

CHƯƠNG 4. GIÁM SÁT DỰ ÁN (3 LT)

1. Quản lý rủi ro
2. Quản lý chất lượng
3. Kiểm soát các vấn đề phát sinh
4. Theo dõi và báo cáo

Executing Processes Activities

- ✿ Directing the various technical and organizational interfaces that exist in the project
- ✿ Applying planned, systematic quality activities
- ✿ Organizing and motivating the team
- ✿ Team Building
- ✿ Executing work packages
- ✿ Setting up the communication path
- ✿ Obtaining information, quotations, bids, offers, or proposals
- ✿ Reviewing offers
- ✿ Choosing from among potential sellers
- ✿ Negotiating a written contract with the seller
- ✿ Procuring goods and services

Controlling and Monitoring Processes Activities

- ✚ Controlling changes and recommending preventive action in anticipation of possible problems
 - ✚ Scope
 - ✚ Schedule
 - ✚ Cost
 - ✚ Quality
- ✚ Establishing control systems
- ✚ Monitoring the ongoing project activities against the project management plan and the project performance baseline
- ✚ Tracking team member performance
- ✚ Collecting and distributing performance information
- ✚ Managing communications
- ✚ Tracking, monitoring, and controlling risk
- ✚ Managing the contract and buyer/seller relationships

1. Quản lý rủi ro

Risk management steps



Risk Monitoring and Control

Is an ongoing process for the life of the project; risk changes as the project matures, new risks develop, or anticipated risks disappear

✚ Process of:

- ✚ tracking identified risks,
- ✚ monitoring residual risks,
- ✚ identifying new risks,
- ✚ executing risk response plans
- ✚ evaluating their effectiveness throughout the project life cycle

- Conduct checkpoint reviews by external specialists
- Identify new risks that might result from changes
- Implement the risk response plan if the risks occur

Tracking and Executing the Risk Management Plan

- ✚ Ensure that risk management happens
 - ✚ Implement and track the risk management plan
- ✚ Involve team and other stakeholders rather than doing it all yourself
 - ✚ Communicate the risk management plan status to the team members and other stakeholders
 - ✚ Be sure the plan is made clear to the sponsor and to the reviewers during project reviews
- ✚ Incorporate risk management into the project management planning processes
 - ✚ Review the risk triggers
 - Have any of the risks occurred?
- ✚ Reassess risk after each risk event for probability, impacts, and new events
 - ✚ Reassess risk sources on a regular basis.
 - ✚ Are there new risks resulting from changes in the sponsor's technology, project, organization, or resources? If so, update the plan with the new risks

Tracking and Executing the Risk Management Plan

✚ Evaluate the defined risks

- ✚ Are they still possible?
- ✚ Do they have the same severity?
- ✚ Is there the same tolerance?
- ✚ Does the plan need to be updated?
- ✚ Does additional action need to be taken?

✚ Review the risk contingency reserve

- ✚ Are the plans are still appropriate ?
- ✚ Is any action required based on observed trends?
- ✚ Are backup strategies appropriate?

✚ Review risk response strategies

- ✚ Are they still appropriate?
- ✚ Should backup strategies be used ? Should additional actions be required to implement the strategies?
- ✚ Does the plan need to be updated?

Tracking and Executing the Risk Management Plan

- ✚ Make sure that the risk management plan is maintained
 - ✚ Choose the right risk management strategies (for example, containment or contingency) to fit each risk event
 - ✚ Monitor and control risk on a regular basis
 - ✚ As time passes, some risks, previously considered non-issues, might become issues, while others, previously deemed significant, might become insignificant;
 - Do you need to update the plan?
- ✚ If a risk event occurs
 - ✚ Make appropriate changes to the work breakdown structure (WBS) and the schedule
- ✚ Communicate effectively about risk to appropriate project stakeholders
 - ✚ Maintain current, accurate, and complete documentation
 - ✚ Disseminate it to the appropriate stakeholders in the form of a record of lessons learned and actions taken

Key Message for Risk Management

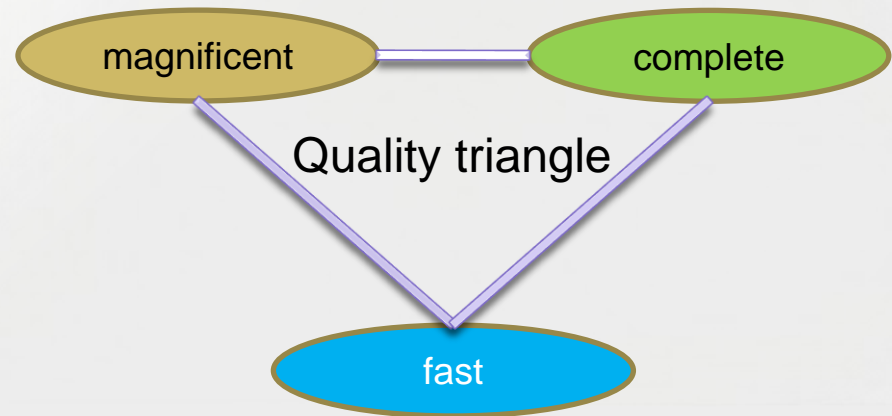
- ✿ Risk management is essential to project success
- ✿ Use risk management to
 - ✿ maximize the positive result
 - ✿ minimize the negative consequences
- ✿ Document risk management standards and procedures and review them with the project team on a regularly scheduled basis
- ✿ Take action to assess and control each risk item
- ✿ Review the outcome of each action formally
- ✿ Risk includes opportunities for gain as well as a potential for loss
- ✿ Risk management is a repetitive process done throughout the life cycle of the project

2. Quản lý chất lượng

1. Quality Management
2. Quality Assurance
3. Quality Audit

Introduction

- ✿ Quality: the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs
- ✿ Quality is not an absolute requirement



Case Study

- ✿ A company decided to achieve a rapid deployment by focusing on 80% solutions and breaking their requirements into five phases of development and deployment.
- ✿ How functional the end result would be ?
- ✿ Would it be $80\% \times 80\% \times 80\% \times 80\% \times 80\%$?
- ✿ That would be 33% - one third what you need.

1. Quality Management

- ✚ Includes activities of the performing organization that determine quality policies, objectives, and responsibilities so that the project satisfies the needs for which it was undertaken
- ✚ Implements the quality management system through the policy, procedures, and processes of quality planning, quality assurance, quality control, with continuous process improvement activities conducted throughout, as appropriate

Goals:

- ✚ Fitness for use.
 - ✚ Is the product or service capable of being used?
- ✚ Fitness for purpose
 - ✚ Does the product or service meet its intended purpose?
- ✚ Customer satisfaction
 - ✚ Does the product or service meet the customer's expectations?
- ✚ Conformance to the requirements
 - ✚ Does the product or service conform to the Requirements?

Project Quality Management Processes

✚ Quality Planning

- ✚ Which quality standards are relevant to the project?
- ✚ How to satisfy them?

✚ Quality Assurance (QA)

- ✚ Apply the planned, systematic quality activities to ensure that the project employs all processes needed to meet requirements
- ✚ Provide an umbrella for another important quality activity, continuous process improvement

✚ Quality Control (QC)

- ✚ Do the specific project results comply with relevant quality standards?
- ✚ How to eliminate causes of unsatisfactory performance?
- ✚ Should be performed throughout the project with quality standards which include project processes and product goals

2. Quality Assurance

✚ Goals:

- ✚ Quality improvement
- ✚ Rework actions to bring defective or nonconforming items into compliance with requirements or specifications
- ✚ Completed checklists which become part of the project's records
- ✚ Process adjustments, which involve immediate corrective or preventive action as a result of quality control measurements

Cost of Quality

- ✚ Total cost of all efforts to achieve product or service quality which includes all work to ensure conformance to the requirements as well as all work resulting from nonconformance to the requirements
 - ✚ Prevention and appraisal costs (cost of conformance) include costs for quality planning, quality control (QC), and quality assurance to ensure compliance to requirements (that is, training, QC systems, etc..)
 - ✚ Failure costs (cost of non-conformance) include
 - costs to rework products, components, or processes that are non-compliant
 - costs of warranty work, waste, and loss of reputation
- Often viewed as a negative cost because errors in work have been traditionally accepted as a cost of doing business

3. Quality Audit

- ✚ Quality Management: all the activities that are intended to bring about the desired level of quality.
- ✚ Quality Audit: the procedural controls
 - ✚ Do project activities comply with the organizational and project policies, processes, and procedures?
- Relates to the approach to quality that is laid down in quality standards such as the ISO-900x standards.
- ✚ Objective:
 - ✚ Identify inefficient and ineffective policies, processes, and procedures in use on the project
 - ✚ Confirm the implementation of approved change requests, corrective actions, defect repairs, and preventive action
- ✚ Additional Project reviews include:
 - ✚ Estimate review
 - ✚ Project plan review
 - ✚ Ongoing project review
 - ✚ Project completion review
 - ✚ Special review

Quality Audit Summary Example

CLASS A:	Under control
	Minor problems might exist, but the project manager has an effective plan for resolution; no major existing potential problems have been identified
CLASS B:	Currently under control
	Existing or potential problems must be resolved to avoid deterioration
CLASS C:	Significant problems
	Corrective plans required immediately. Probably will exceed estimates or budgets; aggressive management action essential to regain control
CLASS D:	Major problems
	Definite financial impact, serious problems with client acceptance, or negative impact on client's business.; thorough management evaluation required; executive call on client

Preparing for Quality Audit

✚ Thorough procedures need to be defined, controlled, communicated and used.

Thorough	Procedures should cover all aspects of work where conformity and standards are required to achieve desired quality levels. For example, one might decide to control formal program testing, but leave the preliminary testing of a prototype to the programmer's discretion.
Procedures	Any recurring aspect of work could merit regulation. The style and depth of the description will vary according to needs and preferences, provided it is sufficiently clear to be followed.
Defined	A major tenet is that the defined procedures are good and will lead to the desired levels of quality. Considerable thought, consultation and trialing should be applied in order to define appropriate procedures. Procedures will often also require defined forms or software tools.
Controlled	As with any good quality management, the procedures should be properly controlled in terms of accessibility, version control, update authorities etc.
Communicated	All participants need to know about the defined procedures - which they exist, where to find them, what they cover. Quality reviewers are likely to check that team members understand about the procedures.
Used	The defined procedures should be followed. Checks will be made to ensure this is the case. A corrective action procedure will be applied to deal with shortcomings. Typically the corrective action would either be to learn the lesson for next time, or to re-work the item if it is sufficiently important.

Operating Quality Audit

- ✿ Affects the entire work lifecycle:

- ✿ **Pre-defined standards** will impact the way the project is planned

- ✿ **Quality requirements** for specific work packages and deliverables will be identified in advance

- ✿ **Specific procedures** will be followed at all stages

- ✿ **Quality Methods** must be defined and followed

- ✿ Completed work and deliverables should be **reviewed for compliance**.

→ This should be seen as an underlying framework and set of rules to apply in the project's Quality Management processes.

Quality Audit reviews

- ✿ Did the Project Team correctly follow its defined procedures ?

- ✿ Purpose:

 - ✿ encourage conformity by the threat of a subsequent bad experience with the quality police.

 - ✿ Learning lessons

 - ✿ Fix administrative items

→ Too late to affect the outcome of the work.

→ Are applied at phase end and project completion.

Key Messages

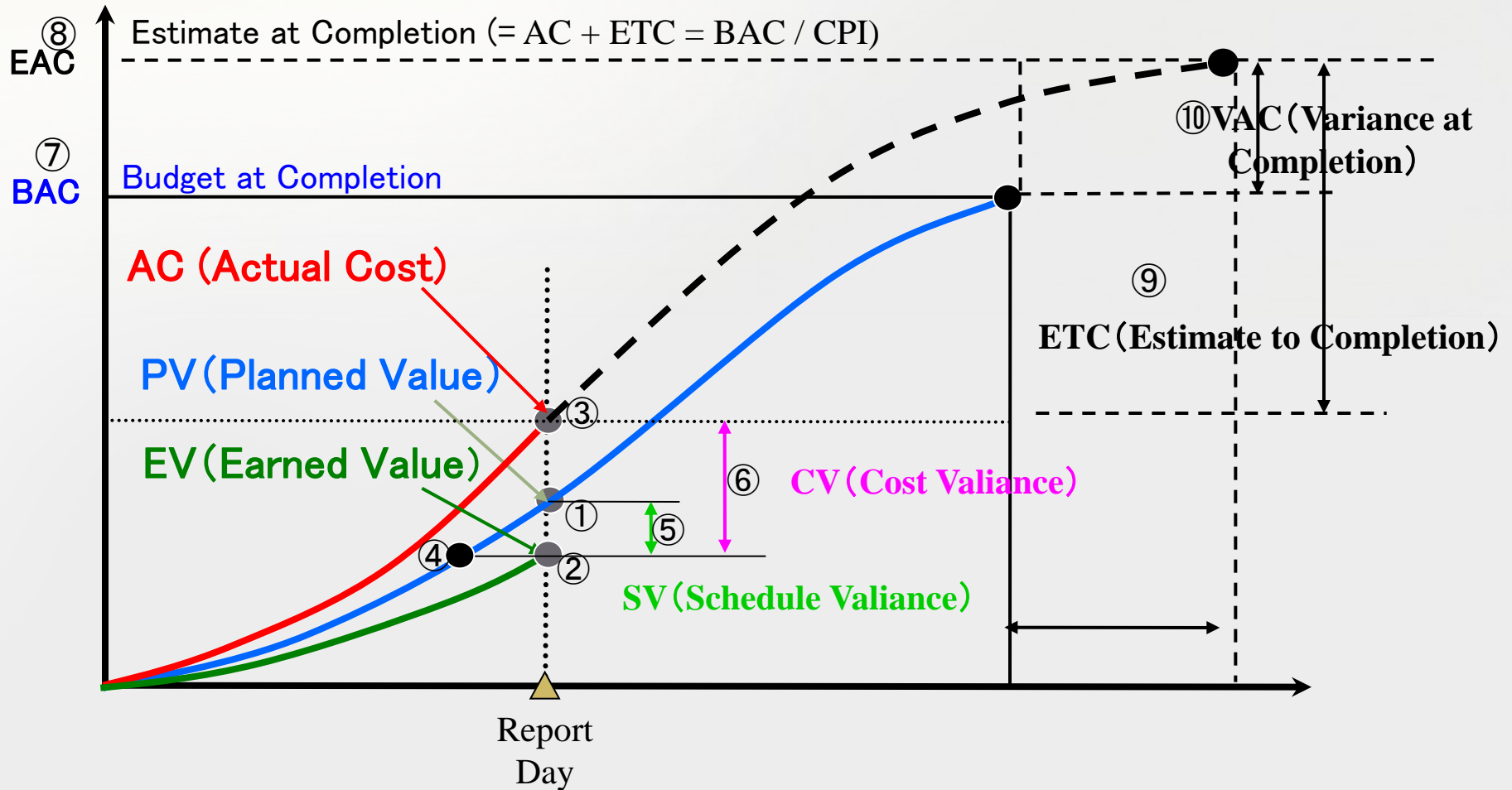
- ✿ Quality is planned in, not inspected in
- ✿ The development and maintenance of a project quality team facilitates work that is performed appropriately and that conforms to the customer's requirements
- ✿ The use of tools is essential to the execution of quality programs; these tools assist and support the project manager in the identification of deviations from standards
- ✿ Cost of Quality includes the cost of conformance and the cost of nonconformance
- ✿ The Plan- Do-Check-Act cycle of activities is designed to drive continuous improvement and is the basis for quality improvement

3. Kiểm soát chi phí và các vấn đề phát sinh

1. Cost control

- ✿ Monitor the status of the project to update the project budget and managing changes to the cost baseline.
- ✿ PM will use the inputs as follows:
 - ✿ Project funding requirements
 - ✿ Work performance information

2. Using Earned Value



Using Earned Value

①PV	Planned Value	
②EV	Earned Value	
③AC	Actual Cost	
⑤SV	Schedule Variance	$EV - PV$
SPI	Schedule Performance Index	EV / PV
⑥CV	Cost Variance	$EV - AC$
CPI	Cost Performance Index	EV / AC
⑦BAC	Budget at Completion	
⑧EAC	Estimate at Completion	
⑨ETC	Estimate to Complete	$EAC - AC$
⑩VAC	Variance at Completion	$BAC - EAC$

3. Issue Management

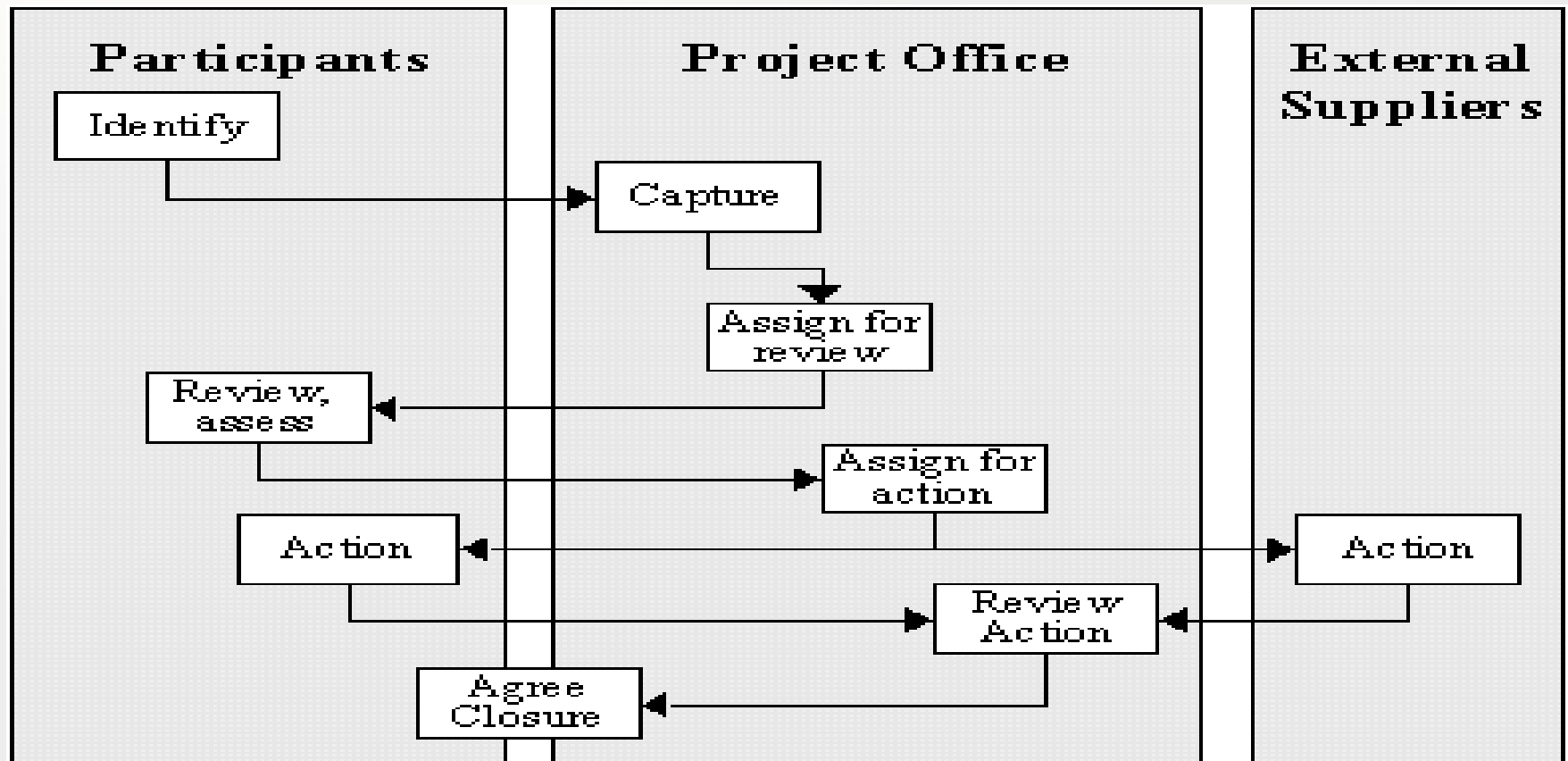
- ✚ In project, a lot of problems occur, e.g:
 - ✚ software errors or "bugs" in the developed technical solution,
 - ✚ more general problems that concern the project team,
 - ✚ issues that represent a requested change to the system, and
 - ✚ problems or "bugs" that need to be reported to an external supplier.
- These should be surfaced as early as possible and dealt with efficiently.

Issue Management Process

- ✚ Involve a combination of procedures, responsibilities and systems.
 - ✚ Define and agree:
 - ✚ who does what,
 - ✚ the detailed procedures, forms, tools etc,
 - ✚ protocols for levels of authority, e.g. what type of corrective action can be undertaken without reference to the project's senior leadership,
 - ✚ linkage to other management procedures, e.g. the scope change management process, configuration management,
 - ✚ linkage to external supplier's procedures,
 - ✚ which tools will be used to support and manage the process,
 - ✚ how to communicate and promote the process and its importance to all participants.
- The key to success is to have a well-controlled but easy and efficient process.

Issue Management Process

✿ Here is a basic process for dealing with issues:



Using Issue Submission Form to submit the concerns

WACPMI Project R

Issue Submission Form

Demonstration Form Only - No Processing is Performed

Reported by:	<input type="text"/>	Project area:	<input type="text" value="Project R"/>
Job title:	<input type="text"/>	Reference:	<input type="text" value="00001"/>
Contact number:	<input type="text"/>	Date Reported:	<input type="text"/>

Description

Priority:

Assessments

Assigned to assesson: Date:

Action(s)

Assigned to for action: Date:

Action(s): Impact:

External cross reference: Cost:

Change request reference:

Outcome

Closure approved by: Closure date:

- From a control point of view, it is important to record the participants involved, the dates and the status.
- The Project Office team will monitor and chase progress.
- The Project Manager will review the status and take further action as required.

Using Issue Log to manage problems

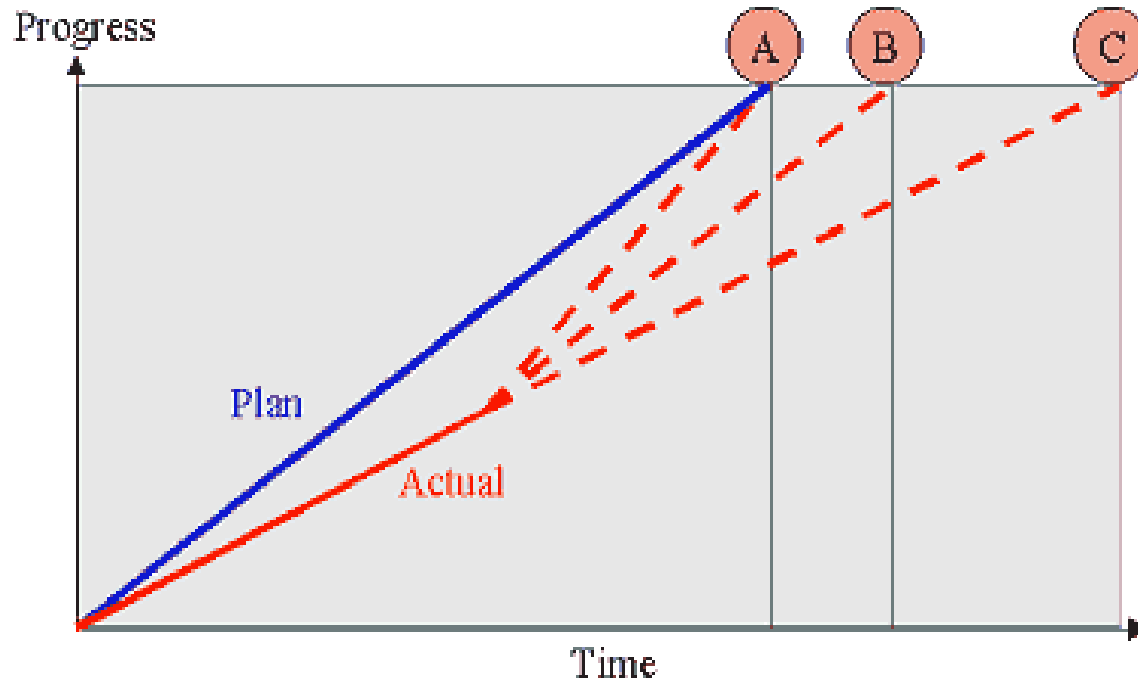
- ✿ To manage all, making issue log is effective way to manage problems.
- ✿ Keep issue log in every meeting.
- ✿ Issue log is a reins for project manager to manage well many problems.

Issue Log

- (1) Trouble in module A (date - name)
- (2) Claim from customer about support system (date – name)
- etc..

4. Theo dõi và báo cáo

What are the implications?



- ✿ If the Project Manager has reacted to the lateness of the project, work may have been re-scheduled to make up for lost time with the intention of meeting the original target - point A.

- ✿ If the Project Manager is not managing the situation, the planning projection will probably be point B. From the current stage of progress, future work will retain the same estimates as before, and, therefore, be projected at the same rate of progress as in the original plan.
- ✿ The cynical observer, however, would probably note that performance has been consistently slower than planned; either the team performs badly or the estimates were wrong. There is every reason to believe this unsatisfactory rate of progress would continue unless specific actions were taken - hence, the realistic projection might be point C.

But what are the implications?

✚ The Project Manager, need to consider:

- ✚ What does the detailed project progress information present ?

- look at the consequences of the current status, for example, the impact on dependencies, resourcing and dates

- ✚ What are appropriate forms of management action (if any) ?

- present your projections and key concerns along with whatever options and recommendations you consider appropriate.

How much control and reporting do we need?



- ✚ Project manager: is expected to be completely in touch with all aspects of progress, performance, expectations, issues, etc.



- ✚ Senior leadership: not wish to see the Project Manager or team members seemingly wasting time doing administrative tasks.



- ✚ Team members: often consider that such administrative tasks distract them from their work.

“No win” scenario

- ✚ To make a success of the project control process, the Project Manager needs to achieve two objectives:

- ✚ to **balance the needs** for information against the time, effort, and emotional costs of collecting and collating the data so as to achieve optimum benefit from the process
- ✚ to **communicate clearly and effectively** to all participants why this information is vital to the success of the project and, therefore, why the participants' time is well spent in contributing accurate, valuable data.

How much control and reporting do we need?

- ✿ Control: require some form of documentation and submission from the individuals.
- ✿ Reporting: provide some level of formalized feedback to the senior leadership and other interested parties.
 - ✿ The level of detail should match the needs to provide optimum benefit.
- Agreement on the needs for control and reporting along with the overall approach to be adopted.
- Careful consideration on the appropriate balance between the various influencing factors, e.g. cost, effort, time, risk, benefit.
- If possible, a sample reporting pack and control procedures should be presented and agreed with the project's Steering Committee, sponsors and other interested parties.

Control and reporting during the project

- ✿ The project control and reporting process should run throughout the project.
- ✿ The main routine aspects are:
 - ✿ Timesheets:
 - normal way of collecting source data about progress from the individual participants;
 - The information to be collected depend:
 - partly on your approach to planning the project
 - partly on the investment you have decided to make in the collection and analysis of progress information.
 - ✿ Collation of information
 - ✿ Reporting
 - ✿ Meetings and communication

- ✚ Use automated tools for the collection and analysis of such data:
 - ✚ Paper-based system
 - ✚ Emailing of spreadsheet forms
 - ✚ Fully automated project tracking tool.

NEW

[illegible]

Deliverables			Completion date		
Ref	Type	Status	Estimated	Planned	Variance
	Draft Project Definition	Complete	06-Sep-00	13-Sep-00	0
	Final Project Definition	Started	20-Sep-00	22-Sep-00	-2

Collation of information

- ✚ Set up reliable, regular methods to collect information from the various participants.
 - ✚ Who needs to submit information for the effective management of the project ?
 - ✚ Important participants often lie outside the direct control of the Project Manager, yet their input could be highly valuable.
 - ✚ Probably the single biggest issue with such people is - "do I have to submit a timesheet?"
- Make sure that all required submissions have been received and processed.
- Turn-around document: well-defined process and format for capturing information
 - ✚ standing data and previous information are visible to the participant
 - ✚ standing data and previous information do not to be re-entered, for example, name, assigned work items, previous totals to date etc.
- ✚ The process will normally involve electronic methods of communication such as:
 - ✚ placing data onto a shared server
 - ✚ using Email
 - ✚ using a project support toolset operating through the network
 - ✚ having a project-specific web site and tools

Reporting

- ✚ Turn a vast amount of data available about the progress of the project into useful information:
 - ✚ work done / estimated work to complete
 - ✚ deliverables delivered / projected dates for remaining deliverables
 - ✚ milestones achieved / projected dates for future milestones
 - ✚ spend against budget
 - ✚ value earned
 - ✚ projected benefit
 - ✚ analysis of significant risks
 - ✚ issues raised / issues dealt with
 - ✚ significant changes made / changes requiring approval.

Project Progress Summary - week 18	
	Progress to date Project remains on track. Effect and % complete within expectation.
	Milestones All completed to date against planned target of 45. Some milestones are moving late pending agreed from user management.
	Deliverables Signed off deliverables running behind schedule due to lack of availability of key user management. Recommended to user and management by project.
	Reviewing Availability of resources from the business could remain unclear. Hours confirmed across significant below planned targets. Recommended to user management by project.
	Projected delivery timeline Projected delivery date remains on target.
	Projected benefit Projected benefit remains on target.
	Issues No adequate training facility is available internally for end-user training. Recommended to user management with internal training and/or evaluation of external facilities.
	Change requests No change requests requiring Steering Committee review this period. Two minor changes approved.
	Risk assessment No change in risk profile or risk avoidance. Risk analysis remains within expectation.
	Quality Review Review completed as scheduled. No issues requiring Steering Committee attention.

Summary Gantt Chart

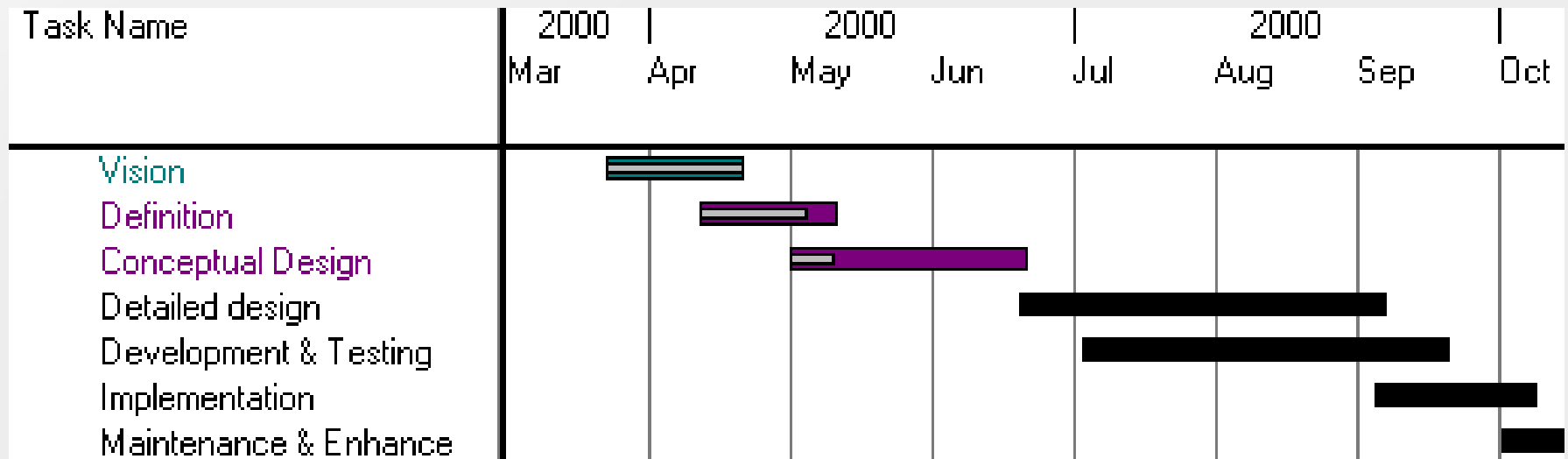
- ✚ Show progress graphically:

- ✚ Color coding: whether tasks are started or finished by the color coding

- ✚ Progress bars within the main bars: their complete percentage

→ Good summary of progress

→ Difficult to relate the many indicators of progress in different areas of the plan or program

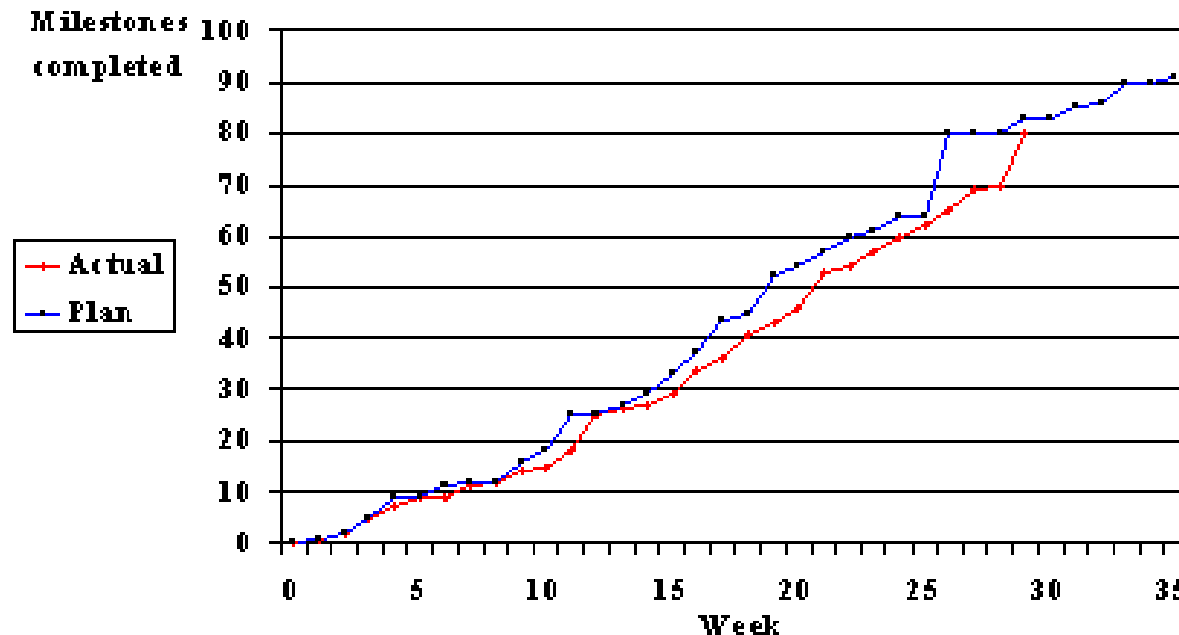


Milestone Progress

- ✚ Reporting the degree to which planned milestones or deliverables have been achieved

- ✚ Example: tracking the project's achievements against the planned milestones

Milestones completed to date



→ The project is a little behind schedule.

→ It is not easy to see exactly

- how far behind
- how much effort is required to catch up
- what the implications are

- ✚ Similar reports could be produced for the delivery of deliverables, completion of tasks, accomplishment of outcomes etc.

Meetings and Communication

- ✚ Communicate in the reports and discuss in the meetings...

Activity in the preceding period	<p>Summary of key work items started, in progress and completed:</p> <ul style="list-style-type: none">■ major deliverables completed■ major milestones achieved■ summary of effort expended■ quality management and quality audit results■ key decisions or changes made
Current status	<p>Progress to date against the plan:</p> <ul style="list-style-type: none">■ milestones,■ % complete,■ deliverables,■ resources consumed,■ earned value,■ project costs,■ current financial position against budget

Meetings and Communication

Projections	Projected: <ul style="list-style-type: none">• key dates• resourcing requirements & costs• project costs• projected benefit
Issues	Significant: <ul style="list-style-type: none">• issues,• risks,• change requests• scope changes• resourcing requirements• contractual disputes
Recommended actions	Recommendations as appropriate, e.g.: <ul style="list-style-type: none">• deadline changes,• scope changes,• resourcing changes,• application of pressure from sponsors and leadership team,• contract re-negotiation

Meetings and Communication

- ✿ All formal meetings should follow best-practice.
- ✿ For example:
 - ✿ agreed scope, objectives, membership, responsibilities, powers etc
 - ✿ scheduled dates, times and venues (agreed well in advance to ensure people can attend)
 - ✿ requirement to attend or send empowered deputy
 - ✿ designated senior member chairs the meeting
 - ✿ standardized agenda - any special items or changes communicated in advance
 - ✿ reports and materials for review issued sufficiently in advance for the attendees to have time to read them
 - ✿ agreed decision making process (for example, can "the boss" overrule everyone else?)
 - ✿ formal minutes (i.e. notes summarizing key points, decisions and agreed actions)
 - ✿ minutes and other communications circulated promptly after the meeting
 - ✿ process for reviewing and/or challenging the minutes.

Meetings and Communication

- ✿ Meetings should be scheduled to provide the best balance between the costs of senior staff time and the need to drive the project efficiently with a view to optimum business benefit.
- ✿ Timing and frequency will depend on the type of project, how rapidly it progresses, what stage it is at, how much oversight and sponsorship it requires, etc.
- ✿ It is common to find a Steering Committee meeting once a month. That might be a good average, but there will be times when more interaction is required, and periods when there is relatively little to be discussed.
- ✿ Meetings could be scheduled to reflect the varying needs of the project and to tie in with its projected timing. With the rapid iterative approach of many eProjects, the leadership will need to be involved frequently and be ready to make rapid decisions.