MRSC 2073 – ENGINEERING STAKEHOLDER MANAGEMENT

By

Syuhaida Ismail

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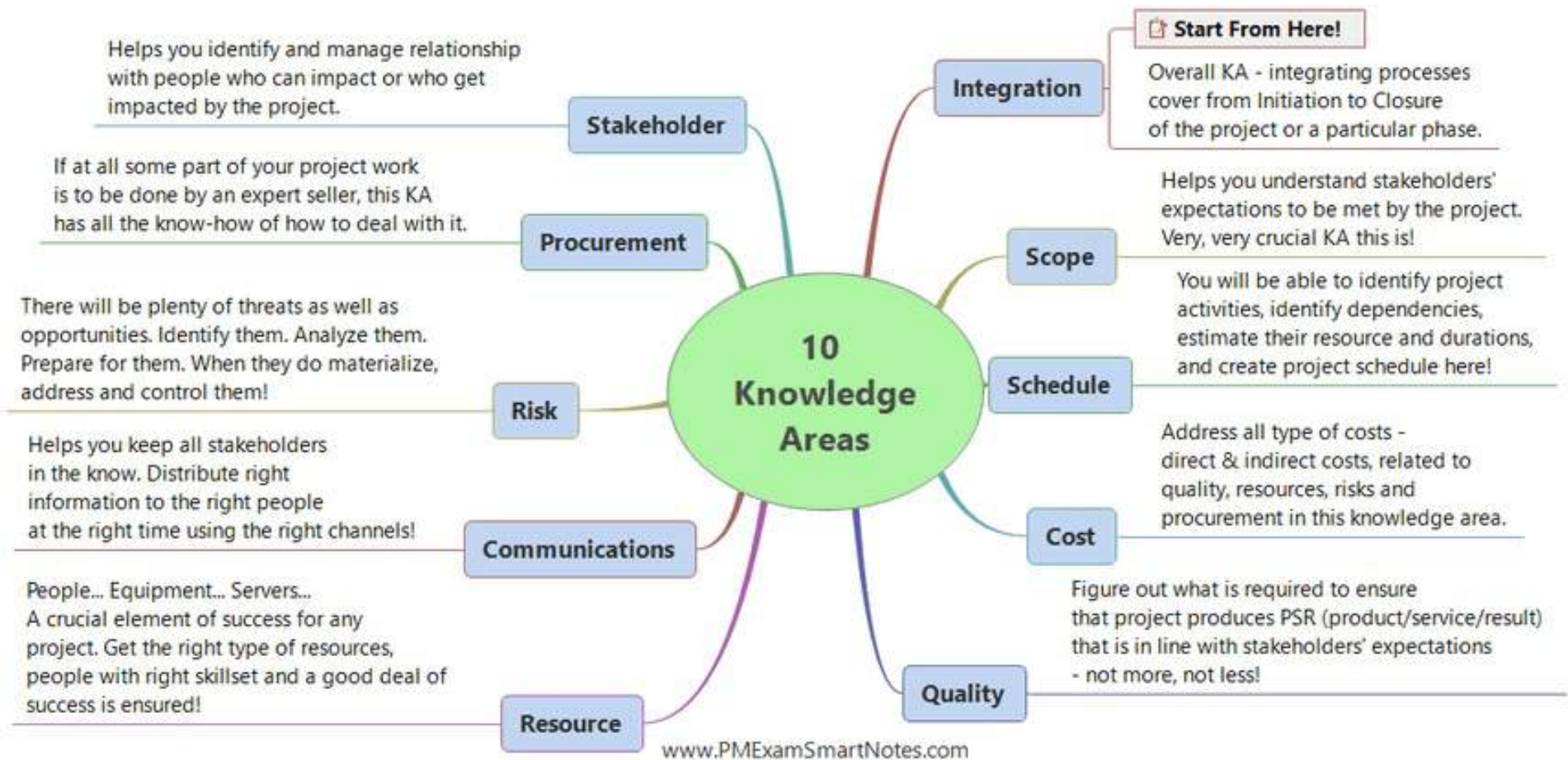0126469235

syuhaida.kl@utm.my

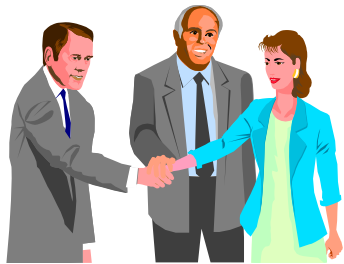# Assessment

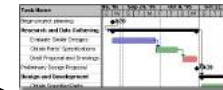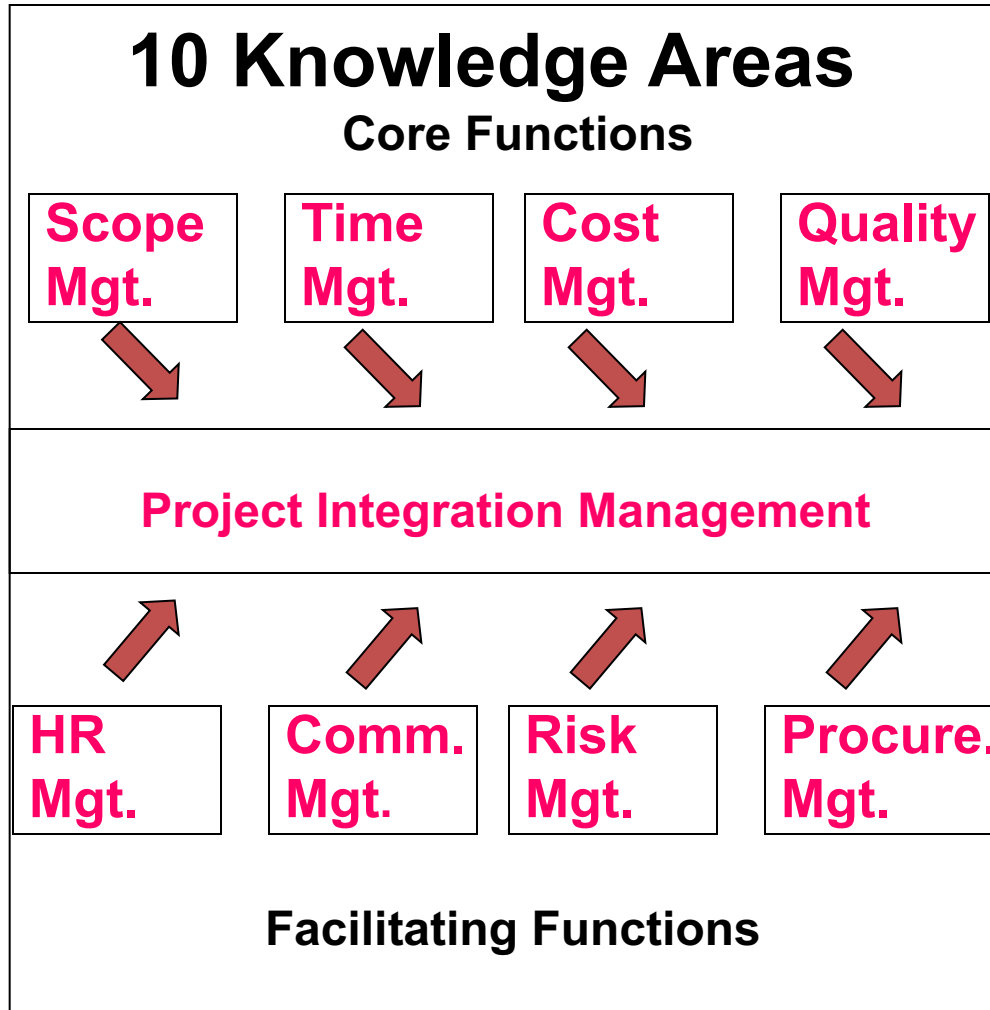| No.	CLO*	T&L Methods	Student Learning Time (Face to Face)	****Assessment Methods
CLO1	Identify stakeholder management principles for engineering and sustainable development	Lecture, active learning	11 hours	PMA (20%) Presentation (15%)
CLO2	Evaluate and measure stakeholder management tools and techniques at an engineering business and project level	Lecture, **industrial lecture**, active learning	20 hours	Case Study Report (20%) PMA (20%)
CLO3	Work with team members cooperatively and integrate ethics as team member	Lecture, active learning	11 hours	Presentation (10%) Test (10%)
		TOTAL	**42 hours**	

Assessment

Assessment Methods	Percent
PMA	40%
Presentation	25%
Case Study Report	25%
Test	10%

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Stakeholder
Helps you identify and manage relationship with people who can impact or who get impacted by the project.

Procurement
If at all some part of your project work is to be done by an expert seller, this KA has all the know-how of how to deal with it.

Risk
There will be plenty of threats as well as opportunities. Identify them. Analyze them. Prepare for them. When they do materialize, address and control them!

Communications
Helps you keep all stakeholders in the know. Distribute right information to the right people at the right time using the right channels!

Resource
People... Equipment... Servers... A crucial element of success for any project. Get the right type of resources, people with right skillset and a good deal of success is ensured!

10 Knowledge Areas

Integration
📄 **Start From Here!**
Overall KA - integrating processes cover from Initiation to Closure of the project or a particular phase.

Scope
Helps you understand stakeholders' expectations to be met by the project. Very, very crucial KA this is!

Schedule
You will be able to identify project activities, identify dependencies, estimate their resource and durations, and create project schedule here!

Cost
Address all type of costs - direct & indirect costs, related to quality, resources, risks and procurement in this knowledge area.

Quality
Figure out what is required to ensure that project produces PSR (product/service/result) that is in line with stakeholders' expectations - not more, not less!

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Project Management Framework

10 Knowledge Areas
Core Functions

| Scope Mgt. | Time Mgt. | Cost Mgt. | Quality Mgt. |

Project Integration Management

| HR Mgt. | Comm. Mgt. | Risk Mgt. | Procure. Mgt. |

Facilitating Functions

Stakeholder needs and expectations

Tools and techniques

Project Success

Project Management Framework

10 Knowledge Areas

Core Functions

| Scope Mgt. | Sche. Mgt. | Cost Mgt. | Quality Mgt. |

Project Integration Management

| Resource Mgt. | Comm. Mgt. | Risk Mgt. | Procure. Mgt. |

Facilitating Functions

Stakeholder needs and expectations

Tools and techniques

Project Success

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Ice-Breaking

Ice-Breaking

- Your background?

- Current position?

- Experience in managing stakeholders?

- Master Project topic and supervisor(s)?

References/Bibliography

- PMI (2017). PMBOK 6th Edition

- Nigel J Smith (2008). Engineering Project Management. Chicester, United Kingdom: John Wiley and Sons Ltd

- Anna Lund Jepsen and Pernille Eskerod (2013). Project Stakeholder Management. England: Gower Publishing Limited.

- Andrew C. Wicks, Jeffrey S Harrison, and R. Edward Freeman (2007). Managing for Stakeholders: Survival, Reputation, and Success. USA: Caravan.

- Aimee L Franklin (2020). Stakeholder Engagement. Switzerland: Springer Nature Switzerland AG

What is Stakeholders Management?

Stakeholders management is "the **processes** required **to identify the people, groups, or organisations** that **could impact or be impacted** by the project, **to analyse** stakeholder expectations in project decisions and execution" (PMI, 2017)

- It covers only 4 process groups (from total 5) and 4 processes
- Both a management science of science (technical skill, tool and technique) and art (soft skill and people) that follows systematic and structured process

PMI and PMBOK®

- Project Management Body of Knowledge® (PMBOK®)

  – A book published by Project Management Institute (PMI), which presents a set of standard terminology and guidelines for project management. The Sixth Edition is the document resulting from work overseen by PMI

  – 49 processes + 5 process groups

    + 10 knowledge areas
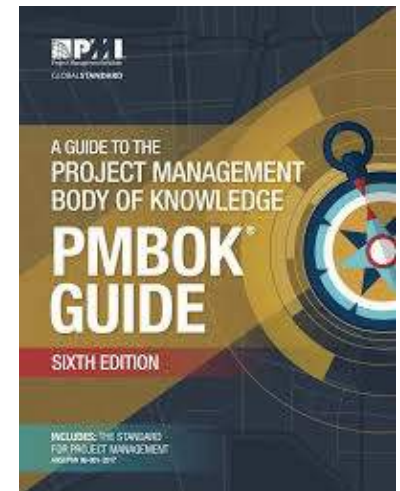
Why Project Management?

- Poorly managed projects or the absence of project management may result in:
  - Missed deadlines
  - Cost overruns
  - Poor quality
  - Rework
  - Uncontrolled expansion of the project
  - Loss of reputation for the organisation
  - **Unsatisfied stakeholders**
  - Failure in achieving the objectives for which the project was undertaken
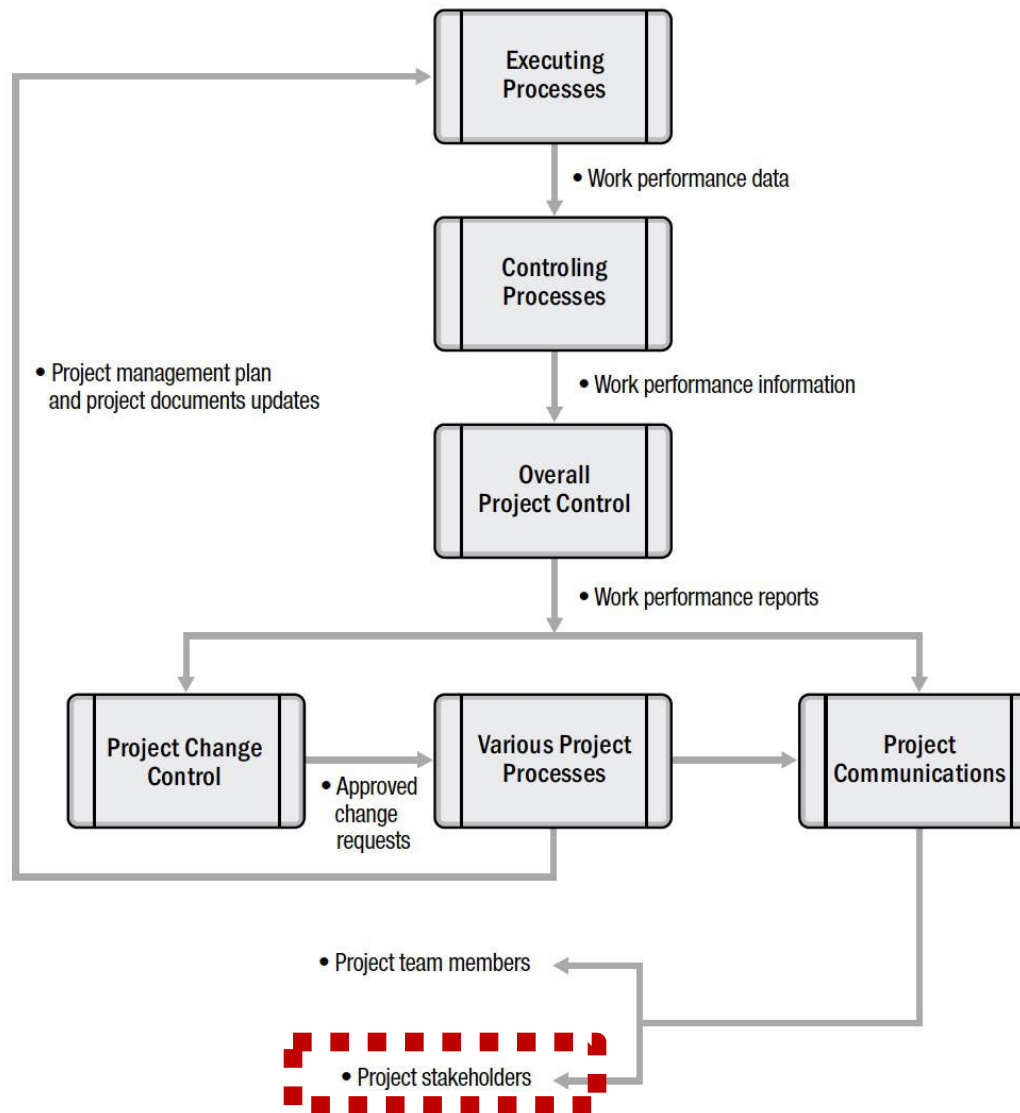
Key Definitions
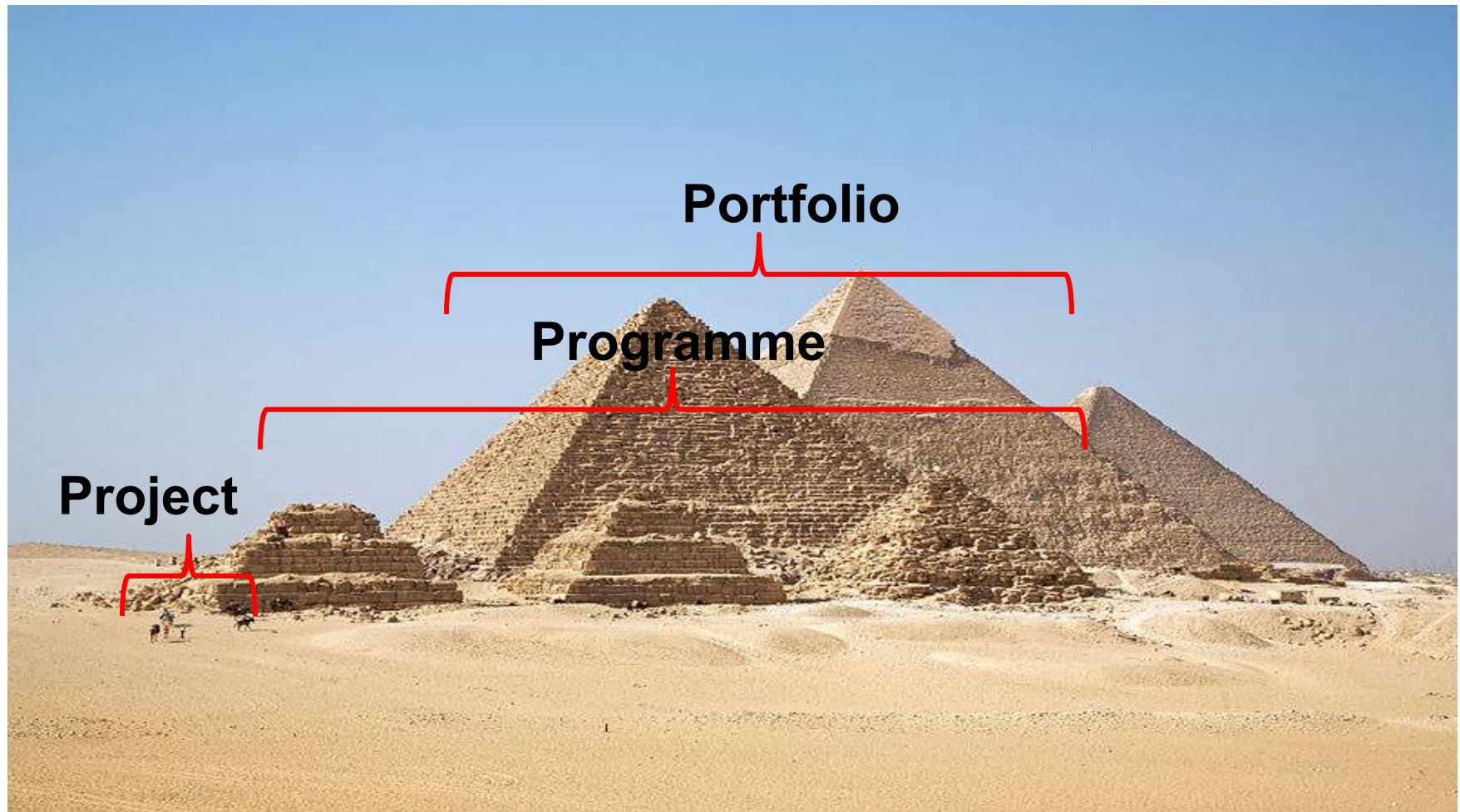
Why Stakeholders Management?

- Programme management, portfolio management and project management differ in their life cycles, activities, objectives, focus, and benefits

- However, all often engages with the same stakeholders and may need to use the same resources, which may result in a conflict in the organisation

- This **increases the need for coordination** within the organisation through the use of portfolio, programme and project management to **achieve a workable balance** in the organisation

Organizational Strategy

Sample Portfolio

| Program A | Program B | Portfolio A |

| Program B1 | | Program C |

| Project 1 | Project 2 | Project 3 | Project 4 | Project 5 | Project 6 | Project 7 | Project 8 | Project 9 | Operations |

Shared Resources and Stakeholders
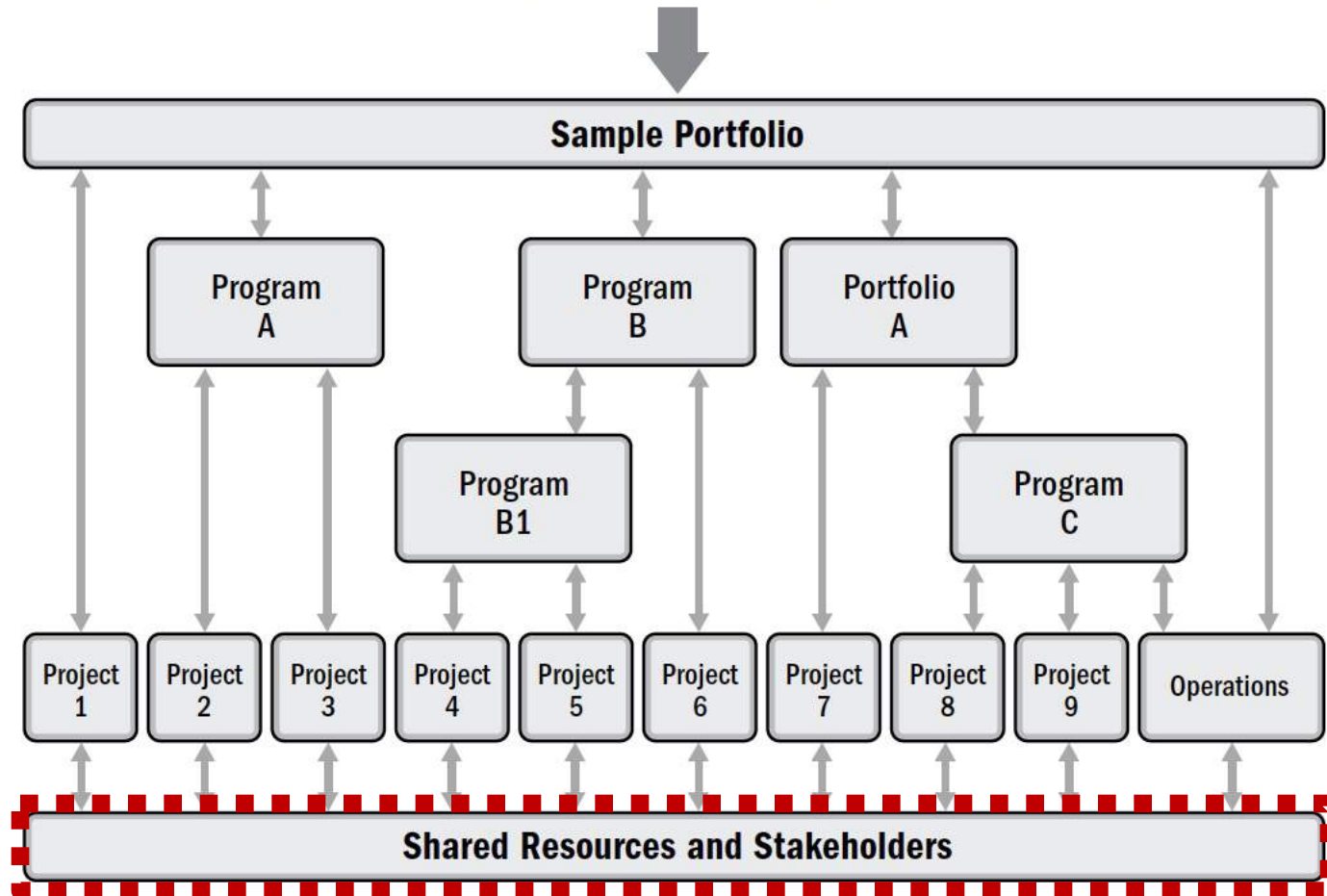
Project Success Measure

- Project stakeholders may have different ideas as to:
  - What the successful completion of a project will look like
  - which factors are the most important
- To clearly document the project objectives and to select objectives that are measurable
- Questions that **both key stakeholders and the project manager** should answer, document and agree upon are:
  - What does success look like for this project?
  - How will success be measured?
  - What factors may impact success?

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Strategies in Stakeholders Management

- Involving 5 Ps
  - Plan – set of step a firm intends to follow to be successful
    - Pizza Hut and Dunkin Donut buy raw materials in bulk
    - Domino's and Papa John used specialised kitchen

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Strategies in Stakeholders Management

- Henry Ford used "assembly lines" for bulky and lower cost of car manufacturing and focused only on BLACK car, yet had to change

Strategies in Stakeholders Management

- Ploy – movement to trick competitor
  - Vic Road used fallen trees on federal road
  - Greek used Trojan horse to trick Trojan

Strategies in Stakeholders Management

- Pattern – consistency in firm's strategic action
  - K-mart's inconsistency (from discounted store to sporting goods to building supply to office supply to IT) leads to bankruptcy
  - Apple's consistency except for Apple TV in 2007

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Strategies in Stakeholders Management

- Another inconsistency in the 1980s...
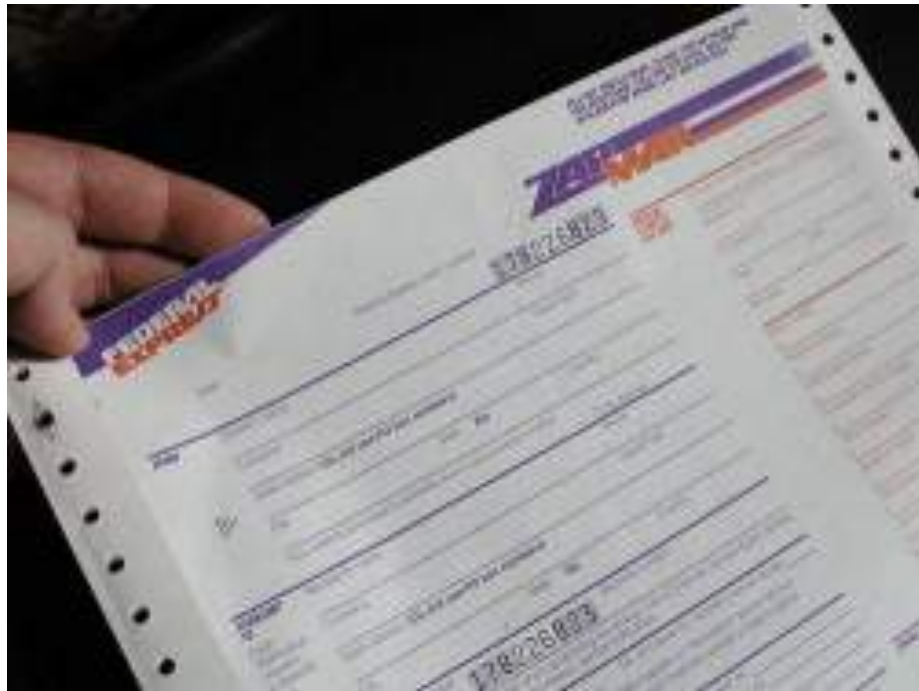
Strategies in Stakeholders Management

- Position – firm's place in industry compared to competitors
  - Apple (unique features, loyal customer, not compete against price e.g. Lenovo, Acer, Toshiba), A&W (first franchise chain), McDonald's, Coca Cola
  - Gap Inc. owns Old Navy (younger customer), Gap and Banana Republic (matured customer)

Strategies in Stakeholders Management

- Panama Canal, a ship canal that connects Atlantic Ocean and Pacific Ocean is uncontested
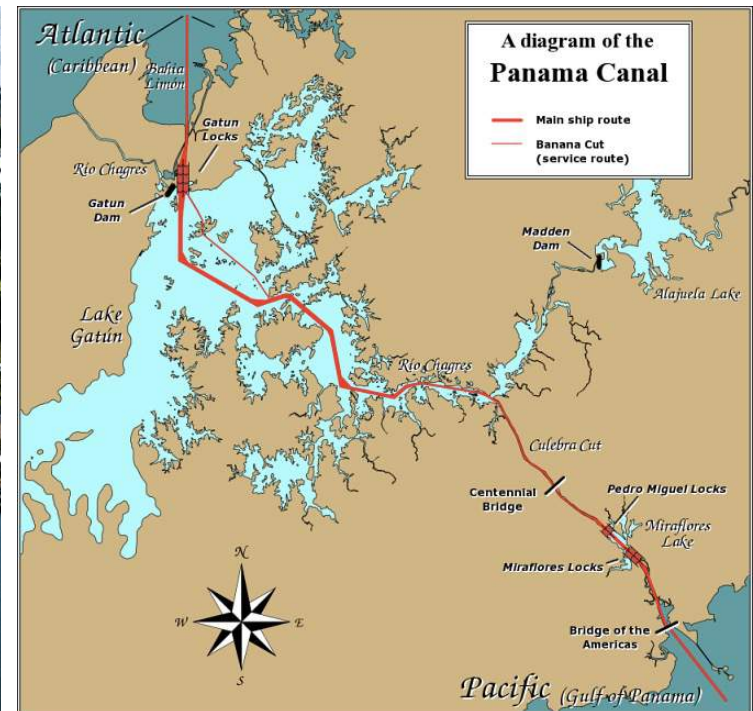
Strategies in Stakeholders Management

- Perspectives – how key stakeholders interpret landscape
  - Amazon.com (Jeff Bezos viewed internet as sales channel for book which was mainly communication for academic and government in 1990s)

PROCESS GROUP AND KNOWLEDGE AREA MAPPING

Knowledge Areas	Project Management Process Groups				
	Initiating	Planning	Executing	Monitoring and Controlling	Closing
4. Project Integration Management	4.1 Develop Project Charter	4.2 Develop Project Management Plan	4.3 Direct and Manage Project Work 4.4 Manage Project Knowledge	4.5 Monitor and Control Project Work 4.6 Perform Integrated Change Control	4.7 Close Project or Phase
5. Project Scope Management		5.1 Plan Scope Management 5.2 Collect Requirements 5.3 Define Scope 5.4 Create WBS		5.5 Validate Scope 5.6 Control Scope	
6. Project Schedule Management		6.1 Plan Schedule Management 6.2 Define Activities 6.3 Sequence Activities 6.4 Estimate Activity Durations 6.5 Develop Schedule		6.6 Control Schedule	
7. Project Cost Management		7.1 Plan Cost Management 7.2 Estimate Costs 7.3 Determine Budget		7.4 Control Costs	
8. Project Quality Management		8.1 Plan Quality Management	8.2 Manage Quality	8.3 Control Quality	
9. Project Resource Management		9.1 Plan Resource Management 9.2 Estimate Activity Resources	9.3 Acquire Resources 9.4 Develop Team 9.5 Manage Team	9.6 Control Resources	
10. Project Communications Management		10.1 Plan Communications Management	10.2 Manage Communications	10.3 Monitor Communications	
11. Project Risk Management		11.1 Plan Risk Management 11.2 Identify Risks 11.3 Perform Qualitative Risk Analysis 11.4 Perform Quantitative Risk Analysis 11.5 Plan Risk Responses	11.6 Implement Risk Responses	11.7 Monitor Risks	
12. Project Procurement Management		12.1 Plan Procurement Management	12.2 Conduct Procurements	12.3 Control Procurements	
13. Project Stakeholder Management	13.1 Identify Stakeholders	13.2 Plan Stakeholder Engagement	13.3 Manage Stakeholder Engagement	13.4 Monitor Stakeholder Engagement	

Developed by: **DEEP FRIED BRAIN PROJECT**

What is Stakeholders Management?

Stakeholders management is "the **processes** required **to identify the people, groups, or organisations** that **could impact or be impacted** by the project, **to analyse** stakeholder expectations in project decisions and execution" (PMI, 2017)

- Both a management science of science (technical skill, tool and technique) and art (soft skill and people) that follows systematic and structured process
- Related to Quality Management that includes the processes for incorporating the organisation's quality policy regarding planning, managing, and controlling project and product quality requirements, in order to meet

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What is Stakeholders Management?

- Both a management of:
  - Science (technical skill, tool and technique)
  - Art (soft skill and people) that follows systematic and structured process
- Related to:
  - **Quality Management** - processes for incorporating the organisation's quality policy regarding planning, managing, and controlling project and product quality requirements, in order **to meet stakeholders' expectations**
  - **Communication Management** - the processes necessary to ensure that **the information needs of the project and its stakeholders are met** through implementation of activities designed to achieve effective information exchange

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PROCESS GROUP AND KNOWLEDGE AREA MAPPING

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Contemporary Project Manager

Role of PM mapped to Talent Triangle

Overlapping Project Manager Skills
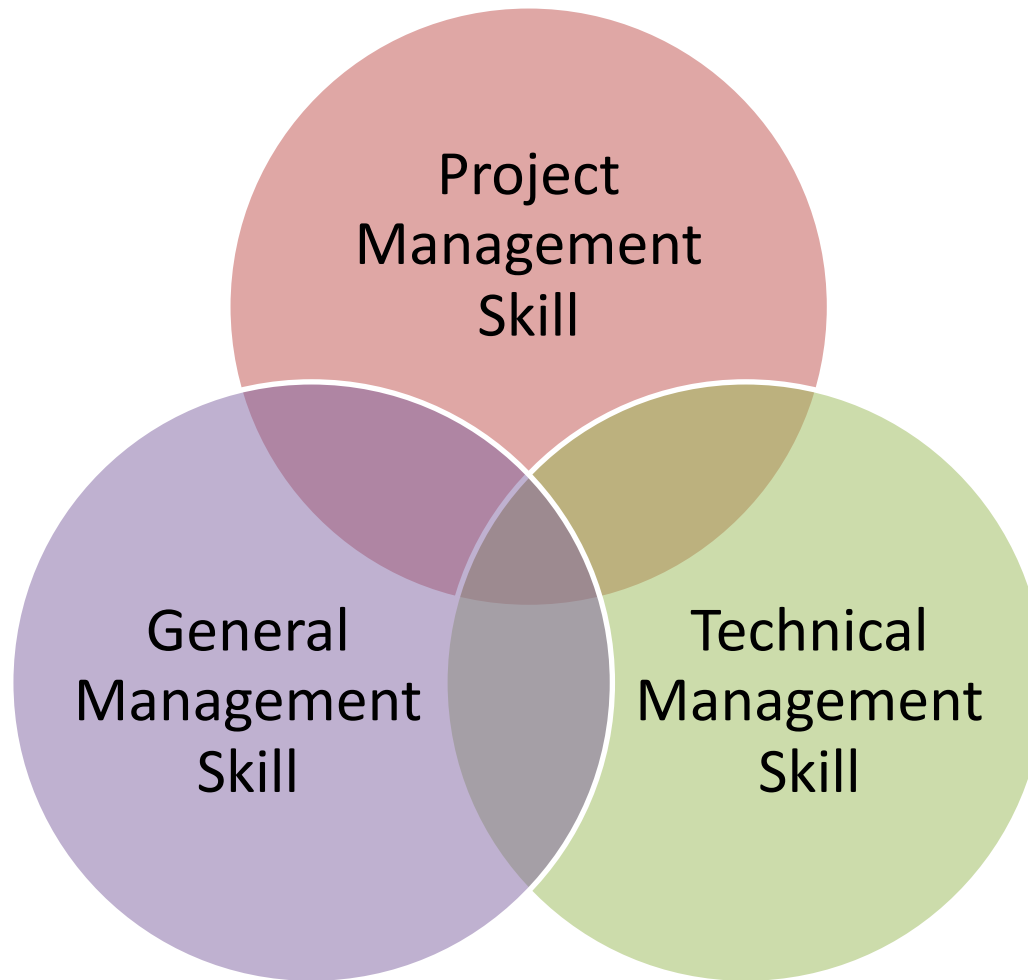
Project Stakeholder Management Overview

13.1 Identify Stakeholders

.1 Inputs
- .1 Project charter
- .2 Business documents
- .3 Project management plan
- .4 Project documents
- .5 Agreements
- .6 Enterprise environmental factors
- .7 Organizational process assets

.2 Tools & Techniques
- .1 Expert judgment
- .2 Data gathering
- .3 Data analysis
- .4 Data representation
- .5 Meetings

.3 Outputs
- .1 Stakeholder register
- .2 Change requests
- .3 Project management plan updates
- .4 Project documents updates

13.2 Plan Stakeholder Engagement

.1 Inputs
- .1 Project charter
- .2 Project management plan
- .3 Project documents
- .4 Agreements
- .5 Enterprise environmental factors
- .6 Organizational process assets

.2 Tools & Techniques
- .1 Expert judgment
- .2 Data gathering
- .3 Data analysis
- .4 Decision making
- .5 Data representation
- .6 Meetings

.3 Outputs
- .1 Stakeholder engagement plan

13.3 Manage Stakeholder Engagement

.1 Inputs
- .1 Project management plan
- .2 Project documents
- .3 Enterprise environmental factors
- .4 Organizational process assets

.2 Tools & Techniques
- .1 Expert judgment
- .2 Communication skills
- .3 Interpersonal and team skills
- .4 Ground rules
- .5 Meetings

.3 Outputs
- .1 Change requests
- .2 Project management plan updates
- .3 Project documents updates

13.4 Monitor Stakeholder Engagement

.1 Inputs
- .1 Project management plan
- .2 Project documents
- .3 Work performance data
- .4 Enterprise environmental factors
- .5 Organizational process assets

.2 Tools & Techniques
- .1 Data analysis
- .2 Decision making
- .3 Data representation
- .4 Communication skills
- .5 Interpersonal and team skills
- .6 Meetings

.3 Outputs
- .1 Work performance information
- .2 Change requests
- .3 Project management plan updates
- .4 Project documents updates

Overview

- Stakeholders management should commence as soon as possible **after the project charter has been approved**, the project manager has been assigned and the team begins to form

- Stakeholder satisfaction should be **identified and managed as a project objective** through:
  - Continuous communication
  - Understanding of needs and expectations
  - Address of issues as they occur
  - Management of conflicting interests f
  - Foster of appropriate stakeholder engagement in project decisions and activities

Process 1: Identify Stakeholders

Identify Stakeholders

Inputs

.1 Project charter
.2 Business documents
  • Business case
  • Benefits management plan
.3 Project management plan
  • Communications management plan
  • Stakeholder engagement plan
.4 Project documents
  • Change log
  • Issue log
  • Requirements documentation
.5 Agreements
.6 Enterprise environmental factors
.7 Organizational process assets

Tools & Techniques

.1 Expert judgment
.2 Data gathering
  • Questionnaires and surveys
  • Brainstorming
.3 Data analysis
  • Stakeholder analysis
  • Document analysis
.4 Data representation
  • Stakeholder mapping/ representation
.5 Meetings

Outputs

.1 Stakeholder register
.2 Change requests
.3 Project management plan updates
  • Requirements management plan
  • Communications management plan
  • Risk management plan
  • Stakeholder engagement plan
.4 Project documents updates
  • Assumption log
  • Issue log
  • Risk register

Process 1: Identify Stakeholders

- The process of:
    - Identifying project stakeholders regularly
    - Analysing and documenting relevant information regarding their interests, involvement, interdependencies, influence, and potential impact on project success

Process 1: Identify Stakeholders
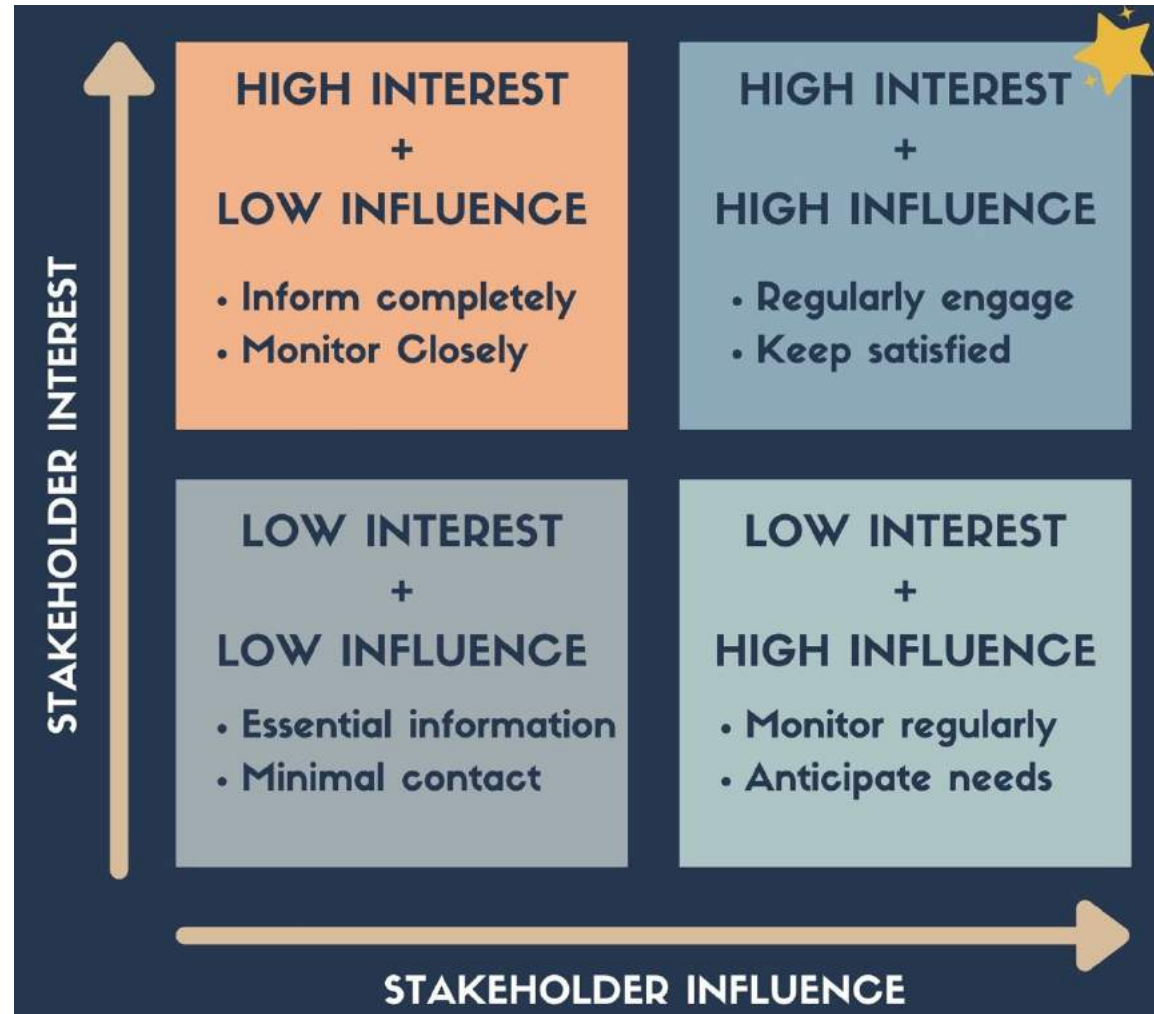
Project Charter

- Project Charter lists the main goals of a project as well as a detailed plan for how to attain those goals
- It identifies the key stakeholder list and their responsibilities

Project Management Plan I: Communications Management Plan

Stakeholder Communication Plan Template

Stakeholder	Power/Interest	Key Interest & Issues	Communication Vehicle	Frequency	Comments

Project Management Plan I: Stakeholder Engagement Plan
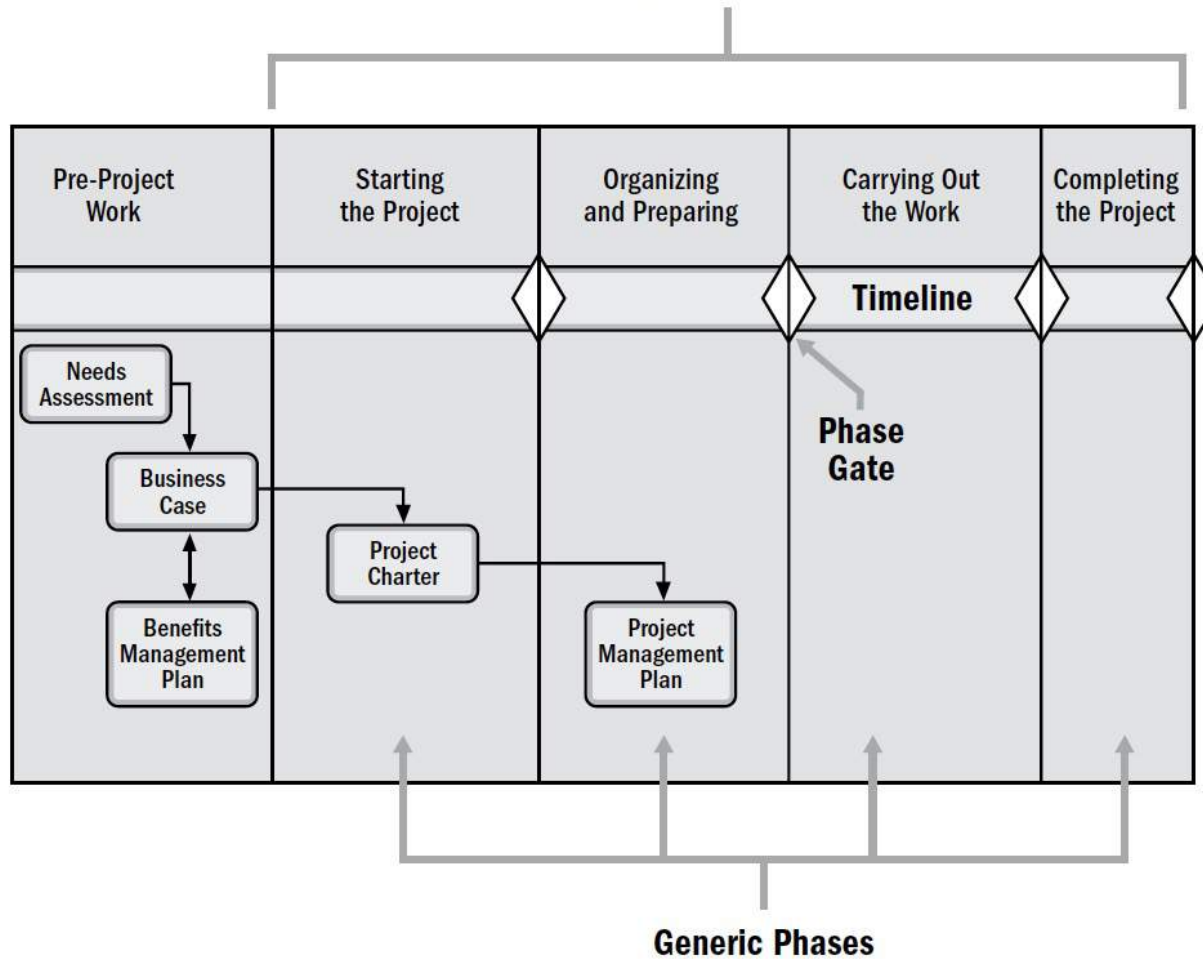
Business Documents

- Consists of:
  - Business case
  - Benefits management plan
- Business case is a documented economic feasibility study used throughout the project life cycle that:
  - Developed and maintained by sponsor/funder
  - Lists the objectives and reasons for project initiation
  - Identifies **stakeholders affected**
  - Helps measure project success at the end of the project against the project objectives
  - May be used before the project initiation and may result in a go/no-go decision for the project
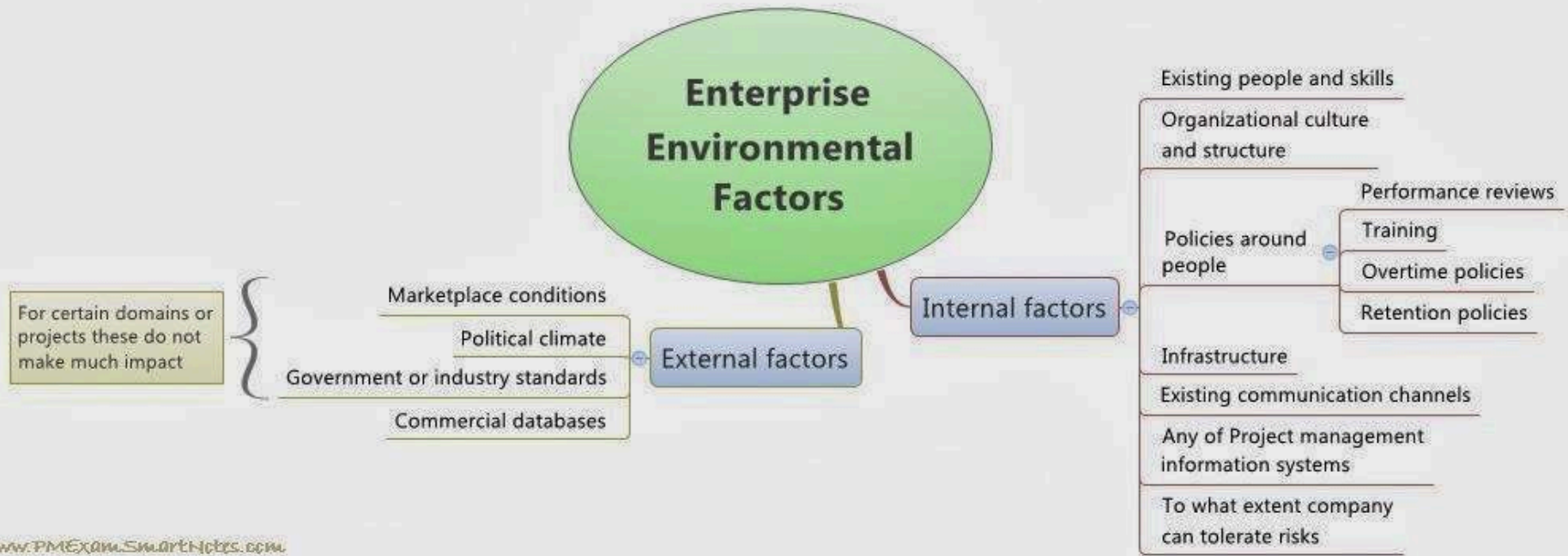
Business Documents

- Benefits management plan is a document that:
    - Describes how and when the benefits of the project will be delivered
    - Describes the mechanisms that should be in place to measure those benefits
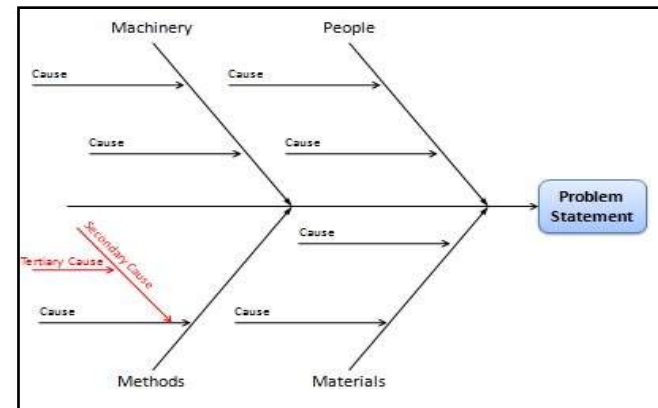   - e.g. cost-benefit analysis

Project Life Cycle

Pre-Project Work	Starting the Project	Organizing and Preparing	Carrying Out the Work	Completing the Project

Timeline

Needs Assessment → Business Case ⇅ Benefits Management Plan → Project Charter → Project Management Plan

Phase Gate

Generic Phases

Enterprise Environmental Factors

For certain domains or projects these do not make much impact

Enterprise Environmental Factors

External factors
- Marketplace conditions
- Political climate
- Government or industry standards
- Commercial databases

Internal factors
- Existing people and skills
- Organizational culture and structure
- Policies around people
  - Performance reviews
  - Training
  - Overtime policies
  - Retention policies
- Infrastructure
- Existing communication channels
- Any of Project management information systems
- To what extent company can tolerate risks
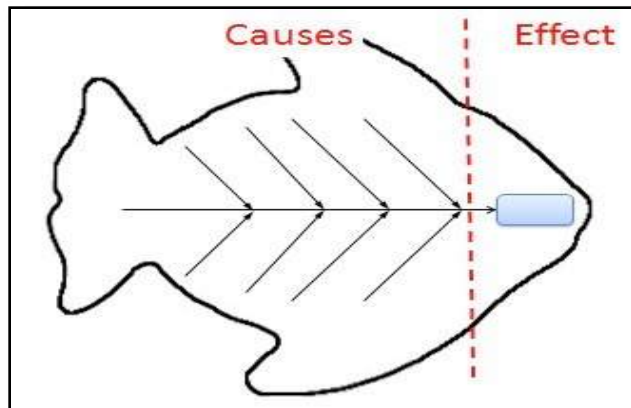
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- All environmental factors that can influence the project's success e.g. weather conditions, government regulations, political situation, market conditions etc
- Other e.g. is social impact assessment

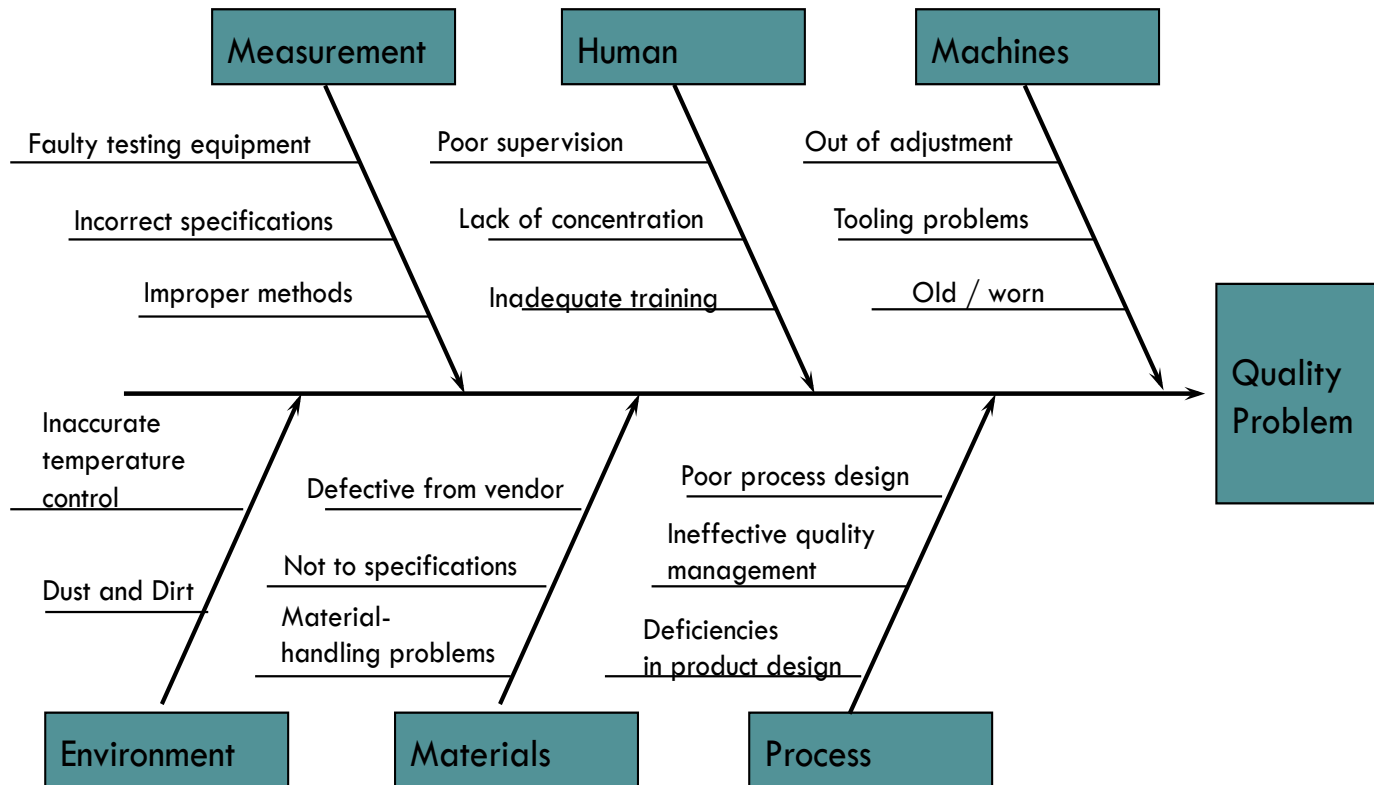UTM UNIVERSITI TEKNOLOGI MALAYSIA

Organisational Process Asset

- Contains:
  - Stakeholder registers – details, requirement versus expectations, influences, specific phase of project life cycle where stakeholder has the most influence or impact, internal/external
  - Stakeholder registers from previous projects
  - Lessons learned repository with information about the preferences, actions, and involvement of stakeholders

Tools

- Ishikawa/ fishbone diagram via brainstorming

Measurement

Human
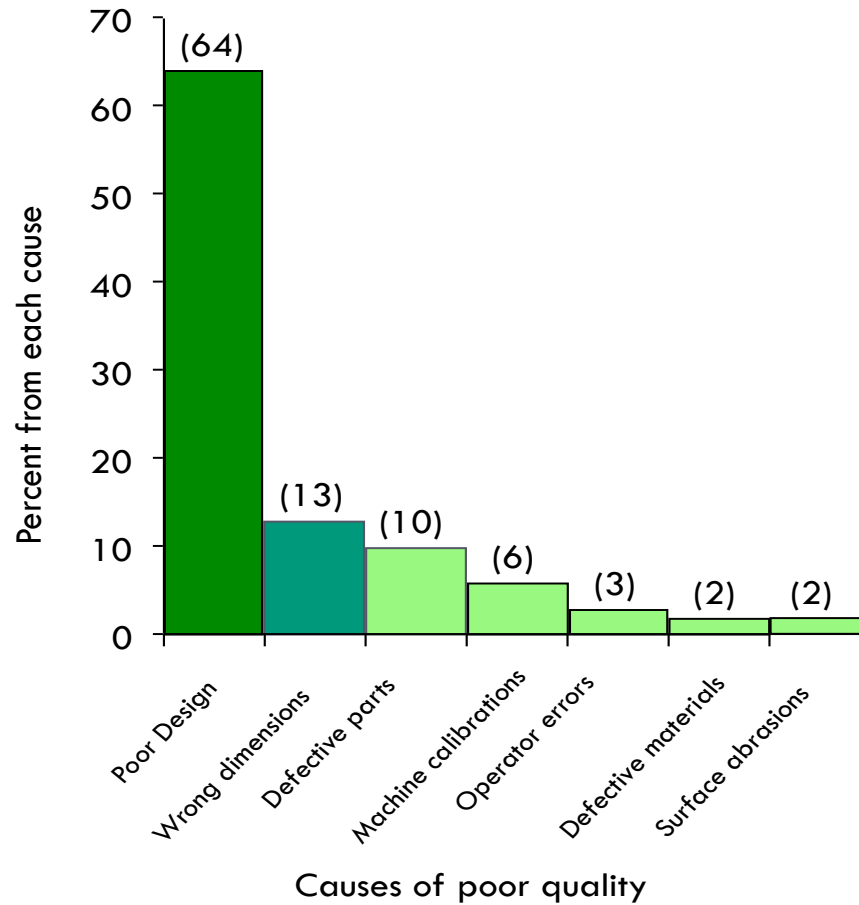
Machines

Faulty testing equipment

Poor supervision

Out of adjustment

Incorrect specifications

Lack of concentration

Tooling problems

Improper methods

Inadequate training

Old / worn

Quality
Problem

Inaccurate
temperature
control

Defective from vendor

Poor process design

Dust and Dirt

Not to specifications

Ineffective quality
management

Material-
handling problems

Deficiencies
in product design

Environment

Materials

Process

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Tools

- PESTEL analysis

P	E	S	T	E	L
- Government policy - Political stability - Corruption - Foreign trade policy - Tax policy - Labour law - Trade restrictions	- Economic growth - Exchange rates - Interest rates - Inflation rates - Disposable income - Unemploy-ment rates	- Population growth rate - Age distribution - Career attitudes - Safety emphasis - Health conscious-ness - Lifestyle attitudes - Cultural barriers	- Technology incentives - Level of innovation - Automation - R&D activity - Technological change - Technological awareness	- Weather - Climate - Environmen-tal policies - Climate change - Pressures from NGO's	- Discrimina-tion laws - Antitrust laws - Employment laws - Consumer protection laws - Copyright and patent laws - Health and safety laws

Tools

- Root Cause Analysis (RCA) by:
  – Defining the problems
  – Collecting data to proof the problems exist and its impact
  – Identifying possible cause
  – Identifying root cause
  – Recommending and implementing solutions
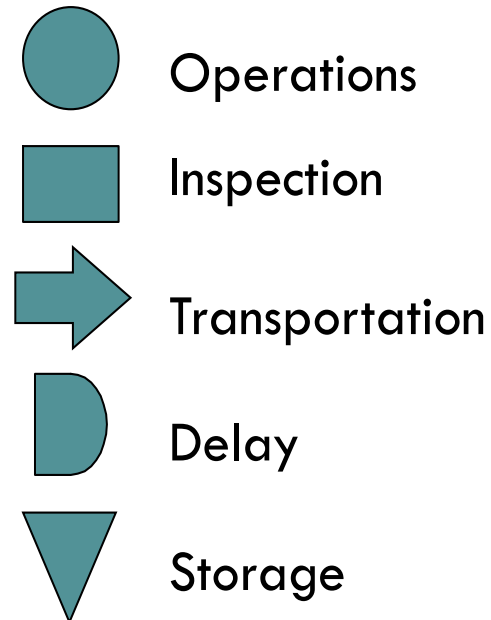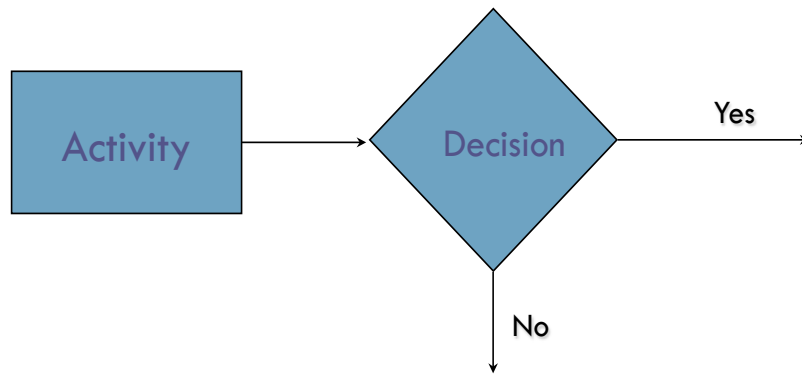
Tools

- Pareto analysis chart - Histogram that shows defects ranked from greatest to least, which states that 80% of the PROBLEMS come from 20% of the CAUSES based on the popular quote of Vilfredo Pareto (1848-1923), an Italian economist i.e. "20% of the population has 80% of the wealth":
  - Listing the problems
  - Identifying root cause
  - Scoring the the problems
  - Grouping the the problems by root cause
  - Summing up the score of each groups
  - Prioritising group problem
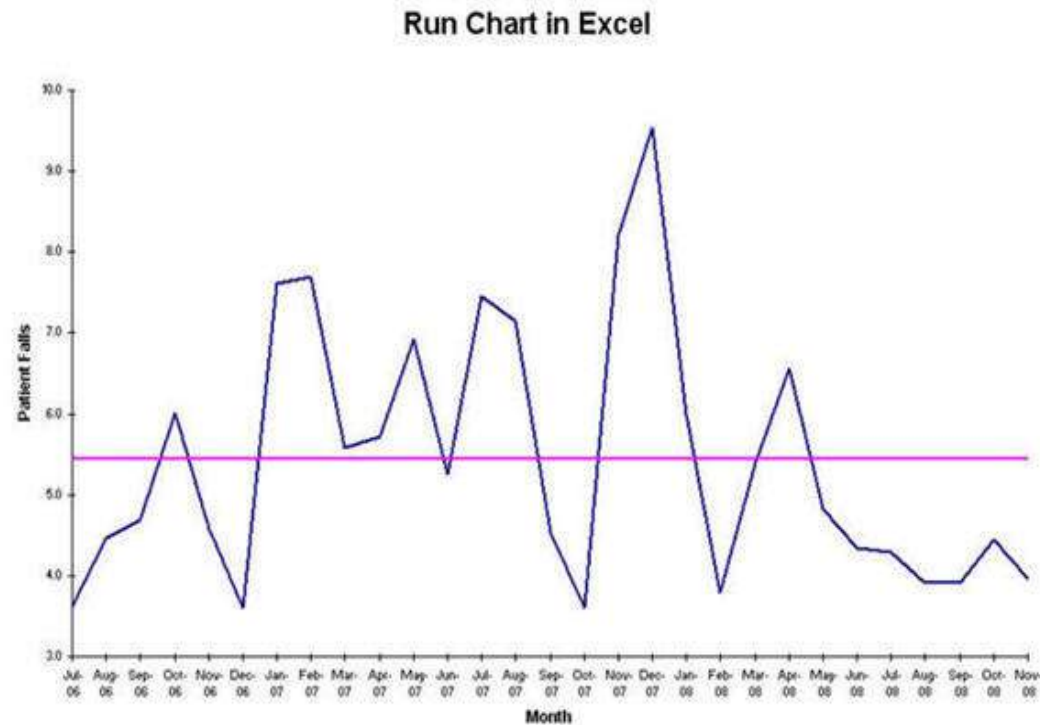 - Recommending and implementing solutions

Tools

Tools

- Flowcharting - Predicts where problems may happen

Activity → Decision

Yes

No

Operations

Inspection

Transportation

Delay

Storage

Tools

- Run chart - Known as line graph that displays process performance over time

Run Chart in Excel

Tools

● Scatter diagram - Shows correlation between two variables e.g. whether there is a relationship between project team and working late hours

Scatterplot for quality characteristic XXX
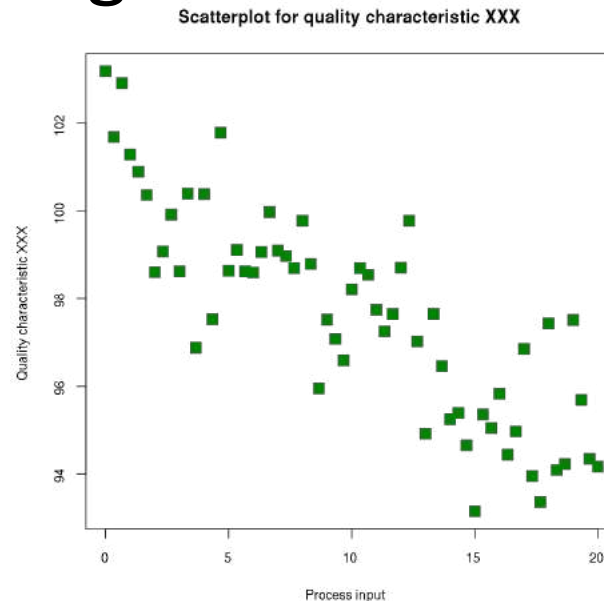
Process 2: Plan Stakeholders Engagement

Plan Stakeholder Engagement

Inputs

.1 Project charter
.2 Project management plan
- Resource management plan
- Communications management plan
- Risk management plan
.3 Project documents
- Assumption log
- Change log
- Issue log
- Project schedule
- Risk register
- Stakeholder register
.4 Agreements
.5 Enterprise environmental factors
.6 Organizational process assets

Tools & Techniques

.1 Expert judgment
.2 Data gathering
- Benchmarking
.3 Data analysis
- Assumption and constraint analysis
- Root cause analysis
.4 Decision making
- Prioritization/ranking
.5 Data representation
- Mind mapping
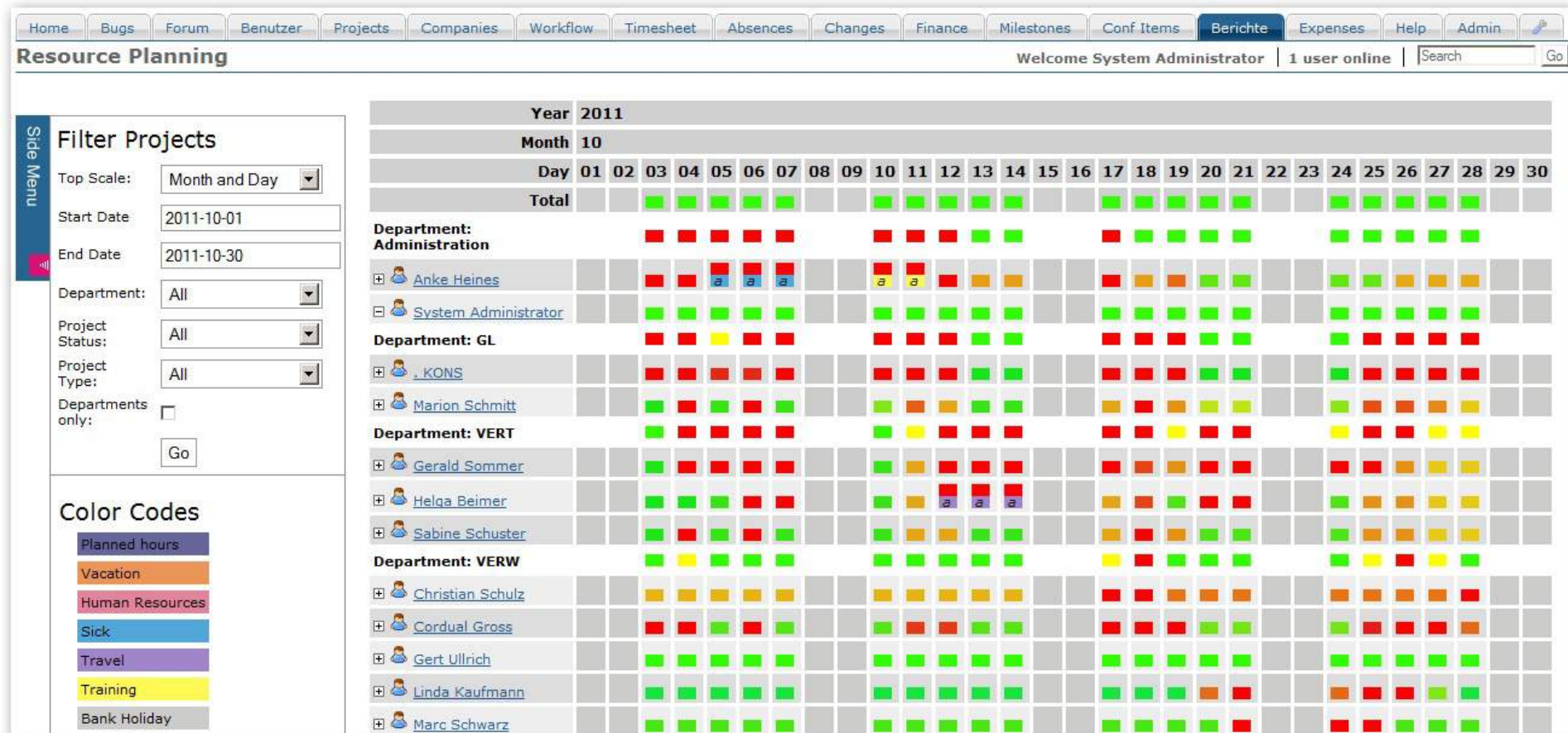- Stakeholder engagement assessment matrix
.6 Meetings

Outputs

.1 Stakeholder engagement plan

Process 2: Plan Stakeholders Engagement

- The process of developing approaches to involve project stakeholders based on their:
  - Needs
  - Expectation
  - Interests
  - Potential impact on the project
- On top of communications management plan, the following are needed:
  - Resource management plan
  - Risk management plan

Resource Management Plan

Risk Management Plan

	Rare	Unlikely	Possible	Likely	Almost Certain
Catastrophic					
Major					
moderate					
minor					
insignificant					

Severity / Probability

Low — Lorem ipsum dolor sit amet, consectetur adipiscing elit.

Moderate — Lorem ipsum dolor sit amet, consectetur adipiscing elit.

High — Lorem ipsum dolor sit amet, consectetur adipiscing elit.

Extreme — Lorem ipsum dolor sit amet, consectetur adipiscing elit.

Process 2: Plan Stakeholders Engagement

- Communications management plan, resource management plan and risk management plan are used to **produce the stakeholder engagement plan matrix** that classify stakeholders as:
  - Unaware – Unaware of the project and potential impacts.
  - Resistant - Aware of the project and potential impacts but resistant to any changes that may occur, unsupportive
  - Neutral - Aware of the project, but neither supportive nor unsupportive
  - Supportive - Aware of the project and potential impacts and supportive of the work and its outcomes
  - Leading - Aware of the project and potential impacts and actively engaged in ensuring that the project is a success

Stakeholder Engagement Plan Matrix
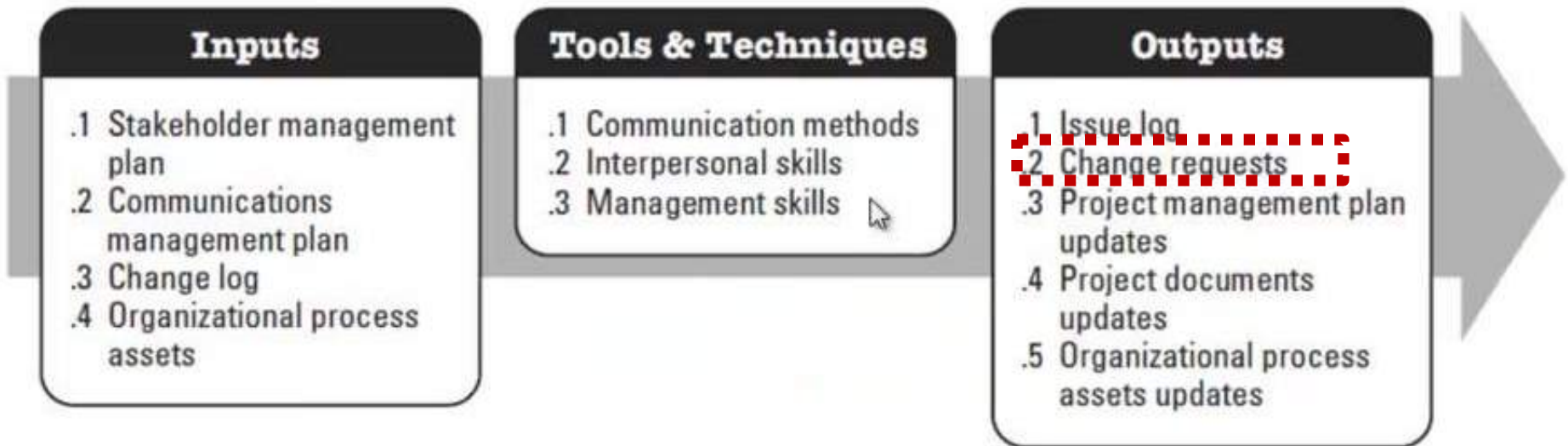
Stakeholder	Unaware	Resistant	Neutral	Supportive	Leading
Stakeholder 01	C			D	
Stakeholder 02			C	D	
Stakeholder 03				CD	

C: Current Engagement

D: Desired Engagement

Process 3: Manage Stakeholders Engagement

Inputs

.1 Stakeholder management plan
.2 Communications management plan
.3 Change log
.4 Organizational process assets

Tools & Techniques

.1 Communication methods
.2 Interpersonal skills
.3 Management skills

Outputs

.1 Issue log
.2 Change requests
.3 Project management plan updates
.4 Project documents updates
.5 Organizational process assets updates

Process 3: Manage Stakeholders Engagement

- The process of communicating and working with stakeholders to:
  - Meet their needs and expectations
  - Address issues
  - Foster appropriate stakeholder engagement involvement
- Aims to produce the change management plan that describes the process for submitting, evaluating and implementing changes to the project

Change Management Plan

Change Management Plan Template

	Task	Status	Remarks	Timeline									
				12-Jun-17	19-Jun-17	26-Jun-17	03-Jul-17	10-Jul-17	17-Jul-17	24-Jul-17	31-Jul-17	07-Aug-17	14-Aug
1	Change Assessment	In Process	Potential delay of one week (see red box in										
1.1	Current Situation Characterization	In Process	Progressing according to schedule										
1.1.1	Interviewing the major users of the current system	Completed	22 Current users were interviewed										
1.1.2	Mapping out the current situation	In Process	Progressing according to schedule										
1.2	Assessing Required Changes	In Process	Potential delay of one week (see red box in timeline section)										
1.2.1	Mapping the new systems requirements	Completed											
1.2.2	Approval of the new map	In Process	Progressing according to schedule										
1.2.3	Putting together a work plan for the new system	Not Started	Potential delay of one week (see red box in timeline section)										
2	Change Impacts	In Process	Progressing according to schedule										
2.1	Assessing who will be impacted	Completed											
2.2	Estimating the positive impacts on the company	Completed											
2.3	Presenting the impacts to the key stakeholders	Not Started	Planned to commence on the 10th of July 2017										
2.4	Go / No-Go approval	Not Started											
3	Stakeholder Engagement	In Process	Progressing according to schedule										
3.1	Agreeing on the frequency of the initial status meetings	In Process	Progressing according to schedule										
3.2	Approving the format of the status reports	In Process	Progressing according to schedule										
4	Communication Plan	Not Started											
4.1	Agree on communication medium (E-mails, meetings, etc.)	Not Started											
4.2	Agree on frequency of communications	Not Started											
5	Change Readiness	Not Started											

Techno-PM
Project Management Templates

ADKAR Change Management Plan

A	D	K	A	R
Awareness	**Desire**	**Knowledge**	**Ability**	**Reinforcement**

- All stakeholders (including employees) must be aware of the business reasons for change
- Awareness is the goal and outcome of initial messages related to an organizational change

- All stakeholders must have the desire to participate and fully support change
- Desire is the goal and outcome of sponsorship and change resistance management

- All stakeholders must have a thorough understanding of the change process and its ultimate objectives
- Knowledge is the goal and outcome of training and coaching

- All stakeholders should have the ability to realize and implement change at the required performance level
- Due to the ability to learn new skills and by managing behavior, change is accepted
- Ability is the goal and outcome of additional coaching, practice and time.

- Reinforcement to sustain change makes it clear for all employees that there is no turning back
- Reinforcement is the goal and outcome of adoption measurement, corrective action, and recognition of successful change

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Skills in Managing Stakeholders Engagement

- Leadership - communicate the vision and inspire stakeholders to support the work and outcomes of the project

- Conflict management - project manager should ensure that conflicts are resolved in a timely manner.

- Cultural awareness - consider cultural differences and the requirements of stakeholders

- Negotiation - achieve support or agreement that supports the work of the project or its outcomes and to resolve conflicts **within the team or with other stakeholders**

- Observation/conversation - stay in touch with the work and attitudes of PMT and other stakeholders.

- Political awareness - understanding the power relationships within and around the project

- Networking - ensure access to information about levels of engagement of stakeholders

- Active listening - reduce misunderstandings and miscommunication

Culture Differences amongst Stakeholders Worldwide

- Americans place an exceptionally high priority on time, viewing time as an asset. Many Asians place more worth on relationships.

- Personal touching and distance norms differ around the world. Americans generally stand about three feet from each other when carrying on business conversations, but Arabs and Africans stand about one foot apart.

- Family roles and relationships vary in different countries.

- Business and daily life in some societies are governed by religious factors.

- Time spent with the family and the quality of relationships are more important in some cultures than the personal achievement and accomplishments espoused by the traditional U.S. manager.

- Many cultures around the world value modesty, team spirit, collectivity, and patience much more than competitiveness and individualism, which are so important in the United States.

Culture Differences amongst Stakeholders Worldwide

- Punctuality is a valued personal trait when conducting business in the United States, but it is not revered in many of the world's societies.

- To prevent social blunders when meeting with managers from other lands, one must learn and respect the rules of etiquette of others.

- Americans often do business with individuals they do not know, unlike businesspersons in many other cultures.

- Italians, Germans and French generally do not soften up executives with praise before they criticise. Americans do soften up folks, and this practice seems manipulative to Europeans.

- Israelis are accustomed to fast-paced meetings and have little patience for American informality and small talk.

- British executives often complain that American executives chatter too much. Informality, egalitarianism (equality), and spontaneity from Americans in business settings surprise many foreigners.

Culture Differences amongst Stakeholders Worldwide

- Europeans feel they are being treated like children when asked to wear name tags by Americans.

- Executives in India are used to interrupting one another.

- When negotiating orally with Malaysian or Japanese executives, it is appropriate to allow periodically for a time of silence.

- Refrain from asking foreign managers questions such as "How was your weekend?" That is intrusive to foreigners, who tend to regard their business and private lives as totally separate.

- Mexican employers seek workers who are agreeable, respectful, and obedient, rather than innovative, creative, and independent.

- Mexicans do not feel forced to follow rules that are not associated with a particular person in authority they work for or know well.

- Mexicans are very status conscious so business titles and rank are important.

Culture Differences amongst Stakeholders Worldwide

- The Japanese place great importance on group loyalty and consensus, a concept called Wa.

- When confronted with disturbing questions or opinions, Japanese managers tend to remain silent.

- Most Japanese managers are reserved, quiet, distant, and introspective, whereas most U.S. managers are talkative, insensitive, impulsive, direct, and individual oriented.

- Unlike Americans, Japanese prefers to do business on the basis of personal relationships rather than impersonally speaking over the phone or by written correspondence.

- Avoid embarrassing a Brazilian by criticising an individual publically. That causes that person to lose face with all others at a business meeting.

- Appointments are commonly cancelled or changed at the last minute in Brazil, so do not be surprised or get upset.

Culture Differences amongst Stakeholders Worldwide

- Germans are like Americans in that they do not need a personal relationship to do business. They are more interested in a businessperson's academic credentials and their company's credentials.
- German meetings adhere to strict agendas, including starting and ending times.
- Egyptians prefer to do business with those they know and respect, so expect to spend time cultivating a personal relationship before business is conducted.
- In Egypt, business moves at a slow pace and society is extremely bureaucratic.
- The Chinese rarely do business with companies or people they do not know. Your position on an organisational chart is extremely important in business relationships.
- Arriving late to a meeting is an insult to Chinese and could negatively affect your relationship.

Culture Differences amongst Stakeholders Worldwide

- Meetings with Chinese require patience because mobile phones ring frequently and conversations tend to be loud.

- People in India do not like to say "no," verbally or nonverbally.

- Rather than disappoint you, Indian often will say something is not available, or will offer you the response that they think you want to hear, or will be vague with you.

- Indians prefer to do business with those whom they have established a relationship built upon mutual trust and respect.

- Punctuality is important for Indians.

- Indians generally do not trust the legal system and someone's word is often sufficient to reach an agreement.

Process 4: Monitor Stakeholders Engagement

Monitor Stakeholder Engagement

Inputs

.1 Project management plan
  - Resource management plan
  - Communications management plan
  - Stakeholder engagement plan
.2 Project documents
  - Issue log
  - Lessons learned register
  - Project communications
  - Risk register
  - Stakeholder register
.3 Work performance data
.4 Enterprise environmental factors
.5 Organizational process assets

Tools & Techniques

.1 Data analysis
  - Alternatives analysis
  - Root cause analysis
  - Stakeholder analysis
.2 Decision making
  - Multicriteria decision analysis
  - Voting
.3 Data representation
  - Stakeholder engagement assessment matrix
.4 Communication skills
  - Feedback
  - Presentations
.5 Interpersonal and team skills
  - Active listening
  - Cultural awareness
  - Leadership
 - Networking
  - Political awareness
.6 Meetings

Outputs

.1 Work performance information
.2 Change requests
.3 Project management plan updates
  - Resource management plan
  - Communications management plan
  - Stakeholder engagement plan
.4 Project documents updates
  - Issue log
  - Lessons learned register
  - Risk register
  - Stakeholder register

Process 4: Monitor Stakeholders Engagement

- The process of:

    - Monitoring project stakeholder relationships

    - Tailoring strategies for engaging stakeholders through the modification of engagement strategies and plans

- One of the important output is work performance information that is related to the earned value of the project

Earned Value Management
Work Performance Information

Actual Cost

Planned Value

Earned Value

Cost

Time
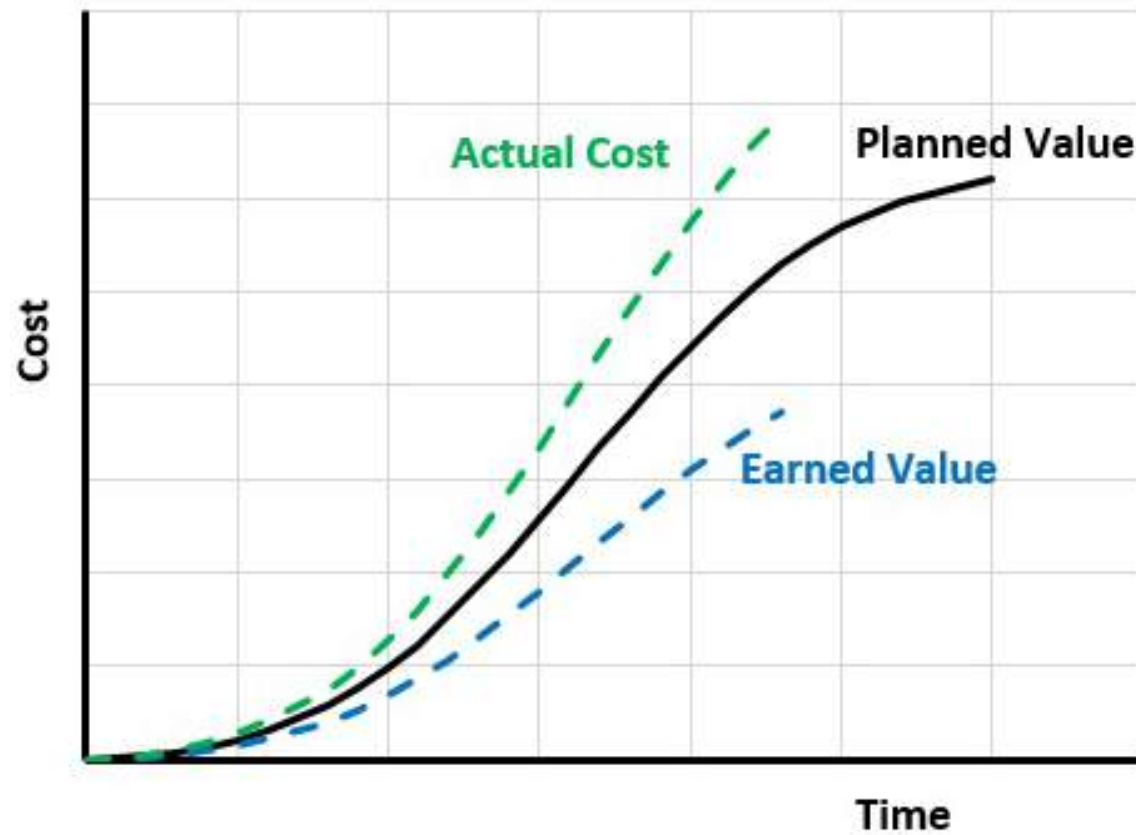
Task 1

- Work in a group. This task is worth 20 marks
- Based on the Torre David case study:
  - Determine the stakeholders based on the stakeholder map of internal and external stakeholders
  - Investigate the stakeholders involvement in the lifecycle of this project/operation
  - Examine whether the stakeholders management approach throughout this project/operation is a success/failure
  - Assess the factors that most influence a successful/failed stakeholders management approach adopted

- https://www.youtube.com/watch?v=v1p9jlQUW0k

Knowledge Area 1: Integration Management

Element of Stakeholders Management in Project Integration Management

- Through Project Integration Management, project managers must coordinate all of the other knowledge areas throughout a project's life cycle, including the stakeholders

- Many new project managers have trouble looking at the "big picture" and want to focus on too many details

- E.g. Sony and Siemen do it all while Apple Inc outsources to various suppliers and OEMs to pass over costs to customer i.e. Corning gorilla glass manufactured in China by Taiwanese

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Element of Stakeholders Management in Project Integration Management

- Leadership is crucial, where there can only be one responsible project leader

- Project Manager is supported by a Project Management Office (PMO), a management structure standardising project-related governance process, facilitating sharing of resources, method, tool and technique
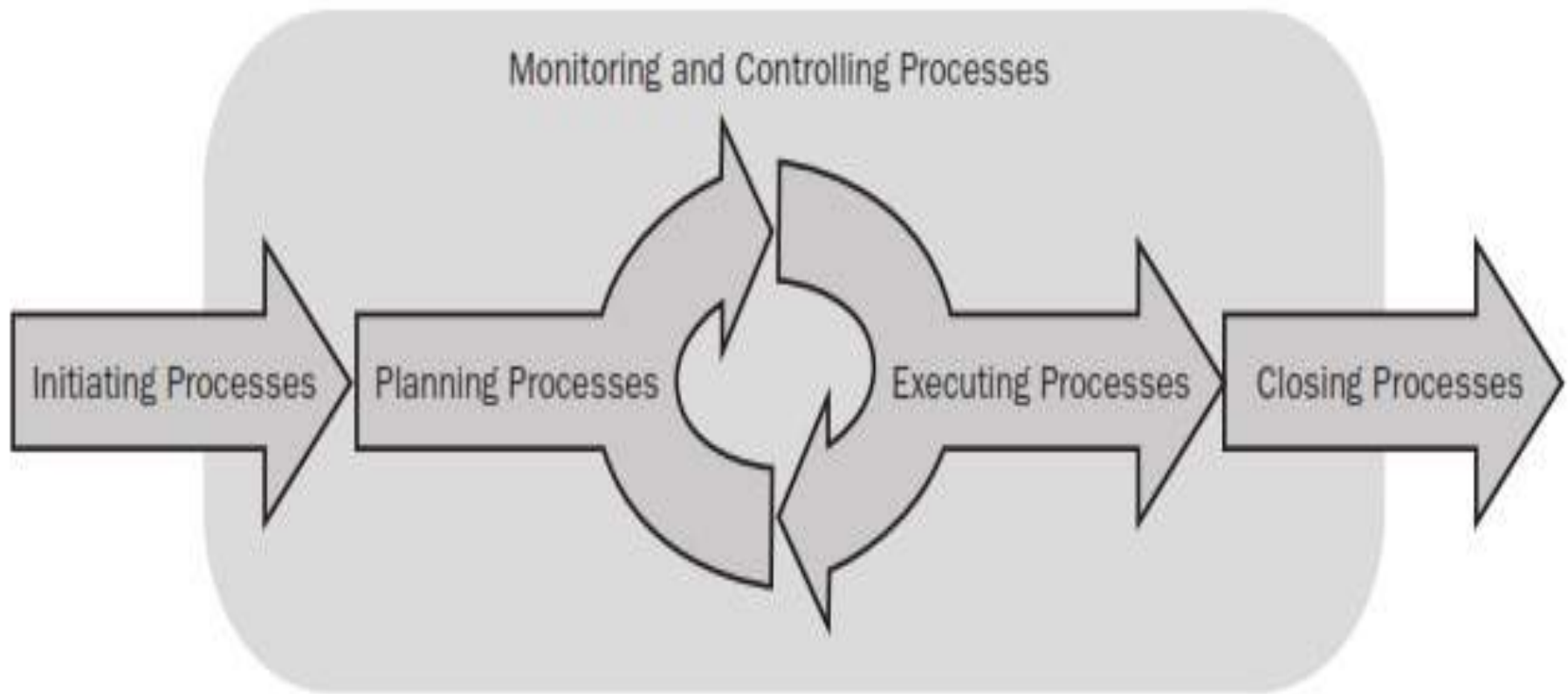
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Project Manager vs PMO

Project Manager	PMO
Project focus Manages individual project	Overall organisational focus and company goal Manages methodology, standard, metrics, shared resources etc a) Supportive PMO – consultative role b) Controlling PMO – require compliance to governance c) Directive PMO – directly manage projects

- https://www.youtube.com/watch?v=slCRDW5kShU

- https://www.youtube.com/watch?v=LuVPnW0s3Vo

- https://www.youtube.com/watch?v=gBnvGS4u3F0

Project Management Process (IPEC+MC)

Process Groups Interact in a Phase or Project

SWOT Analysis – Initiating Process

SWOT ANALYSIS

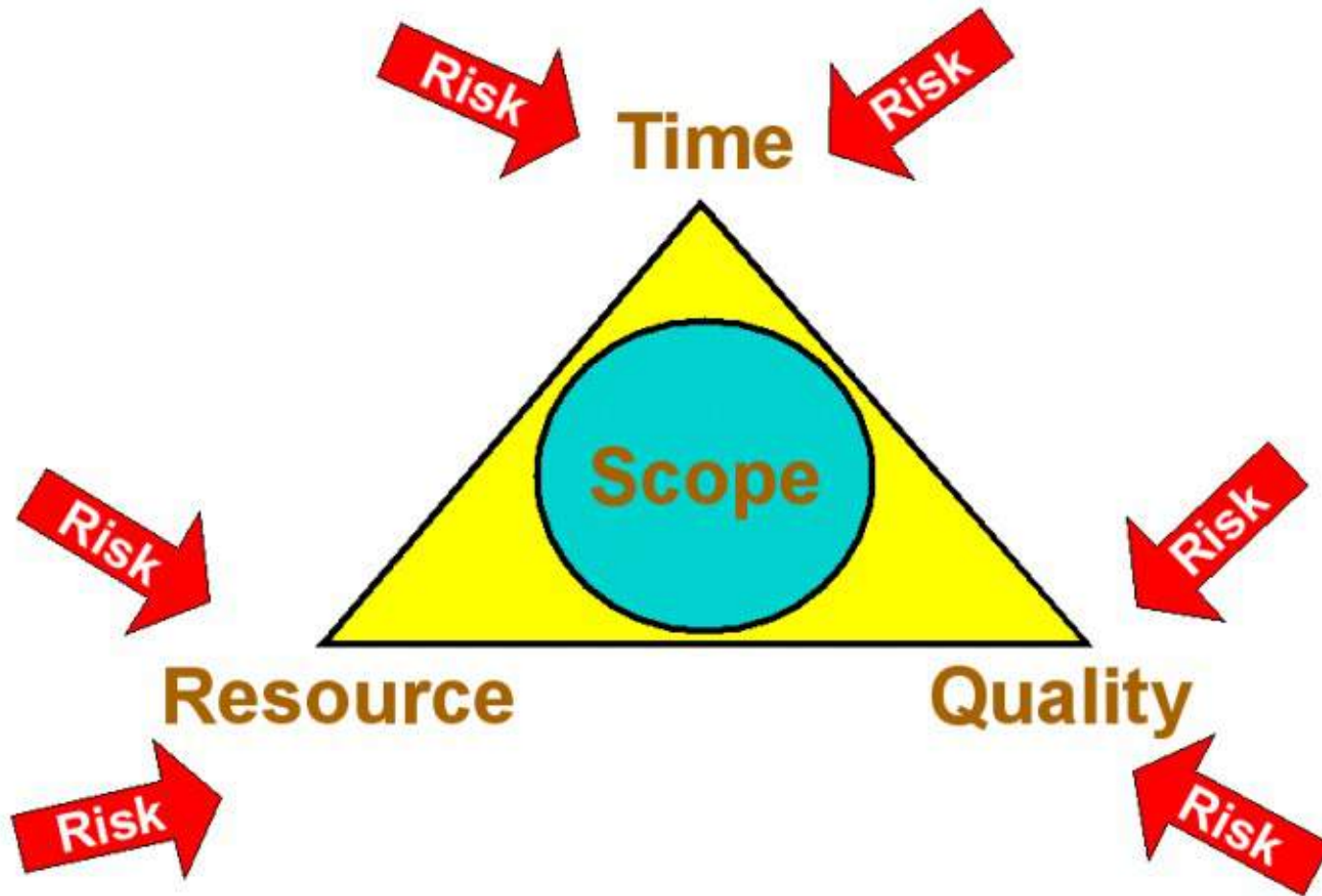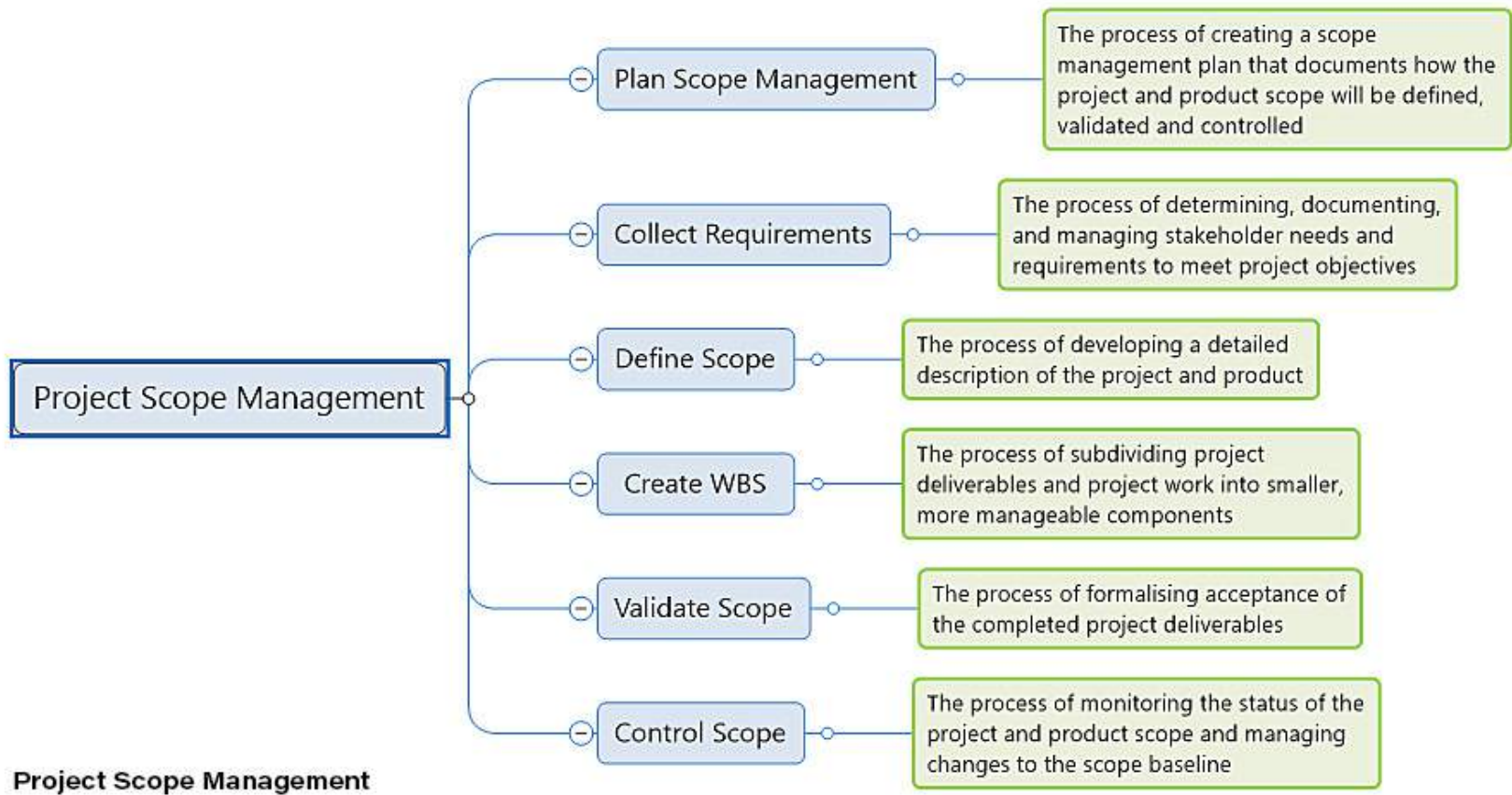|	Helpful to achieving the objective	Harmful to achieving the objective
Internal origin (attributes of the organization)	Strengths	Weaknesses
External origin (attributes of the environment)	Opportunities	Threats

Task 4

- In 10 minutes, develop the SWOT analysis on the delivery of MRSC2073 Engineering Stakeholders Management. You are to present this within 2 minutes.

Knowledge Area 2: Scope Management

Element of Stakeholders Management in Project Scope Management

Project Scope Management

Plan Scope Management	The process of creating a scope management plan that documents how the project and product scope will be defined, validated and controlled
Collect Requirements	The process of determining, documenting, and managing stakeholder needs and requirements to meet project objectives
Define Scope	The process of developing a detailed description of the project and product
Create WBS	The process of subdividing project deliverables and project work into smaller, more manageable components
Validate Scope	The process of formalising acceptance of the completed project deliverables
Control Scope	The process of monitoring the status of the project and product scope and managing changes to the scope baseline

Knowledge Area 3: Schedule Management

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Element of Stakeholders Management in Project Schedule Management

- Create project calendar
- Define WBS
- Define the activities
- Determine sequence of activities
- Estimate activities duration
- Estimate activities resources
- Determine constraints and limitation
- Develop schedule
- Control

It involves BOTH project planning and scheduling

Project Schedule Management

- **Project planning**
  - Process of identifying all the activities necessary to successfully complete the project
  - Technique e.g. WBS

- **Project scheduling**
  - Process of determining sequential order of planned activities, assigning realistic durations to each activity, and determining start and finish dates for each activity
  - Technique e.g. Gantt chart, PERT and CPM

Project Planning Technique: WBS

- A work breakdown structure (WBS) is an outcome-oriented analysis of the work involved in a project that defines the total scope of the project

- A **graphical display** of the project that shows division of work in a **multilevel system**

- The concept of the WBS is simple: **in order to manage a whole project, one must manage/control each of its part**

- It is a foundation document in project management because it provides the basis for **planning** and managing project **schedules**, costs and changes

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Project Planning Technique: WBS

- WBS defines:
  - Work to be performed
  - The needed expertise
  - Selection of the project team
  - Base for project scheduling and control
- The development of WBS is a continuing process:
  - Starts when the project is first assigned to the project manager
  - Continues until all work packages have been defined

Sample of Intranet WBS Organised by Product

Intranet

Web Site Design	Home Page Design	Marketing Pages	Sales Pages
Site Map	Text	Text	Text
Graphic Design	Images	Images	Images
Programs	Hyperlinks	Hyperlinks	Hyperlinks
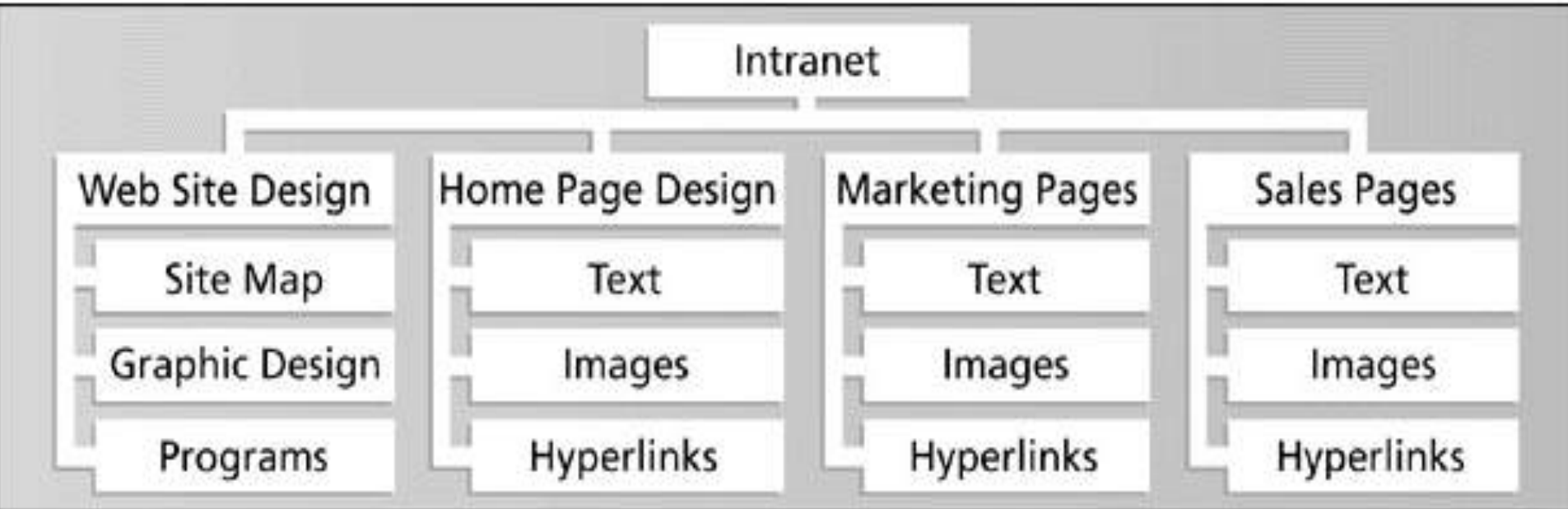
Sample of Intranet WBS Organised by Phase
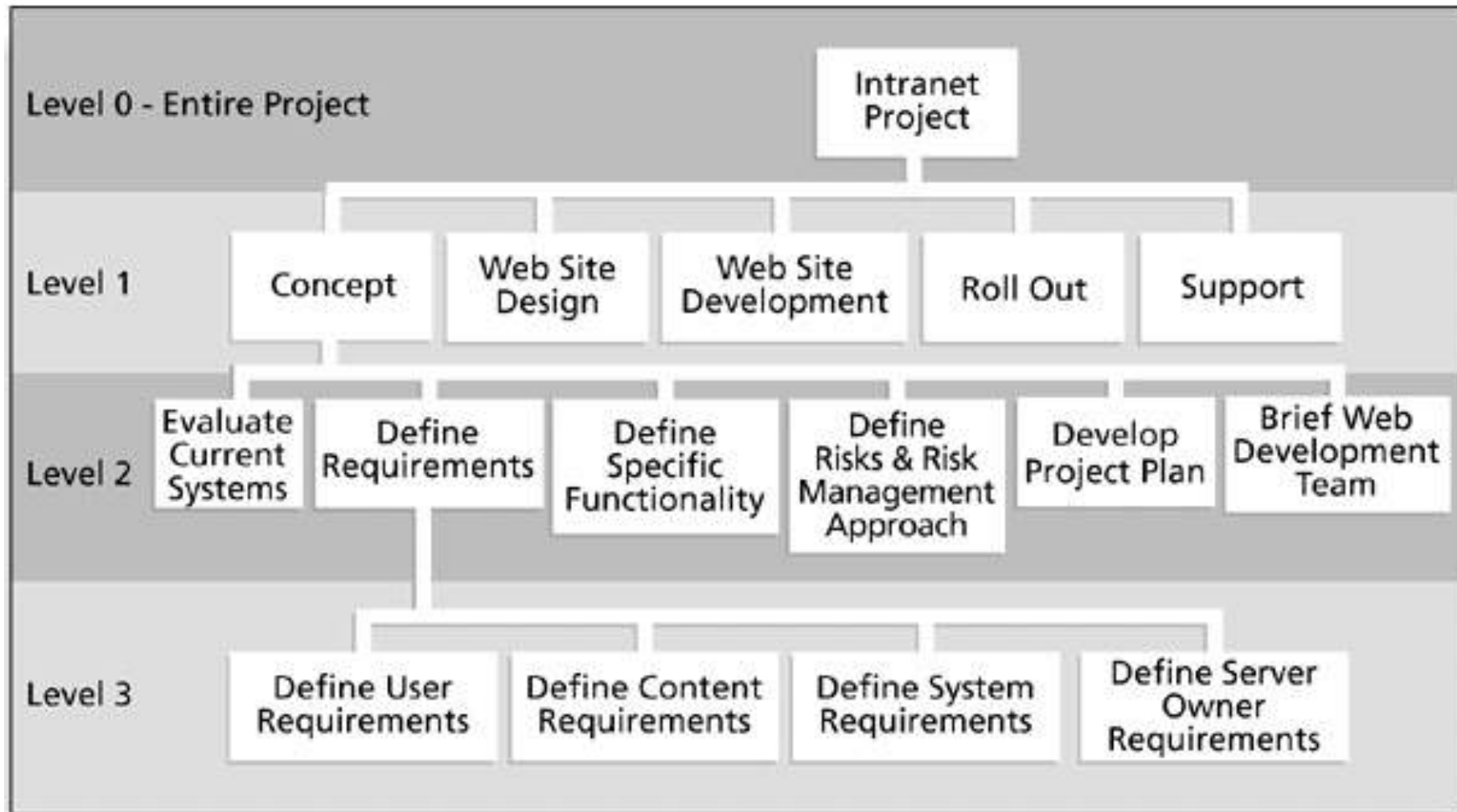
Intranet WBS in Tabular Form

1.0 Concept
        1.1 Evaluate current systems
        1.2 Define Requirements
                1.2.1 Define user requirements
                1.2.2 Define content requirements
                1.2.3 Define system requirements
                1.2.4 Define server owner requirements
        1.3 Define specific functionality
        1.4 Define risks and risk management approach
        1.5 Develop project plan
        1.6 Brief web development team
2.0 Web Site Design
3.0 Web Site Development
4.0 Roll Out
5.0 Support

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Intranet WBS and Gantt Chart in Microsoft Project 98

WBS   **Gantt Chart**
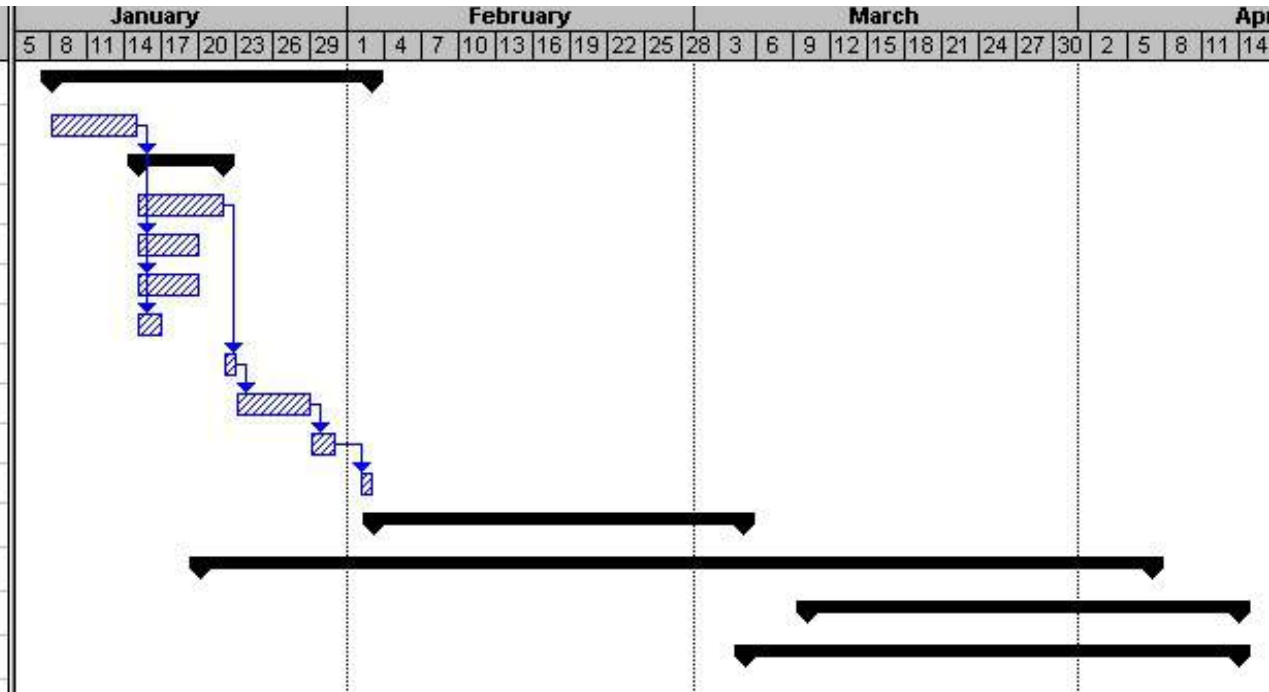
Knowledge Area 4: Cost Management

Element of Stakeholders Management in Project Cost Management

- One of the important output is Process 4: Monitor Stakeholders Engagement is **work performance information** that is related to the **earned value of the project**

- Earned value is a **predetermined** amount of *value* i.e. budget, that is claimed, or *earned*, when the corresponding work is accomplished

# Earned Value Management System (EVMS)

- Measure project performance

- Integrate project scope, cost and schedule

- Allow project manager and team tyo assess project performance/progress and forecast future performance

Earned Value Management System (EVMS)

Components

- Planned Value (PV)
  - How much work you planned to have accomplished at a given point in time

- Actual Cost (AC)
  - How much work you have actually spent at a given point in time

- Earned Value (EV)
  - The value in terms of your base budget of what you have accomplished at a given point in time (or, % complete X Planned Value)

Example
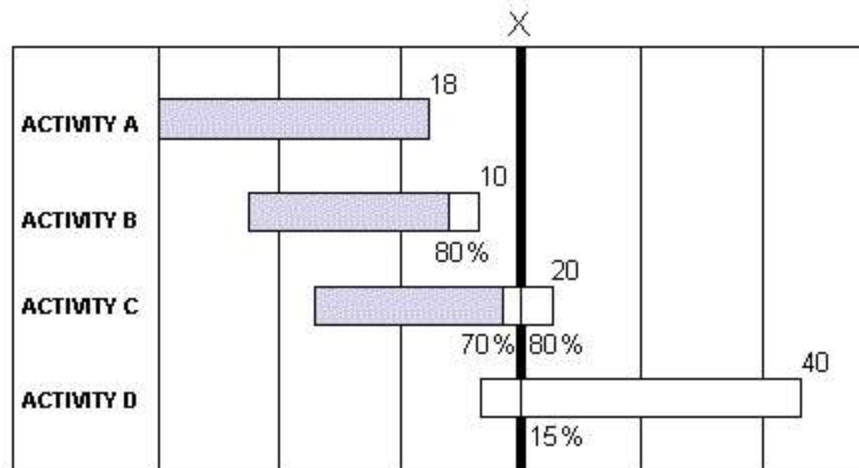
On Day X:

➢ PLANNED VALUE = 18 + 10 + 16 + 6 = 50

➢ EARNED VALUE = 18 + 8 + 14 + 0 = 40

➢ ACTUAL COST = 45 (from your project tracking - not evident in above chart)

Knowledge Area 5: Quality Management

Element of Stakeholders Management in Project Quality Management

- Objectives:
  - Improve quality of project
  - Achieve maximum **stakeholders satisfaction**

- Philosophies:
  - Process improvement
  - Customer and supplier involvement
  - Teamwork and training to achieve customer satisfaction
  - Cost effectiveness
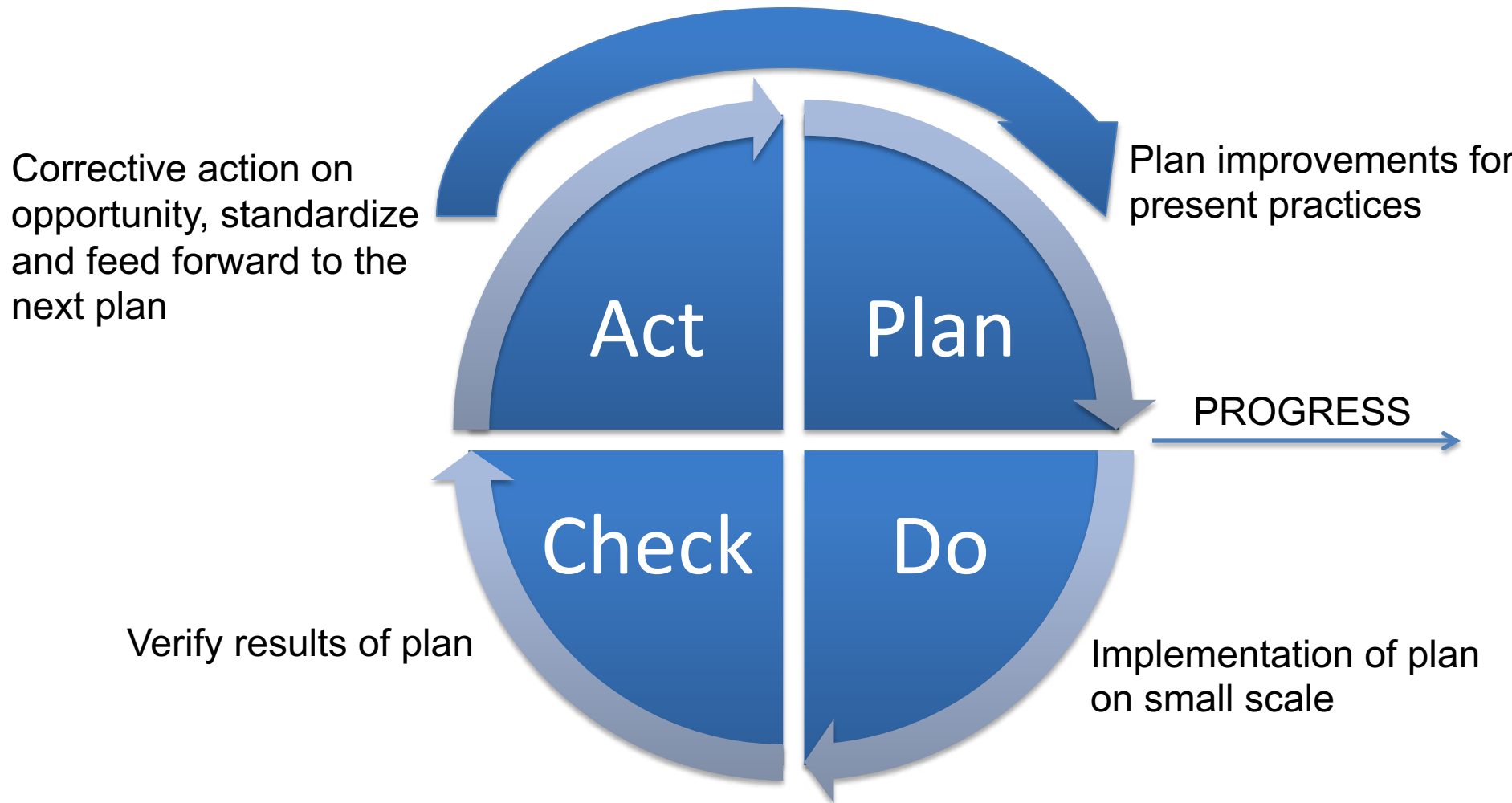 - Defect free quality work

Steps of Quality Management

- Preparation and planning
- Implementation of plan
- Measurement and verification of implementation
- Evaluation of results

Stakeholders Satisfaction

- Function of project is to provide stakeholders, particularly the clients with the products, services, facilities or structures that meet their need

- Ensuring quality at each stage in the project (from initiation to closure) will satisfy the clients

- Thus, project manager and PMT function to:
  - Maintain and incrementally improve current methods and procedures through process control
 - Direct efforts to achieve technological advances through innovation

Quality Management Process (PDCA)

Corrective action on opportunity, standardize and feed forward to the next plan

Plan improvements for present practices

Act

Plan

PROGRESS

Check

Do

Verify results of plan

Implementation of plan on small scale

Knowledge Area 6: Resource Management

Element of Stakeholders Management in Project Resource Management
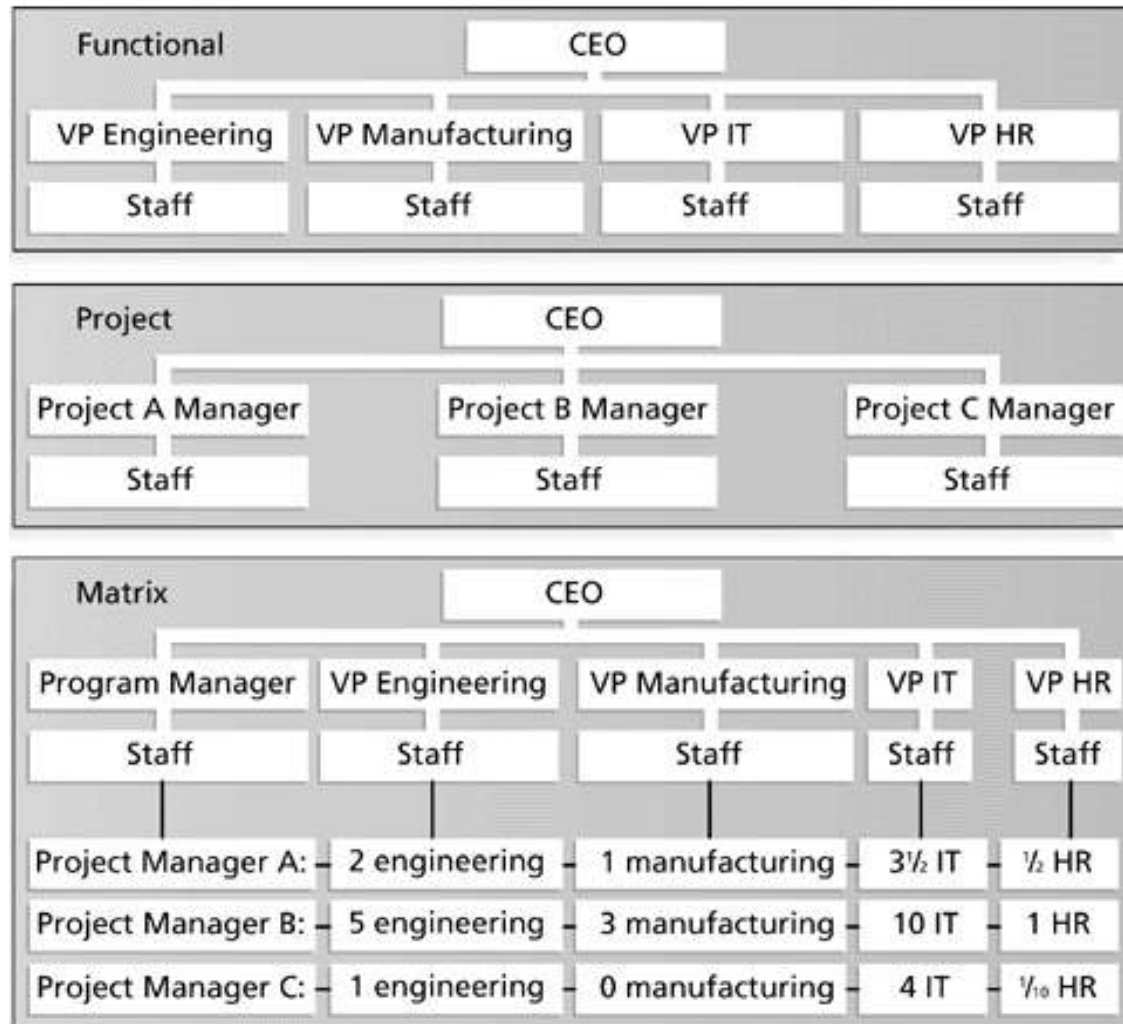
Functional Structure

Functional structure

- Groups tasks and activities by **business function**, such as production/operations, marketing, finance/accounting, research and development, and management information systems

Functional Structure

FIGURE 7-3

Netflix's Organizational Structure

Advantages and Disadvantages of a Functional Organisational Structure

TABLE 7-7   Advantages and Disadvantages of a Functional Organizational Structure

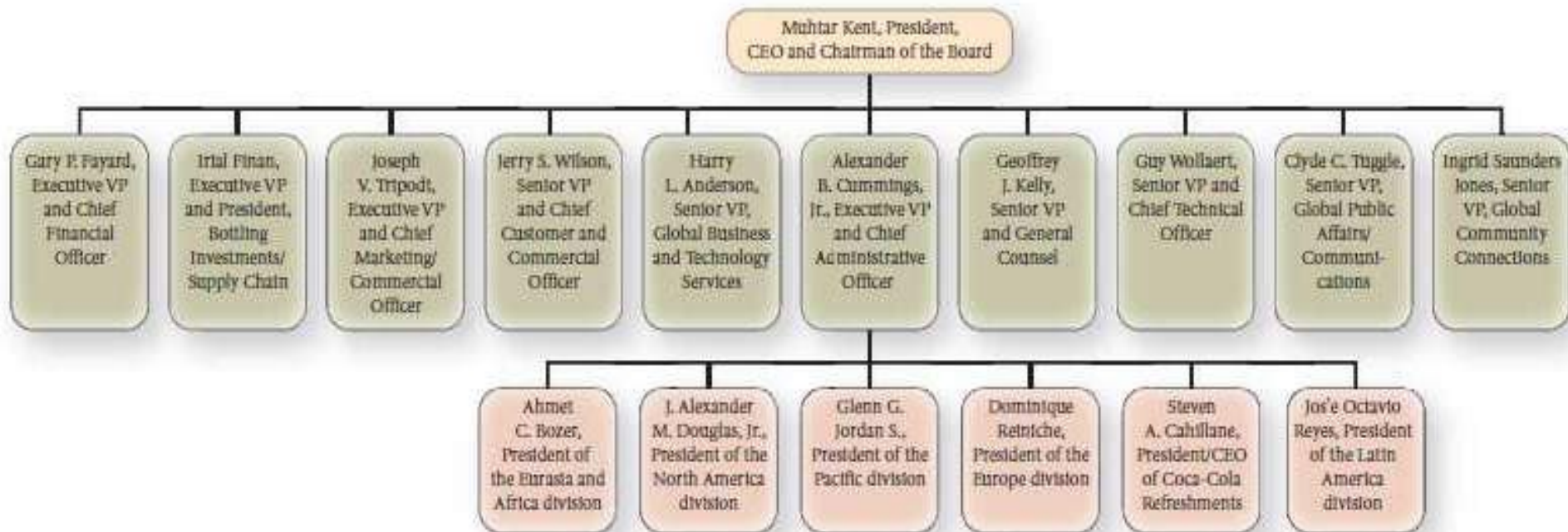| Advantages	Disadvantages
1. Simple and inexpensive	1. Accountability forced to the top
2. Capitalizes on specialization of business activities such as marketing and finance	2. Delegation of authority and responsibility not encouraged
3. Minimizes need for elaborate control system	3. Minimizes career development
4. Allows for rapid decision making	4. Low employee/manager morale
	5. Inadequate planning for products and markets
	6. Leads to short-term, narrow thinking
	7. Leads to communication problems

Divisional Structure

❖**Divisional structure**

● Functional activities are performed both centrally and in each separate division

● Division of geographic area, product or service, customer, process

● E.g. GE's employees belong to 1 of 6 product divisions (Energy, Capital, Home and Business Solutions, Health Care, Aviation and Transportation)

Divisional Structure

FIGURE 7-4

Coca-Cola Company Executive Officers

Source: Coke's 2010 Annual Report.

Advantages and Disadvantages of a Divisional Organisational Structure

TABLE 7-8 Advantages and Disadvantages of a Divisional Organizational Structure

Advantages	Disadvantages
1. Accountability is clear	1. Can be costly
2. Allows local control of local situations	2. Duplication of functional activities
3. Creates career development chances	3. Requires a skilled management force
4. Promotes delegation of authority	4. Requires an elaborate control system
5. Leads to competitive climate internally	5. Competition among divisions can become so intense as to be dysfunctional
6. Allows easy adding of new products or regions	6. Can lead to limited sharing of ideas and resources
7. Allows strict control and attention to products, customers, and/or regions	7. Some regions/products/customers may receive special treatment

Matrix Structure

❖ **Matrix structure**

- Most complex of all designs because it depends upon both vertical and horizontal flows of authority and communication

- Yet heavily rely on horizontal relationship

- High flexibility as it creates cross-functional teams that each works on a different project

- Create spirit of teamwork and collaboration

Matrix Structure

❖For a matrix structure to be effective, organizations need participative planning, training, clear mutual understanding of roles and responsibilities, excellent internal communication, and mutual trust and confidence

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Advantages and Disadvantages of a Matrix Structure

TABLE 7-9 Advantages and Disadvantages of a Matrix Structure

Advantages	Disadvantages
1. Project objectives are clear	1. Requires excellent vertical and horizontal flows of communication
2. Employees can clearly see results of their work	2. Costly because creates more manager positions
3. Shutting down a project is easily accomplished	3. Violates unity of command principle
4. Facilitates uses of special equipment/ personnel/facilities	4. Creates dual lines of budget authority
5. Functional resources are shared instead of duplicated as in a divisional structure	5. Creates dual sources of reward/punishment
	6. Creates shared authority and reporting
	7. Requires mutual trust and understanding

Matrix Structure
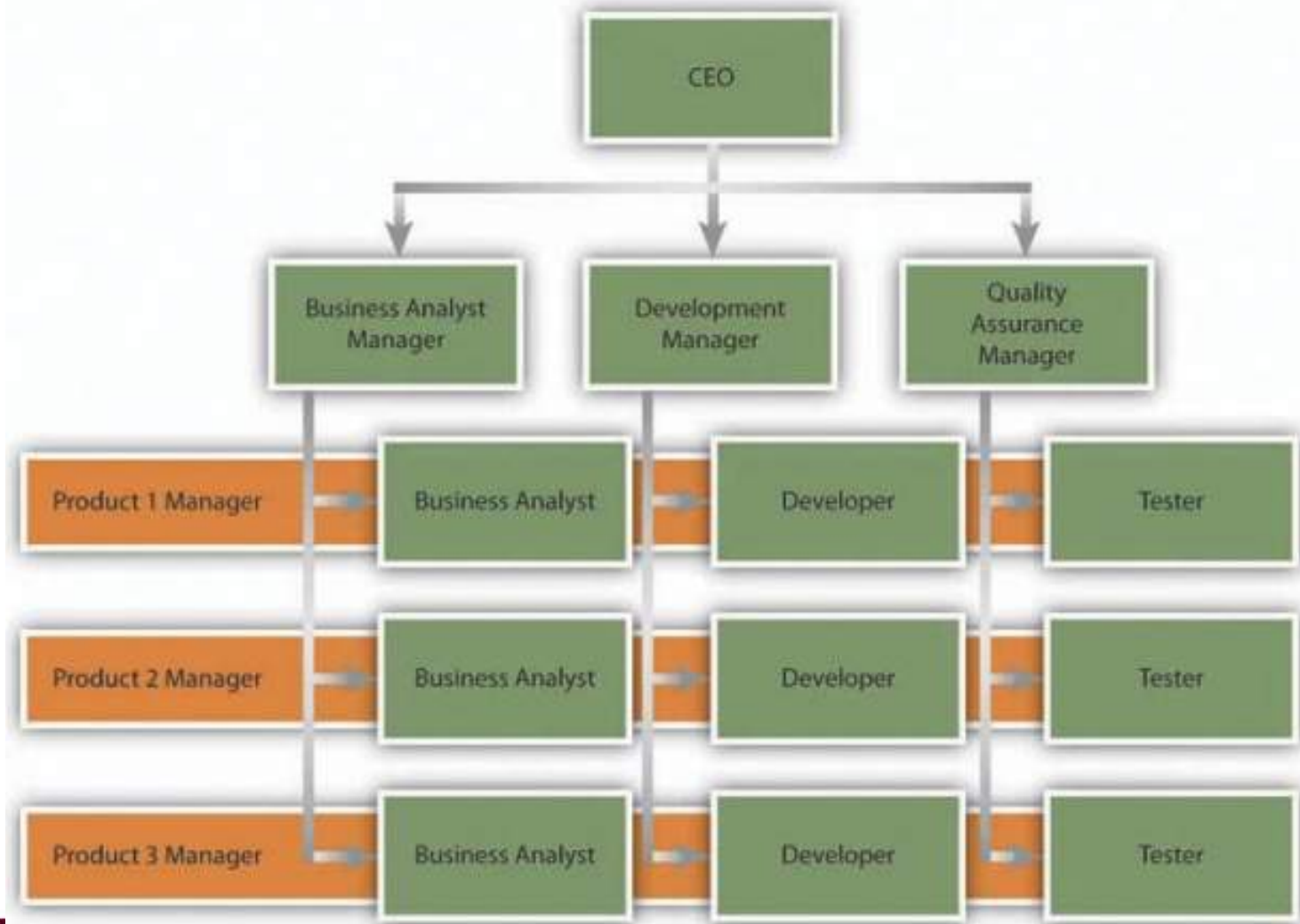
Advantages of Project Management Organisational Approach

- Teamwork - better motivation and communication

- Synergism - high performing team

- Cross-border management - difficult cultures, functions and boundaries

- Forward-looking - what else needs doing

- Client relations - one point of contact

- Results – more effective

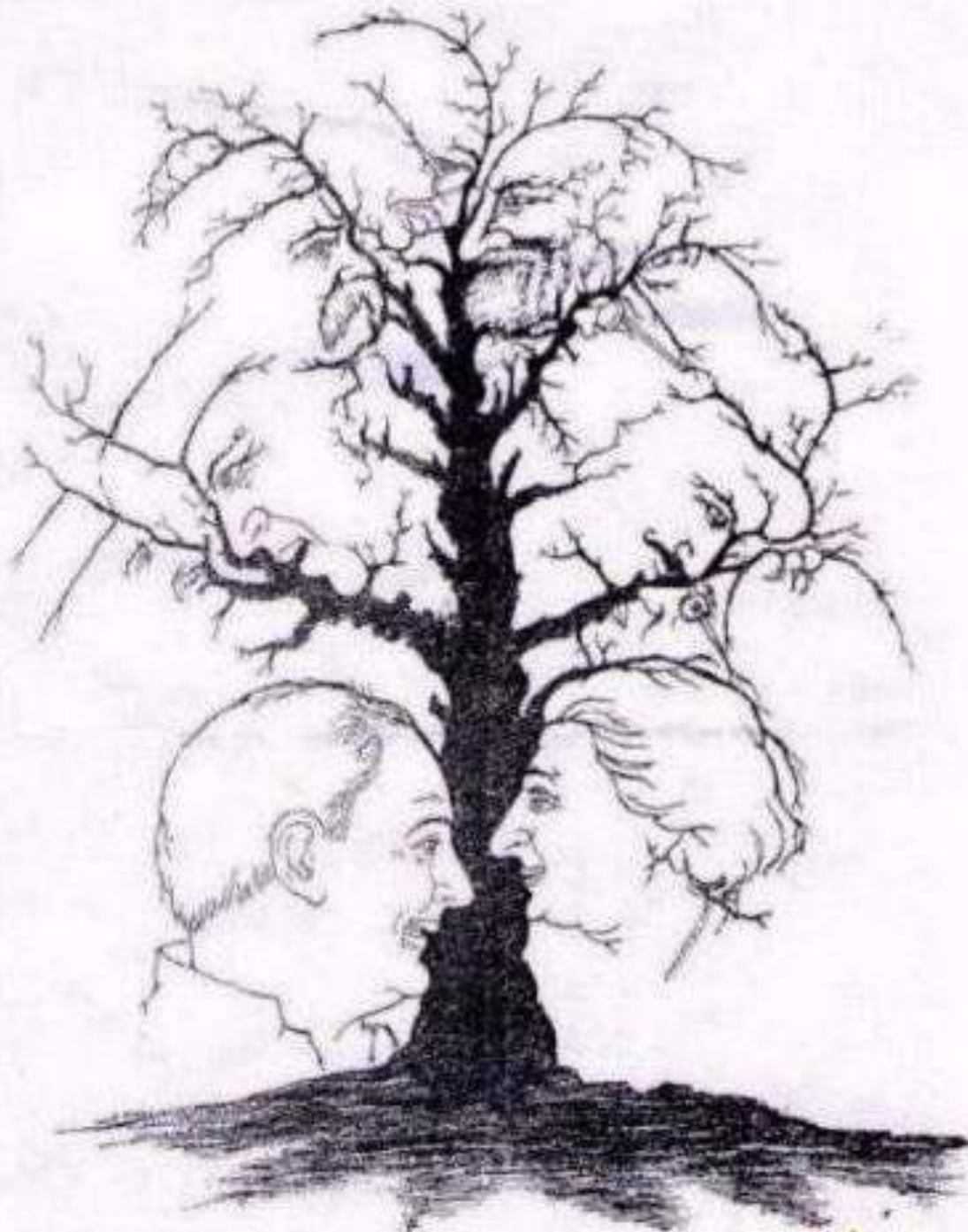# Knowledge Area 7: Communications Management

Element of Stakeholders Management in Project Communication Management
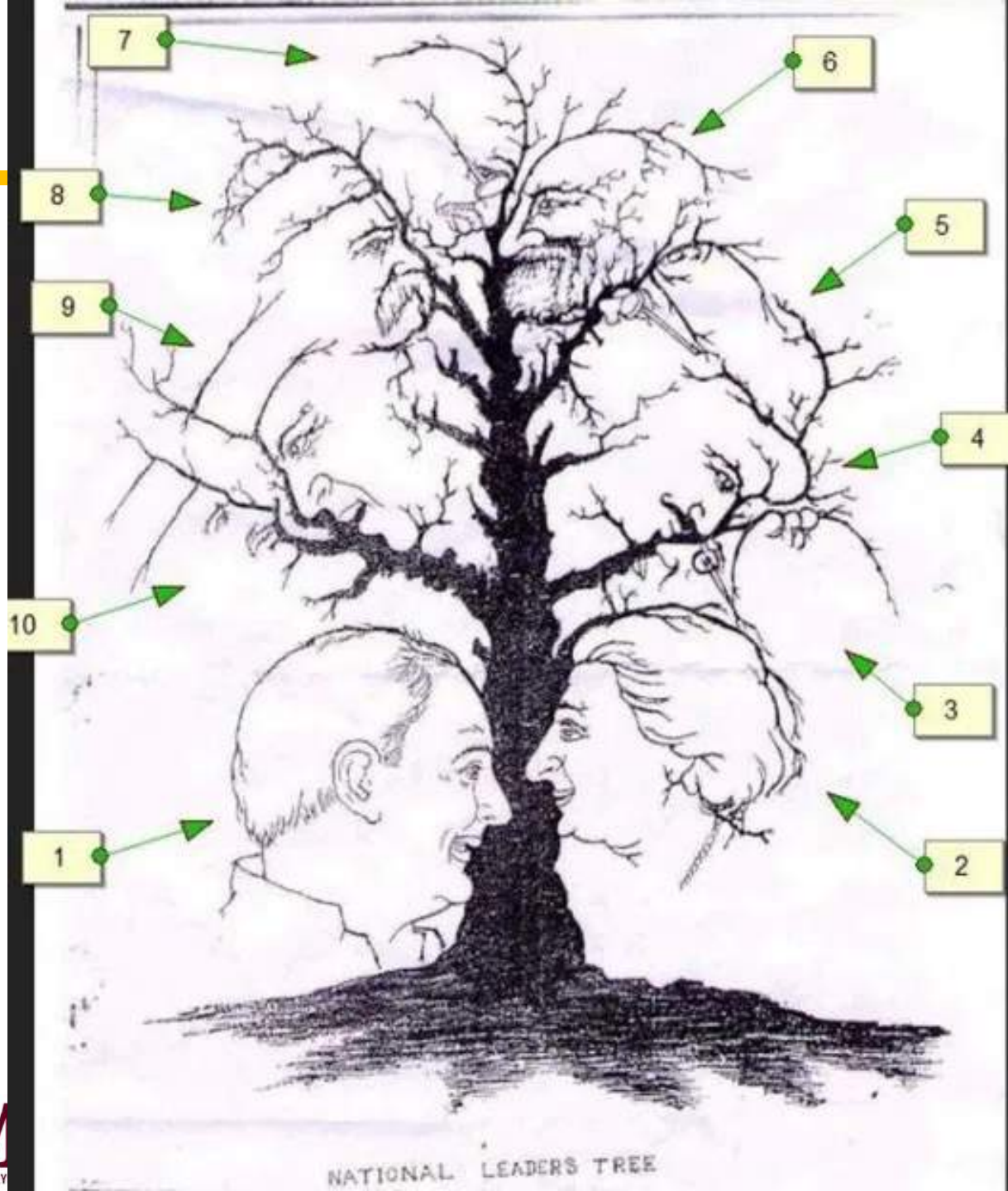
- The greatest threat to many projects is a failure to communicate to the key stakeholders

- Strong verbal skills are a key factor in career advancement for Project Managers

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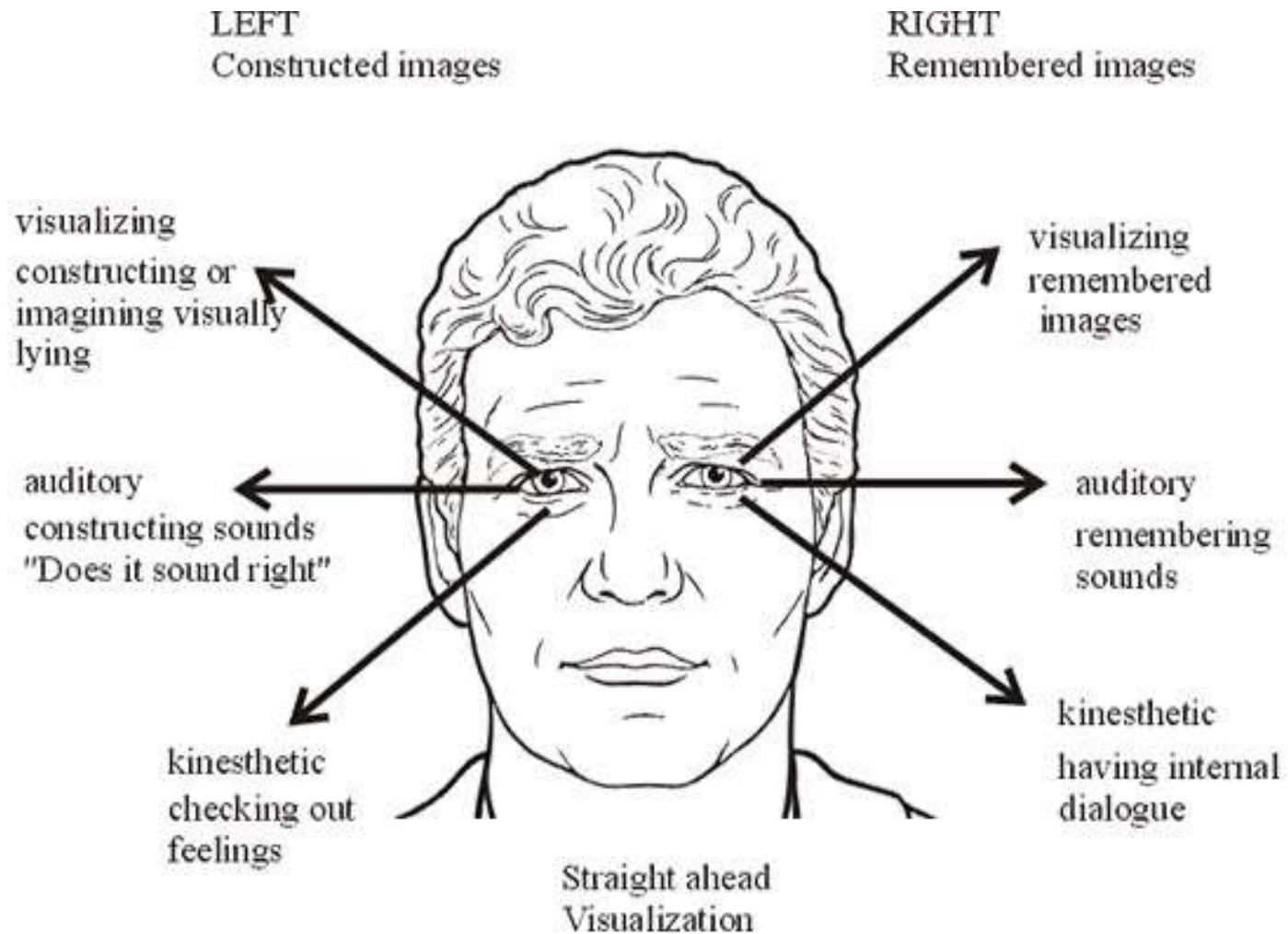
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Project Communications Management Processes

- Communications planning: determining the information and communications **needs of the stakeholders**

- Information distribution: making needed information available in a **timely manner**

- Performance reporting: collecting and **disseminating performance information to all relevant stakeholders**

- Administrative closure: generating, gathering, and disseminating information to formalise phase or project completion (**including lesson learn**)

NATIONAL LEADERS TREE

Eye Cue

LEFT
Constructed images

RIGHT
Remembered images

visualizing
constructing or
imagining visually
lying

visualizing
remembered
images

auditory
constructing sounds
"Does it sound right"

auditory
remembering
sounds

kinesthetic
checking out
feelings

kinesthetic
having internal
dialogue

Straight ahead
Visualization

Communications Planning

- Every project should include some types of communications management plan, a document that guides project communications amongst stakeholders

- Creating a **stakeholder analysis** for project communications also aids in communications planning

Communications Management Plan Contents

- A description of a collection and filing structure for gathering and storing various types of information
- A distribution structure describing what information goes to whom (which stakeholders), when, and how
- A format for communicating key project information
- A project schedule for producing the information
- Access methods for obtaining the information
- A method for updating the communications management plans as the project progresses and develops
- A stakeholder communications analysis

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Performance Reporting

- Performance reporting **keeps stakeholders informed** about how resources are being used to achieve project objectives
  - Status reports describe where the project stands at a specific point in time
  - Progress reports describe what the PMT has accomplished during a certain period of time
  - Project forecasting predicts future project status and progress based on past information and trends
  - **Status review meetings often include performance reporting**

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Conflict Handling Modes in Communication Management

- Confrontation or problem-solving: directly face a conflict

- Compromise: use a give-and-take approach

- Smoothing: de-emphasize areas of differences and emphasize areas of agreement

- Forcing: the win-lose approach

- Withdrawal: retreat or withdraw from an actual or potential disagreement

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Knowledge Area 8: Risk Management

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Risk Level for Typical Project

POTFOLIO MANAGER
(Head of Division/GM)

PROGRAM MANAGER
(Head of Department/SM)

PROJECT MANAGER
(Head of Section/Mgr)

What is Risk? Risk = Likelihood x Impact

A risk is a **potential problem** characterised by:

(a) A likelihood of occurrence

(b) A potential impact

Risk Assessment Map

Impact Probability	Low	Medium	High
High	🟡 ?	🟡	🟡
Medium			
Low	🟡		? 🟡

Risk Register

ID	Date raised	Risk description	Likelihood of the risk occuring	Impact if the risk occurs	Severity *Rating based on impact & likelihood.*	Owner *Person who will manage the risk.*	Mitigating action *Actions to mitigate the risk e.g. reduce the likelihood.*
1	[enter date]	Project purpose and need is not well-defined.	Medium	High	High	Project Sponsor	Complete a business case if not already provided and ensure purpose is well defined on Project Charter and PID.
2	[enter date]	Project design and deliverable definition is incomplete.	Low	High	High	Project Sponsor	Define the scope in detail via design workshops with input from subject matter experts.
3	[enter date]	Project schedule is not clearly defined or understood	Low	Medium	Medium	Project Manager	Hold scheduling workshops with the project team so they understand the plan and likelihood fo missed tasks is reduced.

Knowledge Area 9: Procurement Management

Element of Stakeholders Management in Project Procurement Management

- Procurement refers to the process of acquiring projects

- The process may be categorised into six main elements:

  1. Initiation – recognises need for a facility/service etc
  2. Funding – provides finance required for project
  3. Design – translates **requirement** into drawings
  4. Statutory Approval – obtains **relevant authorities** to initiate and construct a facility and upon its completion/occupancy/completion of facility
  5. Tendering - obtains offer leading to a **contract** between a client and contractor, a client and consultant or a contractor and sub-contractor
  6. Construction - physically fits the varied components of a facility together, to form a final structure

Procurement System

- The system of procurement determines the **relationship of contracting parties/stakeholders** involved in the procurement process

- The **contractual relationship indicates the types of risks each party will be responsible** and the reward for doing so in the processes of construction procurement.

Common Construction Procurement in Malaysia

1. Traditional - client has separate contractual undertaking with both Design Consultant and Contractor

2. Design and Build – Known as package deal or turnkey, both designing and constructing works are undertaken by one single entity called D&B contractor

3. Construction Management - Provide managerial and supervisory service for the project

4. Hybrid

5. Miscellaneous (PPP/PFI)

    – Build, Operate and Transfer – Privately financed, operated and transferred to the employer after the concession period

    – Serial – More than 1 project in accordance with the tender submitted for the initial project and in series

    – Continuation – Scope of the original contract extended beyond the contract domain

    – Periodic – Execution of works is required in intervals

    – Partnering – Receive all contracts from employer and the payment follows an initial agreed formula

    – Independent – Undertaking stipulated tasks for an agreed consideration

Design-Bid-Build Route

◦ **Organization Structure**
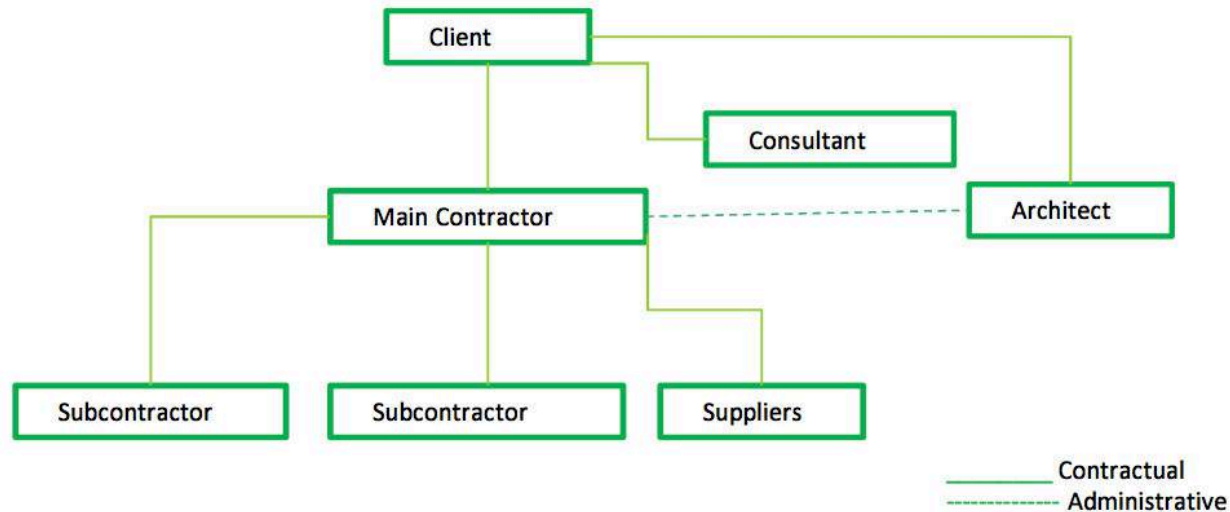
Design And Build Route

◦ **Organization Structure**


```
                         ┌──────────┐
                         │  Client  │
                         └──────────┘
  ┌──────────────────┐                    ┌──────────────────┐
  │ Client Consultants│                   │ Project Manager  │
  │   (Fee Contract)  │                   │  (Fee Contract)  │
  └──────────────────┘                    └──────────────────┘
                      ┌──────────────────┐
                      │  D&B Contractor  │
                      │ (Standard LS Contract) │
                      └──────────────────┘
  ┌──────────────────┐  ┌──────────────────┐  ┌──────────────────┐
  │  D&B Consultants  │  │  Sub-Contractors │  │    Suppliers     │
  └──────────────────┘  └──────────────────┘  └──────────────────┘
```

———— Contract Relationship

innovative ● entrepreneurial ● global
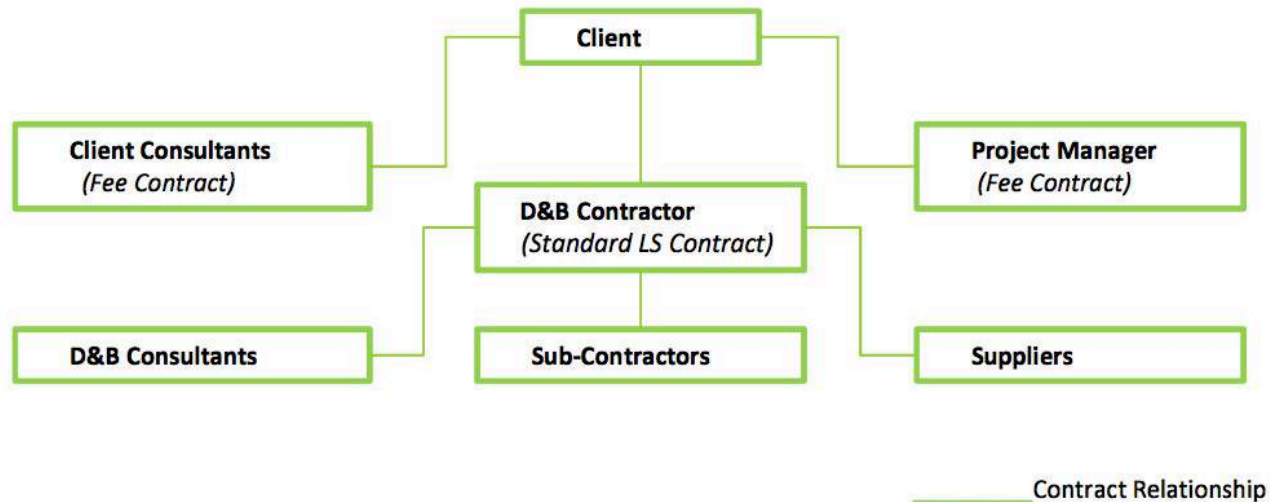
Construction Management Route

Organization Structure

Client
- Construction Manager (Fee Contract)
- Project Manager (Fee Contract)
- Client's Designers (Fee Contract)

Works Contractor (LS Contract)
- Sub Contractor

Works Contractor (LS Contract)
- Suppliers

Works Contractor (LS Contract)

Consultants

_____ Contract Relationship
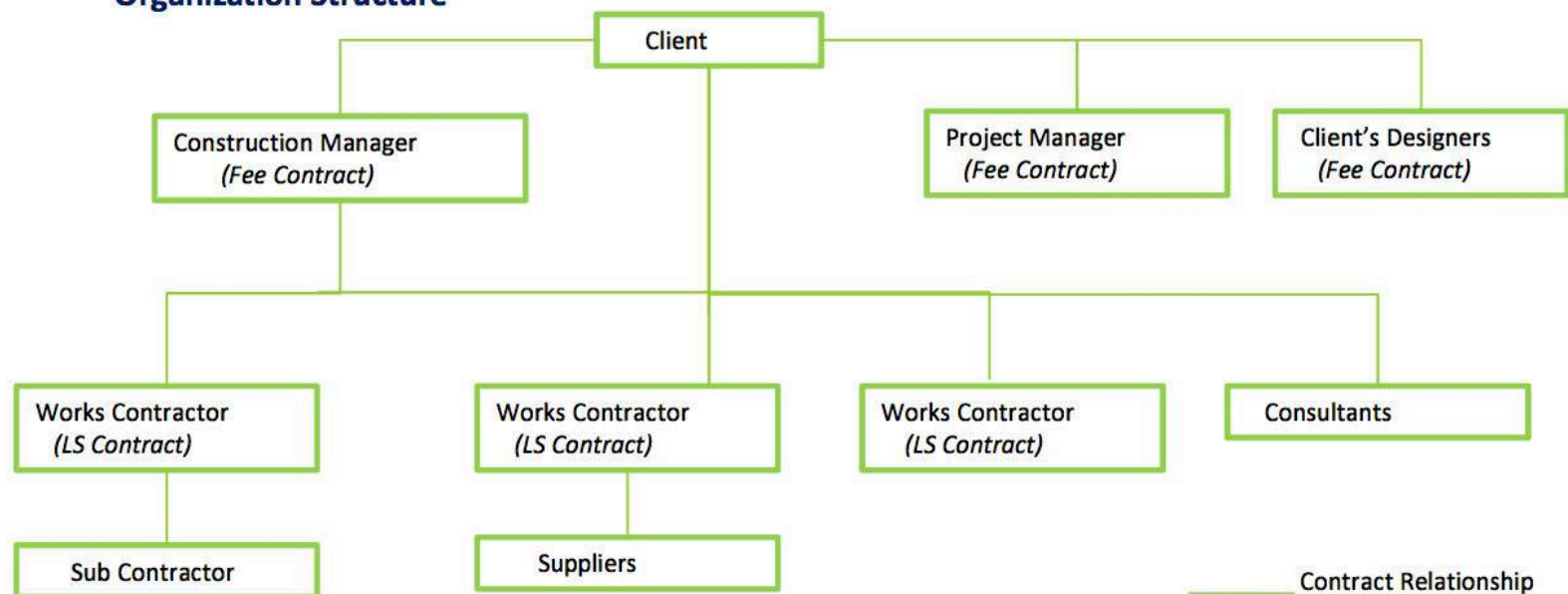
Sultanah Nur Zahirah Hospital, Kuala Terengganu completed in 1985 is the first government project procured via design and build contract

The Sultan Abdul Hal
Muadzam Shah Bridge or bett
known as the 2nd Penang Brid
is procured via PFI with t
Chinese construction consortiu

A 24-km Second Penang Bridge is procured via PFI by the Chinese consortium

Knowledge Area 10: Stakeholder Management