



BPP 1113

Project Management Processes and Scope Management



Lecture Objective

- Describe the Project Processes
- Discuss the application of process groups in a project
- Analyze the interaction between project processes
- Apply appropriate strategy in customizing process interactions
- Discuss Work Breakdown Structure (WBS)

Project Processes

Project Processes

- Project are composed of processes
- A Process is a series of actions bringing about a result
- Project processes are fall into two category:
 - Project Management Processes
 - Product Oriented Processes

Project Processes (cont'd)

Project Management Process

- Describe, organize and complete the work of the project
- Applicable to most project, most of the time

Project Processes (cont'd)

Product Oriented Processes

- Specify and create the project's product
- Typically defined by project life cycle
- Varies by its application

Project Management Processes vs Product Oriented Processes

- Overlap
- Interact
- Eg. The scope of the project cannot be defined in the absence of some basic understanding of how to create the product

Process Groups

Process Groups



Process Groups (cont'd)

- The process groups are linked by the results (outcome) they produce
- The links are iterated – planning provides executing with a documented project plan early on, and then provides documented updates to the plan as the project progresses

Process Groups (cont'd)

- PM process groups are NOT discrete, one time events
- They are overlapping activities that occur at varying levels of intensity throughout each phase of the project
- Process group interactions also cross phases

Process Groups (cont'd)

- Repeating the initiation processes at the start of each phase helps to keep the project focused on the business need that it was undertaken
- Actual input and outputs of the processes depend upon the phase in which they are carried out

Process Groups (cont'd)

- Progressive detailing of the project plan is often called rolling wave planning, indicating that planning is an iterative and ongoing process
- Stakeholders involvement improves the probability of satisfying customer requirements and realized the buy in or shared ownership

Process Groups (cont'd)

- Project Management Processes can be organized into five groups:
 - Initiating processes
 - Planning processes
 - Executing processes
 - Controlling processes
 - Closing processes

Project Management Processes

- Initiating Processes
 - Authorizing the project or phase

Project Management Processes (cont'd)

- Planning Processes
 - Defining and refining objectives and selecting the best of the alternative courses of action to attain the objectives that the project was undertaken to address

Project Management Processes (cont'd)

- Executing Processes
 - Coordinating people and other resources to carry out the plan

Project Management Processes (cont'd)

- Controlling Processes
 - Ensuring that project objectives are met by monitoring and measuring progress regularly to identify variances from plan so that corrective action can be taken when necessary

Project Management Processes (cont'd)

- Closing Processes
 - Formalizing acceptance of the project or phase and bringing it to an orderly end

Project Process Interactions

Project Process Interactions

- Individual processes are linked by their input and outputs
 - Input : documents or documentable items that will be acted upon
 - Tools and techniques : mechanisms applied to the input to create the outputs
 - Output : documents or documentable items that are a result of the process

Project Process Interactions (cont'd)

- Initiating processes
 - Single process
 - Authorizing the project or phase is part of project scope management

Project Process Interactions (cont'd)

- Planning
 - Crucial and major importance
 - Planning is an ongoing effort throughout the life of a project
 - Amount of planning performed should be commensurate with the scope of the project
 - Planning processes are subject to frequent iterations

Project Process Interactions (cont'd)

- Planning (cont'd)

- *Core Processes : Some planning processes have clear dependencies that require them to be performed in essentially the same order on most project*
- *Facilitating Processes : Interactions among the other planning processes and are more dependent on the nature of the project*

Project Process Interactions (cont'd)

- Executing
 - Also include core processes and facilitating processes

Project Process Interactions (cont'd)

- Controlling
 - Project performance must be monitored and measured regularly to identify variances from the plan
 - Includes taking preventive action in anticipation of possible problems

Project Process Interactions (cont'd)

- Closing
 - Contract close out : completion and settlement of the contract
 - Administrative closure : generating, gathering and disseminating information to formalize phase or project completion, evaluating project and compiling lesson learned

Customizing Process Interactions

- The previous processes and interactions meet the test of general acceptance
- NOT ALL the processes will be needed on all projects and NOT ALL the interactions will apply to all projects

Project Scope Management

Project Scope Management

Includes the processes required to ensure that the project includes all the work required and only the work required to complete the project successfully *PMBOK 4th ed*

Project Scope Management (cont'd)

- **Collect Requirements** – the process of defining and documenting stakeholder's needs to meet the project objective
- **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

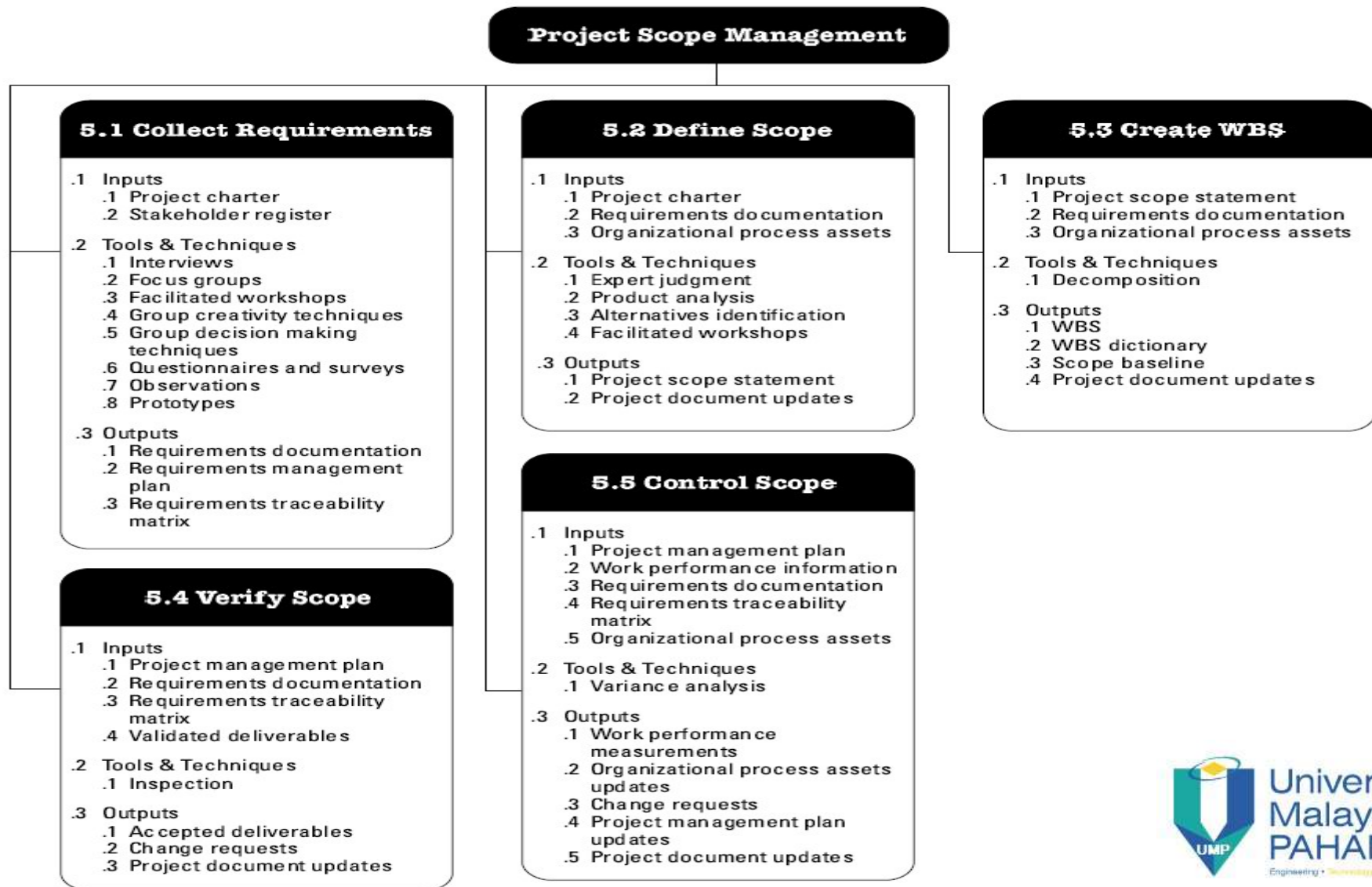
Project Scope Management

- **Verify Scope** – the process of formalizing 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

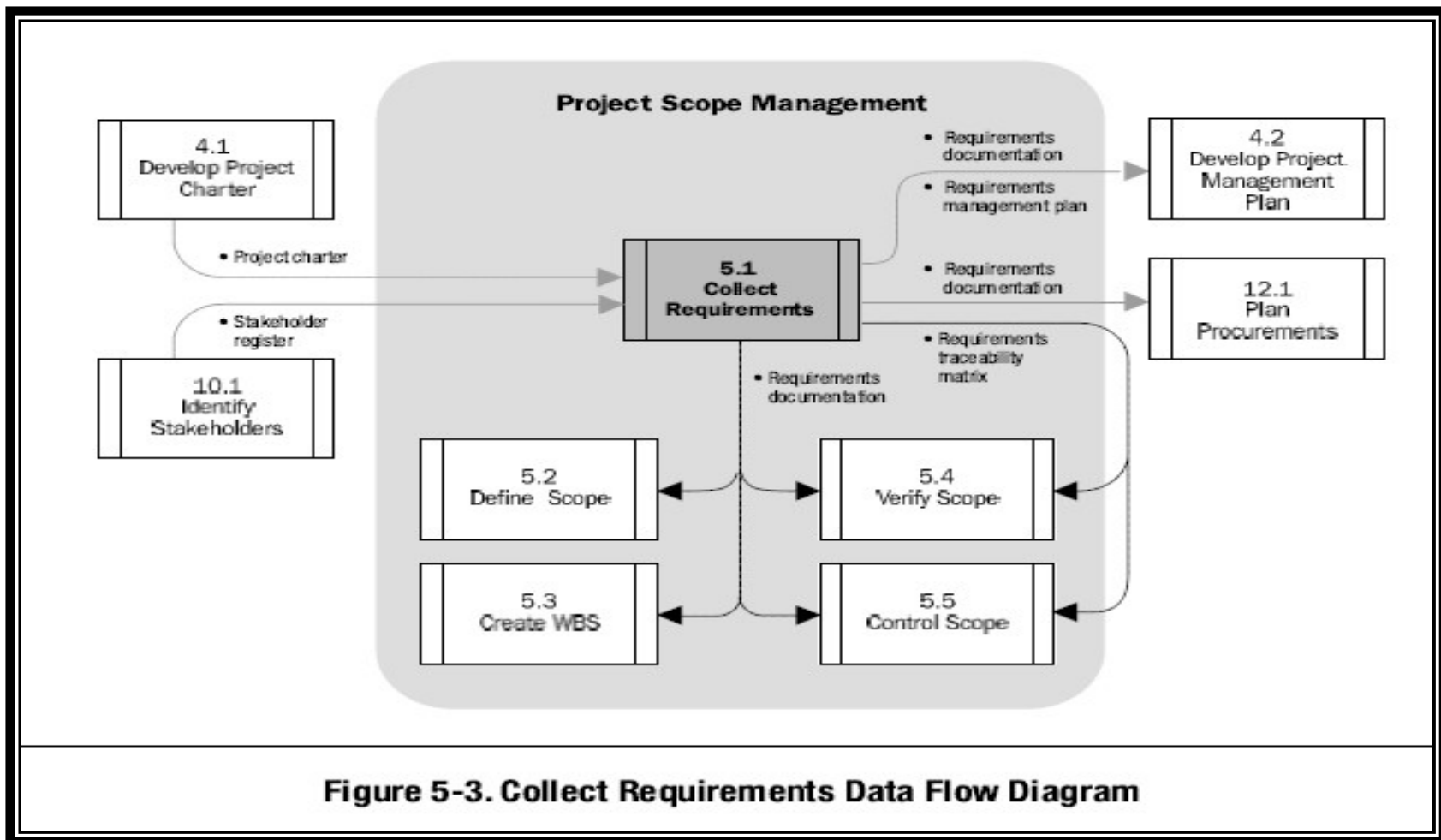
Project Scope Management (cont'd)

Knowledge Areas	Project Management Process Groups				
	Initiating Process Group	Planning Process Group	Executing Process Group	Monitoring & Controlling Process Group	Closing Process Group
4. Project Integration Management	4.1 Develop Project Charter	4.2 Develop Project Management Plan	4.3 Direct and Manage Project Execution	4.4 Monitor and Control Project Work 4.5 Perform Integrated Change Control	4.6 Close Project or Phase
5. Project Scope Management		5.1 Collect Requirements 5.2 Define Scope 5.3 Create WBS		5.4 Verify Scope 5.5 Control Scope	

Project Scope Management (cont'd)



Project Scope Management (cont'd)



Source: PMBOK 4th Ed

Project Scope Management: Collect Requirements

The process of defining and documenting the project sponsor, customer and stakeholder's expectations and needs for meeting the project objective. Such requirement details will be used to manage customer expectations throughout the project

Kim Heldman

Project Scope Management: Collect Requirements (cont'd)

- First process in Project Scope Management and Second process in the Planning process group
- Describe and control what is and what is not work of the project
- Define what is included in the work of the project

Project Scope Management: Collect Requirements (cont'd)

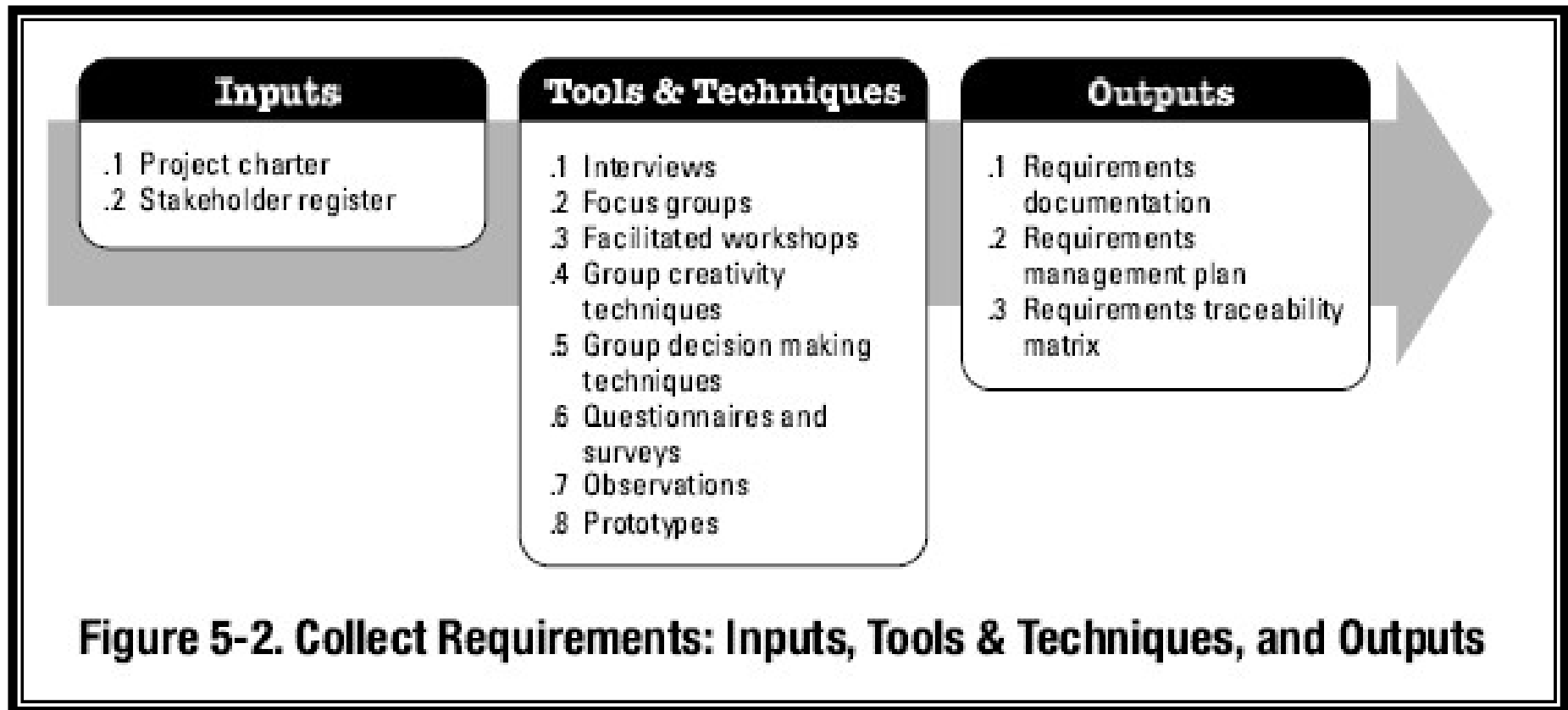
- Requirements describe the characteristics of the deliverables
- Also describe functionality
- Requirements quantify and prioritize the wants, needs and expectation of project sponsors and stakeholders
- “Understanding, documenting and agreeing upon requirements is a critical factor to project success”

Kim Heldman

Project Scope Management: Collect Requirements (cont'd)

- Requirements must be documented, analyzed and quantified in enough detail that they can be measured
- Requirements become the basis for developing the WBS and are essential in estimating costs, developing project schedule and quality planning

Project Scope Management: Collect Requirements Inputs, Tools and Techniques and Outputs



Source: PMBOK 4th Ed

Project Scope Management: Collect Requirements Tools and Techniques

- Interviews
 - One on One conversation with stakeholders
 - Adv: the SME and experienced project participants can impart a lot of information in a short amount of time and typically have a good understanding of the features and functions needed from the project deliverables

Project Scope Management: Collect Requirements Tools and Techniques (cont'd)

- Focus Groups
 - Conducted by trained moderator
 - Picking the SME and stakeholders to participate in the focus group and to learn about their expectations and attitudes about a proposed product, service or result

•Project Scope Management: Collect Requirements Tools and Techniques (cont'd)

- Facilitated Workshop
 - Focused sessions that bring key cross-functional stakeholders together to define product requirements
 - Major technique for quickly defining cross-functional requirements and reconciling stakeholder differences
 - Benefit: Issues can be discovered and resolved quickly

Project Scope Management: Collect Requirements Tools and Techniques (cont'd)

- Group Creativity Techniques
 - Brainstorming
 - Group Nominal
 - The Delphi Technique
 - Idea/Mind Mapping

Project Scope Management: Collect Requirements Tools and Techniques (cont'd)

- Group Decision Making Techniques
 - Assessment process of multiple alternatives with an expected outcome in the form of future actions resolution. Used to generate, classify and prioritize product requirements
 - Unanimity
 - Majority
 - Plurality
 - Dictatorship

Project Scope Management: Collect Requirements Tools and Techniques (cont'd)

- Another techniques
 - Questionnaires and surveys
 - Observations
 - Prototypes

Work Breakdown Structure (WBS)



Work Breakdown Structure (WBS)

- WBS is used as basis for further planning, execution and control
- It is developed by listing deliverables – first major deliverables and then progressively smaller ones until the team feels that every deliverable has been identified

Why using Work Breakdown Structure (WBS)?

- One of the most essential project management tools
- Pictorial representation of project activities
- Project team member can ensure that they remember all major portions of work to be accomplished
- Basis for all remaining planning
- Easily modified and can handle changes that often happen in a project
- Understand exactly where and why problem occurred
- Project communication

WBS Format

- Indented outline format [1]
- Organizational Chart Format [2]
- Free format [3]
- [2] + [3]  [1]  imported into Ms Project

Work Packages

- Lowest level of WBS
- Also known as deliverables
- “a deliverable ... at the lowest level of each branch of a WBS. The work package includes the schedule activities and schedule milestones required to complete the work package deliverable”

Work Packages (cont'd)

- The work package is the point from which;
 - Work activities are defined
 - The schedule is formed
 - Resources are assigned
 - Many of the control features will be developed

Conclusion

- Every project has its own process groups which will determine the process flow of a project.
- The process group will make or break the project success
- Scope management is crucial in every project in identifying the needs and requirement of a project