



CarnegieMellon
Software Engineering Institute

Pittsburgh, PA 15213-3890

People Capability Maturity Model[®] (P-CMM[®])

Version 2.0

CMU/SEI-2001-MM-01

Bill Curtis
TeraQuest Metrics, Inc.

William E. Hefley
Q-Labs

Sally A. Miller
Software Engineering Institute

July 2001

Unlimited distribution subject to the copyright.

This report was prepared for the

SEI Joint Program Office
HQ ESC/DIB
5 Eglin Street
Hanscom AFB, MA 01731-2116

The ideas and findings in this report should not be construed as an official DoD position. It is published in the interest of scientific and technical information exchange.



FOR THE COMMANDER

Norton L. Compton, Lt Col., USAF
SEI Joint Program Office

This work is sponsored by the U.S. Department of Defense. The Software Engineering Institute is a federally funded research and development center sponsored by the U.S. Department of Defense.

Copyright 2001 by Carnegie Mellon University.

NO WARRANTY

THIS CARNEGIE MELLON UNIVERSITY AND SOFTWARE ENGINEERING INSTITUTE MATERIAL IS FURNISHED ON AN "AS-IS" BASIS. CARNEGIE MELLON UNIVERSITY MAKES NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, AS TO ANY MATTER INCLUDING, BUT NOT LIMITED TO, WARRANTY OF FITNESS FOR PURPOSE OR MERCHANTABILITY, EXCLUSIVITY, OR RESULTS OBTAINED FROM USE OF THE MATERIAL. CARNEGIE MELLON UNIVERSITY DOES NOT MAKE ANY WARRANTY OF ANY KIND WITH RESPECT TO FREEDOM FROM PATENT, TRADEMARK, OR COPYRIGHT INFRINGEMENT.

Use of any trademarks in this report is not intended in any way to infringe on the rights of the trademark holder.

Internal use. Permission to reproduce this document and to prepare derivative works from this document for internal use is granted, provided the copyright and "No Warranty" statements are included with all reproductions and derivative works.

External use. Requests for permission to reproduce this document or prepare derivative works of this document for external and commercial use should be addressed to the SEI Licensing Agent.

This work was created in the performance of Federal Government Contract Number F19628-00-C-0003 with Carnegie Mellon University for the operation of the Software Engineering Institute, a federally funded research and development center. The Government of the United States has a royalty-free government-purpose license to use, duplicate, or disclose the work, in whole or in part and in any manner, and to have or permit others to do so, for government purposes pursuant to the copyright license under the clause at 52.227-7013.

The following service marks and registered trademarks are used in this document:

| | |
|----------------------------------------|-------------------------------|
| Capability Maturity Model [®] | CMM Integration SM |
| CMM [®] | CMMI SM |
| IDEAL SM | |

Capability Maturity Model and CMM are registered trademarks in the U.S. Patent and Trademark Office. CMM Integration, CMMI and IDEAL are service marks of Carnegie Mellon University. EFQM is a registered trademark of the European Foundation for Quality Management. EVA is a registered trademark of Stern Stewart & Company.

Continuous Workforce Innovation

A process area at Maturity Level 5: Optimizing

Purpose **The purpose of Continuous Workforce Innovation is to identify and evaluate improved or innovative workforce practices and technologies, and implement the most promising ones throughout the organization.**

Description Continuous Workforce Innovation involves establishing mechanisms for proposing improvements in workforce activities, identifying needs for new practices, surveying and evaluating innovative practices and technologies, conducting exploratory trials of new practices and technologies, and implementing the most beneficial ones across the organization.

Innovative workforce practices and technologies include new channels for recruiting, new selection techniques, innovative ways to manage performance, innovative technologies for communication, creative compensation schemes, introducing new media and methods for developing knowledge and skills, alternative career choices, and new ways of organizing and empowering the workforce.

Effort toward implementing innovative workforce practices is included in the strategic workforce plans. The group assigned responsibility for coordinating continuous workforce innovation stays aware of the current effectiveness of the organization's workforce activities. A procedure for proposing improvements to workforce activities is developed and communicated to the workforce. Recommendations for adopting innovative or improved workforce practices can result from suggestions from the workforce or from analyzing best practices at other organizations. The coordinating group continually reviews internal proposals and external developments in workforce practices and technology to determine which innovations offer the greatest opportunity

to improve the competency and performance of the organization. The most promising innovations can be tried and, if successful, they are implemented across the organization. The effectiveness of these improved practices is evaluated quantitatively and the results are communicated to the workforce.

Goals

- Goal 1** **The organization establishes and maintains mechanisms for supporting continuous improvement of its workforce practices and technologies.**
- Goal 2** **Innovative or improved workforce practices and technologies are identified and evaluated.**
- Goal 3** **Innovative or improved workforce practices and technologies are deployed using orderly procedures.**
- Goal 4** **Continuous Workforce Innovation practices are institutionalized to ensure they are performed as defined organizational processes.**

Commitment to Perform

Commitment 1 **The organization establishes and maintains a documented policy for conducting Continuous Workforce Innovation activities.**

This policy establishes organizational expectations for identifying improvements in workforce practices and technology innovations that measurably improve the organization's workforce capability and process performance.

Issues typically addressed in the policy include:

1. The continuous improvement and innovation of workforce practices:
 - serves the business objectives and stated values of the organization, and
 - complies with all relevant laws, regulations, and organizational policies.
2. The organization sets and tracks measurable goals for improvement to be achieved through the adoption of innovative workforce practices.
3. Improvements in workforce activities are directed toward:
 - improving the organization's capability in its workforce competencies;
 - aligning performance at the individual, workgroup, unit, and organizational levels; or
 - improving the efficiency of workforce activities.
4. The organization maintains an awareness of:
 - new developments in workforce practices and technologies, and
 - trends in workforce attitudes and needs.
5. The organization evaluates promising new workforce practices and technologies and adopts the most effective ones for ordinary use.
6. All members of the workforce are able to participate in continuously improving workforce activities.

Commitment 2 **An organizational role(s) is assigned responsibility for coordinating the continuous innovation and improvement of workforce practices across the organization.**

Although everyone in the organization may submit improvement proposals (and broad participation should be encouraged), the responsibility and authority for collecting, evaluating, selecting, and coordinating the deployment of innovative improvements is usually assigned to a group or team having responsibility for coordinating continuous improvement activities. Several such groups may exist within the organization, with each group focused on a different area of workforce practices. Examples of how continuous innovation and improvement of workforce practices might be coordinated across the organization include the following:

- A committee reviewing improvement recommendations submitted by individuals or groups
- Specialists in each area of workforce practices working to improve practices or adopt innovations in their area
- A team of experts working together to develop or deploy innovative practices in their area of expertise
- Workforce experts working independently or as a team with technologists to develop innovative workforce technologies in such areas as training or workgroup communication

The role(s) coordinates and helps to:

1. Review suggested improvements in workforce practices submitted by individuals or groups.
2. Identify needed improvements in workforce practices.
3. Explore potential applications of innovative workforce practices and technology.
4. Select and plan for the implementation of innovative or improved workforce practices and technologies.
5. Acquire, customize, install, and evaluate new workforce practices and technologies.
6. Communicate and coordinate with researchers on new developments in workforce practices and technologies that may have potential benefit within the organization.

7. Communicate with suppliers of workforce technology on problems and enhancements.

Ability to Perform

Ability 1 **Within each unit, a responsible individual(s) coordinates actions regarding proposals for improving workforce practices and activities and manages deployment of improvements or innovations.**

Ability 2 **Adequate resources are provided for continuously improving workforce practices and activities.**

1. Data are available for evaluating the needs for continuous workforce improvements or innovations.

| |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Refer to the Communication and Coordination, Quantitative Performance Management, Organizational Capability Management, Organizational Performance Alignment, and Continuous Capability Improvement process areas regarding sources of data that can be used to evaluate the needs for continuous improvement. |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

2. Experienced individuals with expertise in specialized areas are available to help in evaluating, planning, and supporting initiatives for innovating or improving workforce practices and technologies.

Examples of specialized areas for continuous workforce innovation include the following:

- Traditional workforce functions, such as selection or training
- Resources to support ongoing work, such as computers and software
- Advanced communication technology
- Computer-aided training and learning technologies
- Groupware and team coordination technologies
- Knowledge assessment and knowledge management methods
- Performance enhancement methods
- Computer-supported cooperative work
- Organizational design strategies

3. Resources for supporting continuous improvement of workforce practices and activities are made available.

Examples of resources to support continuous improvement include the following:

- Workstations and software
- Workgroup software and other groupware technologies
- Instructional design technology
- Communication technology
- Resources to support scanning the external environment for improvement opportunities, such as benchmarking or subscriptions to on-line databases and external research services

4. Funding and resources are available for:
- acquiring advanced workforce technologies for evaluation and for running trial projects,
 - supporting the facilities and infrastructure needed to install and maintain advanced workforce practices and technology, and
 - establishing the knowledge, skills, and process abilities needed to use improved workforce practices.
5. Time and support are made available for evaluating suggestions and conducting trial implementations.

Ability 3

Those responsible for continuously innovating and improving workforce practices and activities develop the knowledge, skills, and process abilities needed to perform their responsibilities and to apply relevant evaluation methods and continuous improvement techniques.

Examples of relevant methods and techniques include the following:

- Advanced workforce practices
- Continuous improvement techniques
- Change management
- Field experimentation
- Technology evaluation
- Usability analysis
- Workforce performance analysis

Ability 4

Individuals receive orientation or preparation in the innovative or improved workforce practices and technologies adopted by the organization.

1. Individuals who are responsible for performing new workforce activities have developed the knowledge, skills, and process abilities needed to perform their new responsibilities.
2. Individuals who will be subject to new workforce practices and activities are provided orientation to the new activities.
3. Individuals who will use new workforce technologies receive required training in the use of these technologies.
4. Consulting support is available on a continuing basis in the use of new workforce practices and technologies.

Ability 5

The practices and procedures for performing Continuous Workforce Innovation are defined and documented.

1. Practices and procedures are defined and documented at the organizational or unit levels, as appropriate.

2. Guidelines for tailoring the practices and procedures for use in different circumstances are documented and made available, as necessary.
3. The individual(s) assigned responsibility for coordinating Continuous Workforce Innovation activities across the organization ensures that defined practices and procedures are:
 - maintained under version control,
 - disseminated through appropriate media,
 - interpreted appropriately for different situations, and
 - updated through orderly methods.
4. Experiences, lessons learned, measurement results, and improvement information derived from planning and performing Continuous Workforce Innovation practices are captured to support the future use and improvement of the organization's practices.

Practices Performed

Practice 1

The organization establishes a framework for continuously improving its workforce practices and activities.

1. The organization identifies a group of responsible individuals with organization-wide responsibility for continuous improvement within each area of workforce practices and activities

Examples of those with organization-wide responsibility for continuous improvement of workforce practices include the following:

- Staff functions, such as human resources or training, that incorporate continuous improvement responsibilities into their committed work
- Competency ownership teams
- Task forces composed of those responsible for specific workforce practices and those who represent other relevant areas of the organization

2. Those with organizational responsibility for continuous improvement within an area of workforce practices and activities, establish for their area:
 - organizational priorities for improvements, if any,
 - approaches and guidance for identifying and implementing improvements,
 - high-level plans for pursuing improvement activities,

At a high level, Continuous Workforce Innovation activities may be planned as part of the organization's strategic workforce plan. Planning for Continuous Workforce Innovation activities is based on the units' and the organization's measurable objectives. Refer to Practice 6 for information regarding establishing quantitative improvement objectives. Action teams should also develop plans for specific improvement planning, piloting, and deployment activities focused on improving the organization's capability. Deployment planning is addressed in Practice 10 of this process area.

- funding and other resources required to support planned improvement activities, and
- how improvement activities will incorporate both suggestions from the workforce and structured improvement activities guided by quantitative objectives and analyses.

Practice 2

Individuals and workgroups are empowered to continuously improve their performance of workforce activities.

1. The workforce is informed of:
 - their ability to continuously improve the competency-based processes that they perform,

Refer to Practices 9, 12, 13 and 14 of the Continuous Capability Improvement process area for information regarding continual improvement of competency-based processes.

- their ability to continuously improve the workforce activities that they perform, and
 - methods available to them for participating in improvement activities.
2. Those who perform workforce practices and activities are encouraged to identify improvements in performing their responsibilities.

3. When they begin performing an improved practice or activity, individuals or workgroups record evidence for evaluating whether the new practice represents an improvement over previous methods.

Practice 3

A continuous improvement program is established to encourage individuals and workgroups to propose improvements to workforce practices and activities.

1. Based on their experience in implementing improved workforce practices or activities, individuals and workgroups are encouraged to submit improvement proposals for possible adoption across their units or across the organization.

| |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Refer to Practices 5 and 8 of the Continuous Capability Improvement process area for information regarding capturing lessons learned from continuous improvement of personal and workgroup processes. |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

2. Improvement proposals can:
 - be submitted by any individual or workgroup, and
 - address any area of workforce practices or activities.
3. Proposals concerning workforce practices or activities at the organizational level are reviewed by those coordinating improvements in the relevant area of workforce practices for the organization.
4. Proposals concerning workforce activities within a unit are reviewed by the person(s) responsible for workforce activities within the unit, with advice from an appropriate person at the organizational level, if appropriate.
5. Improvement proposals are evaluated by appropriate individuals or groups responsible for improving the area of workforce practices relevant to the proposal.
6. When the implementation of a proposal is localized to a unit and does not require changes to policies or procedures at the organizational level, the unit is empowered to implement the improvement with appropriate review and guidance.
7. Decisions regarding proposals that affect practices and activities at the organizational level are evaluated in the context of other proposed improvements or innovations.

8. Individuals and workgroups are informed of decisions regarding their improvement proposals.

Practice 4

Workforce opinions about their working conditions are periodically evaluated to identify areas that would most benefit from innovative or improved practices.

1. Based upon data collected regarding employee opinions about their working conditions, identify and document employee needs, requirements, and priorities.

Refer to Practice 4 of the Communication and Coordination process area for information regarding the gathering of employee opinions.

Example techniques for gathering employee opinions include the following:

- Focus groups
- Interviews
- Surveys
- Satisfaction feedback
- Exit interviews

2. The employee needs, requirements, or priorities emerging from these analyses provide inputs for use in:
 - identifying workforce practices needing improvement, and
 - selecting among improved workforce practices for trial use and deployment.

Practice 5

Data regarding the impact of the organization's workforce practices and activities are analyzed to identify areas that would most benefit from innovative or improved practices.

1. Data on the capability of the organization's competency development activities are analyzed to determine:

- ❑ which of the organization's workforce competencies would most benefit from innovative or improved competency development practices or activities,

Refer to Practices 2 and 3 of the Organizational Capability Management process area for practices quantifying organizational capability in each of the organization's critical workforce competencies and the quantitative management of capability in each of the organization's critical workforce competencies.

- ❑ within each workforce competency, which competency development activities have been most effective and which are in most in need of improvement, and

Refer to Practices 5 and 6 of the Organizational Capability Management process area for information regarding quantitative management of those competency development activities that have impacts on the capability of critical workforce competencies.

- ❑ within each workforce competency, which workforce practices have been most effective and which are most in need of improvement.

Refer to Practices 5 and 6 of the Organizational Capability Management process area for information regarding quantitative management of those workforce practices and activities that have impacts on the capability of critical workforce competencies.

2. Data on the impact of workforce practices and activities on the capability of competency-based processes are analyzed to determine:

- ❑ which competency-based processes are most in need of improvement, and

Refer to Practices 7 and 8 of the Organizational Capability Management process area for information regarding quantifying organizational capability in each of the organization's critical competency-based processes and the quantitative management of capability in each of the organization's critical competency-based processes.

- within each area of competency-based processes, which workforce practices have had the most beneficial impact and which are most in need of improvement.

Refer to Practice 10 of the Organizational Capability Management process area for information regarding quantitative management of those workforce practices and activities that have impact on the capability and performance of competency-based processes.

3. Data on the impact of workforce practices and activities on the alignment of performance are analyzed to determine:

- which areas of performance are most in need of improved alignment, and

Refer to Practices 1, 2, and 3 of the Organizational Performance Alignment process area for information regarding analysis of data on the alignment of performance across the organization.

- within each area of misaligned performance, which workforce practices have had the most beneficial impact and which are most in need of improvement.

Refer to Practices 4 and 5 of the Organizational Performance Alignment process area for information regarding analysis of data concerning the impact of workforce practices and activities on the alignment of performance across the organization.

Practice 6

Quantitative objectives are established for improving the impact of workforce practices and activities.

Quantitative objectives for improving workforce practices may be established at several levels. They may be established globally across all workforce practices, or they may be established separately for each area of workforce practices, such as staffing practices, compensation practices, and competency development practices. They may be established for specific needs within each workforce competency, or they may be established at the organizational level to affect all workforce competencies. They may be established separately within an organizational unit based on the need to address specific business conditions within that unit.

Quantitative objectives should be set at a level where sufficient control is exercised over the performance of the workforce practice to achieve the targeted result. Quantitative objectives are typically based upon needs for:

- Improving capability in workforce competencies
- Aligning performance
- Anticipated current and future workforce needs

1. Quantitative objectives for improving the impact of competency development practices and activities are based on:
 - the organization's strategic objectives for developing capability in each of its workforce competencies compared to the impact of its competency development practices and activities, and
 - the opportunities for improvement identified in analyzing data on the impact of competency development practices and activities.
2. Quantitative objectives for improving the impact of workforce practices and activities on competency-based processes are based on:
 - the current capability of competency-based processes compared to the capability required to achieve organizational business objectives, and
 - the opportunities for improvement identified in analyzing data on the impact of workforce practices and activities on the capability and performance of competency-based processes.
3. Quantitative objectives for improving the impact of workforce practices and activities on the alignment of performance are based on:
 - the current level of performance alignment across individuals, workgroups, and units compared to that needed to achieve organizational business objectives, and
 - the opportunities for improvement identified in analyzing data on the impact of workforce practices and activities on the alignment of performance.

Practice 7

The organization continuously investigates innovative workforce practices and technologies.

Those responsible for coordinating the continuous innovation and improvement of workforce practices and technologies across the organization:

1. Maintain awareness of:
 - quantitative objectives for improving the impact of competency development practices and activities,
 - quantitative objectives for improving the impact of workforce practices and activities on competency-based processes,
 - quantitative objectives for improving the impact of workforce practices and activities on the alignment of performance,
 - analyses of the organization's competency and capability management data,
 - evaluations of the organizations proposals for improvements to workforce practices,
 - results of assessments of the organization's workforce practices and activities,
 - opinions and concerns of the workforce, and
 - other relevant information about the business conditions affecting the organization.
2. Search for innovations and other developments in workforce practices and technologies through such means as:
 - reading relevant journals and periodicals,
 - attendance at relevant seminars and conferences,
 - benchmarking with other organizations known to innovate in relevant areas of workforce practices, and
 - use of consultants or other external sources of expertise in the state of the art.
3. Determine the feasibility of implementing promising workforce practices and technologies by:
 - gathering information from vendors and consultants on previous implementation and maintenance costs,

- estimating the cost of implementing and maintaining any communication, information, or other technology required to support the innovative practice,
 - evaluating the training and other implementation and maintenance costs involved, and
 - assessing the potential disruption and learning curve associated with introducing the innovative practice.
4. Recommend which innovations in workforce practices and technologies would provide the greatest potential benefit to the organization.

Practice 8**Innovative and improved workforce practices and technologies are evaluated and selected for implementation.**

1. Those responsible for coordinating the continuous innovation and improvement of workforce practices and technologies review improvement proposals and information on innovative practices or technologies in their area and select the most promising for further evaluation.
2. Preliminary cost-benefit analyses are performed for the anticipated impact of proposed innovations or improvements and those with the highest potential benefits are selected for implementation.
3. The potential risks to effective implementation or potential benefits of selected innovations or improvements are evaluated.
4. Innovative and improved workforce practices and technologies that are evaluated to have few risks to effective implementation or expected benefits are approved for organization-wide implementation.

| |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>For an innovative or improved practice or technology to be evaluated as having few risks, its effective implementation or expected benefits should have already been demonstrated within a unit or in other organizations whose conditions are similar to those under which it will be implemented. When there is uncertainty about a practice or technology, it is evaluated in a trial before being implemented throughout the organization.</p> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

5. When significant risks to effective implementation or potential benefits are identified, the innovation or improvement is proposed for trial implementation.

Practice 9

When appropriate, innovative or improved workforce practices or technologies are evaluated in trials to evaluate their benefits and most effective methods for implementation.

The trial is designed to show the strengths and weaknesses that an innovative or improved practice or technology would exhibit in use throughout the organization. Therefore, the trial should identify risks to successful implementation and expected benefits by exposing the practice or technology to the typical conditions under which it will be implemented throughout the organization.

1. The objectives and evaluation criteria for the trial are documented.
2. A plan for conducting one or more trials is developed which covers:
 - the unit(s) to be involved in the trial,
 - resources needed to conduct the trial,
 - the schedule of activities involved in the trial,
 - the training for those who will implement the practice or use the technology,
 - the orientation of those who are affected by the trial,
 - the criteria for evaluating the trial,
 - the data and other information that will be collected for evaluating the trial,
 - how the evaluation will be performed, and
 - the steps to be taken if the trial demonstrates that the practice or technology is beneficial.
3. The plan for the trial is reviewed by all affected parties.

Examples of affected parties for trials include the following:

- Those responsible for administering innovative or improved workforce practices
- Those affected by innovative or improved workforce practices or technologies
- Those who must use innovative or improved workforce practices or technologies
- Those who must provide support for innovative or improved workforce practices or technologies

4. Those responsible for innovative or improved workforce practices or technologies provide consultation and assistance to the trial.
5. The trial is conducted and evaluated according to the plan.
6. The results of the trial effort are collected, analyzed, and documented, including:
 - documentation of any lessons learned and problems encountered during the trial,
 - estimates of the benefits and impacts of broader use in the organization, and
 - assessment of risks in moving to broader implementation.
7. Adjustments to a proposed workforce practice or technology are made and documented during the trial effort to optimize its effective implementation and benefits.
8. Based on trial results, a decision is made to either:
 - terminate the further work with the practice or technology because it has proven ineffective,
 - proceed with full implementation, or
 - make adjustments to the practice or technology, based on lessons learned, and then replan and continue with additional trials.

Practice 10**The deployment of innovative or improved workforce practices or technologies is planned and prepared.**

1. The scope of the organization to which the innovative or improved practice or technology is to be deployed is identified.

The scope to which an innovative or improved practice or technology may be applied can include the entire organization or it may be restricted a specific component of the organization, such as the following:

- Specific workforce competencies
- Specific segments of the workforce
- Specific units
- Specific locations

2. A plan is developed for deploying innovative or improved workforce practices or technologies that have been approved for organization-wide use. The plan typically covers:
- resources needed for deployment,
 - the schedule for deployment across units,
 - the activities involved in deployment within a unit,
 - the training or other preparation for those who will deploy the practice or use the technology,
 - the orientation of those who are affected by the practice or technology,
 - how to mitigate risks involved in the deployment,
 - steps in reviewing deployment status and effectiveness, and
 - any changes required for deploying the practice or technology.

Examples of actions that should be taken in implementing an innovative or improved workforce practice or technology might include changes to the following:

- Organizational policies or procedures
- The measurement or verification of workforce practices and activities
- Descriptions of workforce competencies
- Competency development methods
- Competency or capability management activities

3. Before implementing a workforce practice or activity, those responsible for deploying it should review it with:
- those affected by the practice or activity to identify unanticipated problems or effects,

- those who have expertise in the area of the practice to determine if the improvement is likely to prove beneficial,
- a human resources professional, if they believe the improvement may conflict with organizational policies or procedures, or
- a human resources or legal professional, if the practice or activity is governed by laws or regulations.

Examples of those with whom innovative or improved workforce practices or technologies can be discussed include the following:

- Those responsible for coordinating specific workforce practices and activities across the organization
- Human resources or other appropriate professionals
- Trainers in the relevant area
- Experts in performing the activity

4. The strategy for collecting data to measure and track the impact of an innovative or improved workforce practice or technology is documented, reviewed by all affected parties, and agreed to.
5. Training and other methods for preparing responsible individuals to perform innovative or improved workforce practices or to use new technologies are developed.

Practice 11**Innovative or improved workforce practices and technologies are implemented according to their deployment plans.**

1. Innovative or improved workforce practices and technologies are implemented across all segments of the organization within the deployment scope.
2. Consulting and other facilitative support is provided to those implementing innovative or improved workforce practices and technologies.
3. Progress in deploying innovative or improved practices or technologies is tracked against the plan.
4. When progress in deploying innovative or improved practices or technologies deviates significantly from plan, corrective actions are taken, which may include:
 - re-planning the deployment,

- resolving shortfalls in resources, training, or other preparations for deployment,
 - correcting inefficiencies in the method of deployment, or
 - adjusting innovative or improved workforce practices and technologies to improve their integration into unit activities.
5. Problems in deploying innovative or improved workforce practices and technologies are identified and adjustments are defined for use in future deployments.

Practice 12

The effectiveness and benefits of innovative or improved workforce practices and technologies are evaluated quantitatively.

1. A strategy for evaluating the effectiveness and benefits of innovative or improved workforce practices and technologies is developed.
2. Appropriate methods for evaluating the effectiveness and benefits of innovative or improved workforce practices and technologies are identified, and analyses are planned..
3. Data concerning the effectiveness and benefits of innovative or improved workforce practices and technologies are collected, analyzed, and reported.
4. Results of these analyses are used to improve the selection and implementation of innovative or improved workforce practices and technologies.

Refer to the Organizational Capability Management process area for practices regarding the evaluation of the effectiveness and benefits of workforce practices and technologies.

Practice 13

The status and results of the organization’s Continuous Workforce Innovation activities are periodically reviewed and communicated across the organization.

1. Responsible individuals periodically review the progress in implementing improved or innovative workforce practices and technologies.

Examples of issues to be covered in status reviews include the following:

- Level of suggestions or improvement proposals being made and accepted for broader implementation
- Progress in achieving quantitative objectives for improvement in different areas of workforce practices
- Alternatives considered and those selected for implementation
- Progress or results of trial implementations
- Progress against deployment plans
- Effectiveness and benefits of improved practices and technologies

2. The workforce is kept informed of the organization's activities for continuously innovating or improving its workforce practices and activities.

Refer to Practice 2 of the Communication and Coordination process area for examples of organizational communications mechanisms. Examples of information that are to be communicated include the following:

- The organization's plans and schedules for deploying improved workforce practices and technologies
- Status and disposition of deployment efforts
- Status of the improvement proposals and associated workforce practice improvements
- Significant accomplishments, innovations, and actions taken for workforce practice improvement
- Measured results of deploying the workforce practice improvements
- Recognition of the contributions of the people and teams who are involved in improvement or deployment activities
- Summary information describing the organization's improvement and deployment activities and their results

Measurement and Analysis

Measurement 1 **Measurements are made and used to determine the status and performance of activities for continuously innovating and improving workforce practices and activities.**

Examples of measurements include the following:

- The number of improvement proposals submitted in total and for each area of workforce practices
- The response time for handling improvement proposals
- The percentage of workforce improvement proposals accepted
- The number of innovative workforce practices and technologies evaluated in total and for each area of workforce practices
- The number of innovations or improvements in workforce practices and technologies evaluated in trial implementations
- The number of improved or innovative workforce practices and technologies implemented across the organization

Measurement 2 **Measurements are made and used to determine the effectiveness of continuously innovating and improving workforce practices and technologies.**

Examples of measurements to evaluate the effectiveness of innovative or improved workforce practices and technologies include the following:

- Their impact on individual, team, unit, or organizational performance
- The impact of each workforce innovation or improvement on the efficiency of workforce activities
- The impact of each workforce innovation or improvement on increasing the organization's capability in one or more of its workforce competencies
- The impact of each innovation or improvement on aligning performance
- The effect of implementing each workforce innovation or improvement compared to its defined goals
- The effect of workforce innovations or improvements on team, unit, or organizational performance

Verifying Implementation

Verification 1 **A responsible individual(s) verifies that the activities for continuously innovating and improving workforce practices are conducted according to the organization’s documented policies, practices, procedures, and, where appropriate, plans; and addresses noncompliance.**

These reviews verify that:

1. The activities for Continuous Workforce Innovation comply with the organization’s policies and stated values.
2. The activities for Continuous Workforce Innovation comply with relevant laws and regulations.
3. All innovative or improved workforce practices and their implementations are reviewed to ensure they comply with relevant laws and regulations.
4. Continuous Workforce Innovation activities are performed according to the organization’s documented practices and procedures.
5. Noncompliance issues are handled appropriately.

Verification 2 **Executive management periodically reviews the Continuous Workforce Innovation activities, status, and results; and resolves issues.**

These reviews verify:

1. The appropriateness of the continuous evaluation, innovation, or improvement activities.
2. Progress in evaluating or implementing continuous improvements.

3. Results from reviews of Continuous Workforce Innovation practices and activities.

Refer to Verification 1 for information regarding reviews of Continuous Workforce Innovation activities to ensure adherence to the following:

- Relevant laws and regulations
- Organizational policies, practices, and procedures

4. Status of resolution of noncompliance issues.
5. Trends related to Continuous Workforce Innovation.
6. Effectiveness of Continuous Workforce Innovation activities in continuously innovating and improving workforce practices and technologies.

