People CMM For Enhancing Effectiveness of Knowledge Workers

Raghav S. Nandyal
Chief Executive Officer

SITARA Technologies Pvt. Ltd.
'Bellevue', #559 Road No. 3 Banjara Hills Hyderabad AP - 500 034
Email: raghav_nandyal@sitaratech.com
URL: http://www.sitaratech.com

R e a d i n g   M a t e r i a l

July 18, 2001

Introduction

Background

Bill Curtis initially conceived the concepts that grew to become the P-CMM. The concept was published in American Programmer in August 1990. Following the publication of the concept, Citicorp ran a successful pilot program during 1990 and 1991. A project to develop the model was announced at the 1992 Software Engineering Institute (SEI), Symposium. This work extends the management and organizational perspectives of the Capability Maturity Model for Software to include the management of the people resources necessary for the development and maintenance of software systems. The SEI has been developing and refining the P-CMM since 1992 to provide guidance to organizations that want to improve the way they address people-related issues.

The P-CMM is a maturity framework that focuses on continuously improving the management and development of the human assets of a software or information systems organization. The P-CMM provides guidance on how to continuously improve the ability of software organizations to attract, develop, motivate, organize, and retain the talent needed to steadily improve their software development capability. The strategic objectives of the P-CMM are to-

- ❖ Improve the capability of software organizations by increasing the capability of their workforce
- ❖ Ensure that software development capability is an attribute of the organization rather than of a few individuals
- ❖ Align the motivation of individuals with that of the organization
- ❖ Retain human assets (i.e., people with critical knowledge and skills) within the organization

The P-CMM describes an evolutionary improvement path from ad hoc, inconsistently performed practices, to a mature, disciplined, and continuously improving development of the knowledge, skills, and motivation of the workforce.

The P-CMM helps software organizations –

- ❖ Characterize the maturity of their workforce practices
- ❖ Guide a program of continuous workforce development
- ❖ Set priorities for immediate actions
- ❖ Integrate workforce development with process improvement
- ❖ Establish a culture of software engineering excellence

The P-CMM is designed to guide software organizations in selecting immediate improvement actions based on the current maturity of their workforce practices. The benefit of the P-CMM is in narrowing the scope of improvement activities to those practices that provide the next foundational layer for an organization's continued workforce improvement.

The P-CMM includes practices in such areas as-
- ❖ Work environment
- ❖ Communication
- ❖ Staffing
- ❖ Managing performance
- ❖ Training
- ❖ Compensation
- ❖ Competency development
- ❖ Career development
- ❖ Team-building
- ❖ Culture development

Structure of the P-CMM

As organizations establish and improve their people management practices, they progress through five levels of maturity. Each maturity level is composed of several *key process areas* (KPA) that identify clusters of related workforce practices. When performed collectively, the practices of a key process area achieve a set of goals considered important for enhancing workforce capability.

Achieving each maturity level in the P-CMM institutionalizes new capabilities as a result of an organizational improvement program, resulting in an overall increase in the workforce capability of the organization. Growth through the maturity levels creates fundamental changes in how people are managed and the culture in which they work.

Since the P-CMM suggests an evolutionary, staged approach to managing change, it is required that an organization demonstrates adequate maturity at the lower levels before reaching higher levels. Level 1 is called Initial or Adhoc and is the default maturity level where organizations without adequate people related processes and practices begin. And, unless otherwise an organization has not demonstrated a higher process capability, it is assumed that an organization is a Level 1.

Level 2 is called the Repeatable Maturity Level. In maturing from the Initial to the Repeatable level, organizations install the discipline of performing basic practices for managing its workforce.

In order to successfully demonstrate a Level 2 process capability, the key process areas that an organization should address are—
- ❖ Compensation
- ❖ Training
- ❖ Performance Management
- ❖ Staffing
- ❖ Communication
- ❖ Work Environment

Level 3 is called the Defined Maturity Level. In maturing to the Defined level, workforce practices established at the Level 2 are tailored to enhance the particular knowledge, skills, and work methods that best support the organization's business. The core competencies of the organization are identified, and workforce activities are aligned to support the development of these competencies. In addition to the Level 2 Key Process Areas, an organization must demonstrate adequate practices in areas that include -
- ❖ Participatory Culture
- ❖ Competency-Based Practices
- ❖ Career Development
- ❖ Competency Development
- ❖ Workforce Planning
- ❖ Knowledge and Skills Analysis

Level 4 is called the Managed Maturity Level. In maturing to the Managed level, the organization uses data to evaluate how effective its workforce processes are and to reduce variation in their execution. The organization quantitatively manages organizational growth in workforce capabilities and, when appropriate, establishes competency-based teams. In addition to the Level 2 and Level 3 Key Process Areas, organizations must demonstrate adequate processes and practices surrounding the following Key Process Areas at Level 4.
- ❖ Organizational Performance Alignment
- ❖ Organizational Competency Management
- ❖ Team-Based Practices
- ❖ Team Building
- ❖ Mentoring

Level 5 is called the Optimizing Maturity Level. In maturing to the Optimizing level, the organization looks continually for innovative ways to improve its overall talent. The organization is actively involved in applying and continuously improving methods for developing individual and organizational competence. In addition to internalizing and demonstrating the Level 2, 3 and 4 Key Process Areas, the following areas must be demonstrated with adequate consistency.
- ❖ Continuous Workforce Innovation
- ❖ Coaching
- ❖ Personal Competency Development

There are four themes running across the P-CMM framework involving the above process categories. They are-

- ❖ Developing capabilities
- ❖ Building teams and culture
- ❖ Motivating and managing performance
- ❖ Shaping the workforce

The P-CMM coupled with other Total Quality Management Programs is found to have a tremendous impact and value in sustaining the effectiveness of change management initiative. However, it can be used on its own to guide improvements in the workforce practices of an organization. The P-CMM can be used to guide an assessment of the workforce practices of an organization, and the SEI is piloting an assessment method.

How to Receive More Information

For further information regarding the P-CMM and its future associated products, including training on the P-CMM and how to perform P-CMM-based assessments, contact-

SEI Customer Relations
Software Engineering Institute
Carnegie Mellon University
Pittsburgh, PA 15213-3890
(412) 268-5800
Internet: customer-relations@sei.cmu.edu

References

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