PMP® V5 RDS

Project Integration Management

V1.1

Overview

- The processes and activities to identify, define, combine, unify, and coordinate the various processes and project management activities within the Process Groups
- Integration includes characteristics of unification, consolidation, communication, and integrative actions that are crucial to controlled project execution through completion, successfully managing stakeholder expectations, and meeting requirements.
- It also includes making choices about resource allocation, making trade-offs among competing objectives and alternatives, and managing the interdependencies among the project management Knowledge Areas.

Integration Management Processes

- **4.1 Develop Project Charter —** The process of developing a document that formally authorizes the existence of a project and provides the project manager with the authority to apply organizational resources to project activities.
- **4.2 Develop Project Management Plan —** The process of defining, preparing, and coordinating all subsidiary plans and integrating them into a comprehensive project management plan. The project's integrated baselines and subsidiary plans may be included within the project management plan.
- **4.3 Direct and Manage Project Work —** The process of leading and performing the work defined in the project management plan and implementing approved changes to achieve the project's objectives.

Integration Management Processes

- **4.4 Monitor and Control Project Work —** The process of tracking, reviewing, and reporting project progress against the performance objectives defined in the project management plan.
- **4.5 Perform Integrated Change Control —** The process of reviewing all change requests; approving changes and managing changes to deliverables, organizational process assets, project documents, and the project management plan; and communicating their disposition.
- **4.6 Close Project or Phase —** The process of finalizing all activities across all of the Project Management Process Groups to formally complete the phase or project.

Pre-Project Related Concepts

Business Case

- Explains the business need and the cost-benefit analysis used to justify the project
- Project manager needs to make sure the project activities conforms to the business case throughout the project
- Forms the basis of why the project is selected
- The requesting organization or customer writes the business case
- May be periodically reviewed to ensure that the project is on track to deliver the business benefits
- As the content in the project charter

Project Selection

- Constrained optimization methods (Mathematical approach)
  - Linear programming
  - Integer programming
  - Dynamic programming
  - Multi-objective programming
- Benefit measurement methods (Comparative approach)
  - Murder board (a panel of people who try to shoot down a new project idea)
  - Peer review
  - Scoring models
  - Economic models (mentioned later)

Economic Models

- Present value
- Net present value
- Internal rate of return
- Payback period
- Benefit-cost ratio

Present Value (PV)

- Think about the concept of compound interest
- In terms of capital,
  - **$FV = (1+r)^n * PV$**
  - PV (present value)
  - FV (future value) = PV + interest
  - N = no. of years (or periods)
  - R = interest rate
- Value of money today, discounted by the interest rate, compounded annually

Net Present Value (NPV)

- Project benefits can be realized in many years
- NPV is the present value of total benefits minus costs over time periods; project's benefits can then be compared regardless the no. of years
- Compare many projects to select the highest NPV to initiate
- Good investment if NPV is positive
- Usually, the project with greatest NPV is selected, regardless of no. of years each takes to complete

Time Period	Income/Revenue	Present Value of Income at 10% Interest Rate	Costs	Present value of cost at 10% Interest Rate
0 (beginning)	0	0	200	200
1	50	50/(1+10%)=45.5	100	100/(1+10%)=90.9
2	100	100/(1+10%)^2=82.6	0	
3	300	300/(1+10%)^3=225.4	0	
Total		**353.5**		**290.9**

Discount all income/revenue and costs to present value, then calculate
NPV = benefits – costs = 353.5 – 290.9 = 62.6

Internal Rate of Return (IRR)

- Rate of return (varies the interest rate of NPV) that makes the NPV of the project equal to zero
- A way to compare the effectiveness of investment in projects. The greater IRR, the better return the project gives, and the more effective the money is spent.
- The formula is complicated. It can be calculated by a spreadsheet or financial calculator.
- It compliments the usage of NPV as it calculates the rate of return.

Payback Period

- How soon can the investment of the project recovered?
- The sooner the payback period, the better
- Payback period = (cost of project) / (cash inflows of a period)

Benefit Cost Ratio (BCR)

- Benefit Cost Ratio = Benefits/costs
- Ratio of benefits of a project relative to costs
- The higher, the better

NPV, IRR, Payback Period, BCR

- Which project will you pick?

	Project A	Project B	Which Project?
NPV	95000	75000	
IRR	13%	17%	
Payback period	16 months	21 months	
Benefit cost ratio	2.79	1.3	

Other Concepts

- Economic Value Added (EVA)
  - Whether the project returns to the company more value than it costs
- Opportunity Cost: Opportunity given up by selecting one project over another (usually is the benefit of the 2nd best choice)
  - E.g. Project A's NPV = $45,000, Project B's NPV = $85,000, Project C's NPV = $39,000
  - If select Project B, opportunity cost = $45,000
- Sunk Costs: costs already incurred and cannot be recovered.
  - Independent of any event that may occur in future
  - Not to be considered to carry on with the project or not

Other Concepts

- Law of Diminishing Returns
  - The law states that after a certain point, adding more input will not produce a proportional increase in productivity.
  - How does the law relate to project selection?
- Working Capital

Depreciation

- A method of allocating the cost of a tangible asset over its useful life.
- Businesses depreciate long-term assets for both tax and accounting purposes
- How does it relate to project selection?

Develop Project Charter

(initiating)

Develop Project Charter

- The process of developing a document that formally authorizes the existence of a project and provides the project manager with the authority to apply organizational resources to project activities
- The key benefit of this process is a well-defined project start and project boundaries, creation of a formal record of the project, and a direct way for senior management to formally accept and commit to the project

Develop Project Charter

- Charter created by project sponsor/initiator
- The initiator/sponsor's signature on the charter authorizes the project
- The charter links the project to the strategy and ongoing work of the organization

New RDS Tasks

Develop Project Charter

- Identify key deliverables based on the business requirements in order to manage customer expectations and direct the achievement of project goals.
- Conduct benefit analysis with relevant stakeholders to validate project alignment with organizational strategy and expected business value.
- Inform stakeholders of the approved project charter to ensure common understanding of the key deliverables, milestones, and their roles and responsibilities.

Business Case

Develop Project Charter: Inputs

- It is a result of:
  - Market demand
  - Organizational need
  - Customer request
  - Technological advance
  - Legal requirement
  - Ecological impacts
  - Social need

For reference: IIBA states that the business case should be drafted by Business Analyst. Details are covered in the CBAP course.

Project Statement of Work (SOW)

Develop Project Charter: Inputs

- A narrative description of products or services to be delivered by the project.
- For internal projects, the project initiator or sponsor provides the statement of work based on business needs, product, or service requirements.
- It refers to:
  - Business need
  - Product scope description
  - Strategic plan

Agreements

Develop Project Charter: Inputs

- Define initial intentions for a project
- Different forms:
  - Contracts
  - Memorandums of understanding (MOUs)
  - Service level agreements (SLA)
  - Letter of agreements
  - Letters of intent
  - Verbal agreements, email, or other written agreements
- Typically, a contract is used when a project is being performed for an external customer.

Expert Judgment

Develop Project Charter: Tools and Techniques

- Judgment provided based upon expertise in an application area, knowledge area, discipline industry, etc., as appropriate for the activity being performed.
- Such expertise may be provided by any group or person with specialized education, knowledge, skill, experience, or training.

Facilitation Techniques

Develop Project Charter: Tools and Techniques

- Facilitation techniques have broad application within project management processes and guide the development of the project charter.
- Brainstorming, conflict resolution, problem solving, and meeting management are examples of key techniques used by facilitators to help teams and individuals accomplish project activities.

Project Charter

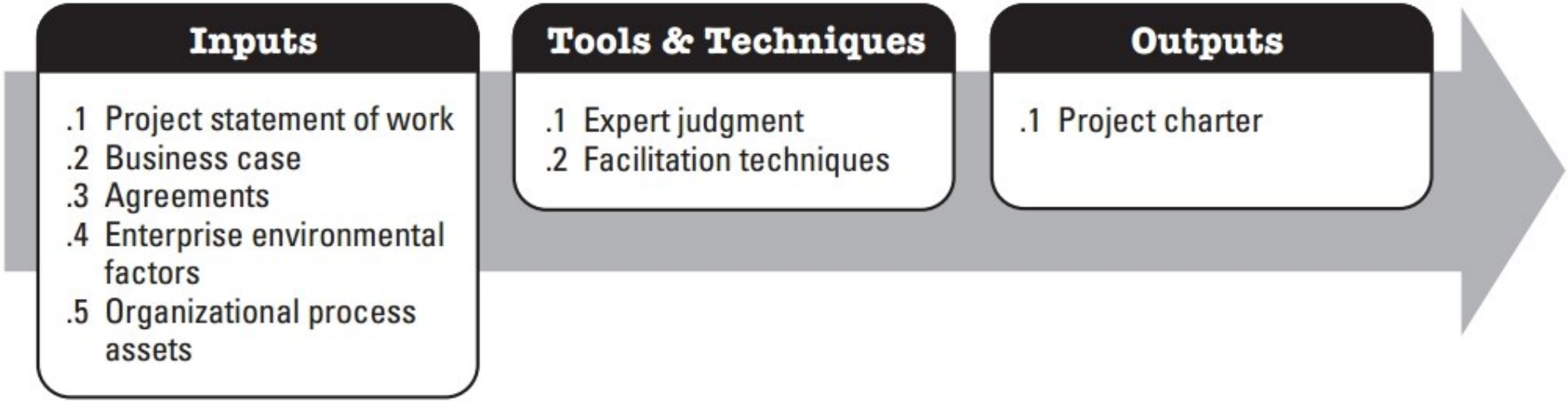
Develop Project Charter: Outputs

- Contents
  - Project title and description
  - Name of project manager and authority level
  - Business case
  - High level time line
  - Resources pre-assigned
  - Stakeholders and their requirements
  - Product description/deliverables
  - Measurable project objectives (success criteria)
  - Project approval requirements
  - Project risks
  - Signature of sponsor(s)

What does a charter do?

- The charter specifies the success criteria
- Should be broad enough so that it does not need to change as the project progresses and details about the project is refined
- A project does not exists without a charter
- Provides high-level requirements for the project
- Links the project to the organization's ongoing work

Develop Project Charter
(initiating)



Develop
Project Management Plan
(planning)

Develop Project Management Plan

- The process of defining, preparing, and coordinating all subsidiary plans and integrating them into a comprehensive project management plan
- The key benefit of this process is a central document that defines the basis of all project work

Develop Project Management Plan

- Defines how the project is executed, monitored and controlled, and closed
- Continuously developed throughout the project life cycle
- Covers all aspects of the project management processes
- Unique to each project

Project Management Plan Contents

- Nine project management plans for the nine knowledge areas: scope, schedule, cost, quality, human resource, communications, risk, procurement, and stakeholder management
- And four other plans:
  - Process improvement plan
  - Change management plan
  - Configuration management plan
  - Requirement management plan
- Three performance measurement baselines
  - Scope, schedule, and cost

Project Management Plan Contents

- Life cycle selected for the project (phases)
- Processes that will be applied to each phase
- Details of the tailoring decisions:
  - Project management processes selected
  - Level of implementation for each selected process
  - Tools and techniques to be used
  - The dependencies and interactions among those processes
- Description of how work will be executed
- How the project baselines will be maintained (CPI, SPI, …)
- Requirements and techniques for communication
- Key management reviews for content, the extent of, and timing to address, open issues and pending decisions

Requirements Management Plan

- Describes how requirements will be identified, managed, and controlled.
- More details are covered in scope management

Change Management Plan

- Changes are costly; PM should undertake to prevent unnecessary changes, and plan the project such that need for changes is minimized.
- What to do when there are change requests, and how to limit the negative effect of changes

Change Management Plan

- Describes how changes are managed and controlled, includes
  - Change control procedures (how and who)
  - Approval levels for authorizing changes
  - Creation of a change control board to approve changes
  - Plan outlining how changes will be managed and controlled
  - Who should attend meetings regarding changes
  - The tools to track and control changes
- Change Control System
  - Part of organizational process assets
  - Includes standard forms, reports, processes, procedures, and software to track and control changes

Configuration Management Plan

- Make sure everyone knows what version of scope, schedule, and other documents are the latest version
- Defines how to manage changes to the deliverables and resulting documentation
- Configuration Management System
  - Part of the project management information system (PMIS)

Process Improvement Plan

- The PM identifies existing processes to use on the project, and may create some new processes
- More details are covered in quality management

Performance Measurement Baseline

- Baselines for the project manager to report project performance against (by earned value management)
  - Scope baseline
    - Project scope statement, WBS, WBS dictionary
  - Schedule baseline
    - Agreed upon schedule, include the start and finish times
  - Cost baseline: time-phased cost budget
    - Cost baseline = budget – management reserve
- The project manager look for deviations from the baseline, and see if adjustments can be made
- They are contents of the PM Plan

Baseline

- Snapshot, reference
- Formal change request may be required if adjustments cannot correct problems
- Baselines can be changed through Perform Integrated Change Control process
- Deviations from baseline are often due to incomplete risk identification and risk management

Project Management Plan Approval

- Can be either summary or detailed to the extent required by the project
- Once completed, the sponsor reviews and approves it.
- Also needs to obtain sign-off from: management, project team, and other stakeholders
- The project management plan has to be realistic

Actions

- Agree on processes to report, control, and incorporate changes
- Meet with stakeholders to define their roles on the project
- Meet with resource managers to get the best resources if possible
- Give team members a chance to agree with the final schedule that converts the team's activity estimates into a calendar schedule

Actions

- Get resource mangers to approve the schedule and when their resources will be used
- Work through iterations of the plan
- Create the necessary project documents
- Look for the impact on your project from other projects
- Hold meetings or presentations to let the sponsor know what project requirements, outlined in the project charter, cannot be met
  - Present options to the sponsor, e.g. crashing or fast tracking

Kickoff Meeting

- Meeting of all parties of the project: customers, sellers, project team, senior management, agencies, functional management, and sponsor
- Make sure everyone is familiar with the details of the project
- Meeting topics may include: introductions, review of project risks, communications management plan, meeting schedule, and formal agreement to the project management plan
- Prepare the meeting minutes to avoid future disputes.

Project Management Plan	Project Documents	
Change management plan	Activity attributes	Project staff assignments
Communications management plan	Activity cost estimates	Project statement of work
Configuration management plan	Activity duration estimates	Quality checklists
Cost baseline	Activity list	Quality control measurements
Cost management plan	Activity resource requirements	Quality metrics
Human resource management plan	Agreements	Requirements documentation
Process improvement plan	Basis of estimates	Requirements traceability matrix
Procurement management plan	Change log	Resource breakdown structure
Scope baseline • Project scope statement • WBS • WBS dictionary	Change requests	Resource calendars
Quality management plan	Forecasts • Cost forecast • Schedule forecast	Risk register
Requirements management plan	Issue log	Schedule data
Risk management plan	Milestone list	Seller proposals
Schedule baseline	Procurement documents	Source selection criteria
Schedule management plan	Procurement statement of work	Stakeholder register
Scope management plan	Project calendars	Team performance assessments
Stakeholder management plan	Project charter Project funding requirements Project schedule Project schedule network diagrams	Work performance data Work performance information Work performance reports

Develop Project Management Plan
(planning)

Direct and Manage Project Work

(executing)

Direct and Manage Project Work

- The process of leading and performing the work defined in the project management plan and implementing approved changes to achieve the project's objectives
- The key benefit of this process is that it provides overall management of the project work

Direct and Manage Project Work

- Integrates all executing processes into one coordinated effort and produce the deliverables
- Managing people, doing the work, and implementing approved changes
- Requesting changes, and completing the work accompanying approved change requests
- Directs the performance of the planned project activities
- Manages the various technical and organizational interfaces

Activities

- Create project deliverables to meet the planned project work
- Provide, train, and manage the team members assigned to the project
- Obtain, manage, and use resources
- Implement the planned methods and standards
- Establish and manage communication channels
- Generate work performance data to facilitate forecasting

Activities

- Issue change requests and implement approved changes into the project's scope, plans, and environment
- Manage risks and implement risk response activities
- Manage sellers
- Manage stakeholders and their engagement
- Collect and document lessons learned
- Implement approved process improvement activities

Project Management Information System

Direct and Manage Project Work: Tools and Techniques

- Part of the enterprise environmental factors
- Provides access to an automated tool, such as a scheduling software tool, a configuration management system, an information collection and distribution system, or web interfaces to other online automated systems used

Deliverable

Direct and Manage Project Work: Outputs

- A deliverable is any unique and verifiable product, result or capability to perform a service that is required to be produced to complete a process, phase, or project.
- Deliverables are typically tangible components completed to meet the project objectives and can include elements of the project management plan.
- Can also be by-products or interim products.

Ensure Common Understanding

- Making sure everyone has the latest copy of the communication management plan and knows how to use it
- Ensuring that the stakeholders whose scope was not included understand that they will not receive that scope
- Making sure all functional managers have the latest copy of the schedule
- Making sure the team understands next month's schedule
- Making sure departments within the organization know when the project will affect their work

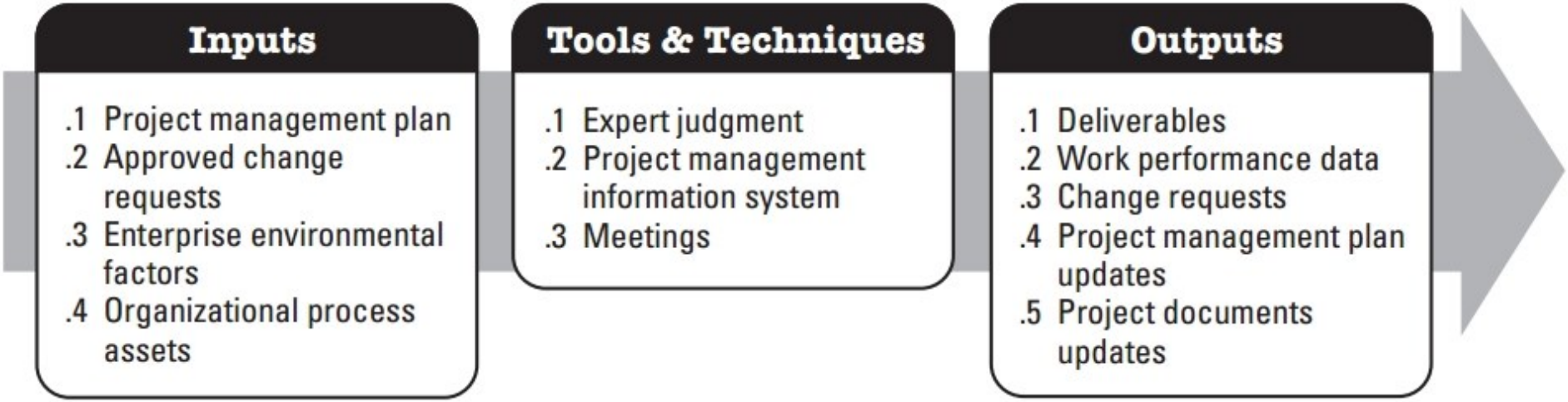
Being of Service

- Letting team members know about information that will affect them (especially in a matrix environment)
- Asking team members how you can help remove roadblocks
- Assisting the team in implementing solutions to problems
- Facilitating technical discussions to review options

Why the above two?

- Many departments involved
- Many people from different countries
- PM has to make sure everyone knows what will be occurring on the project and the latest project management plan
- Reduce time required
- Reduce cost
- Prevent problems

Direct and Manage Project Work
(executing)



Monitor and Control Project Work

(monitoring and controlling)

Monitor and Control Project Work

- The process of tracking, reviewing, and reporting the progress to meet the performance objectives defined in the project management plan
- The key benefit of this process is that it allows stakeholders to understand the current state of the project, the steps taken, and budget, schedule, and scope forecasts

Monitor and Control Project Work

- Monitoring includes collecting, measuring and distributing performance information, and assessing measurements and trends to effect process improvements
- Controlling is determining corrective or preventive actions or re-planning and following up on action plans to determine if the actions taken resolved the performance issues

Monitor and Control Project Work

- Capture, analyze, and manage lessons learned, using lessons learned management techniques in order to enable continuous improvement.

Activities

- Comparing actual project performance against the project management plan (which contains 3 baselines)
- Assessing performance to determine whether any corrective or preventive actions are needed
- Identifying new risks
- Maintaining an accurate, timely information base concerning the project's product(s) and their associated documentation
- Providing information to support status reporting, progress measurement, and forecasting
- Providing forecasts
- Monitoring implementation of approved changes

Analytical Techniques

Monitor and Control Project Work: Tools and Techniques

- Are applied to forecast potential outcomes based on possible variations of project or environmental variables and their relationships with other variables:
  - Regression analysis
  - Grouping methods
  - Causal analysis
  - Root cause analysis
  - Forecasting methods
  - Failure mode and effect analysis (FMEA)
  - Fault tree analysis (FTA)
  - Reserve analysis
  - Trend analysis
  - Earned value management
  - Variance analysis

Change Requests

Monitor and Control Project Work: Outputs

- May be issued which may expand, adjust, or reduce project or product scope.
- Changes can impact the project management plan, project documents, or deliverables.

Change Requests

Monitor and Control Project Work: Outputs

- It includes:
  - **Corrective action**: An intentional activity that realigns the performance of the project work with the project management plan
  - **Preventive action**: An intentional activity that ensures the future performance of the project work is aligned with the project management plan
  - **Defect repair**: An intentional activity to modify a nonconforming product or product component
  - **Updates:** Changes to formally controlled project documents, plans, etc., to reflect modified or additional ideas or content

Corrective Action

- A focused attention rather than random attention
- To look for problems rather than just wait for them
- Required metrics and the baselines to measure against
- Continued measurement
- To know when the project is off track and the ability to identify the need for recommended corrective action
- To find the root cause of the deviation
- Measurement of project performance after corrective action is implemented
- A determination of the need for recommending further corrective action

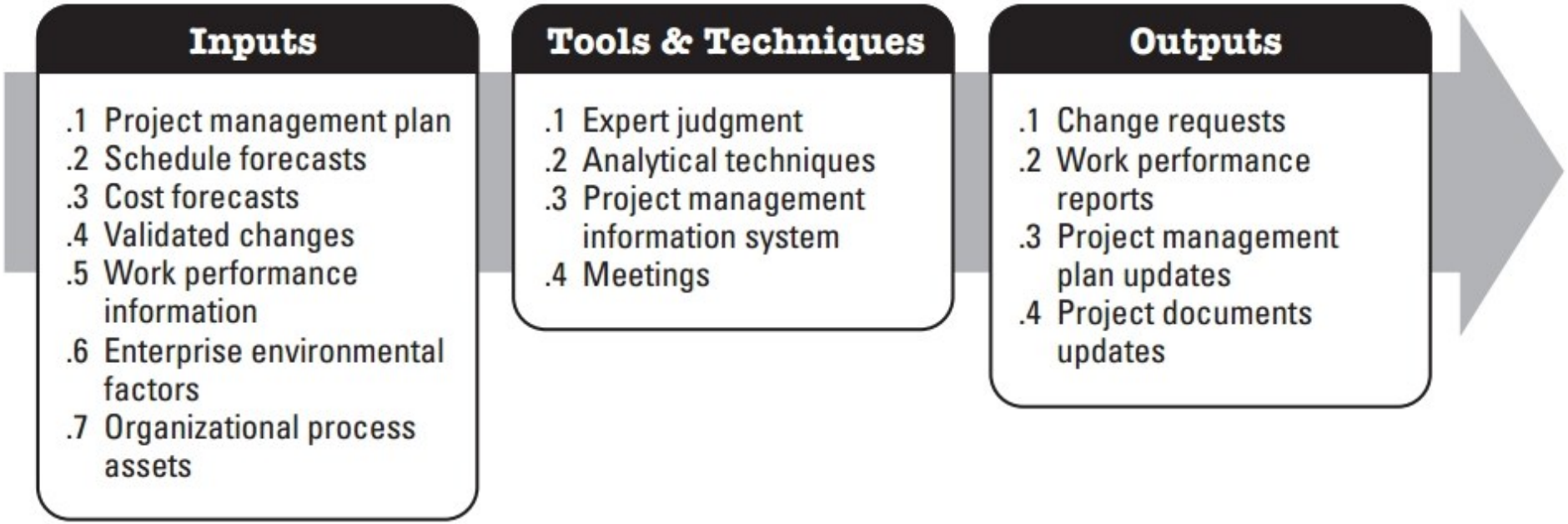
Preventive Action

- Reduce the probability of negative consequences associated with project risks.
- Deal with possible deviations from measurement baselines
- Action to prevent the same problem to repeat later in the project, e.g.
  - Changing a resource because the resource's last activity nearly failed
  - Arranging for team members to gain training in a certain area because there is no one with the necessary skills to back up a team member who may unexpectedly get sick

Defect Repair

- Either repair the defect or completely replace the component.
- Needed when a component does not meet specifications

Monitor and Control Project Work
(monitoring and controlling)



Perform
Integrated Change Control
(monitoring and controlling)

Perform Integrated Change Control

- The process of reviewing all change requests; approving changes and managing changes to deliverables, organizational process assets, project documents, and the project management plan; and communicating their disposition
- It reviews all requests for changes or modifications to project documents, deliverables, baselines, or the project management plan and approves or rejects the changes
- The key benefit of this process is that it allows for documented changes within the project to be considered in an integrated fashion while reducing project risk, which often arises from changes made without consideration to the overall project objectives or plans.

Activities

- Influencing the factors that circumvent integrated change control so that only approved changes are implemented
- Reviewing, analysing, and approving change requests
- Managing the approved changes
- Reviewing, approving, or denying all recommended corrective and preventive actions
- Coordinating changes across the entire project
- Documenting the impact of change requests

Dealing with Change Requests

- Changes may be requested by any stakeholder must be recorded in written form and entered into the change management/configuration management system
- Every documented change request must be approved or rejected
- Look at the impact of each change to all knowledge areas
- As changes may be very expensive and disrupt the project, the project manager should prevent the root cause of the need for changes

Changes are…

- A sign that the PM did not uncover stakeholders' requirements
- Handling possible changes
  - Work to obtain final requirements
  - Spend time in risk management
  - Come up with time and cost reserves
  - Have a process to control changes
  - Have clear roles and responsibilities for approving changes
  - Reevaluate the business case
  - Consider terminating a project that has excessive changes and starting a new project with a more complete set of requirements

Change Control Board

- PMs should not have the authorization to approve/reject changes, but can be a facilitator
- Consists of people with the required expertise to review and analyze change requests
- Responsible for approving or rejecting change requests
- May include the PM, customer, experts, sponsors, and others
- Assume all projects have Change Control Board

Change Authority

- Minor changes: follows the change management plan
- Major changes: change control board
- Changing project charter: sponsor

Process for Making Changes

- High Level Process for making changes:
  - Evaluate the impact: scope, time, cost, etc.
  - Create options: cutting other activities, crashing, fast tracking, etc.
  - Get the change request approved
  - Get customer buy-in

Process for Making Changes

- Detail Level
  - Prevent the root cause of changes
  - Identify change
  - Look at the impact of the change
  - Create a change request (written)
  - Perform integrated change control
    - Assess the change
    - Look for options
    - Change is approved or rejected
    - Update the status of the change in the change control system
  - Adjust the project management plan, project documents and baselines
  - Manage stakeholders' expectations by communicating the change to stakeholders affected by the change
  - Manage the project to the revised project management plan

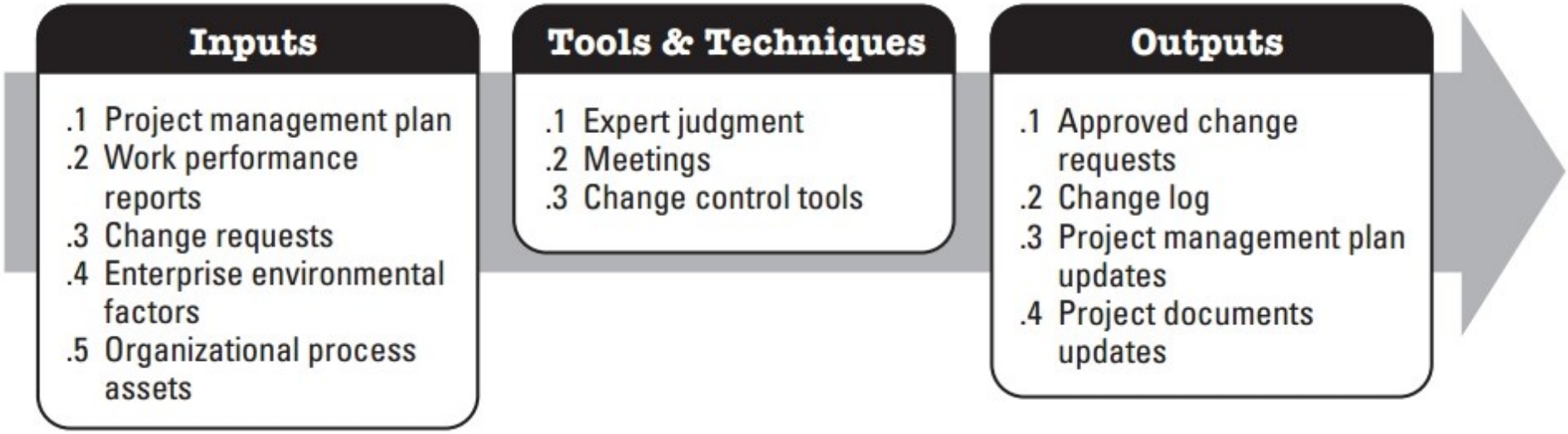
Configuration Management System

- Provides a standardized, effective, and efficient way to centrally manage approved changes and baselines
- Configuration control: specification of both the deliverables and the processes
- Three main objectives:
  - Establishes an evolutionary method to consistently identify and request changes to established baselines, and to assess the value and effectiveness of those changes
  - Provides opportunities to continuously validate and improve the project by considering the impact of each change
  - Provides the mechanism for the project management team to consistently communicate all approved and rejected changes to the stakeholders

Configuration Management Activities

- **Configuration identification.** Selection and identification of a configuration item provides the basis for which product configuration is defined and verified, products and documents are labelled, changes are managed, and accountability is maintained.
- **Configuration status accounting.** A listing of approved configuration identification, status of proposed changes to the configuration, and the implementation status of approved changes.
- **Configuration verification and audit.** Ensures the composition of a project's configuration items is correct and that corresponding changes are registered, assessed, approved, tracked, and correctly implemented.

Perform Integrated Change Control
(monitoring and controlling)



Close Project or Phase

(closing)

Close Project or Phase

- The process of finalizing all activities across all of the Project Management Process Groups to formally complete the project or phase
- The key benefit of this process is that it provides lessons learned, the formal ending of project work, and the release of organization resources to pursue new endeavors

Close Project or Phase

- When closing a project, the PM will review all prior information from previous phase closures to ensure all project work is complete, and project has met objectives
- Include all activities for administrative closure to:
  - Satisfy completion or exit criteria for the phase or project
  - Transfer the project's products, services, or results to the next phase or to production and/or operations
  - Collect project or phase records, audit project success or failure, gather lessons learned and archive project information

Activities

- You always close out a project, whether it is terminated or completed
- Activities
  - Confirm work is done to requirement (OR decide to early terminate project)
  - Complete procurement closure (or contract closure)
  - Gain formal acceptance of the product/deliverables
  - Complete final performance reporting
  - Index and archive records
  - Update lessons learned knowledge base
  - Hand off completed product (OR incomplete product in case of project termination)
  - Release resources

Accepted Deliverables

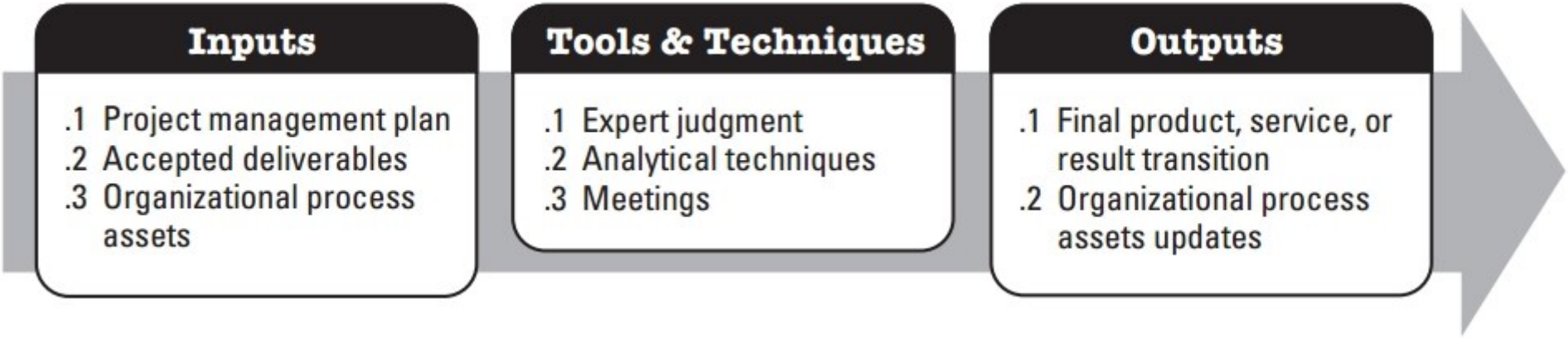
Close Project or Phase: Inputs

- Accepted deliverables may include approved product specifications, delivery receipts, and work performance documents.
- Partial or interim deliverables may also be included for phased or cancelled projects.

On Deliverables

- Direct and Manage Project Work (process) → Deliverables (output)
- Deliverables (input) → Control Quality (process) → Validated Deliverables (output)
- Validated Deliverables (input) → Validate Scope (process) → Accepted Deliverables (output)
- Accepted Deliverables (input) → Close Project or Phase (process) → Final Product, Service, or Result transition (output)

Close Project or Phase
(closing)



Exercise

- Which of the following is the BEST method to control changes on the project?
  A. Look for sources of changes.
  B. Make the changes quickly when they occur.
  C. Prevent changes from being made.
  D. Direct all changes to the change control board.

  Answer: A

- While the project is being completed, management requests a change. What is the FIRST thing the project manager should do?

A. Comply with the request if possible.
B. Obtain an understanding of the scope of the change.
C. Tell the customer that a change will be coming.
D. Ask the team to accept the change.

Answer: B

- Which of the following is NOT a reason to measure variances from the baseline?

A. To catch deviations early
B. To allow early corrective action
C. To determine if there are any wild fluctuations
D. To create a project control system

Answer: D

- Which of the following is a common problem in the Close Project or Phase process?

A. Retaining resources to complete the project
B. Completing the quality assurance plan
C. Obtaining scope validation
D. Completing a project charter

Answer: A

- During what part of the project management process is MOST of a project's budget expended?
  A. Planning
  B. Executing
  C. Monitoring and controlling
  D. Closing

  Answer: B

- Which of the following BEST describes the project manager's role during project planning?

A. Creating a bar chart and getting management to approve it

B. Coordinating the creation of a document that can be used to guide the project

C. Making a list of activities the team members are required to perform

D. Determining what can get in the way and how to prevent it

Answer: B

- Which of the following BEST describes formal acceptance of a project?
  A. Substantial completion is reached.
  B. Customer sign-off of the product is documented.
  C. Final payment is made.
  D. Final deliverables are sent to the customer.

  Answer: B

- The buyer asks the project manager for the status of the project that his team is working on. What is the BEST way to determine the status of a project?

A. Compare the project performance against the project baselines.
B. Compare the earned value to the planned value.
C. Compare the project performance against the integrated change control plan.
D. Compare the number of people used on each work package to the planned number to be used.

Answer: A

- Which of the following BEST describes a project management plan?
  A. The schedule, management plans, and budget
  B. The project manager's plan for managing and controlling the work
  C. The project charter, WBS, and project scope statement
  D. A formal, approved document used to control the project

Answer: D

- Close Procurements is similar to Close Project or Phase in that they both involve:
  A. Product validation.
  B. Kickoff meetings.
  C. Quality assurance activities.
  D. Creation of the scope verification plan.

  Answer: A

- Which of the following describes the BEST use of historical records from previous projects?

A. Estimating, life cycle costing, and project planning

B. Risk management, estimating, and creating lessons learned

C. Project planning, estimating, and creating a status report

D. Estimating, risk management, and project planning

Answer: D

- The project is NOT completed until:
  A. The project scope is completed, administrative closure is completed, and payment is received.
  B. Formal acceptance is received, and any other requirements for project closure as stated in the contract are met.
  C. The customer is satisfied and final payment is received.
  D. Lessons learned are completed.

Answer: B

- The project is not going well and many changes are being made. Which of the following should you do FIRST to gain control of the project?

A. Review the project scope with the stakeholders.
B. Create a new change form.
C. Remind everyone of the change procedures.
D. Ask the sponsor to review the project charter.

Answer: A

- Which of the following is NOT included in a schedule change control system?
  A. Approval levels necessary for authorizing changes
  B. Tracking systems
  C. Paperwork necessary for making changes
  D. Limitations on the scope of changes

Answer: D

- Inputs to the Direct and Manage Project Work process include which of the following:

A. Approved corrective actions.
B. Project management plan.
C. Implemented corrective actions.
D. Defect repair orders.

Answer: C

- Many more changes were made to the project during the project executing processes than had been expected. What is the BEST thing for the project manager to do now?

A. Wait until all changes are known, print out a new schedule, and revise the baseline.

B. Make changes as needed, but maintain a schedule baseline.

C. Make only the changes approved by management.

D. Talk to management before any changes are made.

Answer: B

- When it comes to changes, the project manager's attention is BEST spent on:
  A. Making changes.
  B. Tracking and recording changes.
  C. Informing the sponsor of changes.
  D. Preventing unnecessary changes.

Answer: D

- Approved corrective action is an input to:
  A. Validate Scope.
  B. Direct and Manage Project Work
  C. Develop Project Charter.
  D. Develop Schedule.

  Answer: B

- All of the following would occur during the Close Project or Phase process EXCEPT:
  A. Creating lessons learned.
  B. Formal acceptance.
  C. Reducing resource spending.
  D. Performing benefit cost analysis

Answer: D

- During project executing, a large number of changes are made to the project. The project manager should:

A. Wait until all changes are known and print out a new schedule.
B. Make sure the project charter is still valid.
C. Change the schedule baseline.
D. Talk to management before any changes are made.

Answer: B

The End