CMMI®
V2.0

MODEL
AT-A-GLANCE

Including the following views:
• Development
• Services
• Supplier Management
Designed to meet the challenges of the changing global business landscape, the CMMI model and integrated product suite help organizations drive business performance through building and benchmarking key capabilities.

**MODEL**  
- Clear pathway to performance improvement  
- Simplified for accelerated adoption

**APPRAISAL METHOD**  
- New appraisal method to increase reliability and reduce cost

**TRAINING & CERTIFICATION**  
Updated training includes:  
- Modular training components  
- A focus on learner objectives  
- Virtual and in-person options

**SYSTEMS & TOOLS**  
- Redesigned system to access online models and resources

**ADOPTION GUIDANCE**  
- Guidance for new adopters to get started with CMMI  
- Guidance for transition from CMMI V1.3 to CMMI V2.0
What is the CMMI V2.0 Model?

The Capability Maturity Model Integration (CMMI)® is a proven set of global best practices that drives business performance through building and benchmarking key capabilities.

CMMI best practices focus on what needs to be done to improve performance and align operations to business goals. Designed to be understandable, accessible, flexible, and integrate with other methodologies such as agile, CMMI helps organizations understand their current level of capability and performance and offers a guide to optimize business results.

CMMI V2.0 is one model with multiple customized views that apply to different business environments, enabling organizations to create a view of the model that meets their specific performance improvement needs.

CMMI V2.0 Model At-A-Glance

The Model At-A-Glance booklet includes a summary of CMMI Capability Areas, Practice Areas, and practices.

This summary will provide a helpful overview of the model content areas, but users should read and refer to the complete model content to ensure full understanding and accurate interpretation of the model.

The CMMI model is available for purchase at: https://cmmiinstitute.com/model-viewer
This Model At-A-Glance booklet contains content from CMMI® version 2.1, including the Development, Services, and Supplier Management views. Refer to the release notes, available from the Model Viewer, for more details.
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Intent
Deliver services and manage the service delivery system.

Value
Increase customer satisfaction by delivering services that meet or exceed customer expectations.

Additional Required PA Information
This includes:
- Delivering services in accordance with service delivery approaches and agreements
- Managing changes to the service delivery system
- Receiving and processing service requests
- Maintaining service delivery performance when changes occur

Practice Summary

**LEVEL 1**
SDM 1.1 Use the service system to deliver services.

**LEVEL 2**
SDM 2.1 Develop, record, keep updated, and follow service agreements.
SDM 2.2 Receive and process service requests in accordance with service agreements.
SDM 2.3 Deliver services in accordance with service agreements.
SDM 2.4 Analyze existing service agreements and service data to prepare for updated or new agreements.
SDM 2.5 Develop, record, keep updated, and follow the approach for operating and changing the service system.
SDM 2.6 Confirm the readiness of the service system to support the delivery of services.

**LEVEL 3**
SDM 3.1 Develop, record, keep updated, and use organizational standard service systems and agreements.

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STRATEGIC SERVICE MANAGEMENT

Intent
Develop and deploy standard services that are compatible with strategic business needs and plans.

Value
Increases likelihood of meeting business objectives by aligning standard services with customer needs.

Practice Summary

STSM 1.1  Develop a list of current services.

STSM 2.1  Develop, keep updated, and use descriptions of current services.
STSM 2.2  Collect, record, and analyze data about strategic needs and capabilities for service delivery.
STSM 2.3  Develop, keep updated, and follow an approach for providing new or changed services derived from strategic needs and capabilities.

STSM 3.1  Develop, keep updated, and use the set of organizational standard services and service levels.
## PRODUCT INTEGRATION

### Intent
Integrate and deliver the solution that addresses functionality and quality requirements.

### Value
Increases customers’ satisfaction by giving them a solution that meets or exceeds their functionality and quality requirements.

### Practice Summary

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<td>Develop, keep updated, and follow procedures and criteria for integrating solutions and components.</td>
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<td>Confirm, prior to integration, that each component has been properly identified and operates according to its requirements and design.</td>
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<td>Evaluate integrated components to ensure conformance to the solution’s requirements and design.</td>
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<td>Integrate solutions and components according to the integration strategy.</td>
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<td>LEVEL 3</td>
<td>PI 3.1</td>
<td>Review and keep updated interface or connection descriptions for coverage, completeness, and consistency throughout the solution’s life.</td>
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<td></td>
<td>PI 3.2</td>
<td>Confirm, prior to integration, that component interfaces or connections comply with interface or connection descriptions.</td>
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<td></td>
<td>PI 3.3</td>
<td>Evaluate integrated components for interface or connection compatibility.</td>
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TECHNICAL SOLUTION

Intent
Design and build solutions that meet customer requirements.

Value
Provides a cost-effective design and solution that meets customer requirements and reduces rework.

Practice Summary

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<th>Build a solution to meet requirements.</th>
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<td>LEVEL 2</td>
<td>TS 2.1</td>
<td>Design and build a solution to meet requirements.</td>
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<td>TS 2.2</td>
<td>Evaluate the design and address identified issues.</td>
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<td>Provide guidance on use of the solution.</td>
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<td>Develop criteria for design decisions.</td>
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<td>Develop alternative solutions for selected components.</td>
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<td>TS 3.3</td>
<td>Perform a build, buy, or reuse analysis.</td>
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<td></td>
<td>TS 3.4</td>
<td>Select solutions based on design criteria.</td>
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<td></td>
<td>TS 3.5</td>
<td>Develop, keep updated, and use information needed to implement the design.</td>
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<td></td>
<td>TS 3.6</td>
<td>Design solution interfaces or connections using established criteria.</td>
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PEER REVIEWS

Intent
Identify and address work product issues through reviews by the producer's peers or Subject Matter Experts (SMEs).

Value
Reduce cost and rework by uncovering issues or defects early.

Practice Summary

**LEVEL 1**
PR 1.1 Perform reviews of work products and record issues.

**LEVEL 2**
PR 2.1 Develop and keep updated procedures and supporting materials used to prepare for and perform peer reviews.
PR 2.2 Select work products to be peer reviewed.
PR 2.3 Prepare and perform peer reviews on selected work products using established procedures.
PR 2.4 Resolve issues identified in peer reviews.

**LEVEL 3**
PR 3.1 Analyze results and data from peer reviews.
PROCESS QUALITY ASSURANCE

Intent
Verify and enable improvement of the quality of the performed processes and resulting work products.

Value
Increases the consistent use and improvement of the processes to maximize business benefit and customer satisfaction.

Practice Summary

PQA 1.1 Identify and address process and work product issues.

PQA 2.1 Develop, keep updated, and follow a quality assurance approach and plan based on historical quality data.
PQA 2.2 Throughout the project, objectively evaluate selected performed processes and work products against the recorded process and applicable standards.
PQA 2.3 Communicate quality and non-compliance issues and ensure their resolution.
PQA 2.4 Record and use results of quality assurance activities.

PQA 3.1 Identify and record opportunities for improvement during quality assurance activities.
REQUIREMENTS DEVELOPMENT AND MANAGEMENT

Intent
Elicit requirements, ensure common understanding by stakeholders, and align requirements, plans, and work products.

Value
Ensures that customers’ needs and expectations are satisfied.

Practice Summary

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<td>Record requirements.</td>
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<th>Practice</th>
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<td>RDM 2.1</td>
<td>Elicit stakeholder needs, expectations, constraints, and interfaces or connections.</td>
<td></td>
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<td>RDM 2.2</td>
<td>Transform stakeholder needs, expectations, constraints, and interfaces or connections into prioritized customer requirements.</td>
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<td>RDM 2.3</td>
<td>Develop an understanding with the requirements providers on the meaning of the requirements.</td>
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<td>RDM 2.4</td>
<td>Obtain commitment from project participants that they can implement the requirements.</td>
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<td>RDM 2.5</td>
<td>Develop, record, and maintain bidirectional traceability among requirements and activities or work products.</td>
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<td>RDM 2.6</td>
<td>Ensure that plans and activities or work products remain consistent with requirements.</td>
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<th>Practice</th>
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<td>RDM 3.1</td>
<td>Develop and keep requirements updated for the solution and its components.</td>
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<td>RDM 3.2</td>
<td>Develop operational concepts and scenarios.</td>
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<td>RDM 3.3</td>
<td>Allocate the requirements to be implemented.</td>
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<td>RDM 3.4</td>
<td>Identify, develop, and keep updated interface or connection requirements.</td>
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<td>RDM 3.5</td>
<td>Ensure that requirements are necessary and sufficient.</td>
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<td>RDM 3.6</td>
<td>Balance stakeholder needs and constraints.</td>
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<td>RDM 3.7</td>
<td>Validate requirements to ensure the resulting solution will perform as intended in the target environment.</td>
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VERIFICATION AND VALIDATION

Intent
Verification and validation includes activities that:

- Confirm selected solutions and components meet their requirements
- Demonstrate selected solutions and components fulfill their intended use in their target environment

Value
Verification and validation of selected solutions and components throughout the project increases the likelihood that the solution will satisfy the customer.

Practice Summary

**LEVEL 1**

- **VV 1.1** Perform verification to ensure the requirements are implemented and record and communicate results.
- **VV 1.2** Perform validation to ensure the solution will function as intended in its target environment and record and communicate results.

**LEVEL 2**

- **VV 2.1** Select components and methods for verification and validation.
- **VV 2.2** Develop, keep updated, and use the environment needed to support verification and validation.
- **VV 2.3** Develop, keep updated, and follow procedures for verification and validation.

**LEVEL 3**

- **VV 3.1** Develop, keep updated, and use criteria for verification and validation.
- **VV 3.2** Analyze and communicate verification and validation results.
SUPPLIER AGREEMENT MANAGEMENT

Intent
Establish an agreement with selected suppliers, ensure that the supplier and the acquirer perform according to the terms over the course of the agreement, and evaluate the supplier’s deliverables.

Value
Provides an explicit understanding between the acquirer and supplier to maximize the success of agreed-on efforts to deliver a supplier deliverable.

Additional Required PA Information
The term “supplier deliverable” is an item to be provided to an acquirer or other recipient as specified in an agreement. The item can be a document, hardware or software item, a service, or any type of solution or work product.

Practice Summary

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<td>SAM 1.1</td>
<td>Develop and record the supplier agreement.</td>
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<td>SAM 1.2</td>
<td>Accept or reject the supplier deliverables.</td>
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<td></td>
<td>SAM 1.3</td>
<td>Process supplier invoices.</td>
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<td>2</td>
<td>SAM 2.1</td>
<td>Monitor supplier as specified in the supplier agreement and keep agreement updated.</td>
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<td></td>
<td>SAM 2.2</td>
<td>Perform activities as specified in the supplier agreement.</td>
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<td>SAM 2.3</td>
<td>Verify that the supplier agreement is satisfied before accepting the acquired supplier deliverable.</td>
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<td>SAM 2.4</td>
<td>Manage invoices submitted by the supplier according to the supplier agreements.</td>
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<td>SAM 3.1</td>
<td>Select technical supplier deliverables for analysis and conduct technical reviews.</td>
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<td></td>
<td>SAM 3.2</td>
<td>Select and monitor supplier processes and deliverables based on criteria in the supplier agreement.</td>
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<td>SAM 4.1</td>
<td>Select measures and apply analytical techniques to quantitatively manage supplier performance to achieve quality and process performance objectives.</td>
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SUPPLIER SOURCE SELECTION

Intent
Develop and keep updated a package of materials used to seek proposals from potential suppliers and select one or more suppliers to deliver the solution.

Value
Improves the ability to select the most qualified suppliers to deliver solutions.

Practice Summary

**LEVEL 1**

SSS 1.1 Determine the type of acquisition.
SSS 1.2 Identify potential suppliers and distribute requests for proposals.
SSS 1.3 Evaluate proposals and select suppliers.

**LEVEL 2**

SSS 2.1 Develop a solicitation package and keep it updated.
SSS 2.2 Identify qualified potential suppliers and distribute the solicitation package for their response.
SSS 2.3 Evaluate proposed solutions according to recorded evaluation criteria and select suppliers.

**LEVEL 3**

SSS 3.1 Develop, keep updated, and follow negotiation approaches for soliciting, evaluating, and selecting suppliers.
CONTINUITY

Intent
Plan mitigation activities for significant disruptions to business operations so that work can continue or resume.

Value
Enables continued operation when serious disruptions or catastrophic events occur.

Practice Summary

**LEVEL 1**
- CONT 1.1 Develop contingency approaches for managing significant disruptions to operations.

**LEVEL 2**
- CONT 2.1 Identify and prioritize functions essential for continuity.
- CONT 2.2 Identify and prioritize resources essential for continuity.
- CONT 2.3 Develop, keep updated, and follow continuity plans to resume performing essential functions.

**LEVEL 3**
- CONT 3.1 Develop and keep updated materials for continuity training.
- CONT 3.2 Provide and evaluate continuity training according to the plan.
- CONT 3.3 Prepare, conduct, and analyze results from verification and validation of the continuity plan.
INCIDENT RESOLUTION AND PREVENTION

Intent
Resolve and prevent disruptions promptly to sustain service delivery levels.

Value
Minimize the impact of disruptions to meet objectives and customer commitments more effectively.

Practice Summary

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<td>Record and resolve incidents.</td>
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<td>IRP 2.1</td>
<td>Develop, keep updated, and follow an approach for incident resolution and prevention.</td>
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<td>IRP 2.2</td>
<td>Monitor and resolve each incident to closure.</td>
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<td></td>
<td>IRP 2.3</td>
<td>Communicate incident status.</td>
</tr>
<tr>
<td>3</td>
<td>IRP 3.1</td>
<td>Develop, keep updated, and use an incident management system for processing and tracking incidents and their resolution.</td>
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<tr>
<td></td>
<td>IRP 3.2</td>
<td>Analyze selected incident and resolution data for prevention of future incidents.</td>
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RISK AND OPPORTUNITY MANAGEMENT

Intent
Identify, record, analyze, and manage potential risks or opportunities.

Value
Mitigate adverse impacts or capitalize on positive impacts to increase the likelihood of meeting objectives.

Additional Required PA Information
The term risk refers to uncertainties that may have a negative impact on achieving objectives. The term opportunity refers to uncertainties that may have a positive impact on achieving objectives.

Practice Summary

**LEVEL 1**

RSK 1.1 Identify and record risks or opportunities and keep them updated.

**LEVEL 2**

RSK 2.1 Analyze identified risks or opportunities.
RSK 2.2 Monitor identified risks or opportunities and communicate status to affected stakeholders.

**LEVEL 3**

RSK 3.1 Identify and use risk or opportunity categories.
RSK 3.2 Define and use parameters for risk or opportunity analysis and handling.
RSK 3.3 Develop and keep updated a risk or opportunity management strategy.
RSK 3.4 Develop and keep updated risk or opportunity management plans.
RSK 3.5 Manage risks or opportunities by implementing planned risk or opportunity management activities.

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ORGANIZATIONAL TRAINING

Intent
Develop the skills and knowledge of personnel so they perform their roles efficiently and effectively.

Value
Enhances individuals’ skills and knowledge to improve organizational work performance.

Practice Summary

**LEVEL 1**
OT 1.1 Train people.

**LEVEL 2**
OT 2.1 Identify training needs.
OT 2.2 Train personnel and keep records.

**LEVEL 3**
OT 3.1 Develop and keep updated the organization’s strategic and short-term training needs.
OT 3.2 Coordinate training needs and delivery between the projects and the organization.
OT 3.3 Develop, keep updated, and follow organizational strategic and short-term training plans.
OT 3.4 Develop, keep updated, and use a training capability to address organizational training needs.
OT 3.5 Assess the effectiveness of the organization’s training program.
OT 3.6 Record, keep updated, and use the set of organizational training records.
ESTIMATING

Intent
Estimate the size, effort, duration, and cost of the work and resources needed to develop, acquire, or deliver the solution.

Value
Estimation provides a basis for making commitments, planning, and reducing uncertainty, which allows for early corrective actions and increases the likelihood of meeting objectives.

Practice Summary

**LEVEL 1**

| EST 1.1 | Develop high-level estimates to perform the work. |

**LEVEL 2**

| EST 2.1 | Develop, keep updated, and use the scope of what is being estimated. |
| EST 2.2 | Develop and keep updated estimates for the size of the solution. |
| EST 2.3 | Based on size estimates, develop and record effort, duration, and cost estimates and their rationale for the solution. |

**LEVEL 3**

| EST 3.1 | Develop and keep updated a recorded estimation method. |
| EST 3.2 | Use the organizational measurement repository and process assets for estimating work. |
MONITOR AND CONTROL

Intent
Provide an understanding of the project progress so appropriate corrective actions can be taken when performance deviates significantly from plans.

Value
Increases the probability of meeting objectives by taking early actions to adjust for significant performance deviations.

Practice Summary

**LEVEL 1**
- MC 1.1 Record task completions.
- MC 1.2 Identify and resolve issues.

**LEVEL 2**
- MC 2.1 Track actual results against estimates for size, effort, schedule, resources, knowledge and skills, and budget.
- MC 2.2 Track the involvement of identified stakeholders and commitments.
- MC 2.3 Monitor the transition to operations and support.
- MC 2.4 Take corrective actions when actual results differ significantly from planned results and manage to closure.

**LEVEL 3**
- MC 3.1 Manage the project using the project plan and the project process.
- MC 3.2 Manage critical dependencies and activities.
- MC 3.3 Monitor the work environment to identify issues.
- MC 3.4 Manage and resolve issues with affected stakeholders.
PLANNING

Intent
Develop plans to describe what is needed to accomplish the work within the standards and constraints of the organization, including the:

- Budget
- Schedule
- Resource demand, capacity and availability
- Quality
- Functionality requirements
- Risks and opportunities

Plans also describe:

- The work to be performed
- Applicable organizational set of standard processes, assets, and tailoring guidelines
- Dependencies
- Who performs the work
- Relationships with other plans
- Stakeholders and their role

Value
Optimizes cost, functionality, and quality to increase the likelihood of meeting objectives.

Additional Required PA Information
Planning includes developing budgets and schedules based on estimates; identifying the appropriate set of stakeholders and tasks; managing risks; determining the necessary resources; and developing and keeping the project plan updated to reflect how to perform the work. An important aspect of planning is capacity and availability management.

Capacity and availability management activities can be performed at different levels of the organization and applied to any type of work. Capacity and availability management activities typically involve:

- Developing a capacity and availability management approach and keeping it updated
- Providing and allocating resources
- Monitoring, analyzing, understanding, forecasting, adjusting, and reporting on current demand for:
  - Work activities
  - Services
  - Solutions and Deliverables
- Resources
- Capacity and availability
- Service or service system performance
- Availability

- Determining corrective actions to ensure appropriate capacity and availability while balancing costs against resources needed and supply against demand

**Practice Summary**

**LEVEL 1**

PLAN 1.1 Develop a list of tasks.
PLAN 1.2 Assign people to tasks.

**LEVEL 2**

PLAN 2.1 Develop and keep updated the approach for accomplishing the work.
PLAN 2.2 Plan for the knowledge and skills needed to perform the work.
PLAN 2.3 Based on recorded estimates, develop and keep the budget and schedule updated.
PLAN 2.4 Plan the involvement of identified stakeholders.
PLAN 2.5 Plan transition to operations and support.
PLAN 2.6 Ensure plans are feasible by reconciling available and estimated resources.
PLAN 2.7 Develop the project plan, ensure consistency among its elements, and keep it updated.
PLAN 2.8 Review plans and obtain commitments from affected stakeholders.

**LEVEL 3**

PLAN 3.1 Use the organization’s set of standard processes and tailoring guidelines to develop, keep updated, and follow the project process.
PLAN 3.2 Develop a plan and keep it updated, using the project process, the organization’s process assets, and the measurement repository.
PLAN 3.3 Identify and negotiate critical dependencies.
PLAN 3.4 Plan for the project environment and keep it updated based on the organization’s standards.

**LEVEL 4**

PLAN 4.1 Use statistical and other quantitative techniques to develop and keep the project processes updated to enable achievement of the quality and process performance objectives.
CAUSAL ANALYSIS AND RESOLUTION

Intent
Identify causes of selected outcomes and take action to either prevent recurrence of undesirable outcomes or ensure recurrence of positive outcomes.

Value
Addressing root cause issues eliminates rework and directly improves quality and productivity.

Practice Summary

**LEVEL 1**
CAR 1.1 Identify and address causes of selected outcomes.

**LEVEL 2**
CAR 2.1 Select outcomes for analysis.
CAR 2.2 Analyze and address causes of outcomes.

**LEVEL 3**
CAR 3.1 Determine root causes of selected outcomes by following an organizational process.
CAR 3.2 Propose actions to address identified root causes.
CAR 3.3 Implement selected action proposals.
CAR 3.4 Record root cause analysis and resolution data.
CAR 3.5 Submit improvement proposals for changes proven to be effective.

**LEVEL 4**
CAR 4.1 Perform root cause analysis of selected outcomes using statistical and other quantitative techniques.
CAR 4.2 Evaluate the effect of implemented actions on process performance using statistical and other quantitative techniques.

**LEVEL 5**
CAR 5.1 Use statistical and other quantitative techniques to evaluate other solutions and processes to determine if the resolution should be applied on a broader scale.
CONFIGURATION MANAGEMENT

Intent
Manage the integrity of work products using configuration identification, version control, change control, and audits.

Value
Reduces loss of work and increases the ability to deliver the correct version of the solution to the customer.

Practice Summary

CM 1.1 Perform version control.

CM 2.1 Identify items to be placed under configuration management.
CM 2.2 Develop, keep updated, and use a configuration and change management system.
CM 2.3 Develop or release baselines for internal use or for delivery to the customer.
CM 2.4 Manage changes to the items under configuration management.
CM 2.5 Develop, keep updated, and use records describing items under configuration management.
CM 2.6 Perform configuration audits to maintain the integrity of configuration baselines, changes, and content of the configuration management system.
DECISION ANALYSIS AND RESOLUTION

Intent
Make and record decisions using a recorded process that analyzes alternatives.

Value
Increases the objectivity of decision making and the probability of selecting the optimal solution.

Practice Summary

**LEVEL 1**
- DAR 1.1 Define and record the alternatives.
- DAR 1.2 Make and record the decision.

**LEVEL 2**
- DAR 2.1 Develop, keep updated, and use rules to determine when to follow a recorded process for criteria-based decisions.
- DAR 2.2 Develop criteria for evaluating alternatives.
- DAR 2.3 Identify alternative solutions.
- DAR 2.4 Select evaluation methods.
- DAR 2.5 Evaluate and select solutions using criteria and methods.

**LEVEL 3**
- DAR 3.1 Develop, keep updated, and use a description of role-based decision authority.
MANAGING PERFORMANCE AND MEASUREMENT

Intent
Manage performance using measurement and analysis to achieve business objectives.

Value
Maximizes business return on investment by focusing management and improvement efforts on cost, schedule, and quality performance.

Additional Required PA Information
Managing performance helps to:
- Ensure that benefits and business performance are the leading factors in driving performance and improvement
- Change the paradigm from “process improvement leads to performance improvement” to “performance is the primary driver of process improvement”
- Use the results of measurement and analysis to manage and control performance at various work and business levels

Performance and measurement management includes:
- Setting objectives for:
  - The business
  - Measurement and performance
  - Quality and process performance
- Allocating and tracing objectives to subordinate levels in the business and processes
- Defining measurements to improve the understanding of progress towards achieving the objectives
- Analyzing measurement and performance data to:
  - Understand the relationship and interactions between performance and process
  - Define and take actions to address any observed issues with achieving objectives
  - Make the performance results and related benefits clearly visible to all stakeholders

Measurement and performance objectives are quantitative or qualitative objectives that do not require the additional rigor of statistical and other quantitative techniques. Quality and process performance objectives apply
to High Maturity activities using statistical and other quantitative techniques. These objectives include the use of statistical and other quantitative techniques on the related data.

### Practice Summary

<table>
<thead>
<tr>
<th>Level</th>
<th>MPM 1.1</th>
<th>MPM 1.2</th>
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</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>Collect measures and record performance.</td>
<td>Identify and address performance issues.</td>
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<table>
<thead>
<tr>
<th>Level 2</th>
<th>MPM 2.1</th>
<th>MPM 2.2</th>
<th>MPM 2.3</th>
<th>MPM 2.4</th>
<th>MPM 2.5</th>
<th>MPM 2.6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Derive and record measurement and performance objectives from selected business needs and objectives and keep them updated.</td>
<td>Develop, keep updated, and use operational definitions for measures.</td>
<td>Obtain specified measurement data according to the operational definitions.</td>
<td>Analyze performance and measurement data according to the operational definitions.</td>
<td>Store measurement data, measurement specifications, and analysis results according to the operational definitions.</td>
<td>Take actions to address identified issues with meeting measurement and performance objectives.</td>
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<table>
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<tr>
<th>Level 3</th>
<th>MPM 3.1</th>
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<th>MPM 3.4</th>
<th>MPM 3.5</th>
<th>MPM 3.6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop, keep updated, and use organizational measurement and performance objectives traceable to business objectives.</td>
<td>Follow organizational processes and standards to develop and use operational definitions for measures and keep them updated.</td>
<td>Develop, keep updated, and follow a data quality process.</td>
<td>Develop, keep updated, and use the organization’s measurement repository.</td>
<td>Analyze organizational performance using measurement and performance data to determine performance improvement needs.</td>
<td>Periodically communicate performance results to the organization.</td>
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</tbody>
</table>
MPM 4.1 Use statistical and other quantitative techniques to develop, keep updated, and communicate quality and process performance objectives that are traceable to business objectives.

MPM 4.2 Select measures and analytic techniques to quantitatively manage performance to achieve quality and process performance objectives.

MPM 4.3 Use statistical and other quantitative techniques to develop and analyze process performance baselines and keep them updated.

MPM 4.4 Use statistical and other quantitative techniques to develop and analyze process performance models and keep them updated.

MPM 4.5 Use statistical and other quantitative techniques to determine or predict achievement of quality and process performance objectives.

MPM 5.1 Use statistical and other quantitative techniques to ensure that business objectives are aligned with business strategy and performance.

MPM 5.2 Analyze performance data using statistical and other quantitative techniques to determine the organization’s ability to satisfy selected business objectives and identify potential areas for performance improvement.

MPM 5.3 Select and implement improvement proposals, based on the statistical and quantitative analysis of the expected effect of proposed improvements on meeting business, quality, and process performance objectives.
PROCESS MANAGEMENT

Intent
Manages and implements the continuous improvement of processes and infrastructure to:

- Support accomplishing business objectives
- Identify and implement the most beneficial process improvements
- Make the results of process improvement visible, accessible, and sustainable

Value
Ensures that processes, infrastructure, and their improvement contribute to successfully meeting business objectives.

Practice Summary

**PCM 1.1** Develop a support structure to provide process guidance, identify and fix process problems, and continuously improve processes.

**PCM 1.2** Appraise the current process implementation and identify strengths and weaknesses.

**PCM 1.3** Address improvement opportunities or process issues.

**PCM 2.1** Identify improvements to the processes and process assets.

**PCM 2.2** Develop, keep updated, and follow plans for implementing selected process improvements.

**PCM 3.1** Develop, keep updated, and use process improvement objectives traceable to the business objectives.

**PCM 3.2** Identify processes that are the largest contributors to meeting business objectives.

**PCM 3.3** Explore and evaluate potential new processes, techniques, methods, and tools to identify improvement opportunities.

**PCM 3.4** Provide support for implementing, deploying, and sustaining process improvements.

**PCM 3.5** Deploy organizational standard processes and process assets.
PCM 3.6  Evaluate the effectiveness of deployed improvements in achieving process improvement objectives.

PCM 4.1  Use statistical and other quantitative techniques to validate selected performance improvements against proposed improvement expectations, business objectives, or quality and process performance objectives.
PROCESS ASSET DEVELOPMENT

**Intent**
Develop and keep updated the process assets necessary to perform the work.

**Value**
Provides a capability to understand and repeat successful performance.

**Practice Summary**

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Practice</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAD 1.1</td>
<td></td>
<td>Develop process assets to perform the work.</td>
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<table>
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<tr>
<th>Level 2</th>
<th>Practice</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>PAD 2.1</td>
<td></td>
<td>Determine what process assets will be needed to perform the work.</td>
</tr>
<tr>
<td>PAD 2.2</td>
<td></td>
<td>Develop, buy, or reuse process assets.</td>
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<tr>
<td>PAD 2.3</td>
<td></td>
<td>Make processes and assets available.</td>
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</table>

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<tr>
<td>PAD 3.1</td>
<td></td>
<td>Develop, keep updated, and follow a strategy for building and updating process assets.</td>
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<tr>
<td>PAD 3.2</td>
<td></td>
<td>Develop, record, and keep updated a process architecture that describes the structure of the organization’s processes and process assets.</td>
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<tr>
<td>PAD 3.3</td>
<td></td>
<td>Develop, keep updated, and make processes and assets available for use.</td>
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<tr>
<td>PAD 3.4</td>
<td></td>
<td>Develop, keep updated, and use tailoring criteria and guidelines for the set of standard processes and assets.</td>
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<tr>
<td>PAD 3.5</td>
<td></td>
<td>Develop, keep updated, and make the organization’s process asset library available for use.</td>
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<tr>
<td>PAD 3.6</td>
<td></td>
<td>Develop, keep updated, and make work environment standards available for use.</td>
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<tr>
<td>PAD 3.7</td>
<td></td>
<td>Develop, keep updated, and make organizational measurement and analysis standards available for use.</td>
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</tbody>
</table>
GOVERNANCE

Intent
Provides guidance to senior management on their role in the sponsorship and governance of process activities.

Value
Minimizes the cost of process implementation, increases the likelihood of meeting objectives, and ensures that the implemented processes support and contribute to the success of the business.

Practice Summary

GOV 1.1 Senior management identifies what is important for doing the work and defines the approach needed to accomplish the objectives of the organization.

GOV 2.1 Senior management defines, keeps updated, and communicates organizational directives for process implementation and improvement based on organization needs and objectives.

GOV 2.2 Senior management ensures resources and training are provided for developing, supporting, performing, improving, and evaluating adherence to expected processes.

GOV 2.3 Senior management identifies their information needs and uses the collected information to provide governance and oversight of effective process implementation and improvement.

GOV 2.4 Senior management holds people accountable for adhering to organization directives and achieving process implementation and improvement objectives.

GOV 3.1 Senior management ensures that measures supporting objectives throughout the organization are collected, analyzed, and used.
GOV 3.2  Senior management ensures that competencies and processes are aligned with the objectives of the organization.

GOV 4.1  Senior management ensures that selected decisions are driven by statistical and quantitative analysis related to performance and achievement of quality and process performance objectives.
IMPLEMENTATION INFRASTRUCTURE

Intent
Ensure that the processes important to an organization are persistently and habitually used and improved.

Value
Sustains the ability to consistently achieve goals and objectives efficiently and effectively.

Practice Summary

**LEVEL 1**
- II 1.1 Perform processes that address the intent of the Level 1 practices.

**LEVEL 2**
- II 2.1 Provide sufficient resources, funding, and training for developing and performing processes.
- II 2.2 Develop and keep processes updated, and verify they are being followed.

**LEVEL 3**
- II 3.1 Use organizational processes and process assets to plan, manage, and perform the work.
- II 3.2 Evaluate the adherence to and effectiveness of the organizational processes.
- II 3.3 Contribute process-related information or process assets to the organization.
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