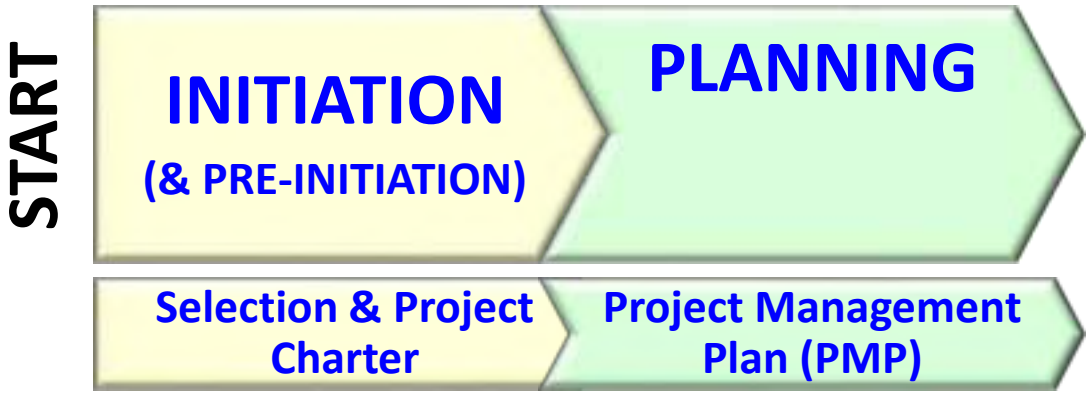
PIM DELIVERABLES IN THE PROCESS GROUPS



- ✓ Activities **(Initiate authorisation)**
  - ➢ Identify stakeholders **(and needs)**
  - ➢ Define/analyse a new project or phase
  - ➢ Obtain Authorisation
- ✓ Key outputs – Project Charter, Stakeholder Register

Source: Adapted from Schwalbe (2018)

PIM DELIVERABLES IN THE PROCESS GROUPS



✓ Activities **(Plan the work)**

- Develop an integrated PMP to define project objectives

✓ Key outputs: PMP & related documents associated with the *Knowledge Areas* - Scope, Requirements, Schedule, Cost, Quality, Resources, Communication, Risk, Procurement, Change, Stakeholders

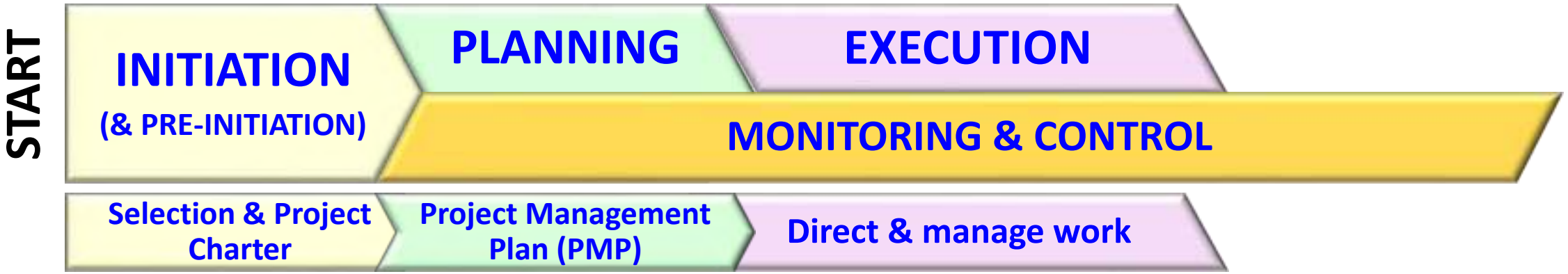
Source: Adapted from Schwalbe (2018)

PIM DELIVERABLES IN THE PROCESS GROUPS

- ✓ Activities **(Work the Plan)** Complete the work and satisfy project objectives
- ✓ Key outputs: Project deliverables, work performance data, team performance assessments, project communication (e.g. reports), supplier agreement, Change requests, Issues logs, etc.

Source: Adapted from Schwalbe (2018)

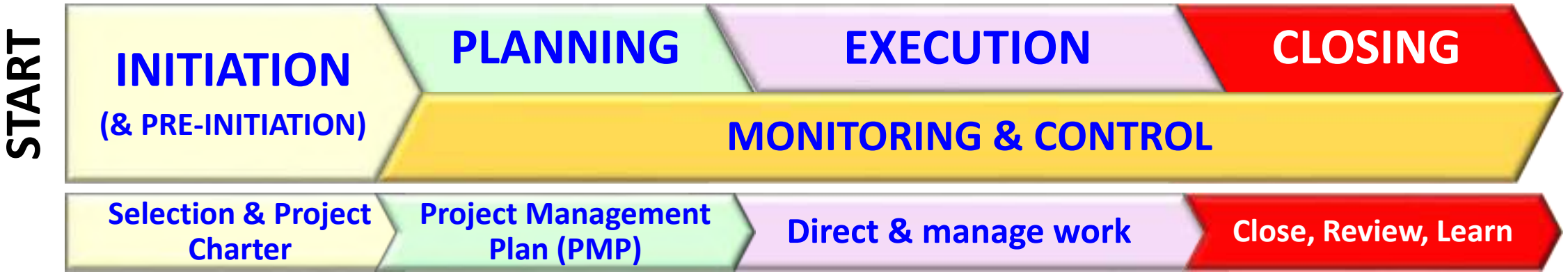
PIM DELIVERABLES IN THE PROCESS GROUPS



- ✓ Activities **(Control the Plan)** Track and review project progress and performance & manage variance and change
- ✓ Key outputs: Change logs, approved Change Requests, work performance information, schedule forecasts, cost forecasts, updates to the Project Plan, Quality Control measurements, verified deliverables, accepted deliverables

Source: Adapted from Schwalbe (2018)

PIM DELIVERABLES IN THE PROCESS GROUPS



- ✓ Activities **(End the work)** Finalise all activities and formally close the project or phase
- ✓ Key outputs: Final product, service or result. Close the project (e.g. formal acceptance), Transition, **Review**, **Learn**

Source: Adapted from Schwalbe (2018)

PIM DELIVERABLES IN THE PROCESS GROUPS

- ✓ Activities **(Identify what really happened)** Get facts to identify what was really achieved
- ✓ Key outputs: Post project interviews, feedback, data/metrics, Post Project report

Source: Adapted from Schwalbe (2018)

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TOPIC SUMMARY

DISCOVERERS WELCOME

TOPIC SUMMARY

- ✓ The five project management process groups are *initiating*, *planning*, *executing*, *monitoring and controlling*, and *closing*
- ✓ You can map the main activities of each process group to the ten knowledge areas
- ✓ There are other project management methodologies **(but they all have strong similarities to what we will cover this semester)**


ANY
QUESTIONS