

Projec Integration Management

Introduction

- Integration Management: Processes & activities to identify, define, combine and coordinate PM activities
- Unification, consolidation, articulation, and integrative actions for completing the project, managing stakeholders requirements
- Making choices about resource allocation, making trade-offs among competing objectives and alternatives and managing interdependencies among PM knowledge areas

Project Integration Management

4.1 Develop Project Charter

- .1 Inputs
 - .1 Project statement of work
 - .2 Business case
 - .3 Contract
 - .4 Enterprise environmental factors
 - .5 Organizational process assets
- .2 Tools & Techniques
 - .1 Expert judgment
- .3 Outputs
 - .1 Project charter

4.2 Develop Project Management Plan

- .1 Inputs
 - .1 Project charter
 - .2 Outputs from planning processes
 - .3 Enterprise environmental factors
 - .4 Organizational process assets
- .2 Tools & Techniques
 - .1 Expert judgment
- .3 Outputs
 - .1 Project management plan

4.3 Direct and Manage Project Execution

- .1 Inputs
 - .1 Project management plan
 - .2 Approved change requests
 - .3 Enterprise environmental factors
 - .4 Organizational process assets
- .2 Tools & Techniques
 - .1 Expert judgment
 - .2 Project management information system
- .3 Outputs
 - .1 Deliverables
 - .2 Work performance information
 - .3 Change requests
 - .4 Project management plan updates
 - .5 Project document updates

4.4 Monitor and Control Project Work

- .1 Inputs
 - .1 Project management plan
 - .2 Performance reports
 - .3 Enterprise environmental factors
 - .4 Organizational process assets
- .2 Tools & Techniques
 - .1 Expert judgment
- .3 Outputs
 - .1 Change requests
 - .2 Project management plan updates
 - .3 Project document updates

4.5 Perform Integrated Change Control

- .1 Inputs
 - .1 Project management plan
 - .2 Work performance information
 - .3 Change requests
 - .4 Enterprise environmental factors
 - .5 Organizational process assets
- .2 Tools & Techniques
 - .1 Expert judgment
 - .2 Change control meetings
- .3 Outputs
 - .1 Change request status updates
 - .2 Project management plan updates
 - .3 Project document updates

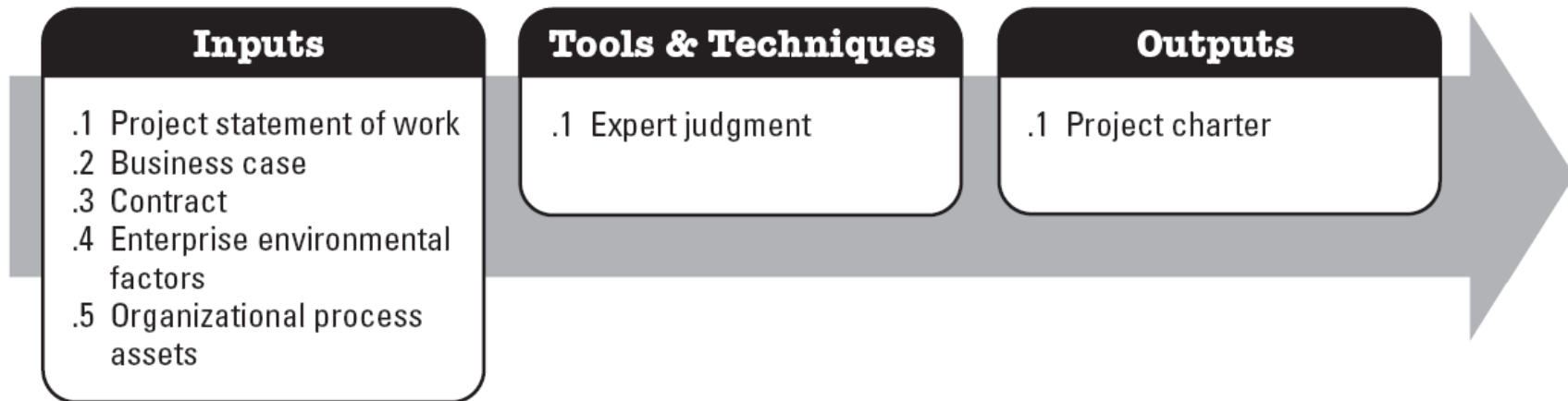
4.6 Close Project or Phase

- .1 Inputs
 - .1 Project management plan
 - .2 Accepted deliverables
 - .3 Organizational process assets
- .2 Tools & Techniques
 - .1 Expert judgment
- .3 Outputs
 - .1 Final product, service, or result transition
 - .2 Organizational process assets updates

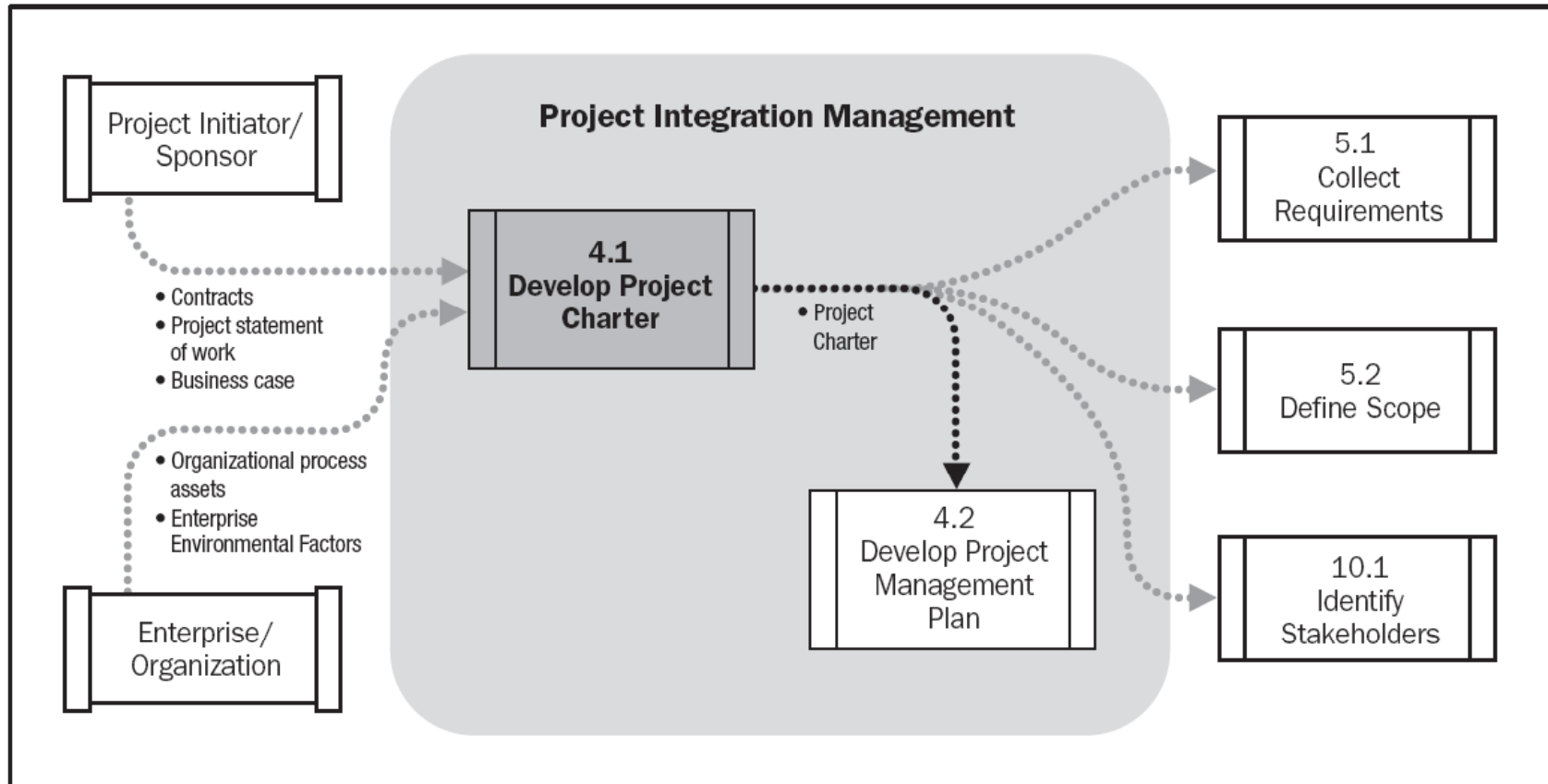
4.1 Develop Project Charter

- Documenting:
 - Initial requirements
 - Expectations
- Authorizes a project/a phase
- Establishing partnership between costumer & contractor
- Assigning a project manager

Input, Tools & Techniques, Outputs



Data Flow Diagram



Inputs

- Project Statement of Work (SOW)
 - Business need
 - Product scope description
 - Strategic plan
- Business Case
 - Market demand
 - Organizational need
 - Customer request
 - Technological advance
 - Legal requirement
 - Ecological impacts
 - Social needs

Inputs

- Contract
- Enterprise Environmental Factors
 - Government/industry standards
 - Organization infrastructure
 - Marketplace conditions
- Organizational Process Assets
 - Standards/policies
 - Templates
 - Historical information/lesson learned

Tools & Techniques

- Expert judgment
 - Other units in the organization
 - Consultants
 - Stakeholders
 - Professional/technical association
 - Industry groups
 - Subject matter experts
 - PMO

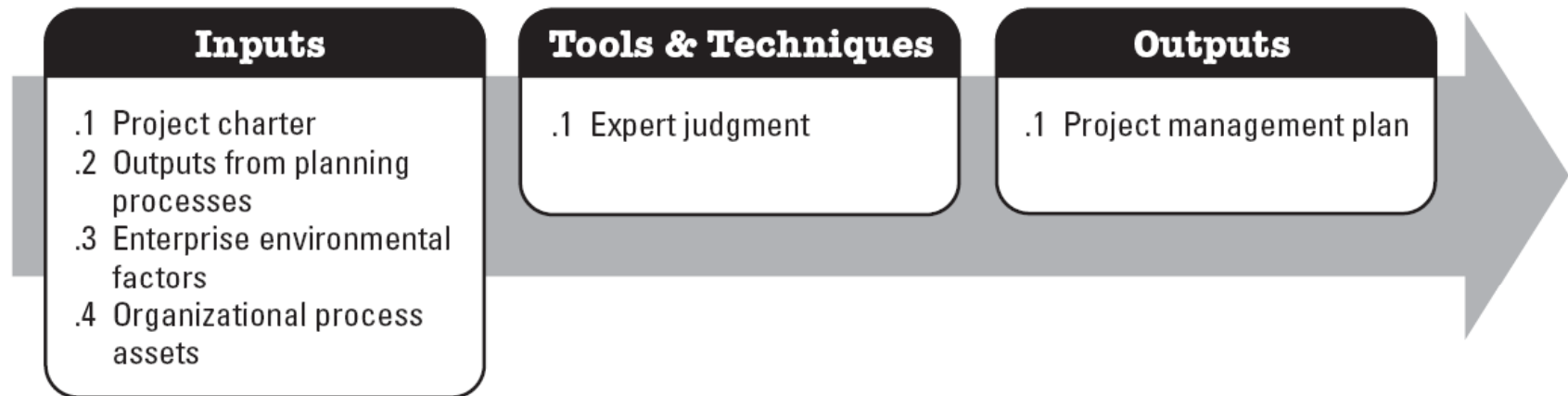
Outputs

- Project Charter
 - Project purpose
 - Measurable project objectives & related success criteria
 - High-level requirements
 - High-level project description
 - High-level risks
 - Summary milestone schedule
 - Summary budget
 - Project approval requirements
 - Assigned project manager, responsibility, authority level
 - Name and authority of the sponsor

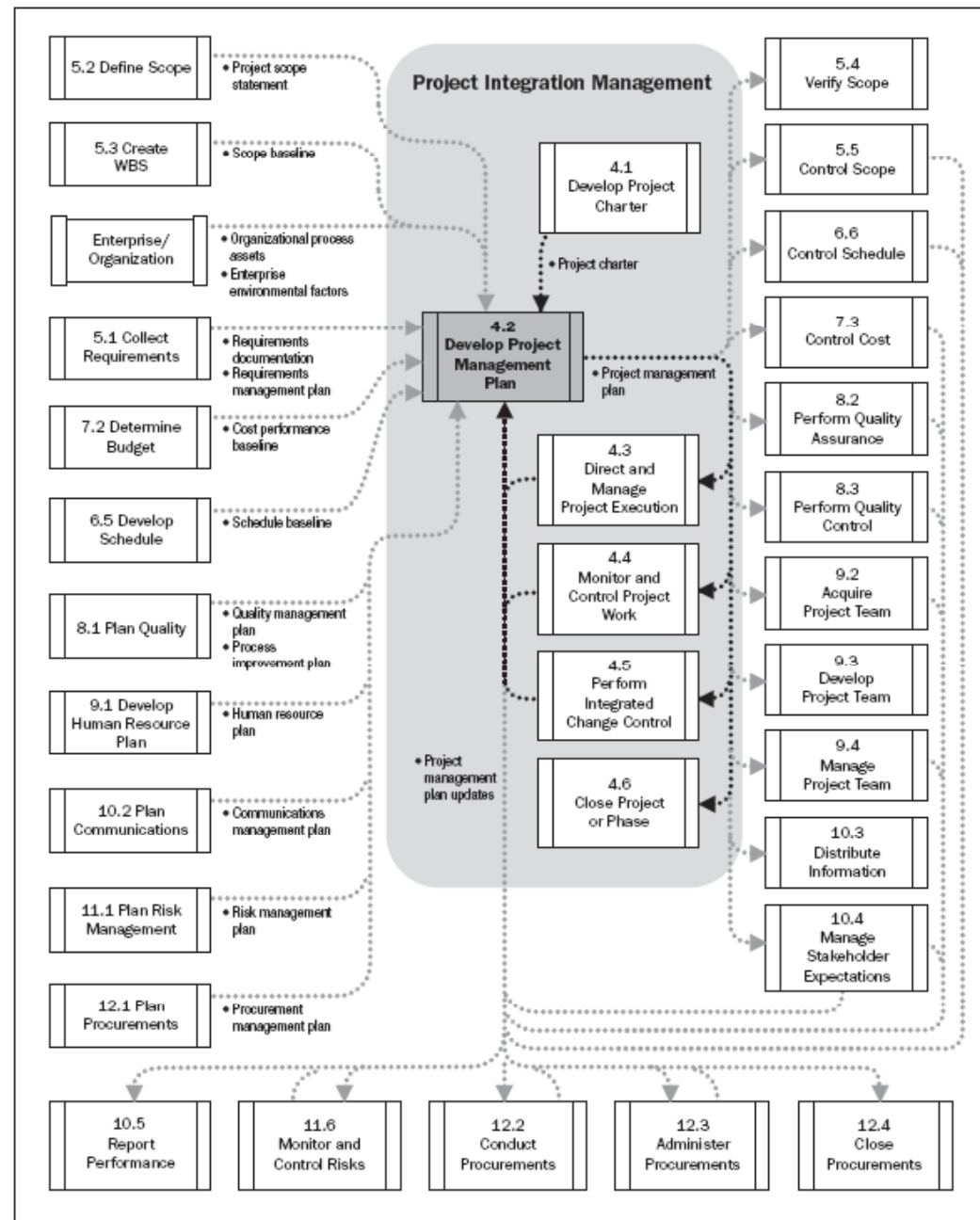
4.2 Develop Project Management Plan

- Documenting the actions necessary to define, prepare, integrate and coordinate all subsidiary plans
- How to execute, monitor, control, close the project
- Progressively elaborated by updates and controlled and approved through Integrated Change Control process

Input, Tools & Techniques, Outputs



Data Flow Diagram



Inputs

- Project Charter
- Outputs from Planning Processes
- Enterprise Environmental Factors
 - Government/industry standards
 - PM Info. System
 - Organizational structure/culture
 - Infrastructure
 - Personnel administration
 -

Inputs

- Organizational Process Assets
 - Standard guidelines, work instructions, proposal evaluation criteria, performance measurement criteria
 - PM plan templates (project validation & acceptance criteria)
 - Change control procedures (how to modify, approve, validate changes)
 - Project files from past projects
 - Historical information, lesson learned
 - Configuration management

Tools & Techniques

- Expert Judgment
 - Customizing the process
 - Developing technical/management details
 - Determining resources/skill levels
 - Defining the level of configuration management
 - Determining documents subject to change control process

outputs

- Project Management Plan
 - Life cycle of project/processes for each phase
 - Results of customizing processes
 - Which processes
 - How detail
 - Tools/techniques
 - How to use the processes
 - How work will be executed
 - Change management plan
 - Configuration management plan
 - Need/techniques of communication among stakeholders

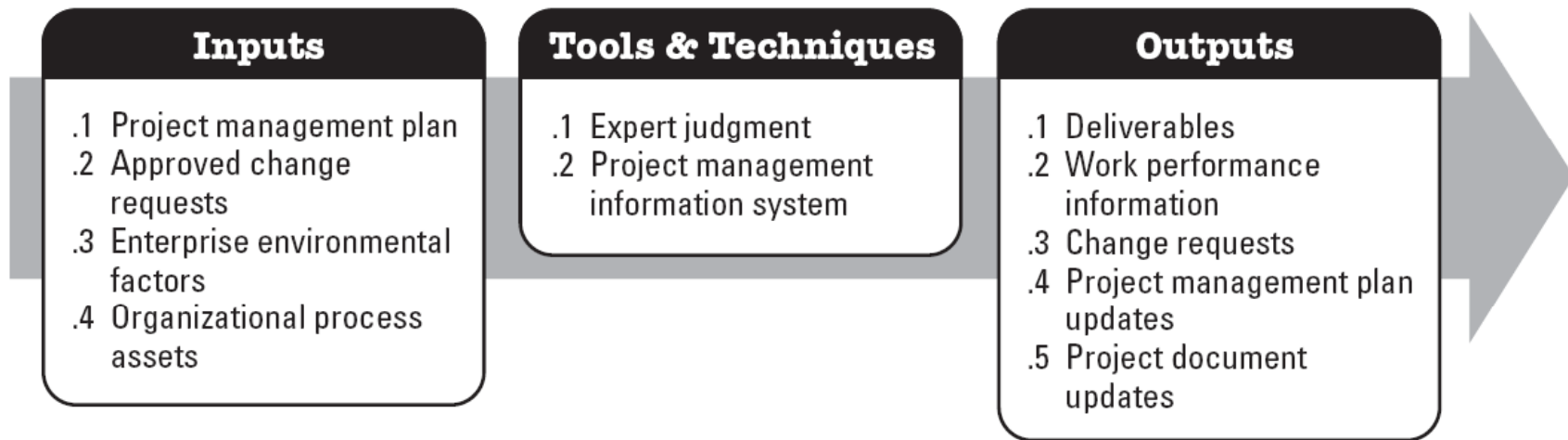
4.3 Direct & Manage Project Execution

- The process of performing the work defined in PM Plan
 - Performing activities
 - Creating deliverables
 - Staff/train/manage the team members
 - Obtain/manage/use resources
 - Implement methods/standards
 - Establish/manage communication channels

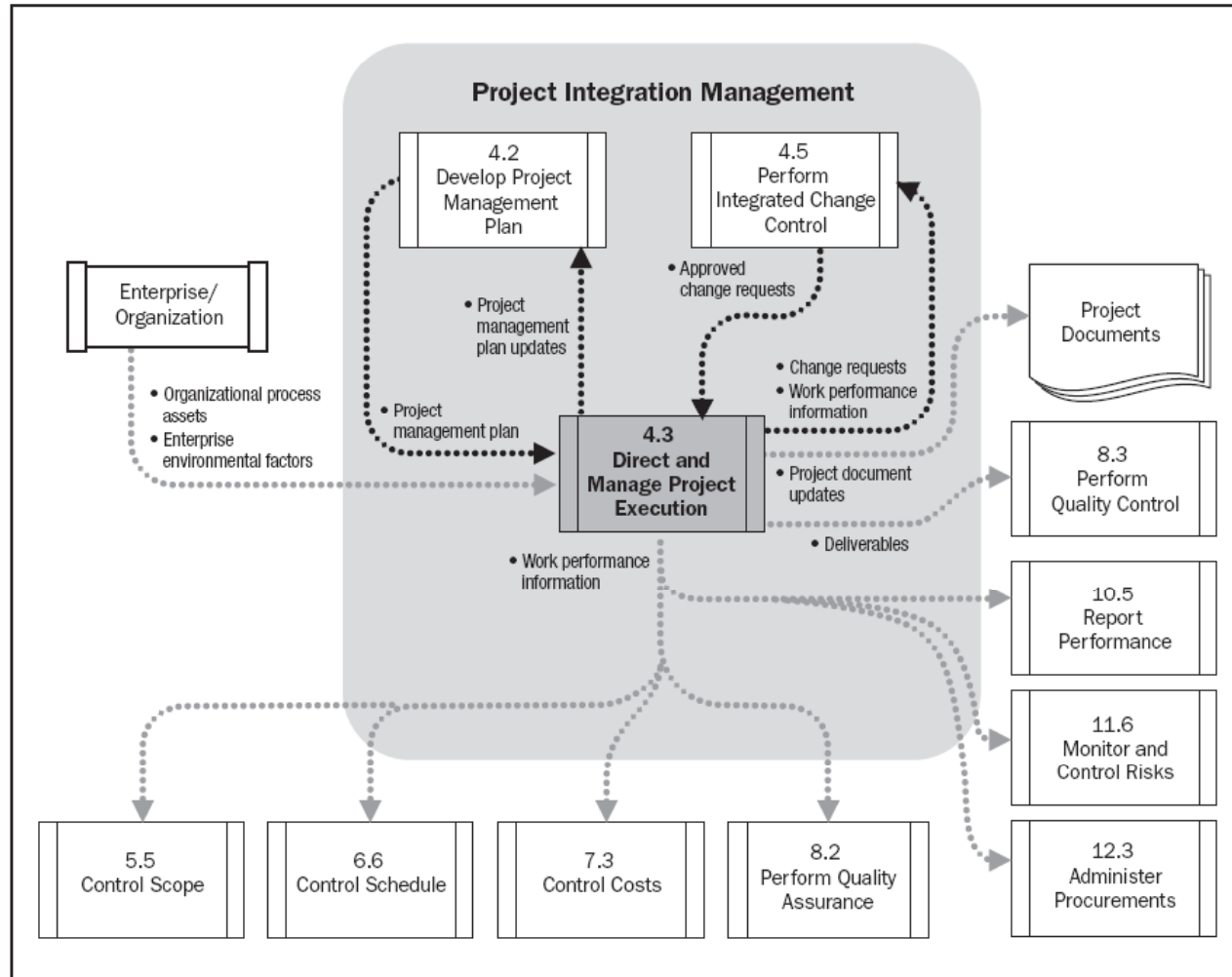
4.3 Direct & Manage Project Execution

- Generate data to facilitate forecasting (cost/schedule/progress report)
- Issue change requests and adapt approved changes
- Manage risks/apply risk response activities
- Collect/document lesson learned
- Implementing approved changes
 - Corrective action
 - Preventive action
 - Defect repair

Inputs



Data Flow Diagram



Inputs

- PM Plan
- Approved Change Requests
- Enterprise Environmental factors
 - Organizational culture/structure
 - Infrastructure
 - Personnel administration
 - Stakeholders risk tolerances
 - PM Info System

Inputs

- Organizational Process Assets
 - Standardized guidelines/work instructions
 - Communication requirements (media, record, security)
 - Issue & defect management procedures (control, identifications, resolution, tracking)
 - Issue & defect management DB
 - Process measurement DB
 - Project files from past projects

Tools & Techniques

- Expert Judgment
 - Other units in organization
 - Consultants
 - Stakeholders
 - Professional/technical associations
- PM Info. System

Outputs

- Deliverables
- Work Performance Information
 - Deliverables status
 - Schedule progress
 - Cost incurred
- Change Requests
 - Corrective action
 - Preventive action
 - Defect repair
 - Updates

Outputs

- PM Plan Updates
 - Requirements, Schedule, Cost, Quality, Human , resources, Communication, Risk, Procurement , Project baselines
- Project Document Updates
 - Requirements
 - Project logs
 - Risk register
 - Stakeholder register

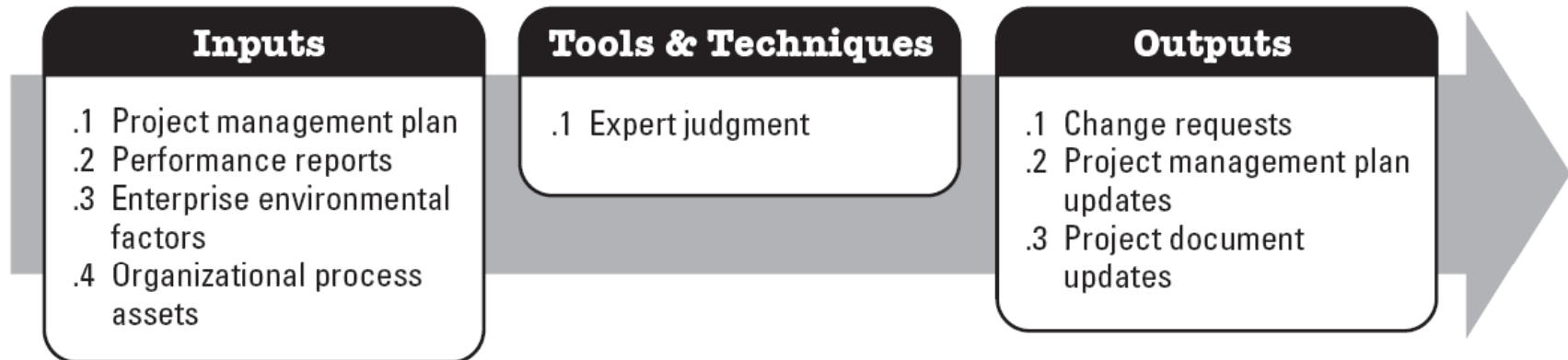
4.4 Monitor & Control Project Work

- Tracking, reviewing, regulating the progress
- Collecting, measuring, distributing performance info., assessing measurements & trends to effect process improvements
- Comparing actual project performance vs. planned one
- Assessing performance
- Identifying new risks, their status, risk response plans

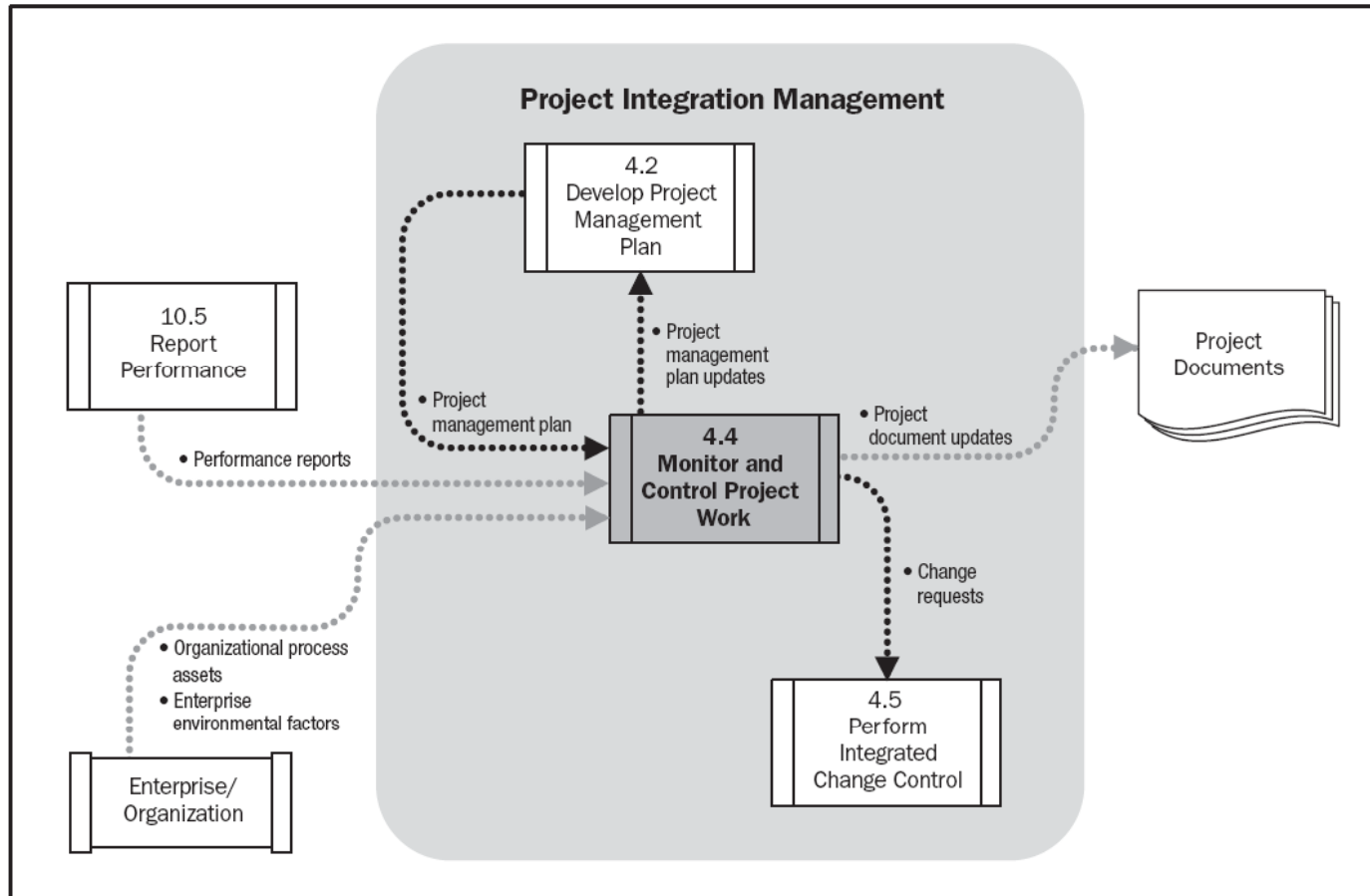
4.4 Monitor & Control Project Work

- Maintaining accurate/timely info about project products/documentation
- Providing info. for reporting status, measuring progress, forecasting
- Providing forecast to update cost/schedule info.
- Monitoring implementation of approved changes

Inputs, Tools & Techniques, outputs



Data Flow



Inputs

- PM Plan
- Performance Report
 - Current status
 - Significant accomplishment for the period
 - Scheduled activities
 - Forecasts
 - Issues
- Enterprise Environmental Factors
 - Government/industry standards

Inputs

- Company work authorization system
- Stakeholder risk tolerance
- PM Info. System
- Organizational Process Assets
 - Organization communication requirements
 - Financial controls procedures
 - Issue/defect management procedures
 - Risk control procedures (categories, probability, impact)
 - Process measurement DB
 - Lesson learned DB

Tools & Techniques

- Expert judgment

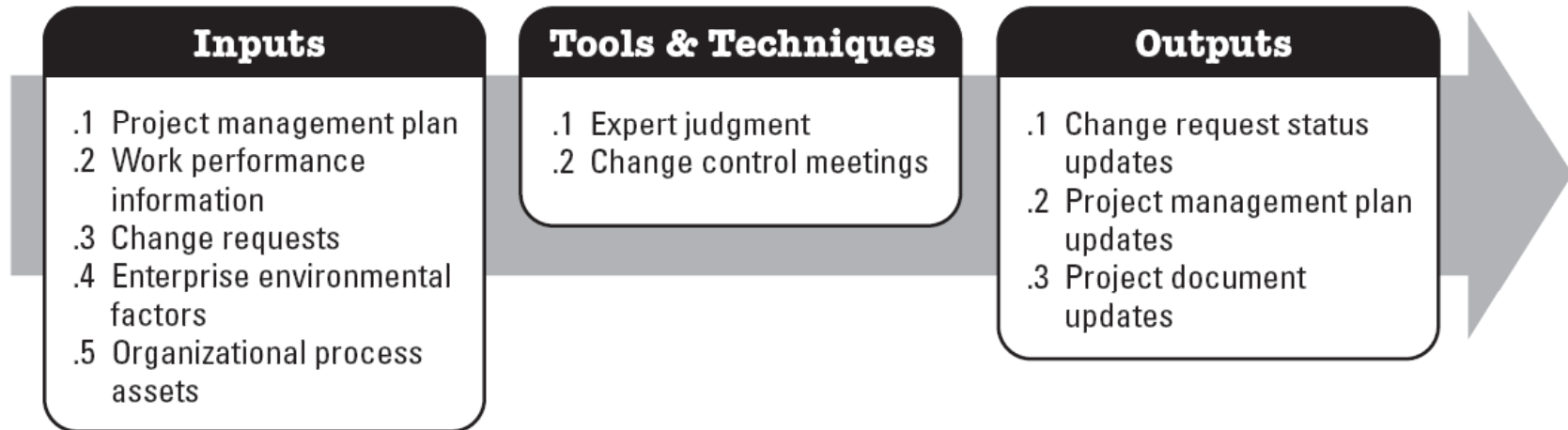
Outputs

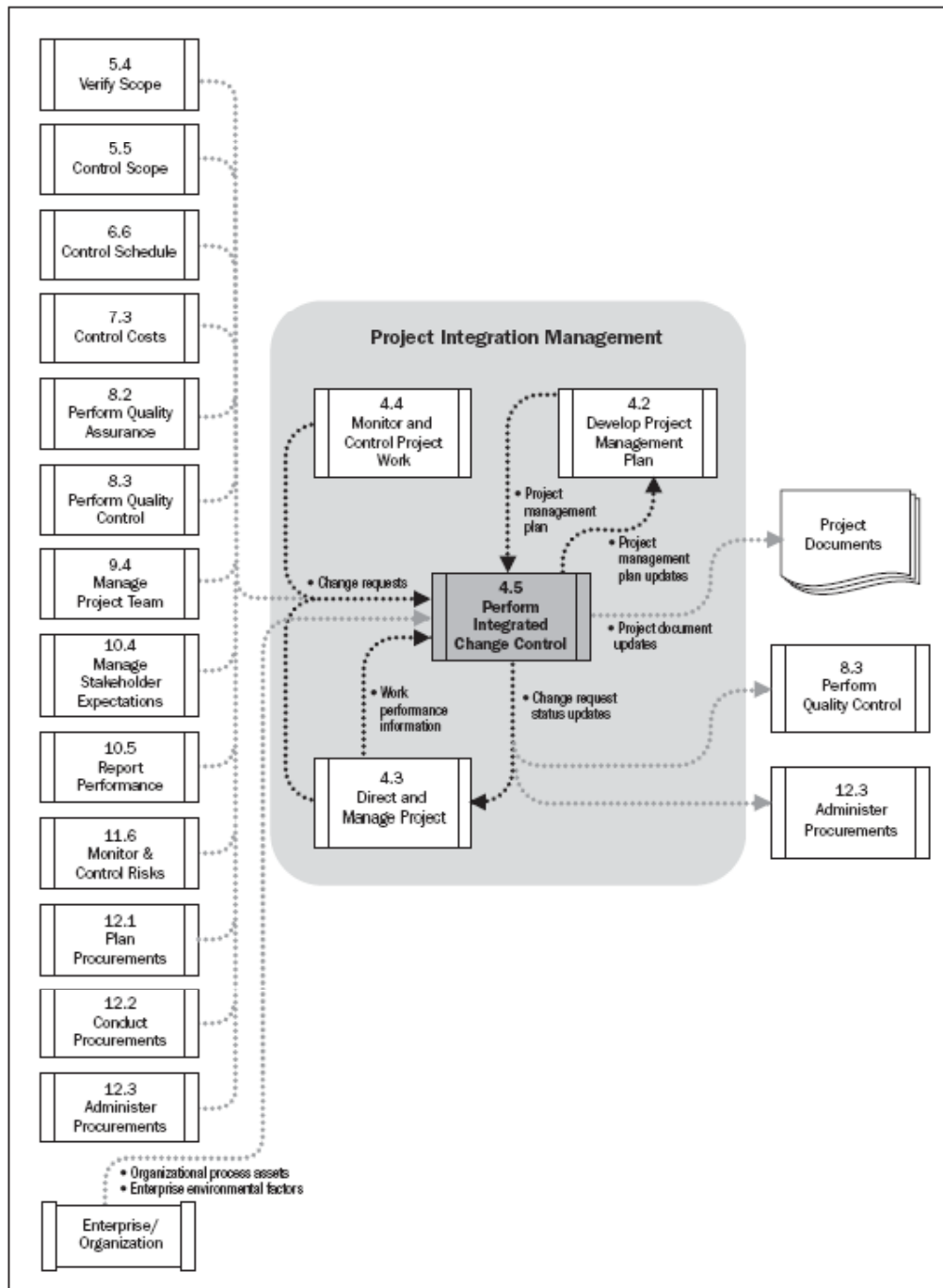
- Change Requests
 - Corrective
 - Preventive
 - Defect
- PM Plan Updates
 - Schedule, cost, quality, scope, schedule, cost performance baseline
- Project Document Updates
 - Forecasts, performance reports, issue log

4.5 Perform Integrated Change Control

- The process of reviewing change requests, approving changes, managing changes
- Include:
 - Influencing factors so that only approved changes are implemented
 - Reviewing, analyzing, approving change requests ASAP
 - Managing approved changes
 - Reviewing, approving, denying recommended corrective/preventive actions
 - Documenting the complete impact of change requests

Inputs, Tools & Techniques, Outputs





Inputs

- PM Plan
- Work Performance Info.
- Change Requests
- Enterprise Environmental Factors
- Organizational Process Assets
 - Change control procedures (approve, validate, implement)
 - Procedure for approving and issuing change authorizations
 - Process measurement DB
 - Configuration management DB
 - Project files

Tools & Techniques

- Expert Judgment
 - Consultants
 - Stakeholders
 - Professional/technical associations
 - Industry groups
 - Subject matter experts
 - PMO
- Change Control Meetings

Outputs

- Change request status updates
- Project Management Plan Updates
- Project Document Updates

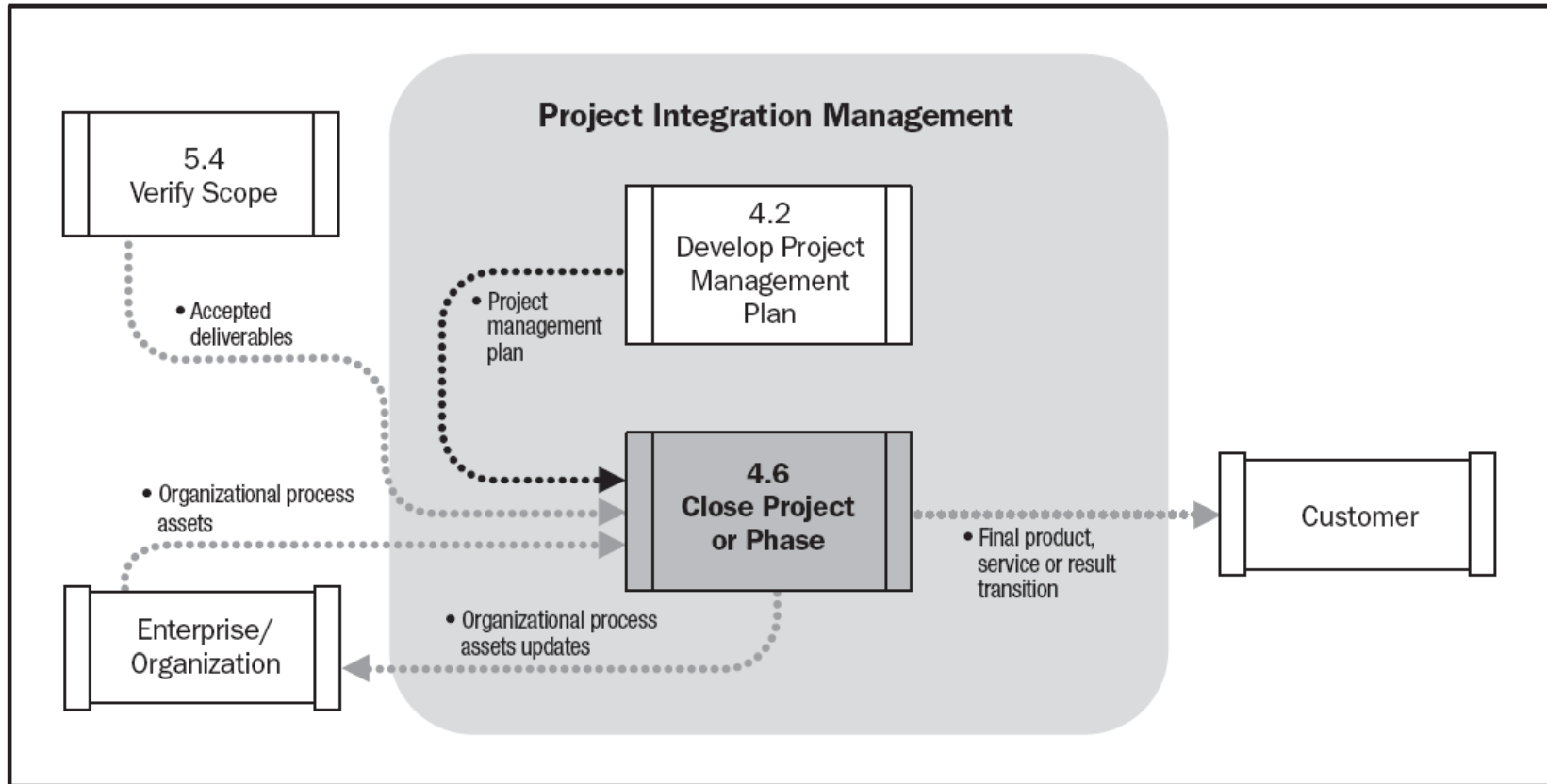
4.6 Close Project/Phase

- Actions/activities necessary to satisfy completion or exit criteria for phase/project
- Actions/activities necessary to transfer the project's product, service, result to next phase/production/operation
- Actions/activities necessary to collect records, audit success/failure, lesson learned

Inputs, Tools & Techniques, Outputs



Data Flow



Inputs

- Project Management Plan
- Accepted Deliverables
- Organizational Process Assets
 - Project/phase closure guidelines
 - Historical info., lesson learned

Tools and Techniques

- Expert Judgment

Outputs

- Final product, service, result transition
- Organizational process assets updates
 - Project files
 - Project/phase closure documents
 - Historical information/lesson learned