

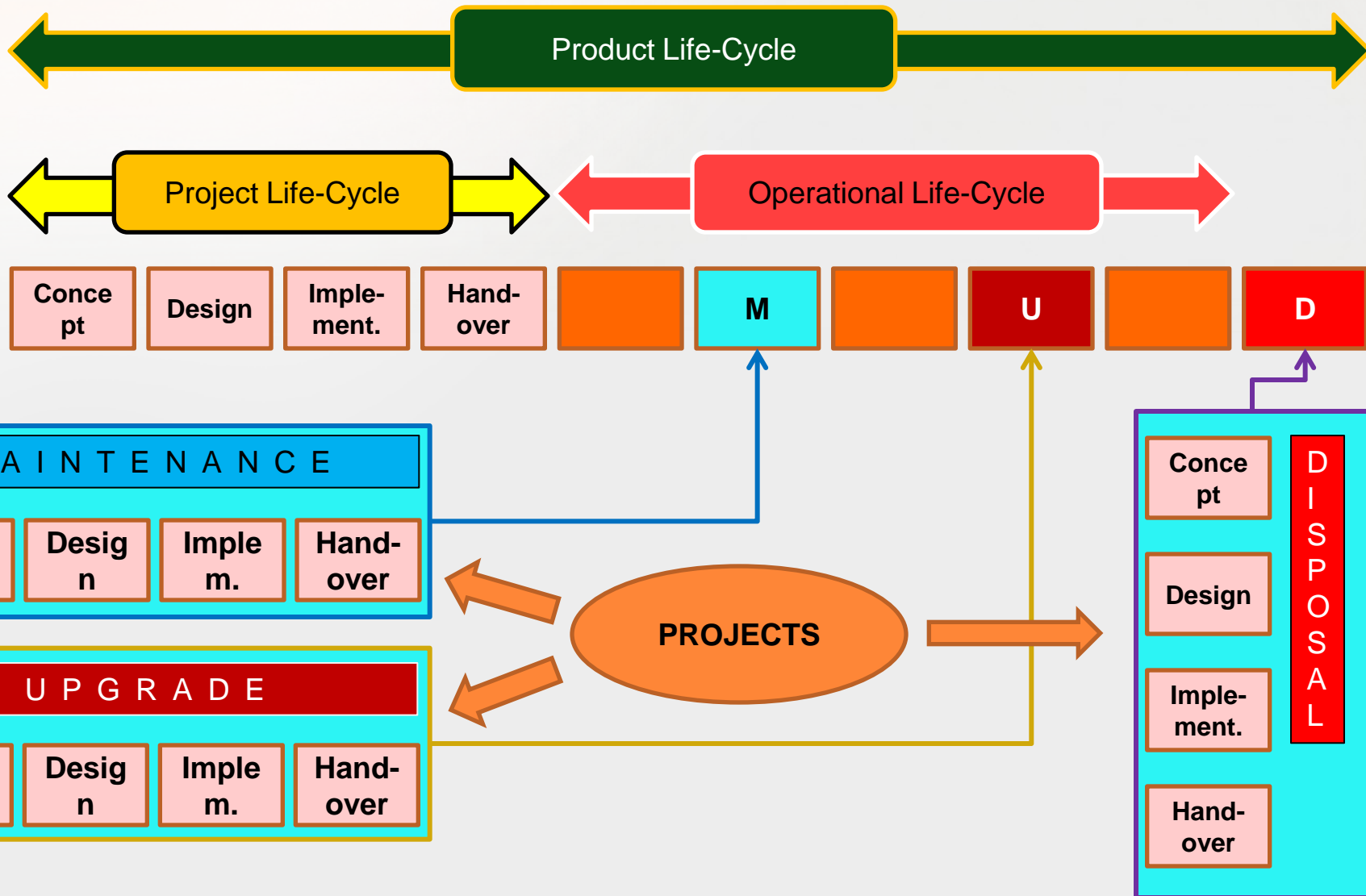
CHƯƠNG 2. LẬP KẾ HOẠCH (3 LT)

1. Giới thiệu chung
2. Lập kế hoạch triển khai dự án
3. Lập kế hoạch ngân sách, tài nguyên, nguồn nhân lực
4. Các kế hoạch khác
5. Kết luận

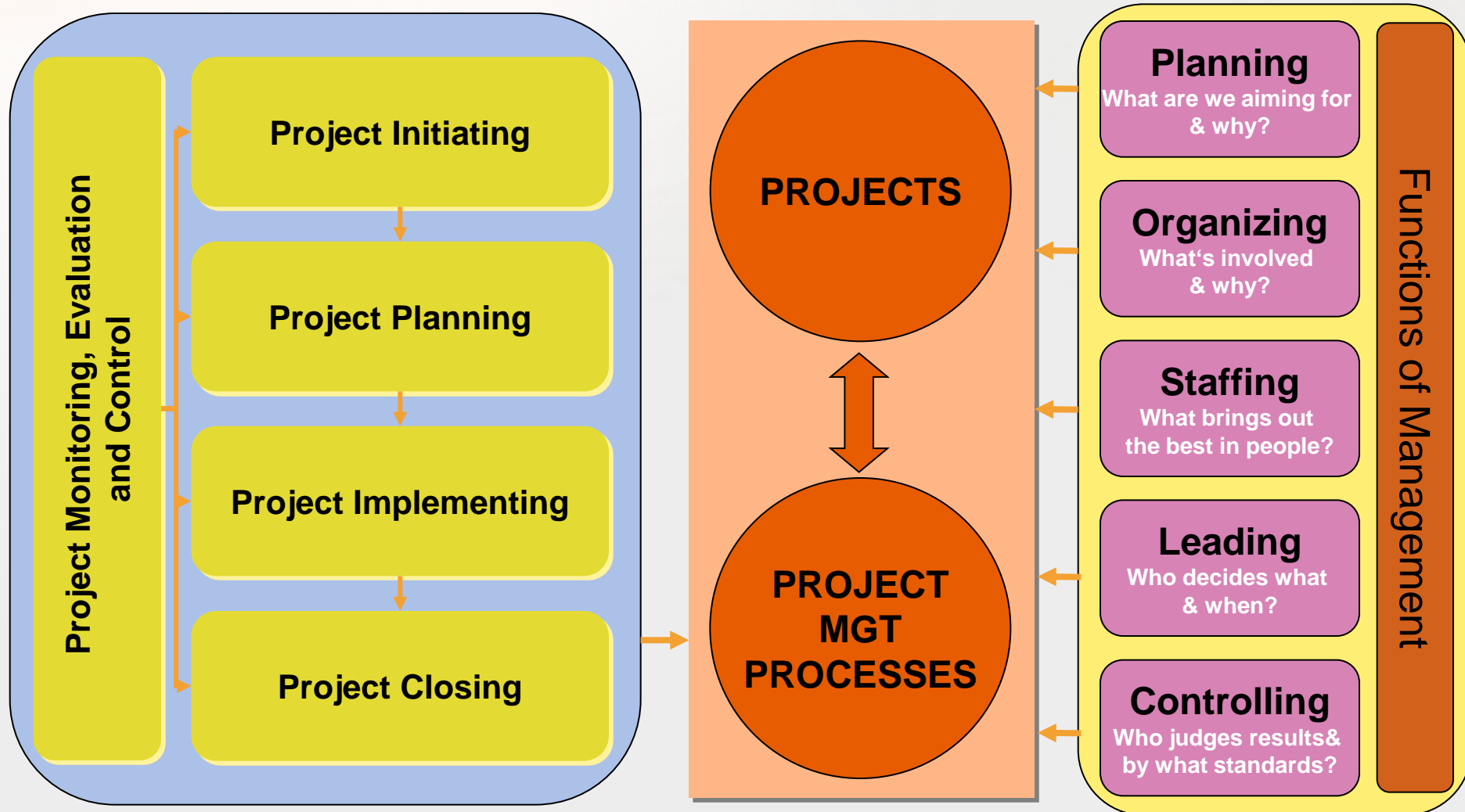
1. Giới thiệu chung

1. Project, Product Life-Cycle & Project Management
2. Different perspectives of project management
3. Planning & Project Planning
4. Project planning strategies

1. Project & Product Life-Cycle



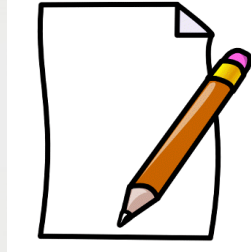
Project Management



2. Different perspectives of project management



3. Planning



Failure to Plan is Planning to Fail

✚ Lays

- ✚ the foundation for organizing, implementing, closing as well as monitoring, evaluating and controlling a project
- ✚ with a view to realizing the project goal and objectives within the constraints of time, budget, given requirements and stakeholder expectations.

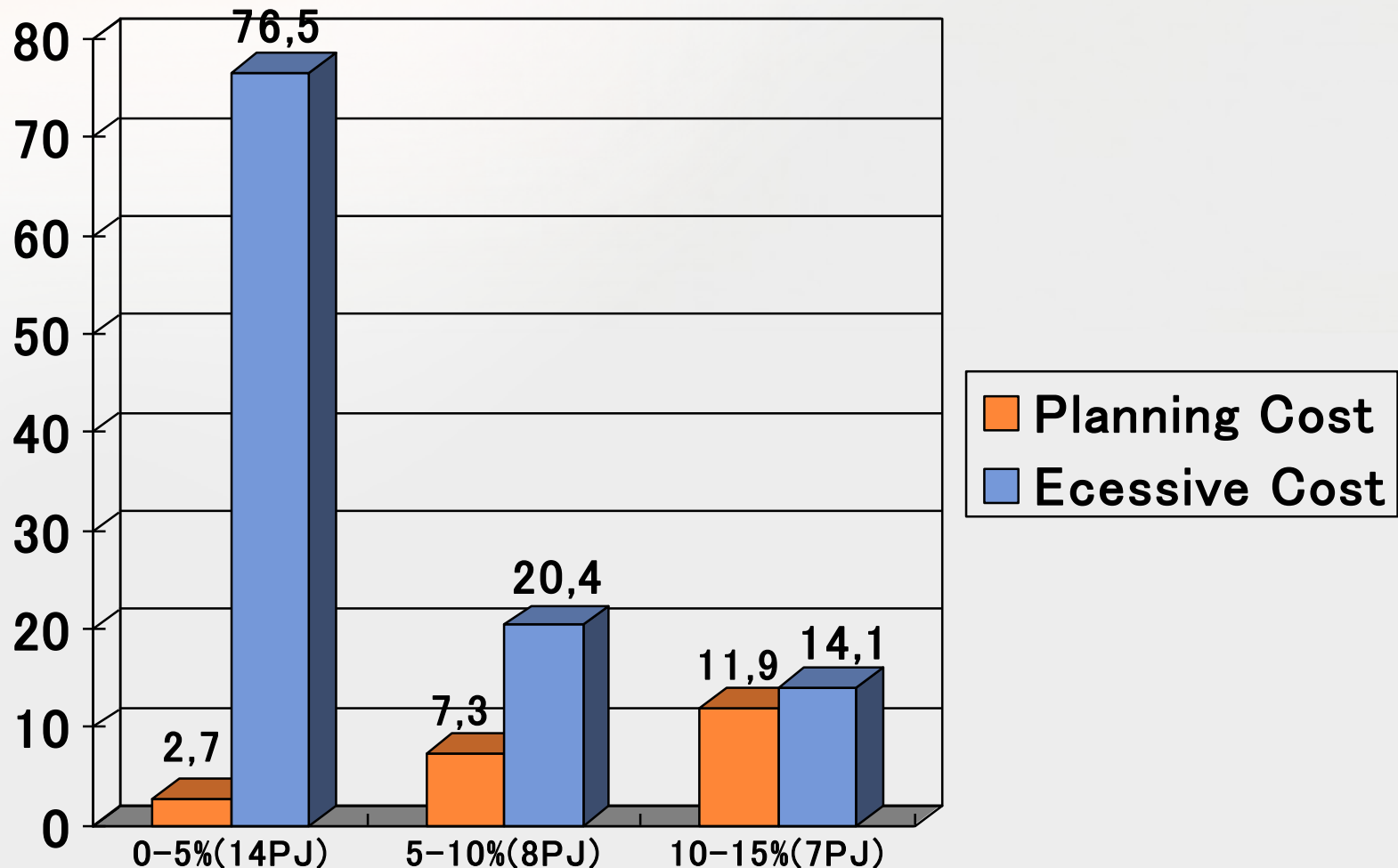
✚ Reduces uncertainty

✚ Increases

- ✚ understanding of the project
- ✚ boosting efficiency in the way it is being carried out.

- ✚ Many project failures are attributed to mistakes and shortcomings which occurred in the project's planning phase.

Example: The relationship between planning cost and excessive cost of 31 project in NASA



Project planning

- ✚ How much time & how many people to plan a project?
 - ✚ Simple projects: few individuals within a short period of time at little cost.
 - ✚ Complex projects: weeks and months of costly work input by the project team and involved stakeholders.
- ✚ Which are the factors that determine primarily the quality of the project plan?
 - ✚ quality of the information used
 - ✚ knowledge and experience of the stakeholders who are assigned the responsibility of developing the plan
 - ✚ resources and time frame made available for it
 - **Ideally, anything that may have an impact on the project should be considered in developing the project plan.**
- ✚ Project plans are not static entities:
 - ✚ new information implying a modification or revision (about project scope, requirements and specifications, cost, schedule, risks, stakeholder needs, etc.) must be periodically updated

4. Planning strategies: Why, What, How?

- ✚ Project Managers must bring the centerpiece of their skills:
 - ✚ the complete understanding of the project's requirements
 - ✚ a deep understanding of all the elements that are required to conduct a successful project.

→ **It all counts for nothing unless it leads to a successful project!**
- ✚ Planning, estimating and resourcing may be viewed as separate issues, but they need to be conducted in parallel as they directly affect each other.
 - ✚ Planning: definition of work to be done, including resource requirements, dependencies and timing.
 - ✚ Estimating: calculation of the amount of time and effort that will be required per type of resource for each part of the work to be done.
 - ✚ Resourcing: allocation of actual resources (usually the project's workforce) to the plan.

The Key Issues

- ✿ Here are some of the key issues in deciding what strategies to take:
 - ✿ top down or bottom up?
 - ✿ all in one go or exploding detail in stages?
 - ✿ fully detailed or streamlined / summary?
 - ✿ one plan or several sub-plans?
 - ✿ automated scheduling or manual scheduling?
 - ✿ activity, process, deliverable, outcome, or milestone-focused?

4.1. Top down or bottom up?

✚ The classic approach to planning is top-down:

- ✚ Divide all the things required into a few high-level items
- ✚ Explode them into greater levels of detail as the planning process proceeds. This explosion:
 - stops at a relatively high/summary level of detail for the initial planning
 - is only expanded into full detail shortly before each new phase of work.

→ Provides an early high-level plan, including initial costs and timings, which can be used in the project's definition and benefit case.

→ The most logical way of thinking about a project

→ The best approach to new endeavors

✚ Bottom-up planning makes sense where we already have a **good example of a successful similar project plan** (assuming it was of good quality) to base the new project on.

- ✚ Start with the full detail of a previous plan
- ✚ Adjust the precise details
- ✚ Estimates and dependencies to be correct for the new project.

→ Needs to be summarized so that they can also be used at a summary level for things like the project definition, benefit case, and reporting.

→ Save time in the planning process

→ Learn lessons from the previous experiences, e.g. estimation can often be extrapolated from the previous projects

4.2. All in one go or exploding detail in stages?

The Project Manager has a continuous duty to make sure the plan is realistic

✚ Top-down plan:

- ✚ When should you explode it into full detail?

→ In case of a simple project (short timescales + manageable number of resources), you may easily be able to generate a sufficiently detailed plan at the beginning of the project and stick with it.

✚ Bottom-up:

- ✚ You already have the full detail
- ✚ Remember to review that detail as you progress through the project as things will inevitably change.

→ You may choose to review the detail in stages in a similar manner to the way you would deal with a top-down plan.

✚ In larger projects, best practice is to explode the detail in stages. Why ?

- ✚ No one needs to know precise details so far in advance that it is of no consequence.
- ✚ Giving precise detail too far in advance inevitably means it will be wrong - some of the people reading the plan will not realize that and those that do may think you are stupid for being so accurate.
- ✚ You have more important things to be doing with your time during the definition and launch of a project than worrying about the precise timing of events in the distant future.

4.3. Fully detailed or streamlined / summary?

- ✿ The full detail is rarely appropriate for anyone except the Project Manager and the Project Office team.
 - ✿ The project sponsors and other concerned parties will only want to see key summary information such as milestones and overall costs.
 - ✿ Project Team members only need to see the full detail where it is related to their own activities.
- Given that the full detail is largely for the Project Manager's benefit - how do you make that choice?

Fully detailed or streamlined / summary?

Factor	Small plan	Large plan
Constructing the plan	Low effort / short time	High effort / long time
Identifying dependencies	Will be at a high level May be inefficiencies and missing links	Can be fine tuned for perfect automatic scheduling
Identifying resources	Probably need to assign groups of people to deliver high-level tasks collectively	Can accurately assign individual people to individual tasks
Telling people what to do	Probably insufficient detail - you will be relying on "word of mouth"	Should all be in the plan
Tracking progress	Low effort but possibility of issues being hidden	High effort - but accurate
Reporting progress	May be usable without summarization	Will need to be summarized for reporting purposes

Fully detailed or streamlined / summary?

- ✚ It is hard to judge the optimum approach.
 - ✚ Very often it will be dictated by norms within your organization, or maybe by previous plans that you are using as a starting point. Strangely, perceptions do not vary significantly with the size and complexity of the project.
 - ✚ In general, people seem to be:
 - ✚ concerned at a lack of analysis in detailed plans that fit on one page,
 - ✚ comfortable with plans around 200-300 lines
 - ✚ disconcerted by plans over 1000 lines, and
 - ✚ convinced the Project Manager is crazy, obsessive and impractical if the plan is over 10,000.
 - ✚ Unfortunately, that generalization is not fully reliable.
- **The key advice is to get your strategy agreed with the project sponsors and others concerned!**

4.4. One plan or several sub-plans?

- ✿ The Project Manager will need to consolidate the plans for the overall estimating and scheduling of the project.
- ✿ Particular attention should be given to issues between the sub-plans, for example:
 - ✿ identifying and working to overall project milestones,
 - ✿ cross dependencies,
 - ✿ scheduling and contention when the same resources are used in more than one sub-plan,
 - ✿ ensuring compatibility and standards.
- The ease with which the project can be handled as a number of sub-plans often depends on the choice of automated project planning tools.
 - Choose tools which have no trouble consolidating and scheduling multiple plans
 - Represent the sub-plans as separate sections within a single physical plan

4.5. Automated scheduling or manual scheduling?

- ✚ Almost all project planning tools provide automated scheduling - so why would you not want to use it?
 - ✚ To obtain good results from automated scheduling, your planning info needs to be mathematically and logically perfect:
 - All dependencies must be correctly stated.
 - All resources need to be identified along with accurate effort estimates.
 - Detailed allocation of people to tasks cannot be assumed - the plan will need the full detail.
 - Resource availability needs to be correctly held.
 - Working days need to be defined (e.g. let's not schedule people for public holidays).
 - ✚ The capability of project planning tools to provide good results varies noticeably between different tools. Some tools provide limited support to spread team members' work to keep them fully occupied and to make optimum progress.

Automated scheduling or manual scheduling?

- ✚ In case of an automated scheduling, what are kinds of planning info to be adjusted by the Project Manager?
 - ✚ adding or changing dependencies (often with no logical justification but simply because the plan works better in that sequence)
 - ✚ adding in arbitrary timing lags (or negative lags) so that areas of the project start 'around the right time'
 - ✚ priorities per task
 - ✚ whether tasks not on the critical path should be done as soon as possible or as late as possible.
- Try to avoid manipulating the plan by locking in specific dates - unless they genuinely are fixed dates. You will almost always have problems when re-scheduling the plan if some of the dates are considered immovable.

Automated scheduling or manual scheduling?

- ✚ Is it a good scheduling ?

- ✚ Simple tests of good scheduling are:

 - ✚ resources are occupied full time on almost all days

 - ✚ no major gap in a path or work stream unless

 - ✚ the earliest achievable end date

→ Automated scheduling can be seen as an investment.

→ The problem with automated scheduling is the time and effort that needs to be invested to get a good model. Not surprisingly, many Project Managers feel they cannot afford that time. Others try it and find things are not working out - so they give up and lock in manual dates instead.

Automated scheduling or manual scheduling?

- ✚ Manual scheduling is probably the more common approach in reality.
- ✚ It can be justified on the basis that progress is more important than accuracy and optimum performance.
- ✚ If you intend to schedule the plan manually, remember these things:
 - ✚ check that you have allowed for the real dependencies within the project (e.g. we cannot train the users until there is a working system available)
 - ✚ check resources are not unrealistically loaded (team members rarely work more than 24 hours in one day)

4.6. Activity, process, deliverable, outcome, or milestone-focused?

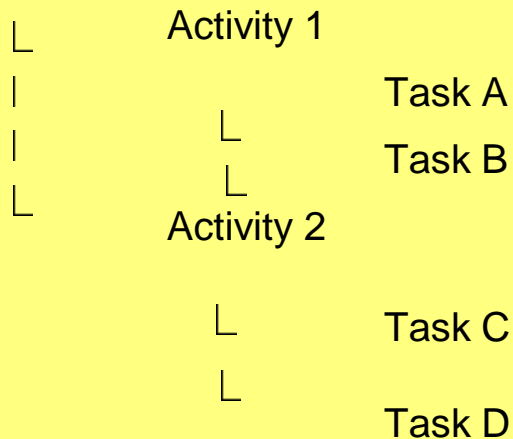
- ✿ How do we define the 'things' in the plan - what are they?

Activity-focused plan

✿ Example:

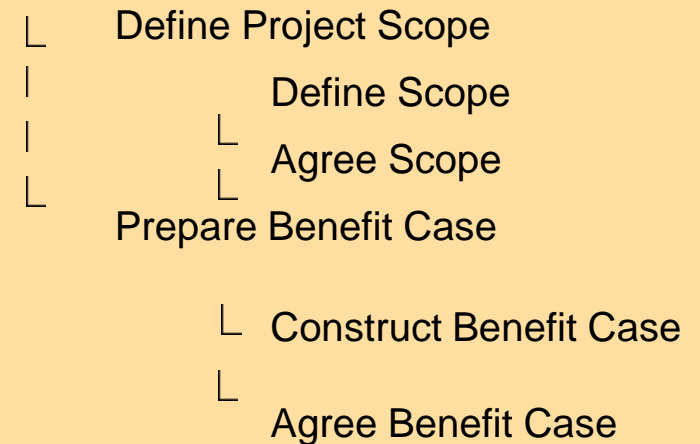
Logical Structure

Phase 1



Example

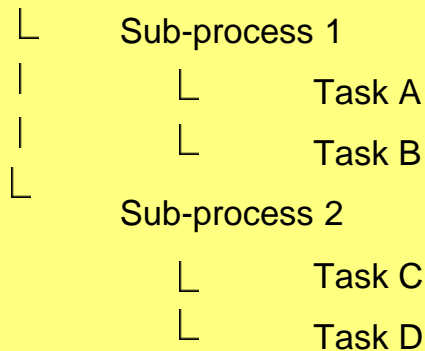
Phase 1 - Define the Project



Process-focused plan

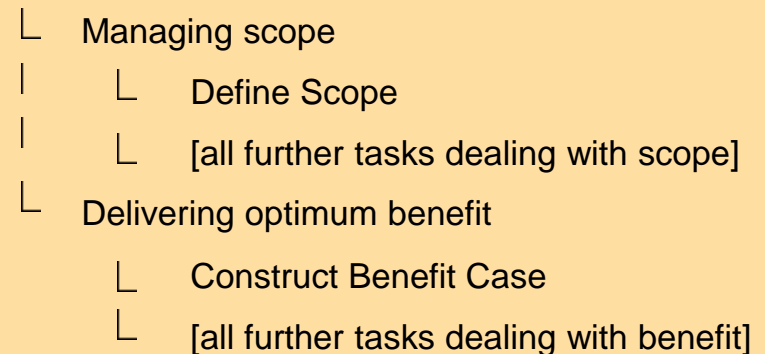
Logical Structure

Process 1



Example

Delivering the project's objectives



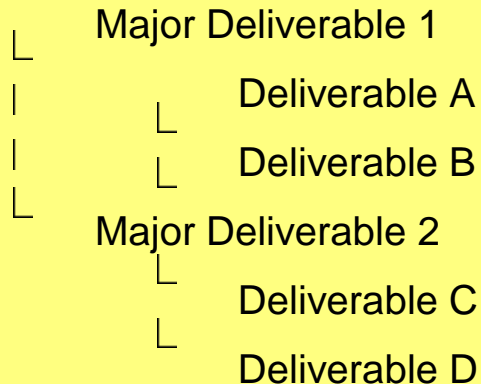
- ❖ **Problem:** it offends those Project Managers and Project Sponsors who expect the plan to be organized in distinct stages
 - ❖ Example: the testing process will start early in the project when the overall approach to testing is agreed; test planning and preparation will occur in the middle; test execution and sign-off occur towards the end.
- ❖ **Should the project plans be organized to show logical and/or time progression?**
 - Within each process, such staging may be apparent, but in a single view it is hard to present both the staging across processes and the story of each process.

Deliverable-focused plan

- ✿ In a deliverable-focused plan the previous examples might look like this:

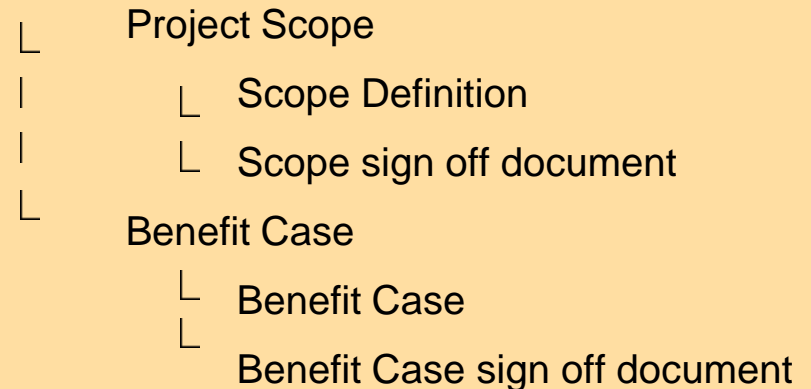
Logical Structure

Phase 1



Example

Phase 1 - Project Definition

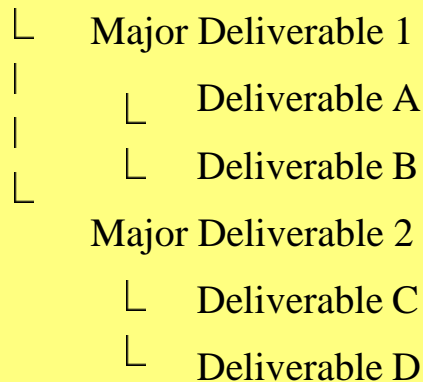


- ✿ Because the plan is now expressed in terms of its deliverables, the expressions have now become nouns - they are the names of the main deliverables being produced.

Outcome-focused plan

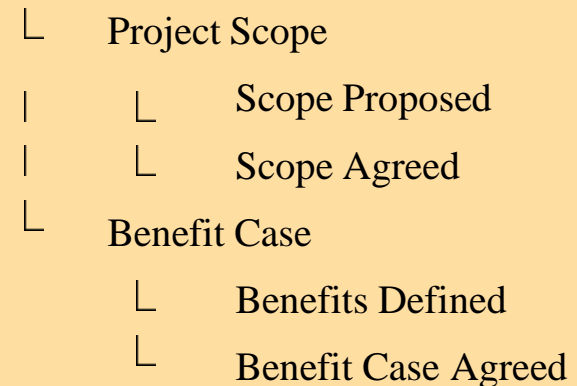
Logical Structure

Phase 1



Example

Phase 1 - Project Defined



The thing most worthy of the Project Manager's attention is not the work done, nor the reports produced, but achieving the desired **outcome** in the most beneficial manner.

There is no doubt that this is a good ambition for the Project Manager.

Should the plan be expressed in those terms so that everyone is focused on the outcomes?

Milestone-focused plan

- ✚ Milestones: critical checkpoints indicating the completion of a significant achievement, deliverable, stage of work etc.
 - ✚ Are inserted into the plan as control points for management and reporting.
 - ✚ Represent important review points or interdependencies in the plan.
- ✚ In high-level planning, it may be appropriate to start from a network plan only showing milestones and their dependencies.
- ✚ Usually the milestones represent deliverables or outcomes → may be a deliverable or outcome view would have worked better

Activity, process, deliverable, outcome, or milestone-focused?

Style	For	Against
Activity focused	It's what many people are familiar with - instructions that tell them what they have to do	Can seem like a lot of work is done without creating any tangible, measurable result
Process focused	Very good at explaining how things are done	Loses the staged view of the overall project
Deliverable focused	Focuses attention on delivering the deliverable	Might focus attention on trivial or artificial outputs instead of the major focus of the work
Outcome focused	Focuses attention on what really counts	Can seem esoteric and can be hard to measure that the outcome has been satisfactorily achieved.
Milestone focused	Presents a simple picture focusing on critical information.	In reality is focused on deliverables or outcomes as described above. Will not normally focus attention on the path or effort to attain each milestones.

An ideal approach would be to hold all these differing views and criteria in a multi-dimensional model of the project whereby the Project Manager can view and present the plan in any of these manners.

Unfortunately the workload to create and manage plans would be high if not prohibitive and the software tools do not exist to make it possible.

A good plan will, nevertheless, be organized so that the major activities, work streams, deliverables and outcomes are all apparent to the reader whichever main structure has been chosen.

Summary

- ✿ The classic and common understanding is that a plan tells you what things to do.
- ✿ It describes the various activities that are required.
- ✿ These would typically be broken down and structured into categories for ease of understanding.

2. Lập kế hoạch triển khai dự án

1. Create a project management plan
2. Project scope plan
 1. Collect requirements
 2. Define scope
 3. Visualize WBS
3. Project time plan
 1. Develop schedule

1. Create a project management plan

- ✿ First of all, it is needed to develop project management plan.
- ✿ Project Management Plan is the plan for the way to manage your project which includes below but not limited to:
 - ✿ Change management plan
 - ✿ Configuration management plan
 - ✿ Key management reviews for content, extent, and timing to facilitate addressing open issues and pending decisions.

Project management plan

- Key deliverable output of the project planning phase
- Include specific information on the individual project activities and tasks that need to be performed:
 - why they need to be done
 - when they will be done and
 - who will do them
 - what resources are needed
 - what criteria must be met in order for the project to be considered successful.

Project Integration Plan

Integration Management

Project Scope Plan

Collect Requirements, Define Scope, Create WBS

Project Communication Plan

Communication Management

Project Cost Plan

Estimate Cost, Determine Budget

Project Time Plan

Define Activities, Sequence Activities, Estimate Activity Resources, Estimate Activity Durations, Develop Schedule

Project Quality Plan

Quality Management

Project Risk Plan

Plan Risk Management, Identify Risk, Perform Qualitative/Quantitative Risk, Plan Risk Responses

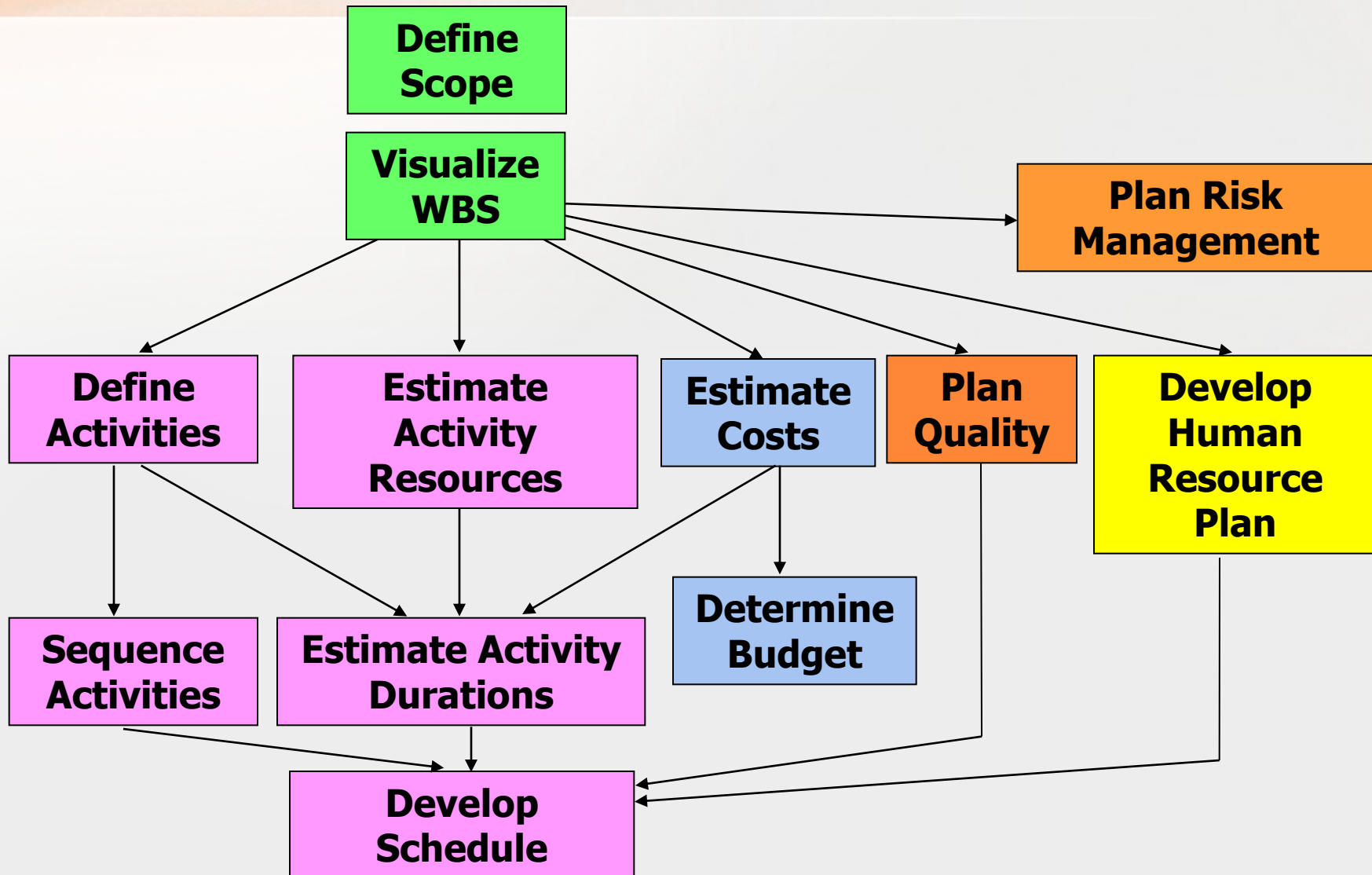
Project Human Resource Plan

Human Resource Management

Project Procurement Plan

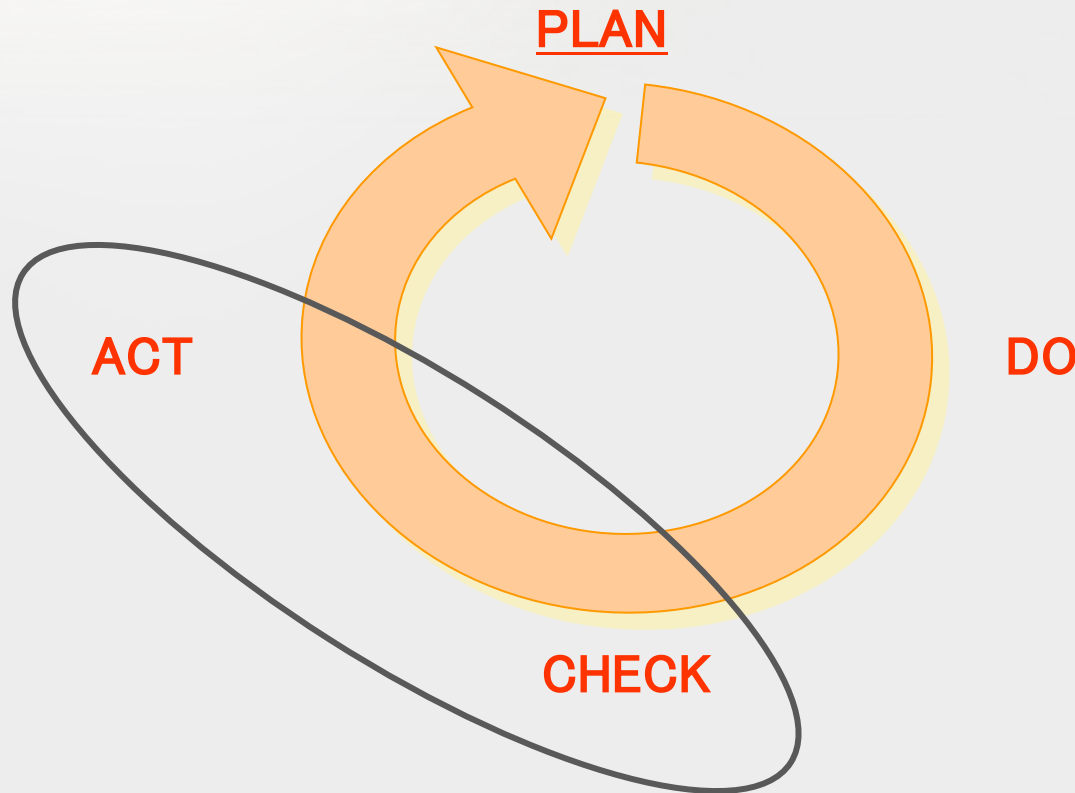
Procurement Management

Project integration plan

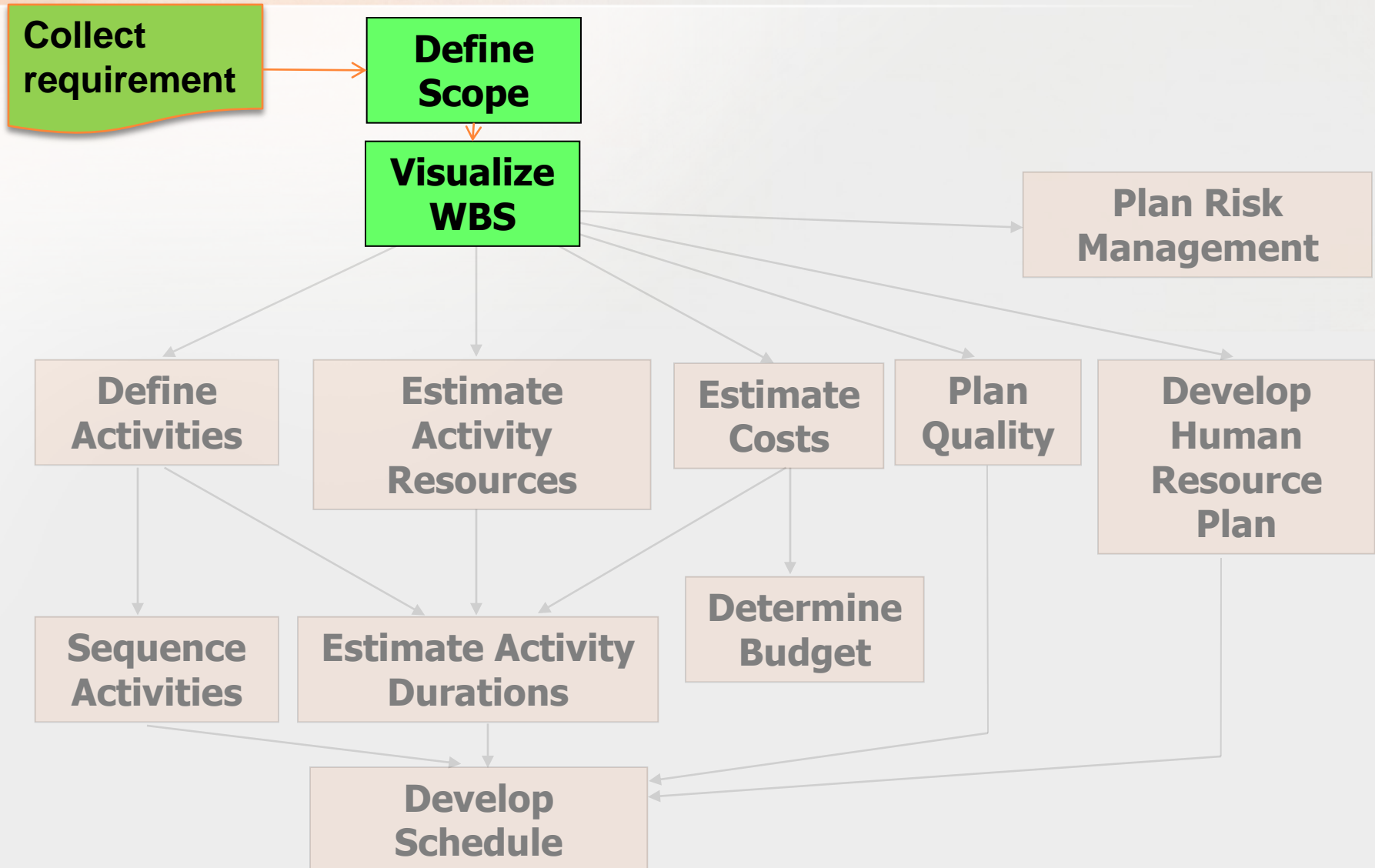


How to execute management cycle?

- ✿ The key to manage well is to run the basic management cycle which is called “PDCA” as follows:



2. Project scope plan

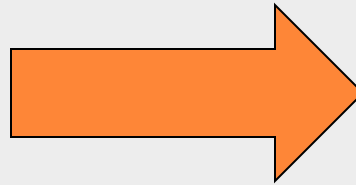


2.1. Collect Requirements

- ✿ The process of defining and documenting stakeholders' needs to meet the project purpose.

Project Charter

1. Project background
2. Project purpose
3. Measurable objectives
 - Quality
 - Cost (Budget)
 - Delivery (Milestone)
4. System configuration
5. WBS
6. Organizational chart
7. Appendix



Requirements Documentation

1. Business needs
2. Project purpose
3. Project objectives
4. WBS deliverables
5. Product design
6. Product development
7. Test scenarios
8. More detail requirements

Interview skill

- ✚ Interview skill is the core skill in Collect Requirements.

- ✚ Generally, listening is hard work for person;
- ✚ Rush to action
- ✚ Speed difference: speaking 135-175 WPM, can listen at 400-500 WPM

- ✚ Lack of training

- ✚ So, you need to train the both skills for effective collect requirements.

- ✚ Open Question:

- ✚ Question which start from the words “What, Why, Who, When, Where, How, How many, How much, How long?” etc.

- ✚ Closed Question

- ✚ Question which start from the words “Do you ~ ?/Are you”

- ✚ A closed question can be answered with either 'yes' or 'no'.

- ✚ → Combine these two questions to get more information from your clients.

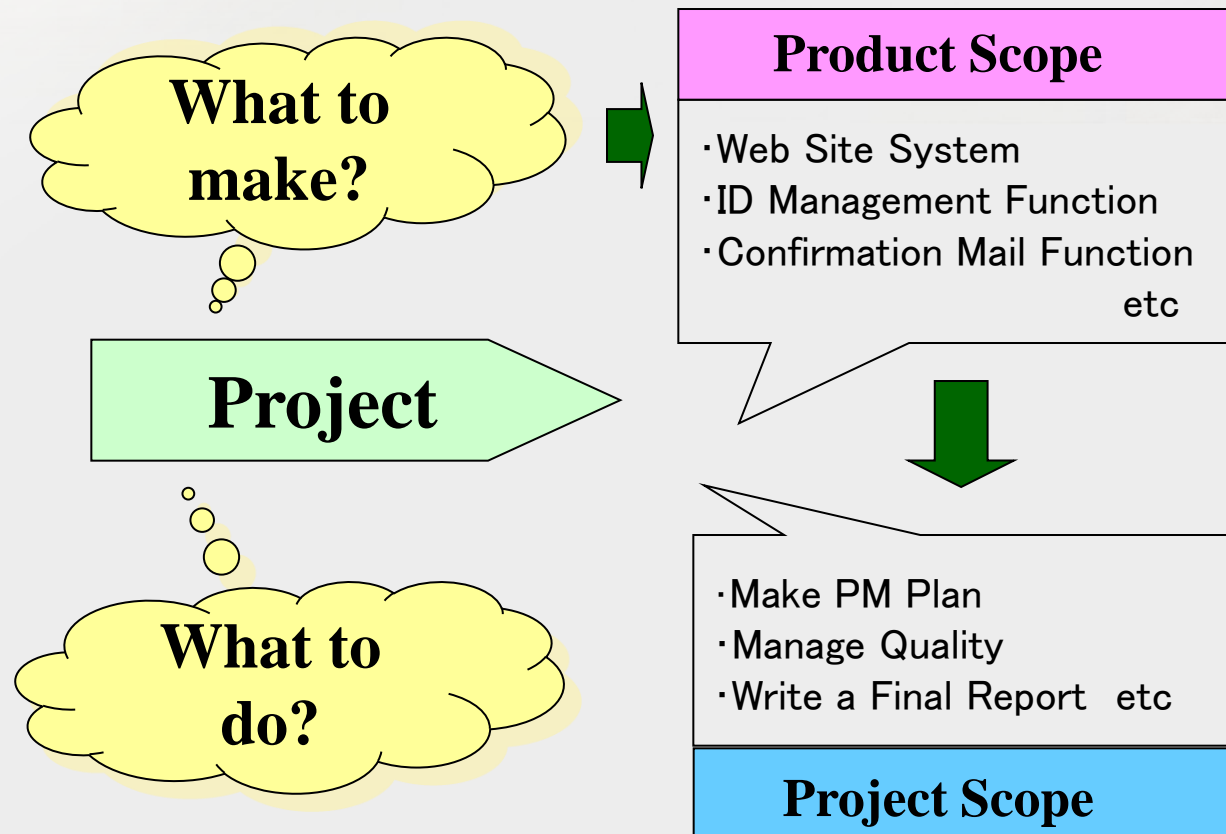
Active Listening

- ✿ Put the speaker at ease. Smile!
- ✿ Make eye contact, ask questions, take note.
- ✿ Show that you want to listen.
- ✿ Exhibit affirmative head nods and appropriate facial expressions.
- ✿ Paraphrase
- ✿ Avoid interrupting the speaker. Don't over talk!
- ✿ Use the starter question when you start the interview.
 - ✿ "Has business been busy today?"
"May I ask a question now?"
- ✿ Yes-Taking Question: Ask question what the answer should be "yes" to make the atmosphere positive.
 - ✿ "We set the dead line at the end of next month at the last meeting, wasn't it?" "Yes, we did."

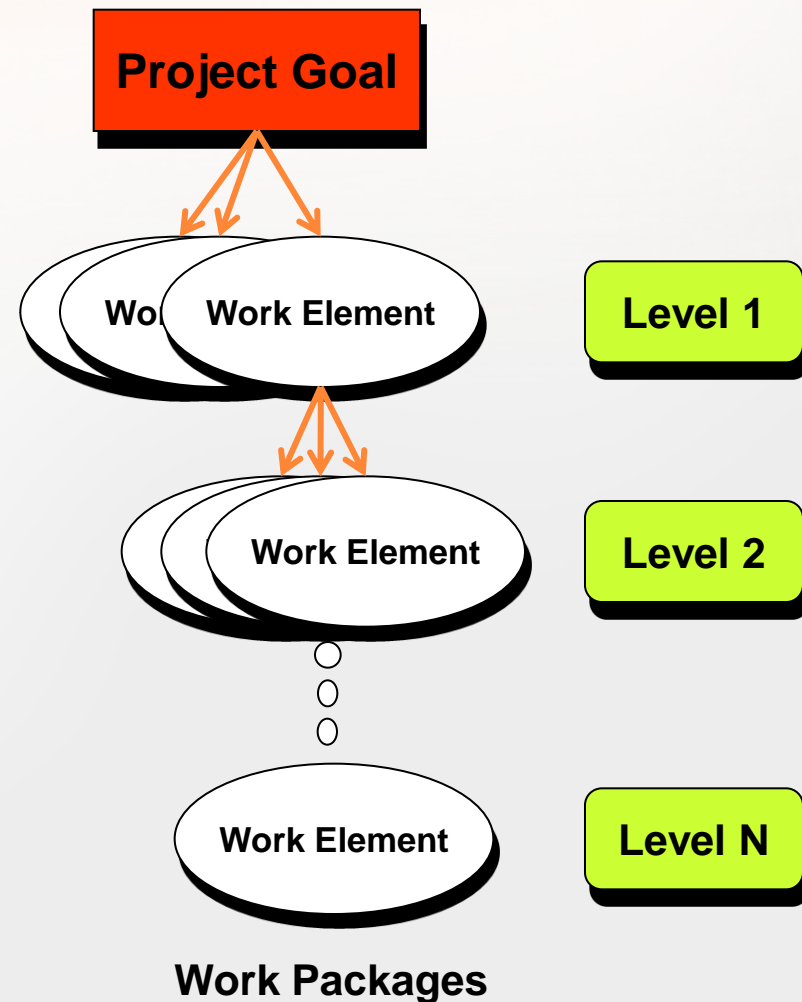
2.2. Define scope

✚ Scope means “range” of the products or services in a project.

As scope is quite important for the project, scope should be managed throughout the project. Scope can be changed little by little in a project, which is called “Scope Creep.” To avoid it, you need to plan the process of change management. It is safe to suppose that scope will change during project. So, scope management plan need to have the process



2.3. Visualize Work Breakdown Structure

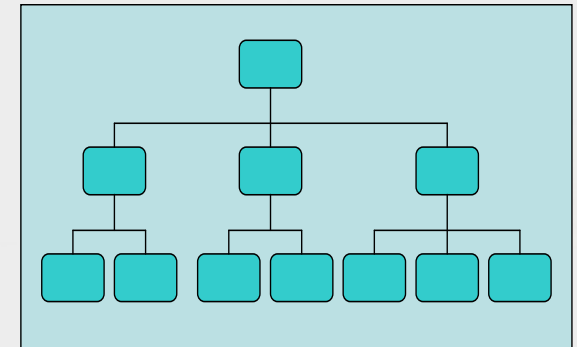


- ✚ The WBS divides the whole project into work elements that represent singular work units, assigned either to the organization or to an outside agency, such as, a contractor or project partner
- ✚ The underlying philosophy of the WBS is to divide the project into assignable “work packages” for which accountability can be expected (e.g., project deliverables or processes)
- ✚ Projects are planned, organized and controlled around the lowest level of the WBS, i.e., the work packages

Create WBS

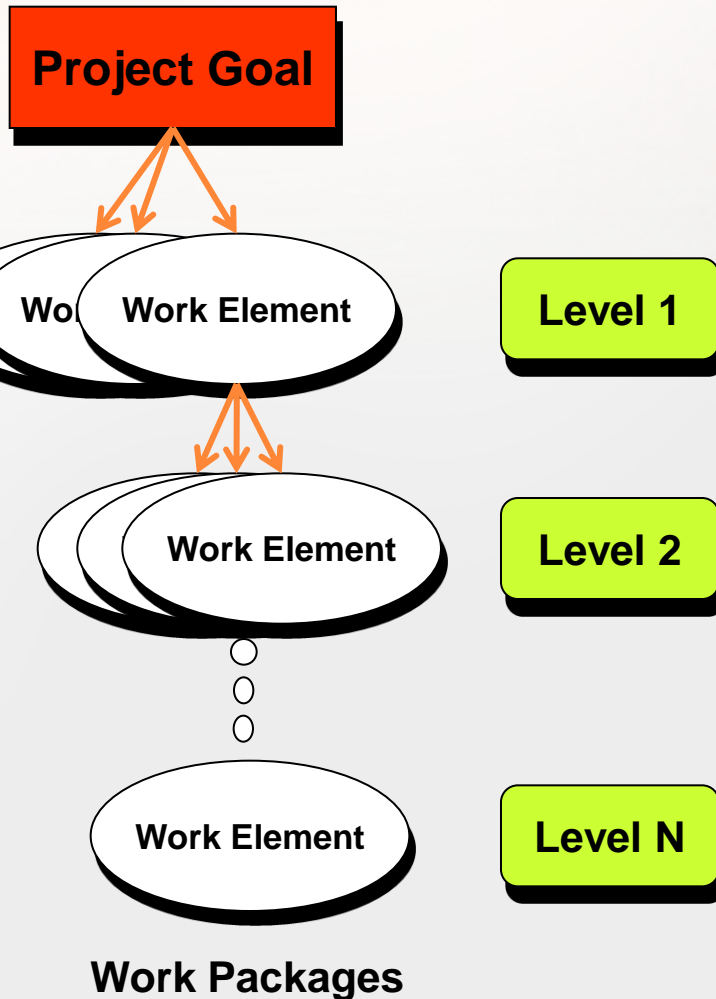
Two forms of WBS:

Chart form

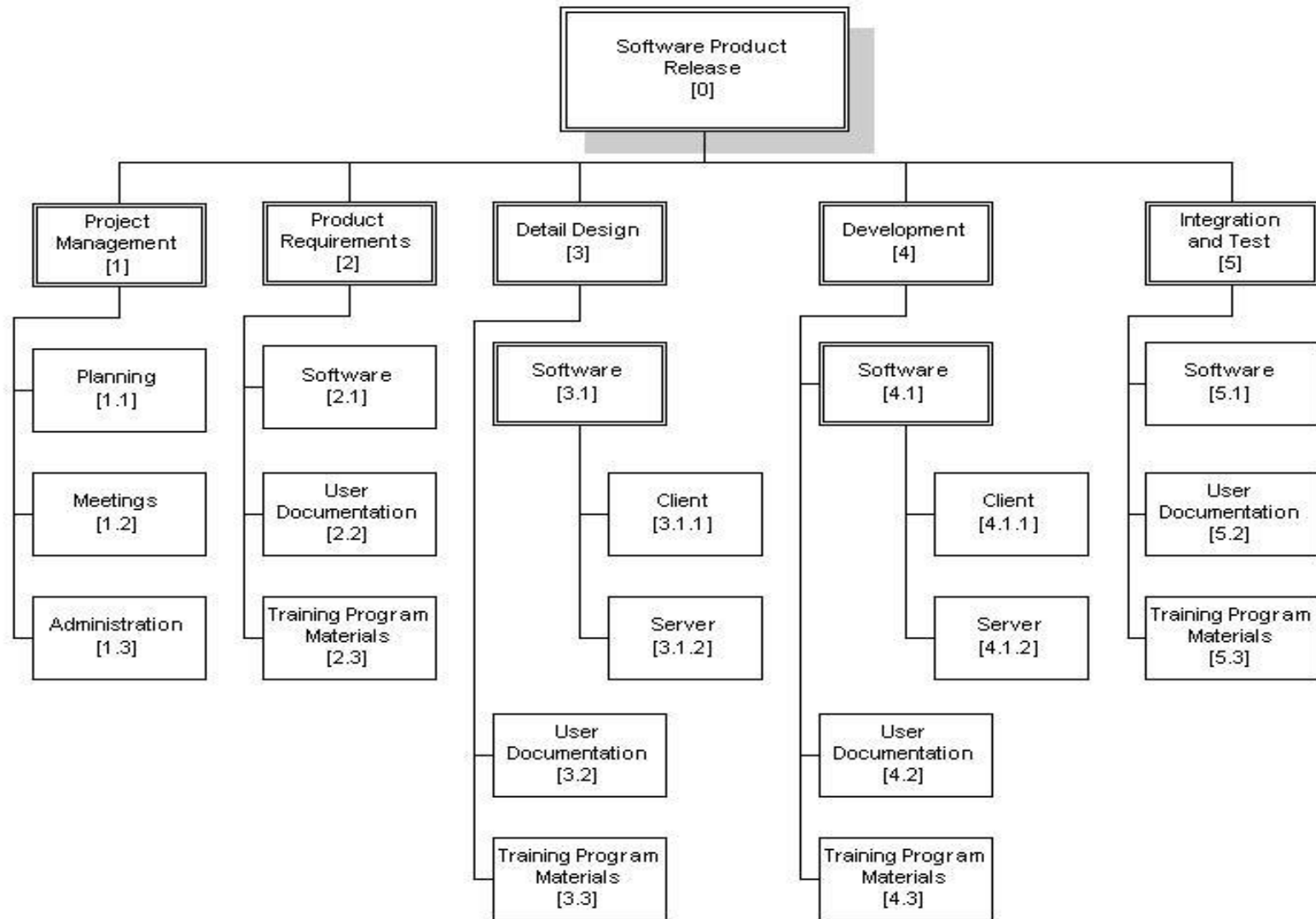


Tabular form

1 Project Management		
	1.1 Planning	
		1.1.1 Scope Statement
		1.1.2 Activity List
		1.1.3 Resource Plan
		1.1.4 Time Estimate
		1.1.5 Cost Estimate
		1.1.6 Risk Analysis
		1.1.7 Schedule
		1.1.8 Project Management Plan
	1.2 Executing	
2 Design		

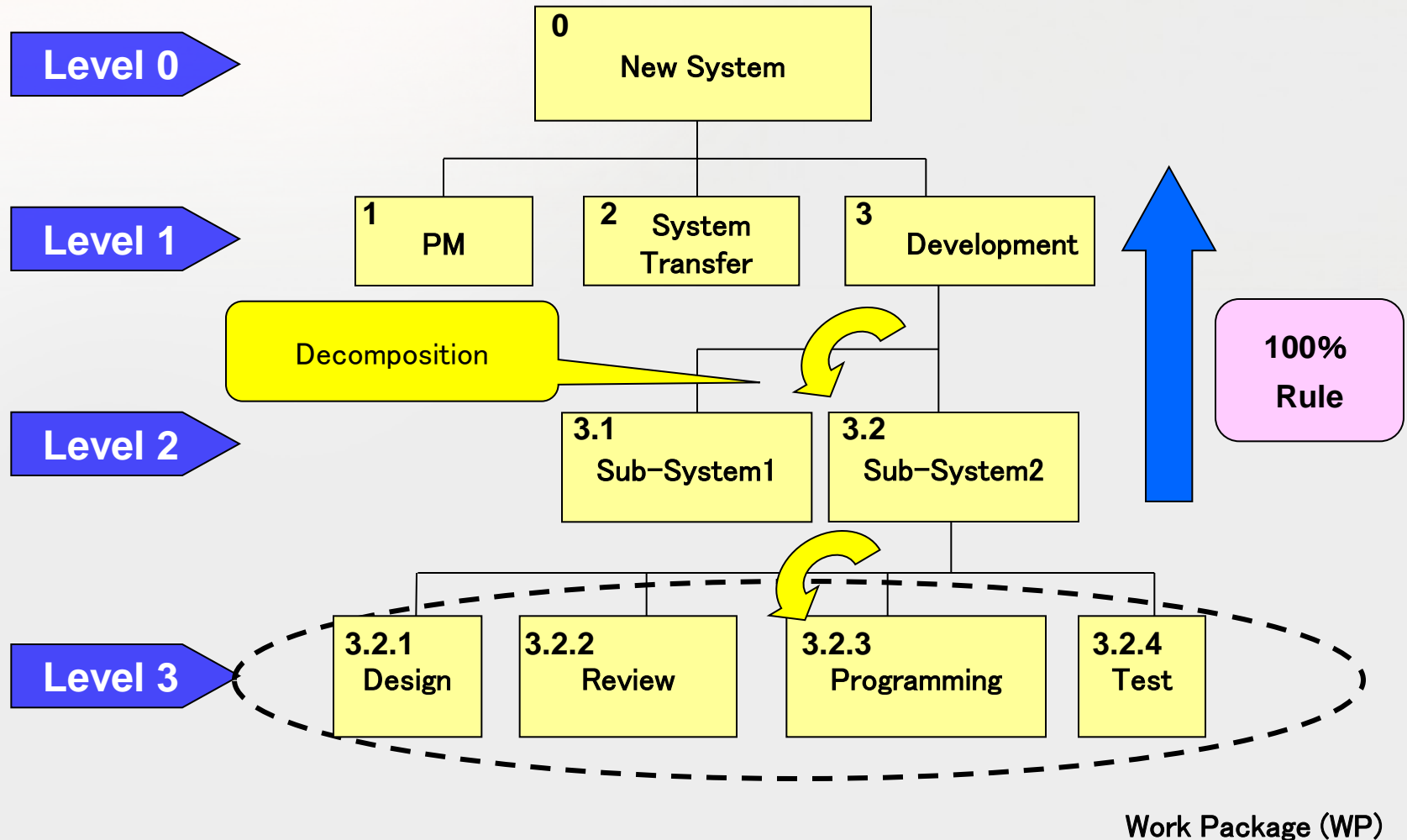


Work Breakdown Structure: Example



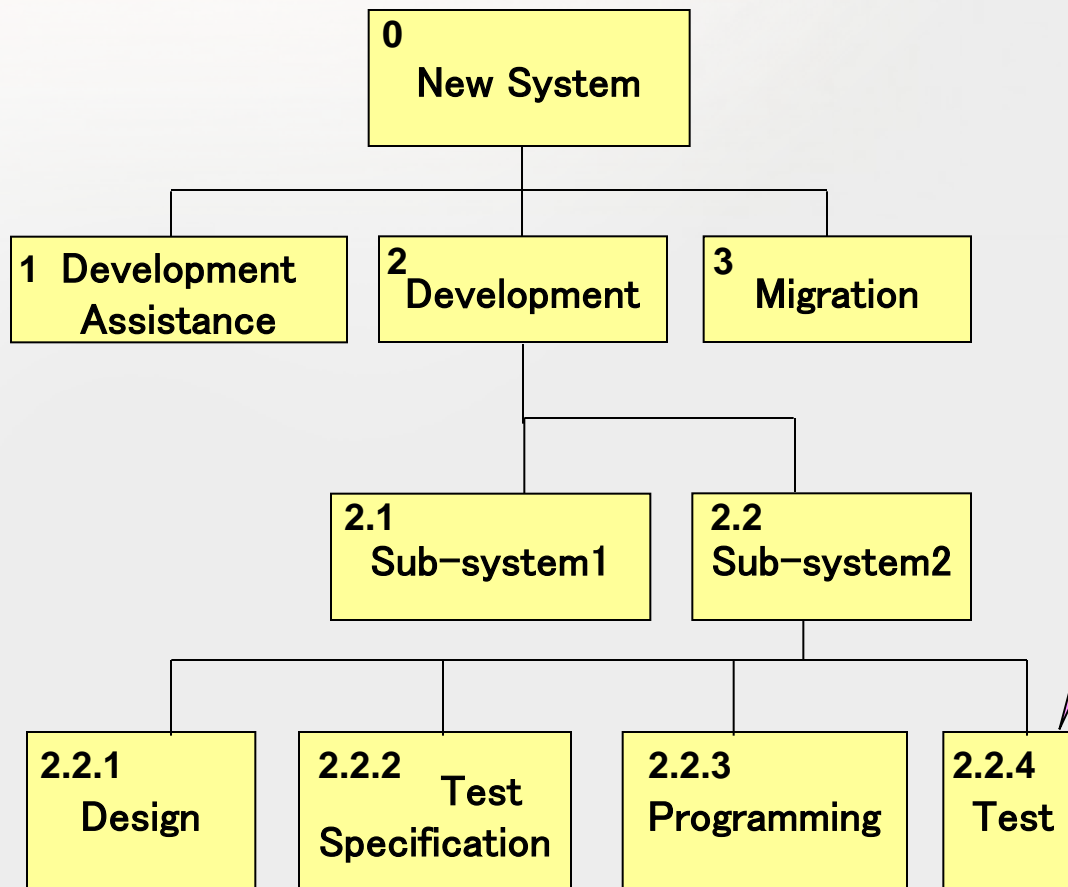
Sample Work Breakdown Structure organized by phase

Work Breakdown Structure: Example



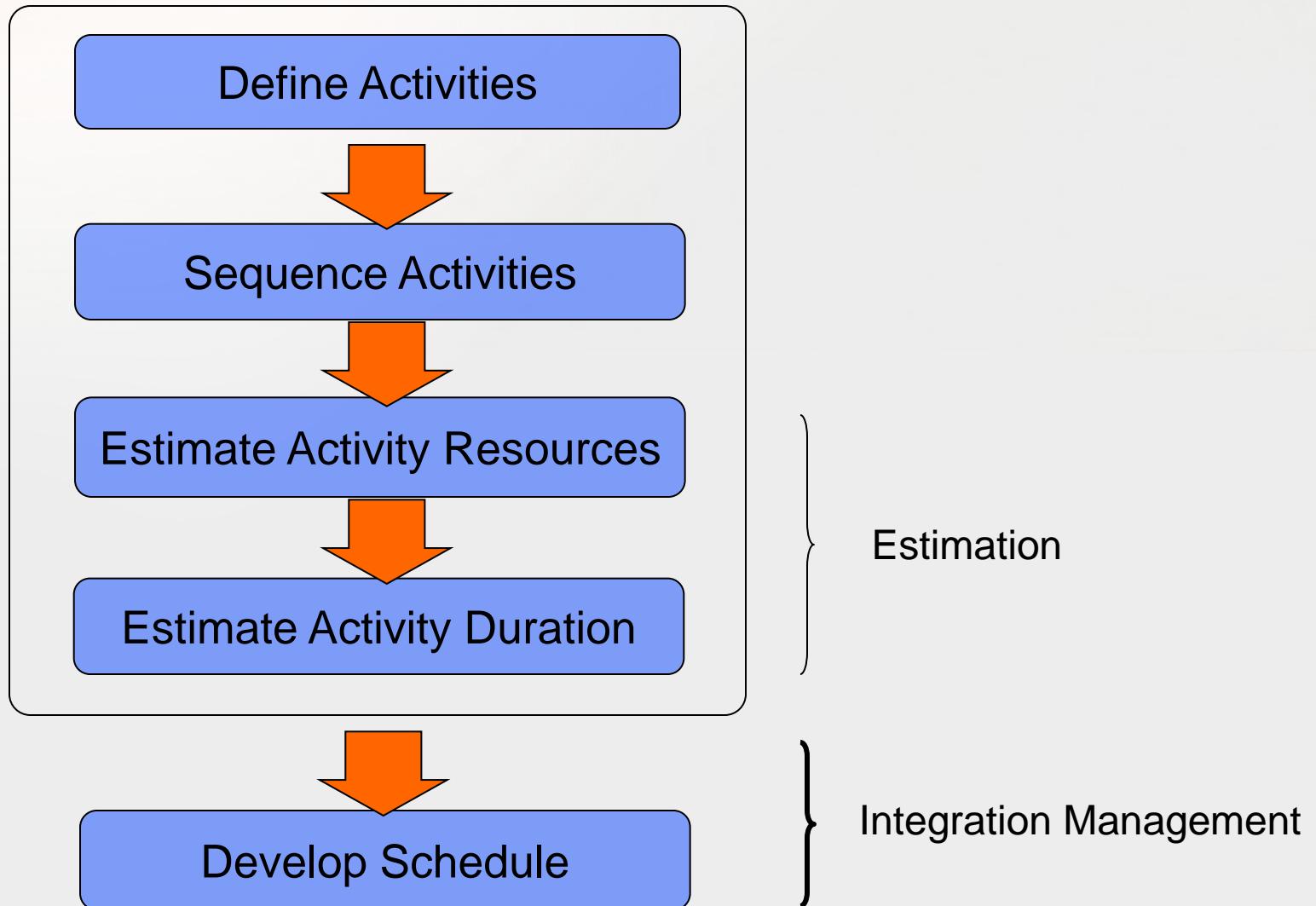
Work Breakdown Structure: Example

Level of Work Package depends on the purpose.

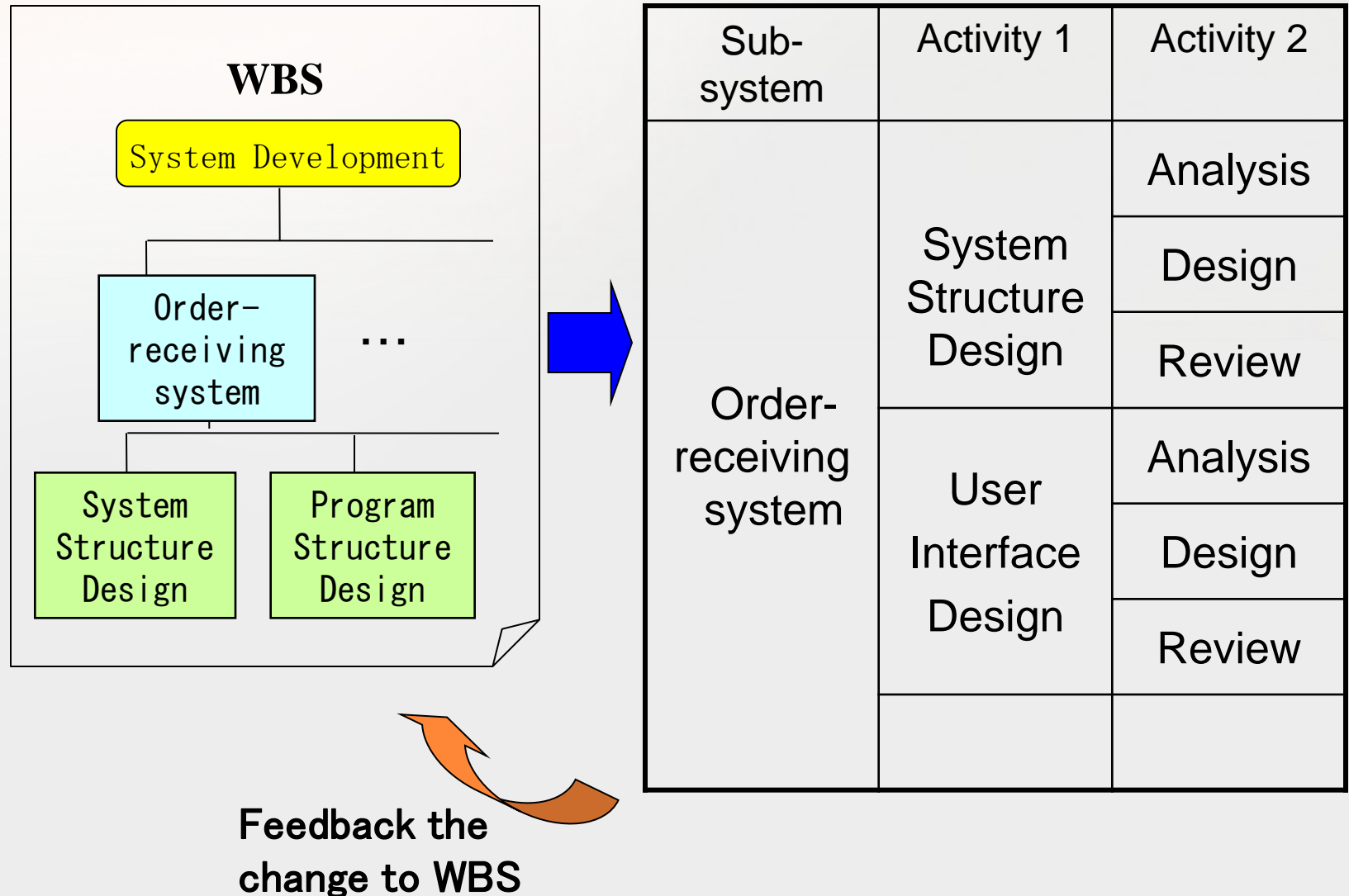


- Can you understand the elements of WBS?
- How often do you check progress?
- Is it clear division of roles?
- Does work package need more accurate estimation?

3. Project time plan

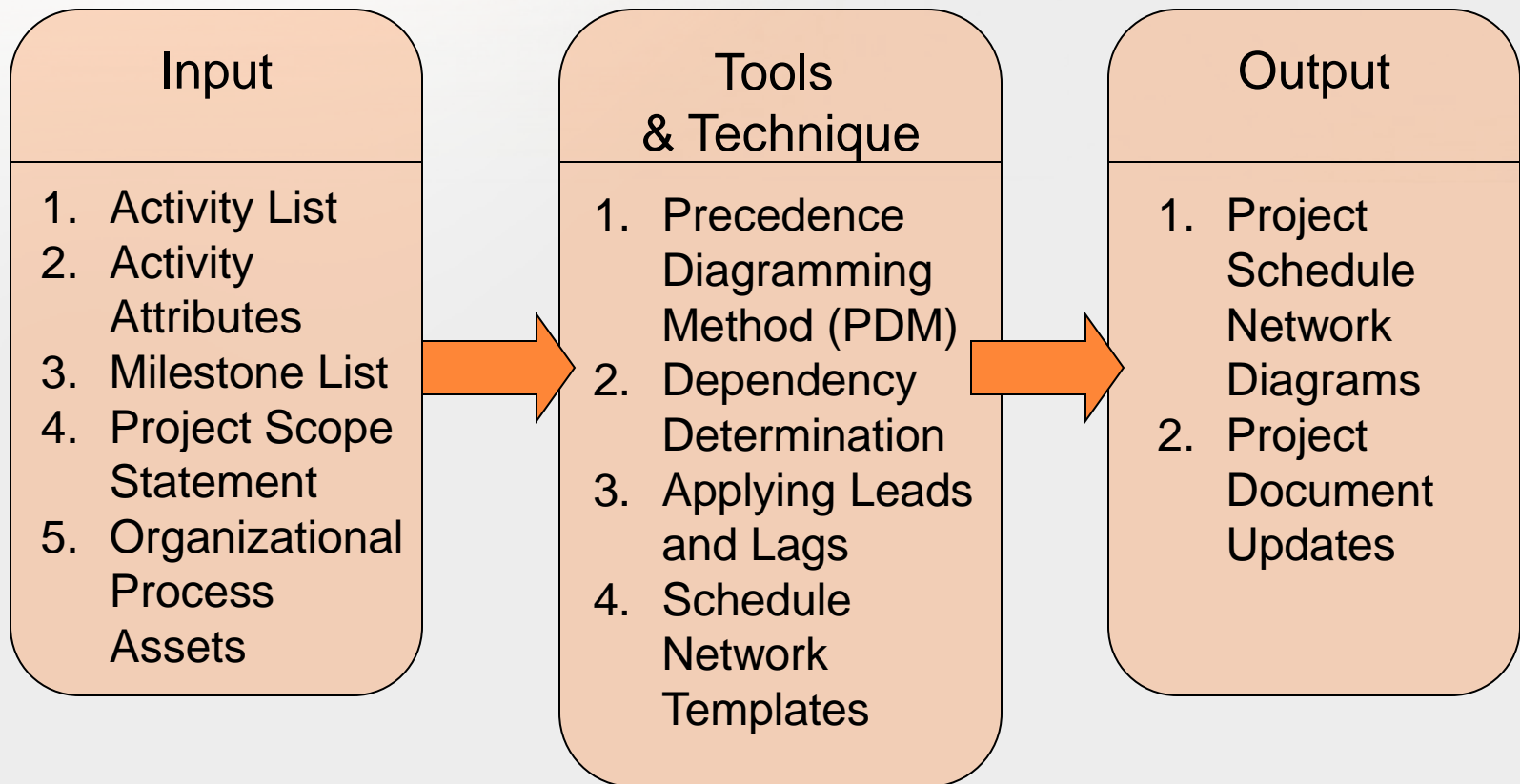


3.1. Define Activities



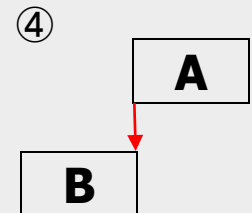
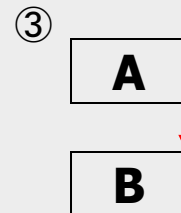
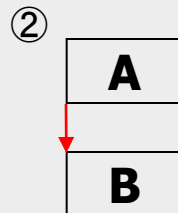
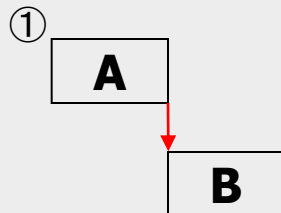
3.2. Sequence Activities

- ✿ Identify and document relationships among the project activities.



Precedence Diagramming Method (PDM)

- Describe the activity as a node and connect it with the other using arrow to express sequence relationship. PDM can describe four dependent relationships.
 - ① Finish to Start (FS) : The initiation of the successor activity depends on the completion of the predecessor activity.
 - ② Finish to Finish (FF) : The completion of the successor activity depends on the completion of the predecessor activity.
 - ③ Start to Start (SS) : The initiation of the successor activity depends on the initiation of the predecessor activity.
 - ④ Start to Finish (SF) : The completion of the successor activity depends on the initiation of the predecessor activity.

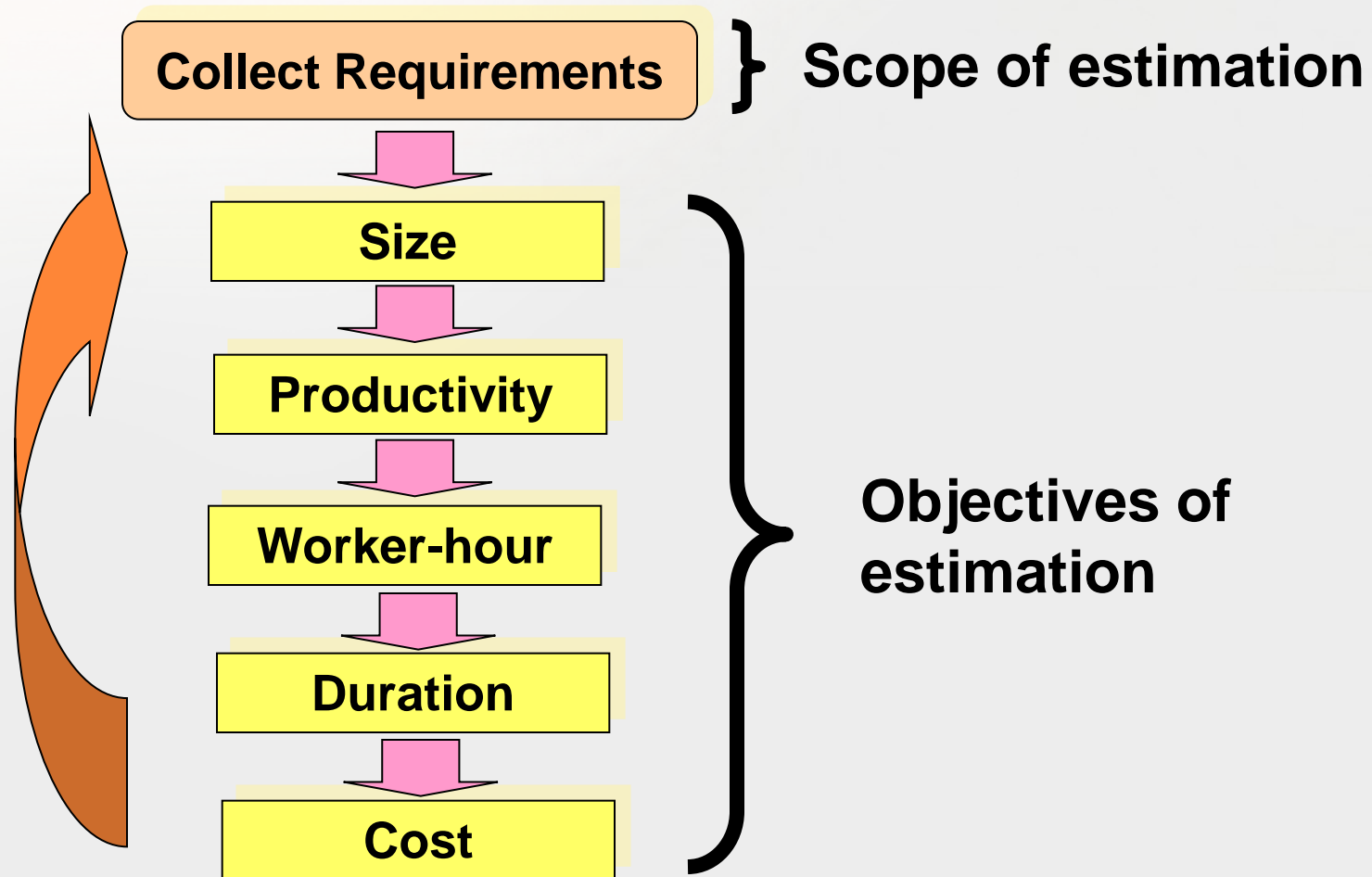


Dependency Determination

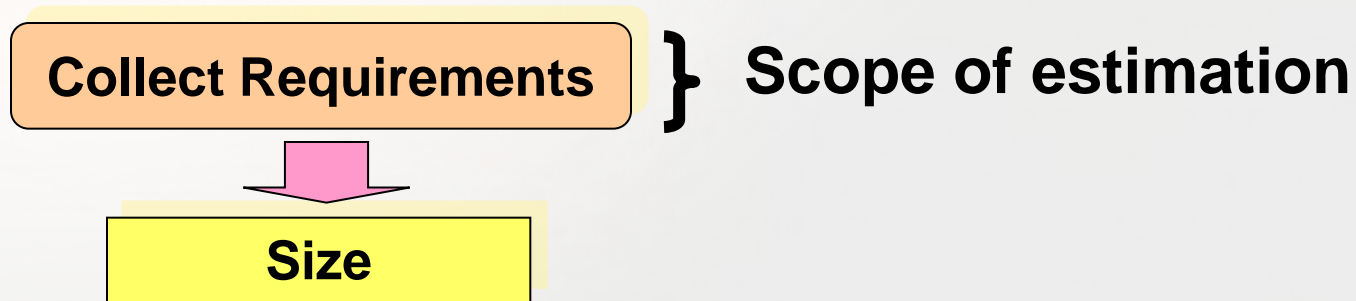
- ✿ To define the sequence among the activities, three types of dependencies are used:
- ✿ **Mandatory Dependencies:**
 - ✿ Dependencies that are contractually required or inherent in the nature of the work.
- ✿ **Discretionary Dependencies:**
 - ✿ Dependencies which can be determined sequence of activities discretionary.
- ✿ **External Dependencies:**
 - ✿ Dependencies that are controlled by outsider.

3.3. Estimation

✿ The basic process of estimation



The basic process of estimation: Sizing



✚ Examples of Metrics

- ✚ Number of requirements
- ✚ Number of steps (LOC: Lines of code)
- ✚ Number of functions (FP: Function point)
- ✚ Number of pages
- ✚ Number of I/O
- ✚ Number of interface

The basic process of estimation: Estimate Productivity

✚ How to estimate the productivity?

$$\text{Productivity} = \frac{\text{Size}}{\text{Worker-Hour}}$$

- ✚ Productivity means the amount of output per hour/day/month.
- ✚ To get the productivity, the past data are used.
- ✚ Over 30 data are desired to get the reliable average productivity. (You need to modify it depends on the skill level of team members.)

The basic process of estimation: Estimate Worker-Hour

- ✚ After you estimate the size and productivity, you can calculate worker-hour using the formula.

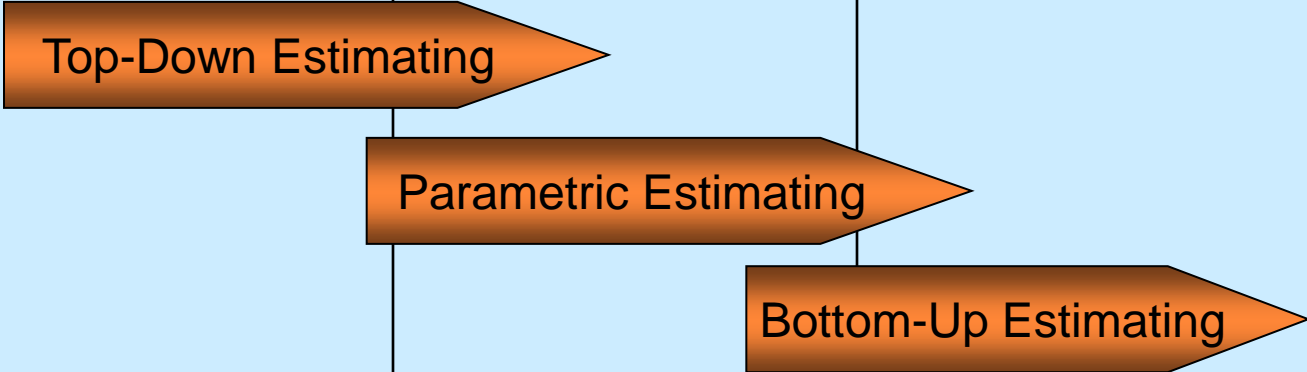
$$\text{Worker-Hour} = \frac{\text{Size}}{\text{Productivity}}$$

The basic process of estimation: Estimate Activity Duration

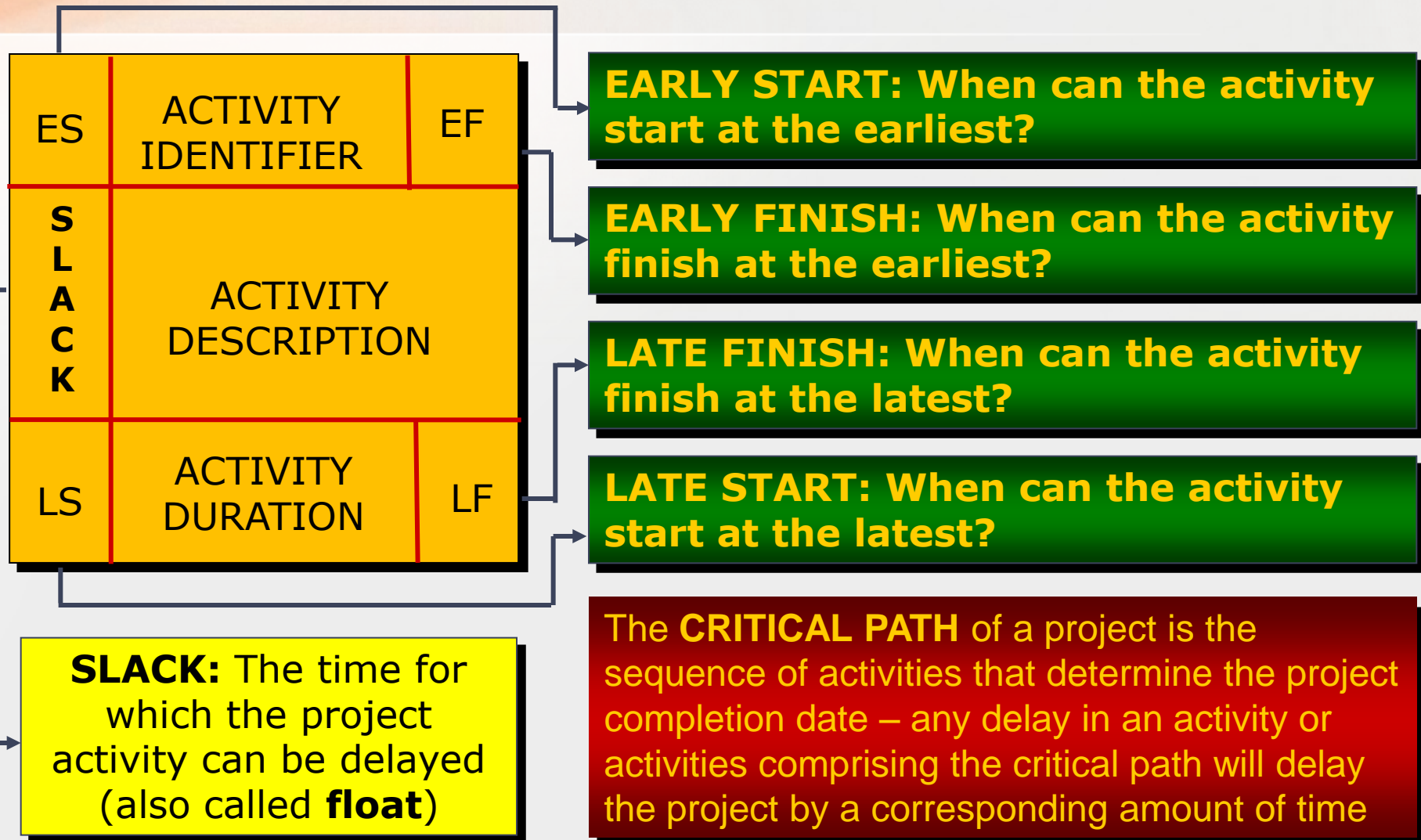
$$\text{Duration} = \frac{\text{Worker-Hour}}{\text{Number of Workers}}$$

- ✿ Estimate Activity Durations is the process of approximating the number of work periods needed to complete individual activities with estimated resources.

The basic process of estimation: Estimation Framework

Phase Estimation	Business Talks	Collect Requirement	System Design
Type of Estimate	Order-of-magnitude estimate	Preliminary estimate	Definitive estimate
Accuracy	-30~+50%	-15~+30%	-5~+15%
Tools and Technique of Estimating	 <p>Top-Down Estimating</p> <p>Parametric Estimating</p> <p>Bottom-Up Estimating</p>		

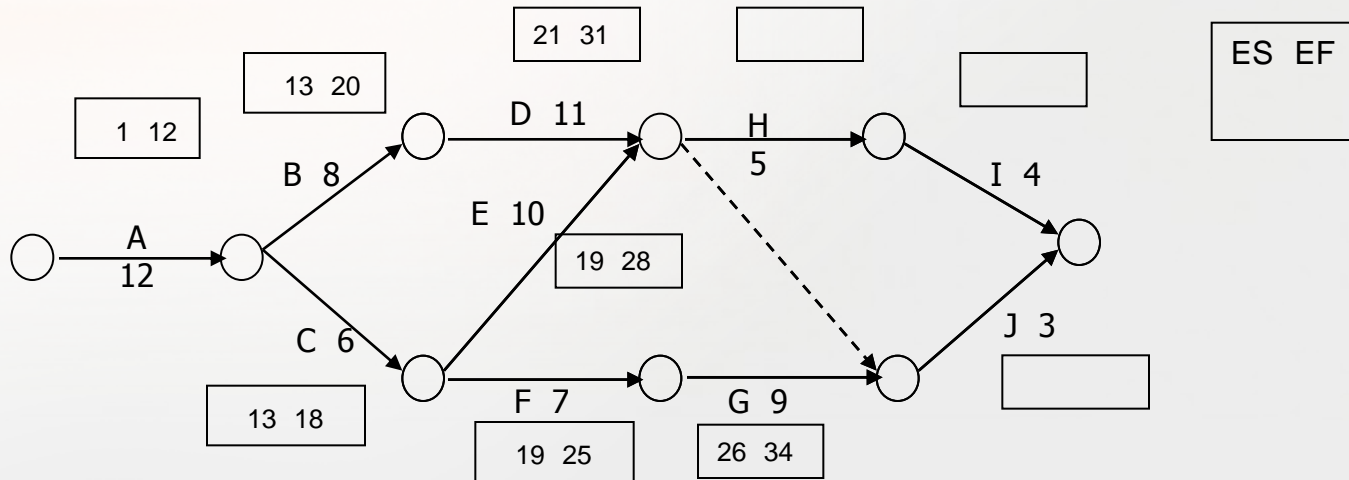
Project Network Diagrams: The Node



Critical Path Method

- ✿ Based on the estimated duration, calculate the theoretical Early Start and Early Finish dates, and Late Start, Late Finish dates.
- ✿ The critical path is the longest path throughout the project. The float of critical path should be zero.
- ✿ Project manager have to focus on the critical path to manage
- ✿ Critical path can change to the other path in a project. So, project manager need to monitor near-critical path as well.

Exercise : Critical Path Method

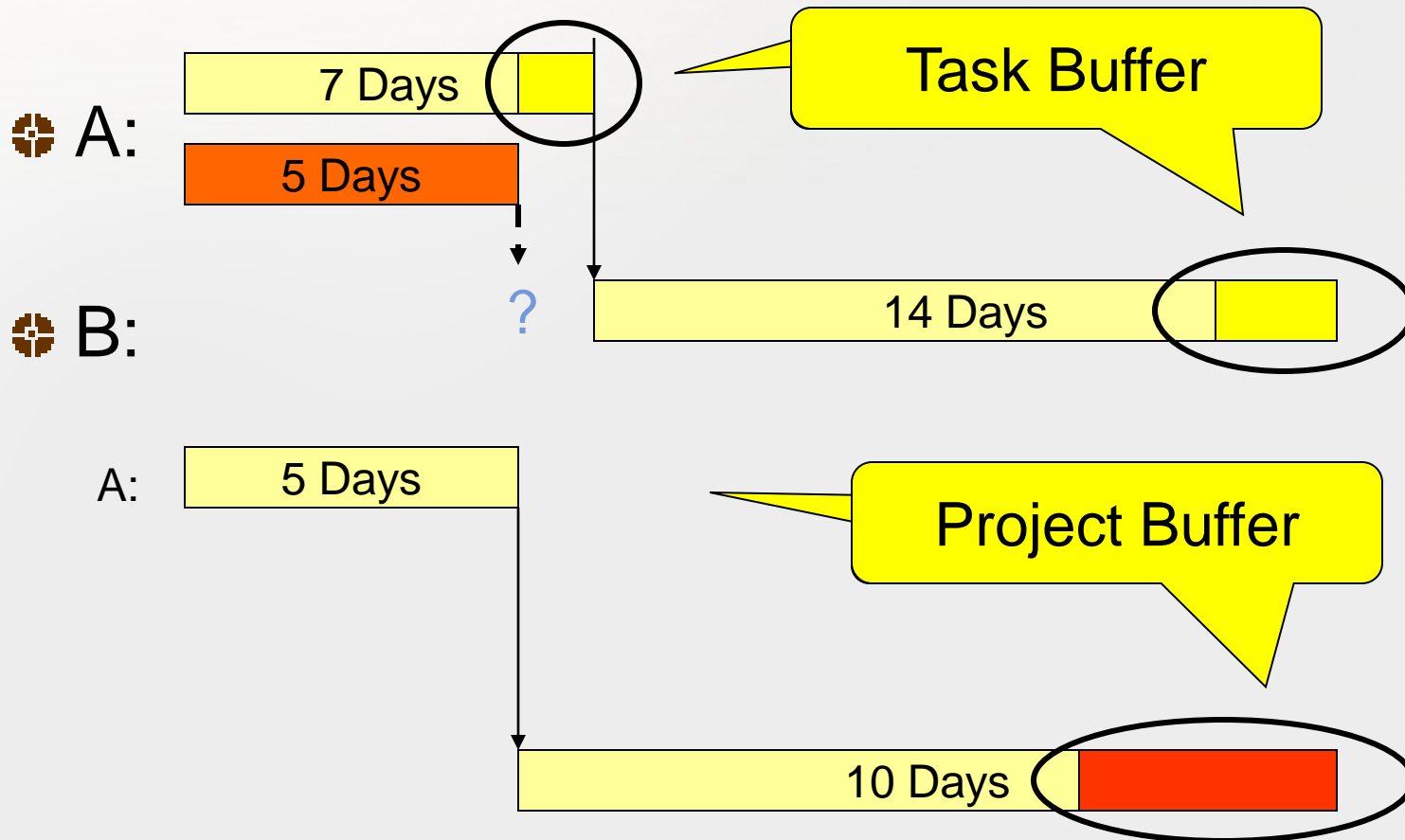


Activity	Predecessor activity	Successor activity	Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
A	—	B、C	12	1	12			
B	A	D	8	13	20			
C	A	E、F	6	13	18			
D	B	H、J	11	21	31			
E	C	H、J	10	19	28			
F	C	G	7	19	25			
G	F	J	9	26	34			
H	D、E	I	5					
I	H	—	4					
J	G、D、E	—	3					

Calculates here

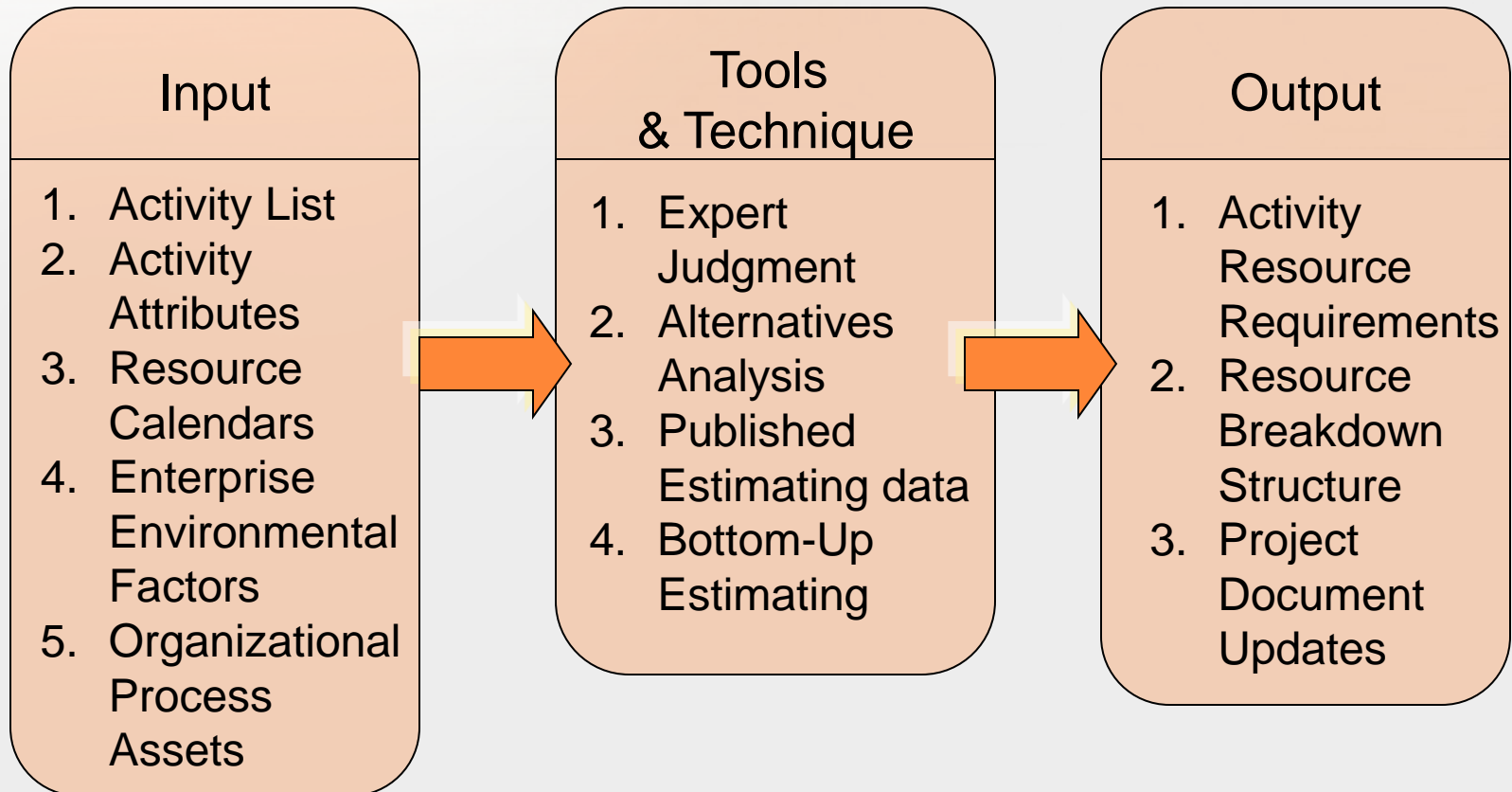
Critical Chain

- ❖ Critical Chain is the method of shorten the project duration.

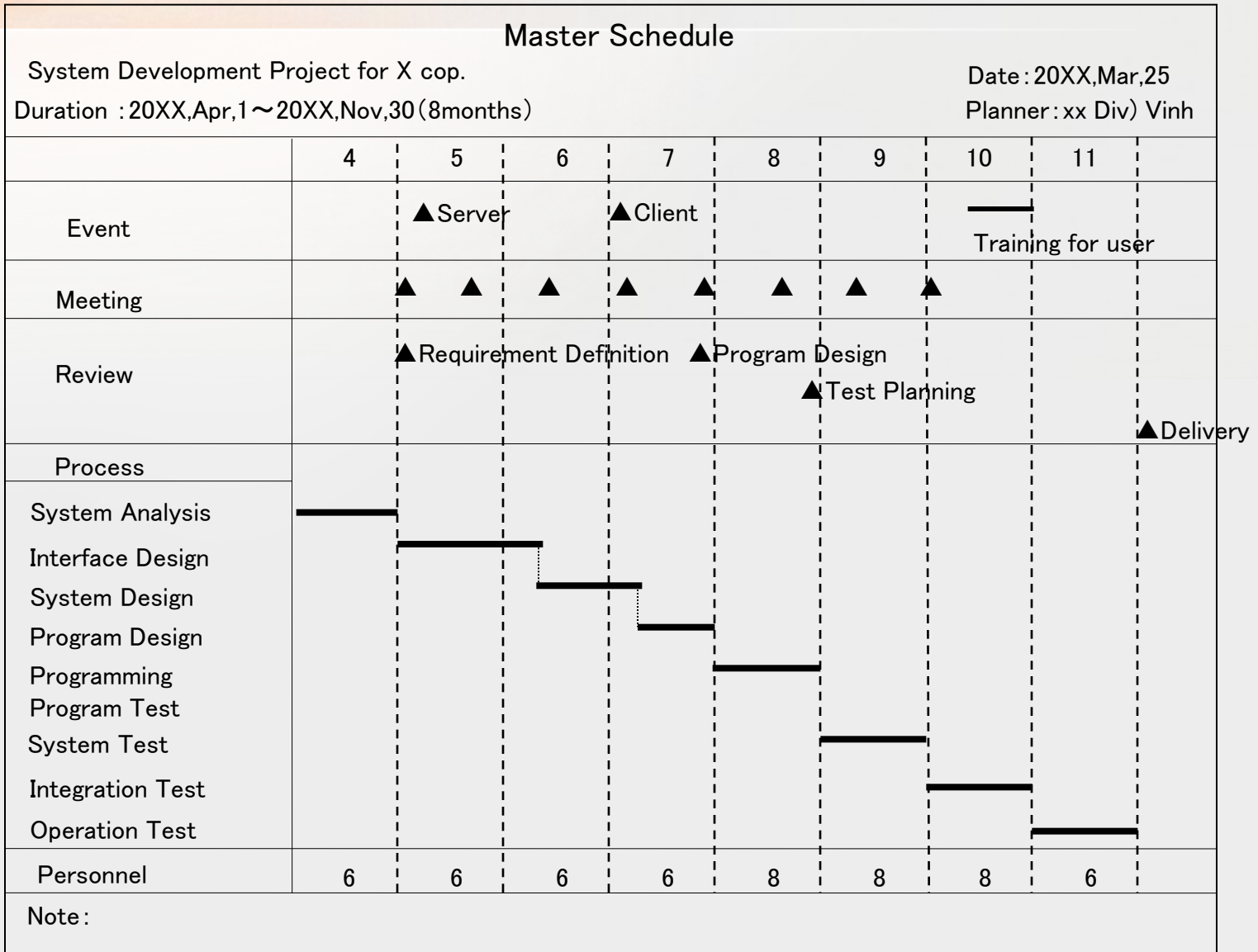


3.4. Estimate Activity Resources

- ✿ Estimate the type and quantities of material, people, equipment, or supplies required to perform each activity.



3.5. Develop master schedule



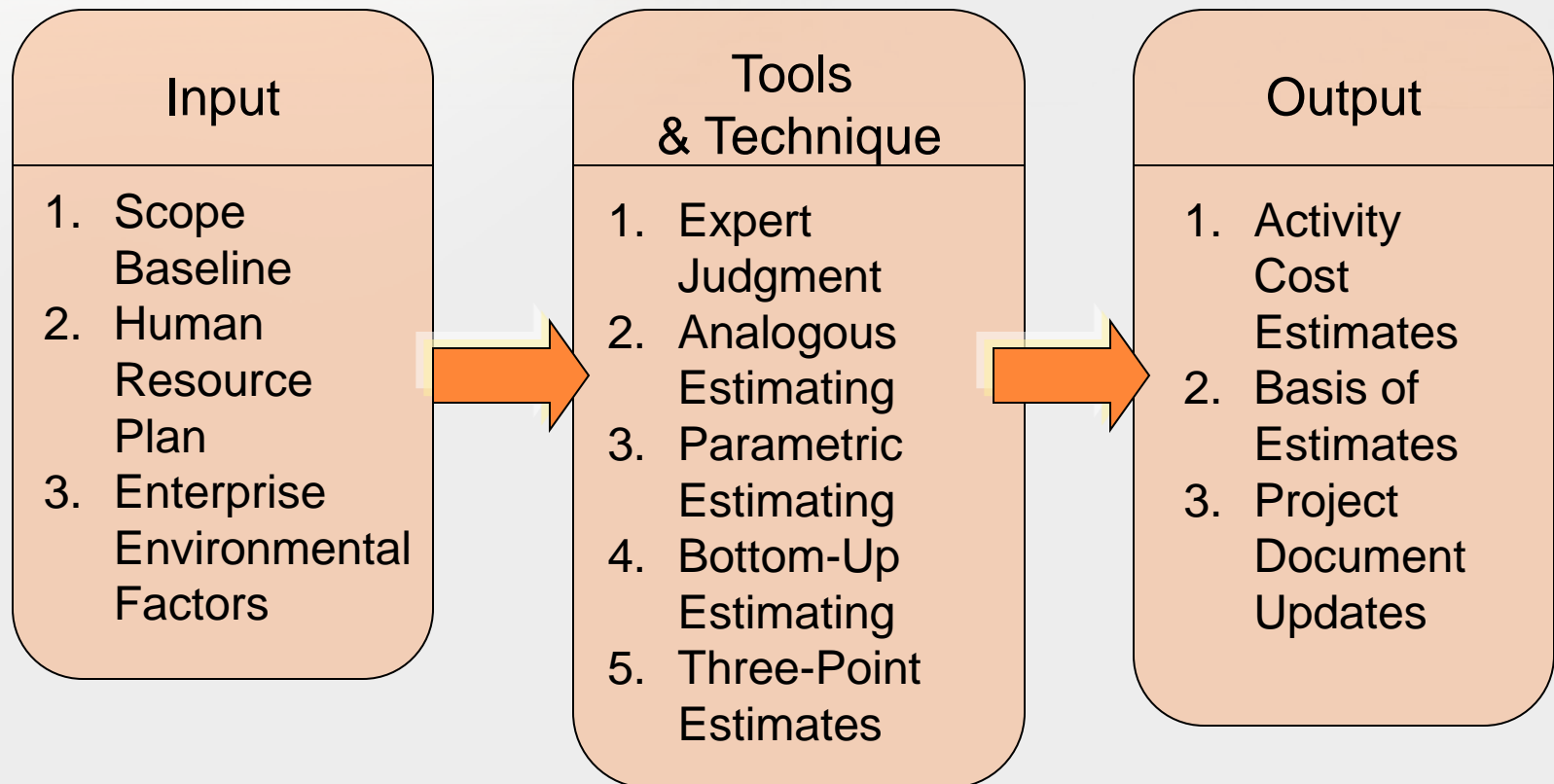
3. Lập kế hoạch ngân sách, tài nguyên, nguồn nhân lực

1. Cost planning
2. Quality planning
3. Human resource planning

1.1 Cost Schedule

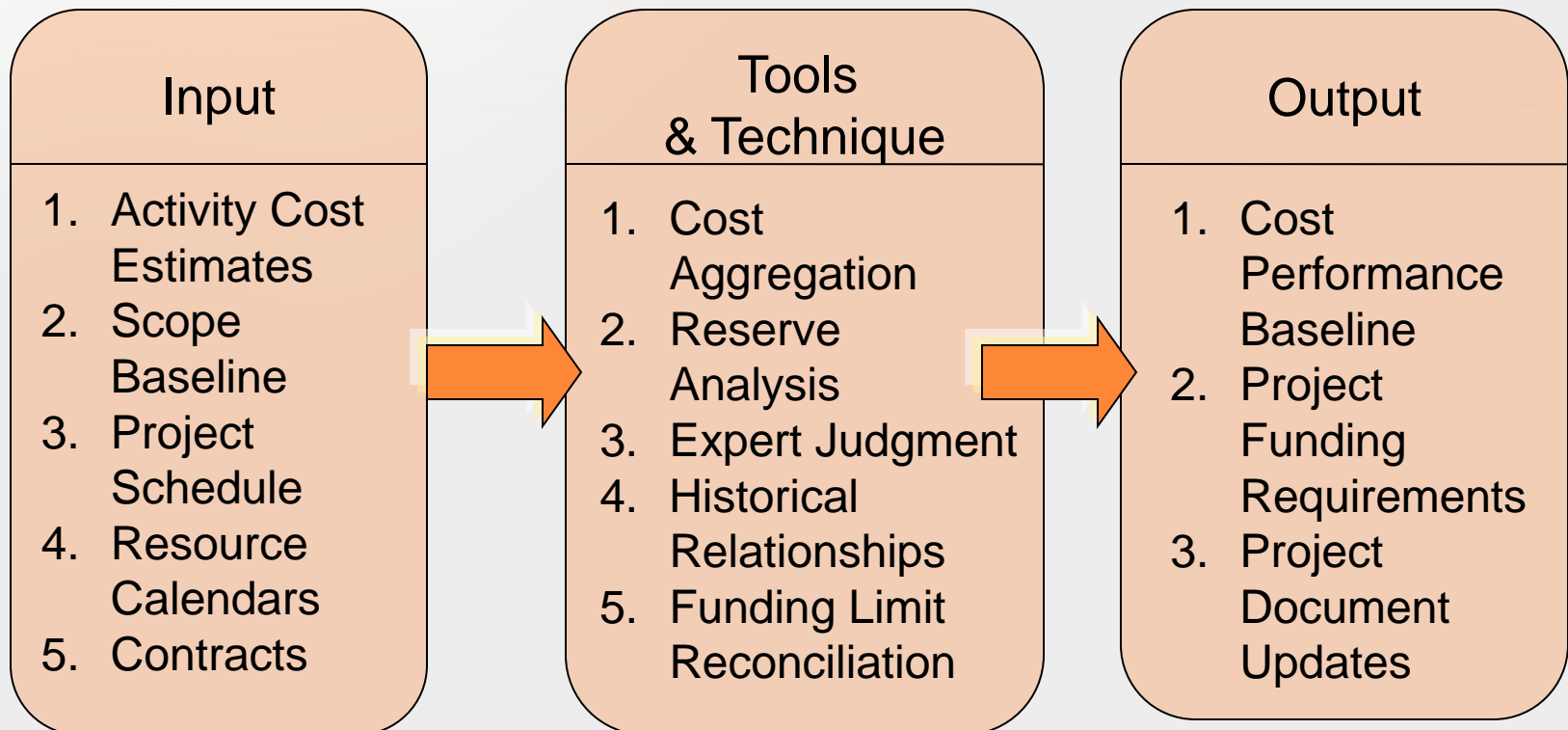
✚ Estimate Costs

- ✚ The process of developing an approximation of the monetary resources needed to complete project activities.



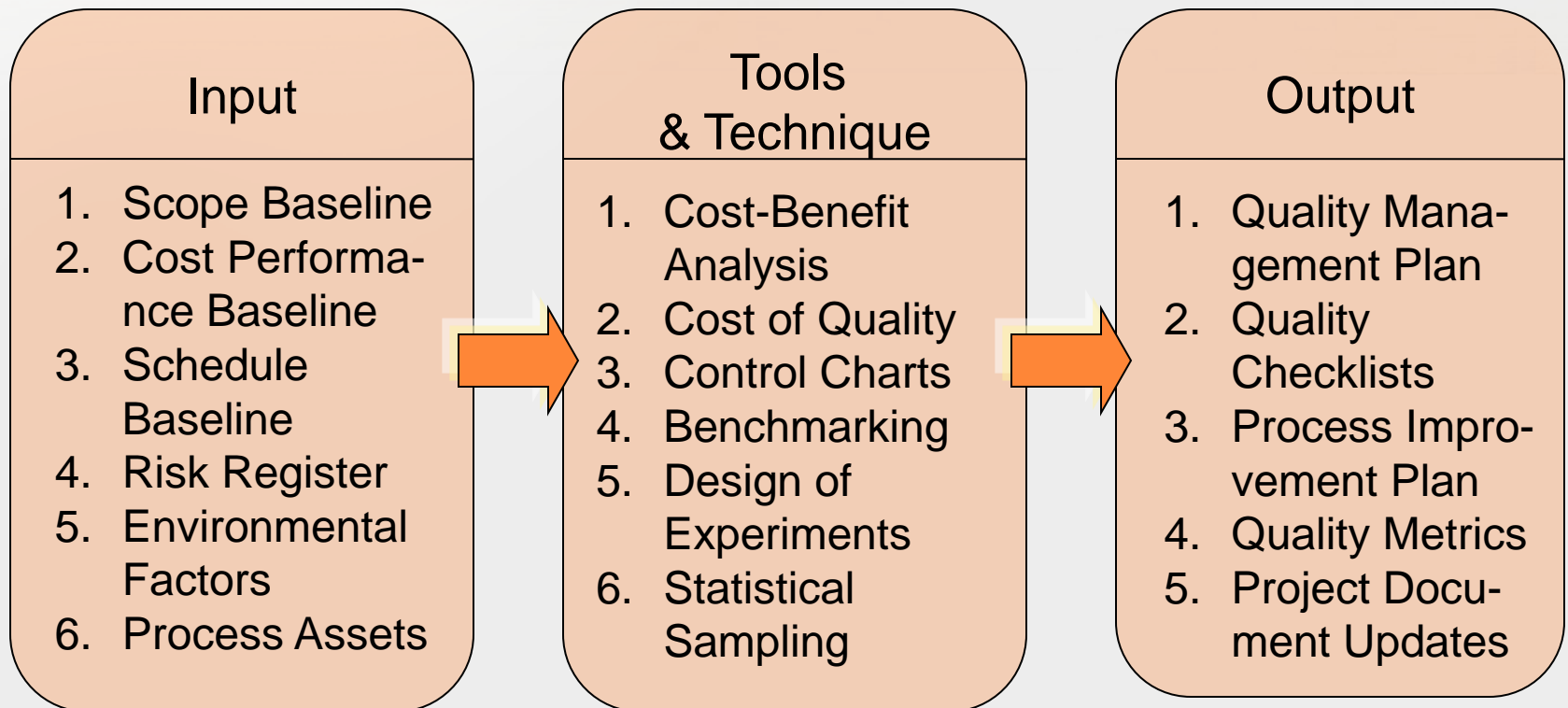
1.2 Determine Budget

- ✿ The process of aggregating the estimated costs of individual activities or work packages to establish an authorized cost baseline.



2. Quality planning

- ✿ Quality planning based on process and result.
- ✿ Test is important, but process design and monitoring are more important.



Sample Quality Planning

HTML Cording Guideline

Overall

	Items	Basic Rules	Changed
Overall	Rule of file name	Usable character : 0-9, a-z, A-Z Don't use number and under bar (_) at the top of file name.	

HTML Cording

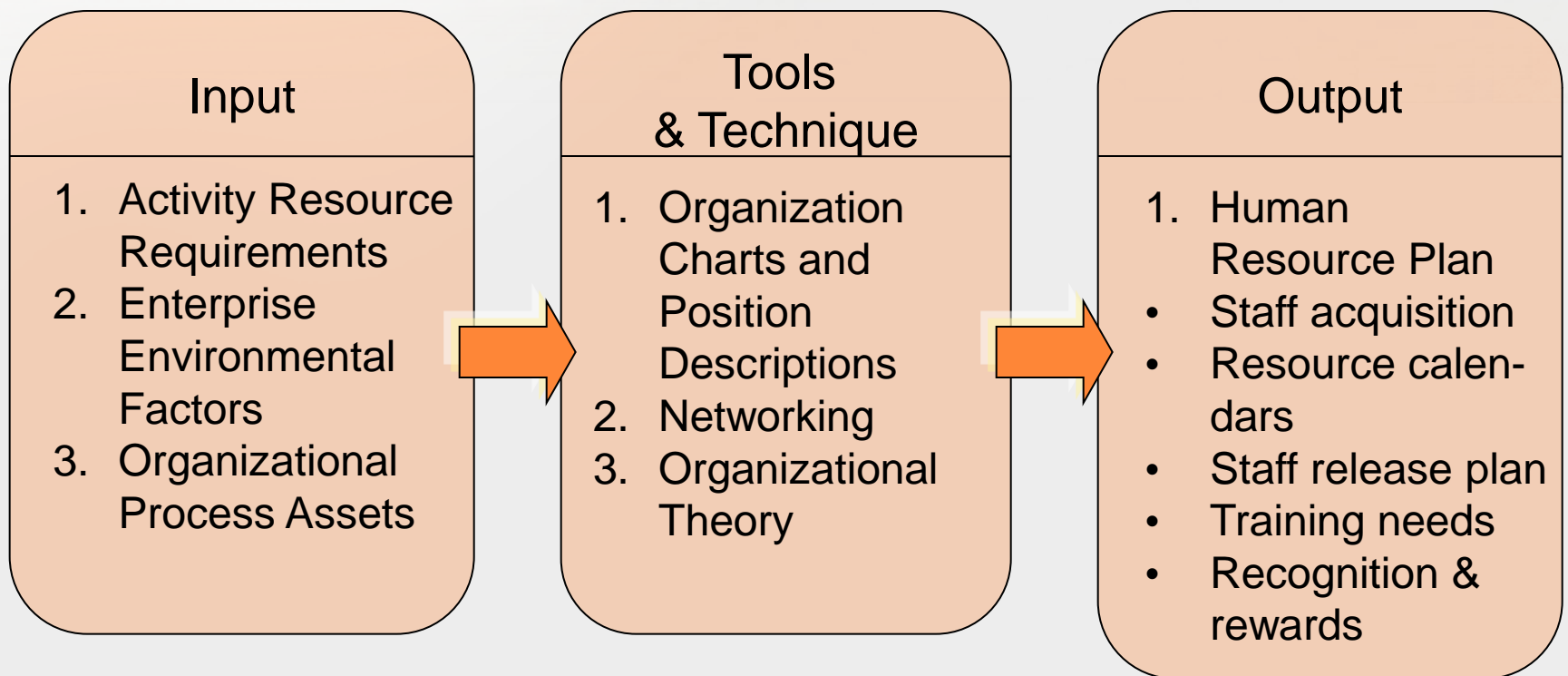
	Items	Basic Rules	Changed
Files	File name	Name the easy file name to know the contents at a sight.	
	Verification Scope	Over WindowsXP and InternetExplorer6, Mac OS10.4 and Forefox 2.0	
HTML	Link	Standardize the type of path (relative or absolute)	
	Javascript	It is prohibited to write javascript in HTML directly. Use external file.	

Exercise : Plan quality in your job

	Items	Basic Rules
Ovreal		
	Items	Basic Rules

3. Human resources planning

- ✿ Identify and document project roles, responsibilities, and required skills, and creating a staffing management plan.



4. Các kế hoạch khác

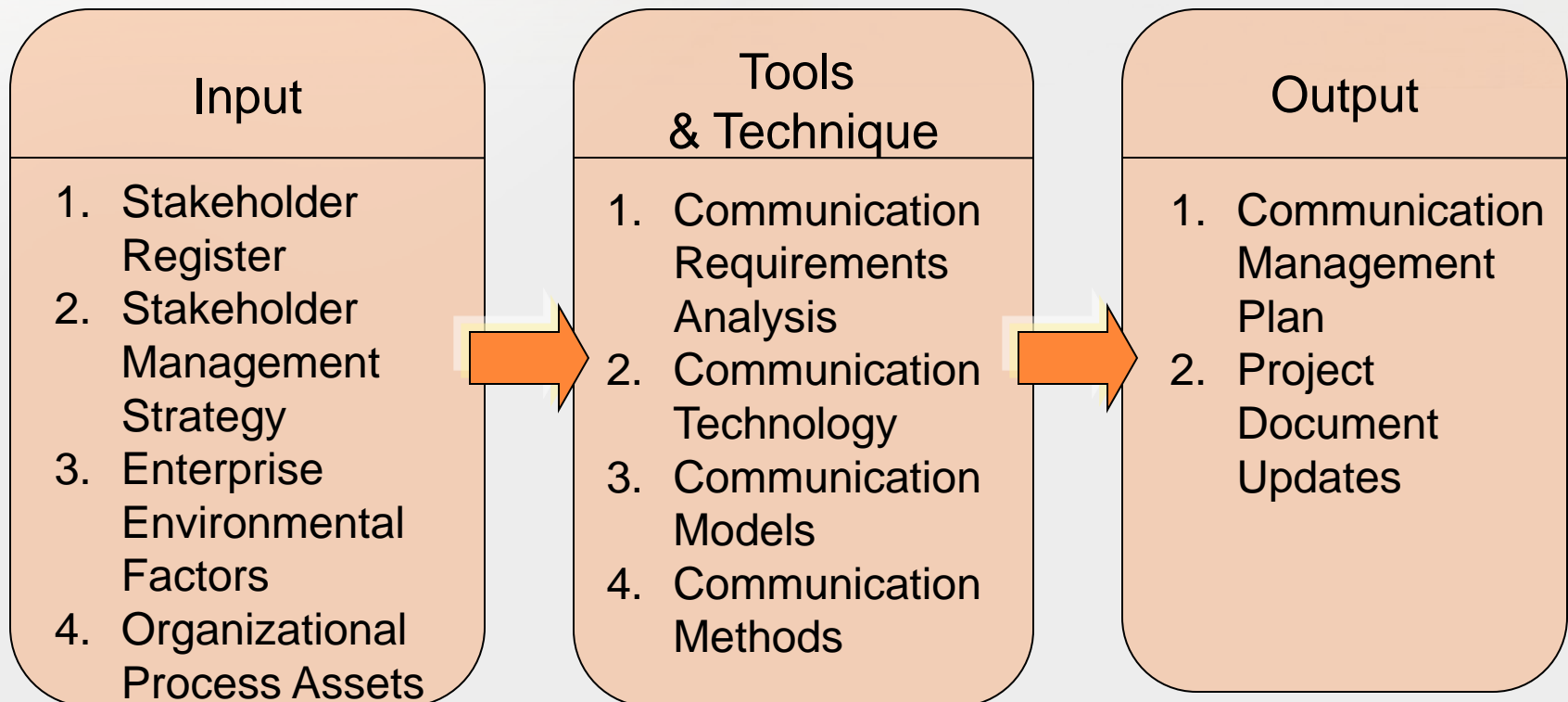
1. Communication planning
2. Risk planning
3. Procurement planning

1. Communication Planning

- ✿ Customer satisfaction depends on the quality of communication.
- ✿ At first, stakeholder analysis is needed.
 - ✿ How about the knowledge and skills?
 - ✿ Who is the key person?
 - ✿ Are there any hidden stakeholders like “top management,” “other division’s staff.”

Plan Communications

- ✿ The process of determining the project stakeholder information needs and defining a communication approach.



Sample of Communication Plan

No	Meeting Type	Purpose	Frequency	Host	Attendance
1	Phase Meeting	Decision Making	Anytime in needed	Client	Client, PM, Sales
2	Team Meeting	Progress Assessment	Once in a week	PM	PM, Project members
3	Morning Meeting	Know each other, good communication	Every morning	PM	PM, Members

Exercise

< Make the rule of how to use e-mail >

In this project, we will use e-mail as a main tool for communication. The purposes of using e-mail are as follows; 1) Distribute information accurately, 2) Record the information, 3) Avoid interruption

< The Rule when you send a mail>

< The Rule when you reply a mail>

< The Rule when you transfer a mail>

< The Rule when you send a mail using bcc.>

2. Risk Planning

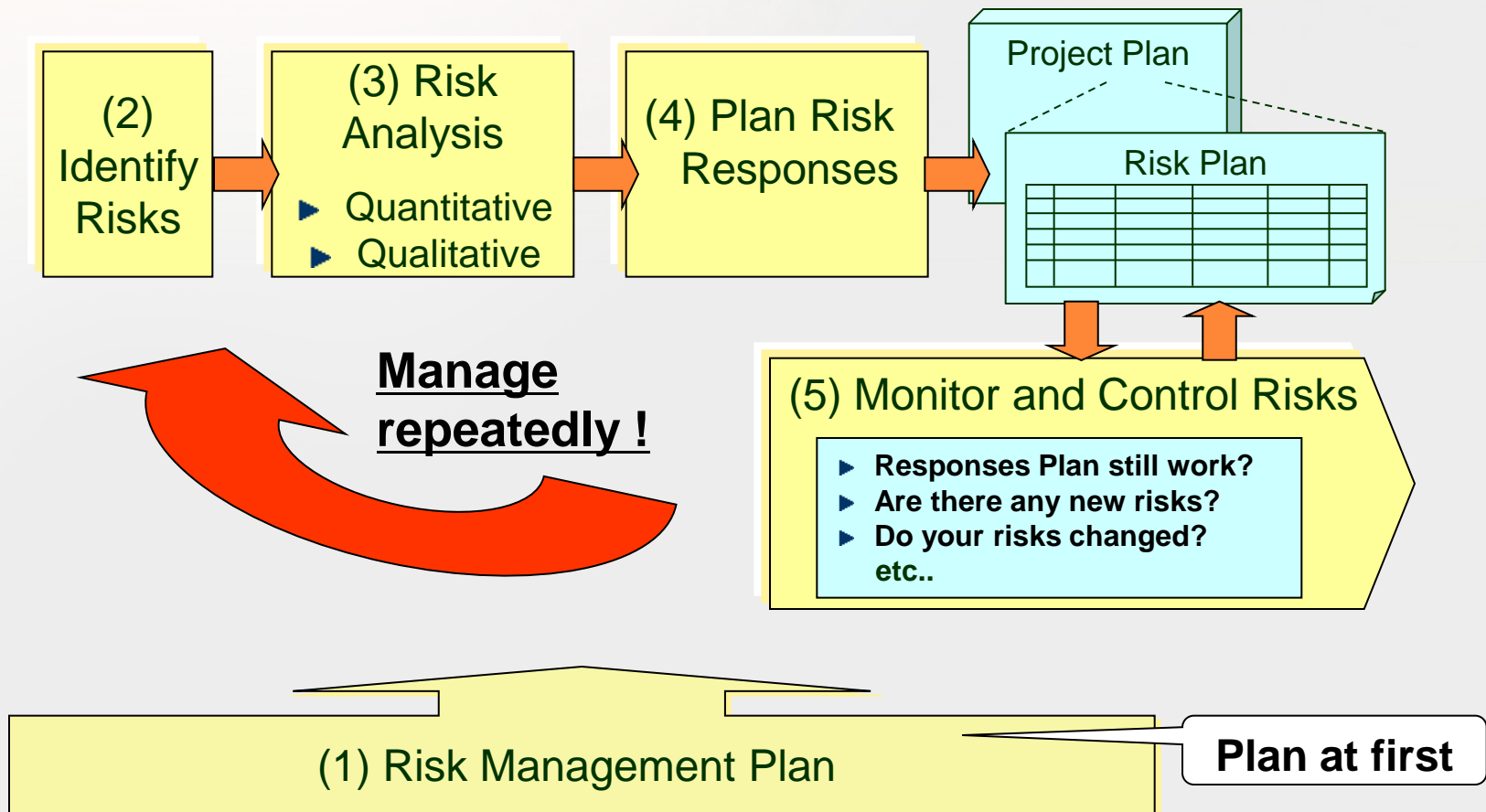
✿ What is a risk?

- ✿ Uncertainty which will be able to make a good or bad impact on the project.
- ✿ Project includes a lot of risk.
- ✿ You need to proceed almost all process in the project considering risk.

Mini Question

- ✿ How to deal with the risk as follows;
 - ✿ You plan to have a home party next weekend.
 - ✿ But you don't know how many people will come.
 - ✿ Now, you consider to prepare drink and food for 10 people.
 - ✿ It will be too much if you have only 5 people.
 - ✿ It will be too small if you have 15 people.
 - ✿ But you can't confirm how many people will come in advance. (Uncertainty will be kept.)
- ✿ Please find out the best way to avoid the risk under uncertainty.

2.1. Whole process of Risk Management



2.2. Risk management plan

✿ Plan Risk Management

- ✿ The process of defining how to conduct risk management activities for a project.

1. Restraint Conditions
2. Scope Statement
3. Schedule/Cost Management Plan
4. Communication Plan
5. Organizational Process Assets etc..

Planning Meeting and Analysis

Risk Management Plan

- Methodology
- Roles and responsibilities
- Budgeting
- Timing
- Risk categories

2.3. Identify Risks

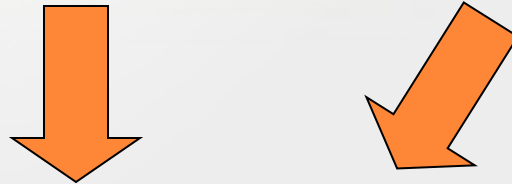
- ✚ Determining the risks which may affect the project and document their characteristics.

Category	Risk Driver	Risk
System	▪ Request is unclear.	▪ It may be delay to fix requirement.
	▪ Size of system is big.	▪ Estimation may be difficult.
	▪ Quality requirement is high.	▪ It may be schedule delay.
Technical	▪ Use new technology.	▪ It may take many time for trouble shooting.
	▪ Use package software.	▪ It can be difficult to customize it.
Organization	▪ End use can't join the project.	▪ It can be difficult to cover all users needs.
	▪ There are not enough system engineer in the project.	▪ The project can be delayed.

2.4. Perform Risk analysis

Probability	
High	Many times occurred in the past
Middle	Several times occurred in the past
Low	Never or few times occurred in the past

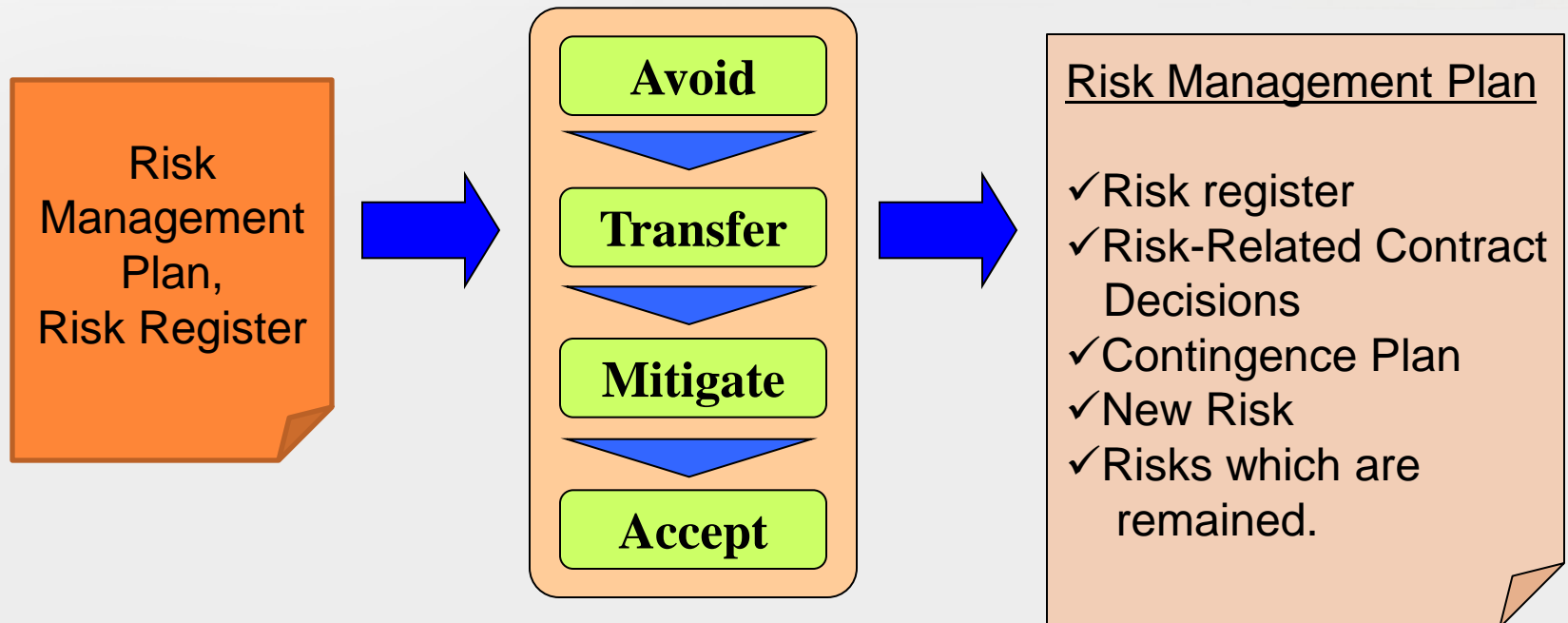
Impact Level	
High	Company have to deal with it. (Lose all profit, Bring lawsuit, Have a press conference for appology etc..)
Middle	Other project team or division need to help the project to solve the problem.
Low	Project team or members can solve problems using their own baffer.



Impact Probability	Big	Middle	Small
High	A	A	B
Middle	A	B	C
Low	B	C	C

2.5. Plan Risk Responses

- ✿ Plan Risk Responses is the process of developing options and actions to enhance opportunities and to reduce threats to project objectives.

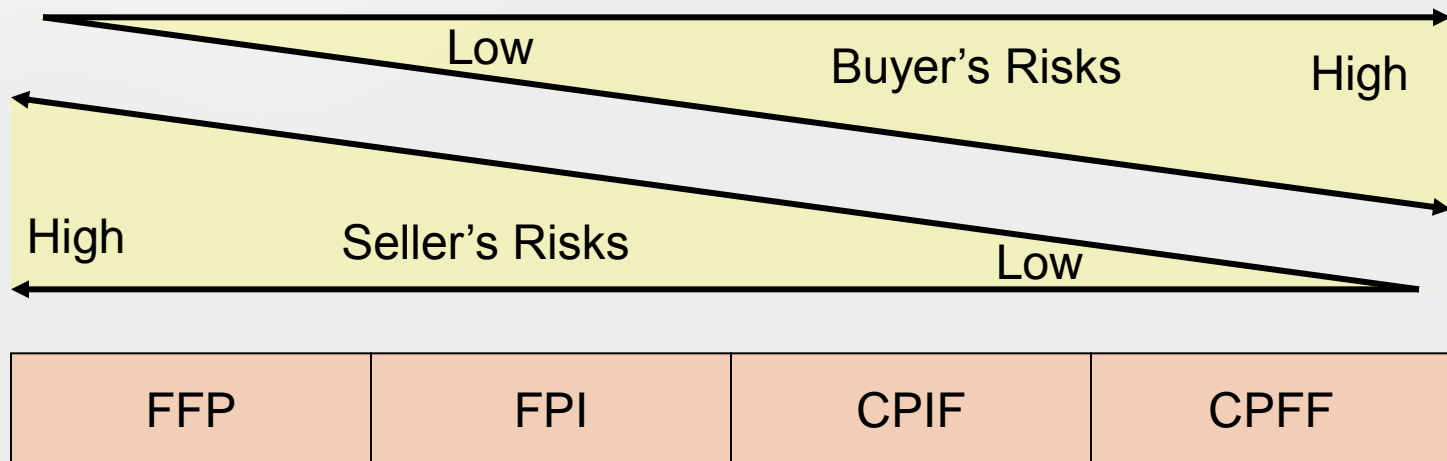


3. Procurement Planning

- ✿ Procurement planning start from “make or buy analysis.”
- ✿ If your project decide to buy, you need to meet with good seller.
- ✿ The basic measure to do so is to make the document like “Request For Proposal (RFP).”
 - ✿ RFP is nearly equal document to Project Charter which includes project goal, output, budget, and due date for provable seller.

How to manage procurement risk?

- ✿ Contract Types determine the risk which is shared between the buyer and seller.
- ✿ Project manager need to understand the basic specification of contract types as follows;



5. Kết luận

Summary:

Initial planning during Project Start

- ✿ The earliest planning overlaps with Project Definition.
- ✿ It is necessary to have some view about the project's approach, timescales, work effort and costs to be able to perform the initial Cost Benefit Analysis and justification.
- ✿ Following that, **the project would normally be planned at a summary or management level of detail.**
- ✿ This management-level plan defines all major work for the duration of the project.
- ✿ By this stage, the **structure** of the work will need to be clear. Phases, major deliverables, activities, work streams and significant milestones will be defined.

Summary:

Detailed planning for the phase

- ✚ As we noted in general, planning is always linked to estimating and resourcing.
- ✚ All these details must be combined to calculate a detailed schedule of work.
- ✚ With good planning tools, a well thought-out **Work Breakdown Structure (WBS), milestones, careful recording of dependencies, effort and resource allocation** you should be able to calculate the detailed schedule automatically
- ✚ **It is not good practice to keep changing the plan every time** there is some divergence from the original expectations (although it can be a useful way of hiding problems).
- ✚ From a practical point of view, **it does make sense to recalculate the plan if there has been any significant change.**
- ✚ The new plan would be based on the current circumstances - to manage expectations and to schedule dates realistically.

Summary:

The planning work at phase end

- ✚ Phase end is always a good time to **review progress**, check that objectives have been met, tasks have been completed, deliverables have been delivered, quality targets have been achieved etc.
- ✚ You should take a good look at the project's achievements against your plan:
 - ✚ What can we learn?
 - ✚ What did we get right?
 - ✚ Why were there variances - bad planning, the impact of good or bad Project Management, good or bad team, or unforeseen circumstances?
 - ✚ If we re-use this plan - what should we change for next time?
- ✚ At this time or earlier you should also be preparing for the next phase of work. In particular, you will be developing the detailed plan for the follow stage of work.

Summary:

Wrapping up the planning work at end of the project

- ✿ At the end of the project, its outcomes should be reviewed and analyzed in much the same way as at the end of a phase. Here are a few specific points about the end of the project:
- ✿ This is when the project's accounting will be finalized, reviewed and reported.
- ✿ The success of the Project Manager will probably be measured partly in terms of actual performance against the plan.
- ✿ Planning and tracking information should be brought up to date and stored for future reference.

Past experience is the single most valuable guide for future planning and estimating - do not lose that knowledge!

Key Messages about Scheduling

- ✚ Developing a realistic schedule is a time-consuming effort
- ✚ Most rescheduling is necessary due to:
 - ✚ Over allocation of resources
 - ✚ Longer schedule than required
- ✚ Adjusting the schedule might require:
 - ✚ Changing task start dates, task durations, or task resources
 - ✚ Adding tasks to the WBS and reflowing the steps that might be necessary
- ✚ Repeating the planning steps until a schedule that works is achieved is critical to project success
- ✚ Many project management tools for scheduling are commercially available
- ✚ Project management tools can be used to help you identify the critical path, however:
 - ✚ Do not use tools blindly
 - ✚ Tools do not manage the project, you do
 - ✚ You are responsible for the success of the project, not the tool
- ✚ The project startup helps the project meet its objectives and helps the team work together to get the job done on time, within budget