



# Measurement and the People CMM<sup>®</sup>

*Improving the capability of your workforce*

Measurement Users' Group Conference  
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# Overview

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- What is the People CMM®?
- Overview of the People CMM®
- Context of the People CMM®
- Measurement and the People CMM®
- Lessons learnt
- Case study

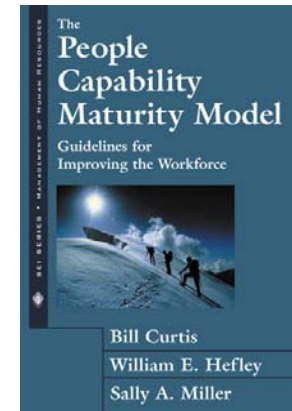
# What is the People CMM®?

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- The People Capability Maturity Model®

- Provides guidelines for improving the workforce
- Developed at the SEI
- Supported by US Army and OSD



- A roadmap for implementing workforce practices that continuously improve the capability of an organization's workforce.

# What is the People CMM<sup>®</sup>?

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- Philosophy (10 principles):
  1. Workforce capability is related to performance
  2. Workforce capability is a competitive issue
  3. Workforce capability linked to strategic objectives
  4. Focus shifted to workforce competencies
  5. Capability measured and improved at multiple levels
  6. Investment in improving critical competencies

*(continued next slide)*

# What is the People CMM®?

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- Philosophy (continued):
  7. Management is responsible for workforce capability
  8. Improvement as a process of proven practices
  9. Organization provides improvement opportunities
  10. New technologies should evolve competencies

# Overview of the People CMM®

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- Architecture:
  - Comprises 22 process areas
  - Implementation practices
    - Unique to each Process Area
  - Institutionalization practices (four types):
    - Commitment to perform
    - Ability to perform
    - Measurement and analysis
    - Verifying implementation

# Overview of the People CMM®

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- Architecture (continued):
  - Workforce practices:
    - staff recruitment, retention and transition;
    - channels of communication, and coordination among teams;
    - work environment conducive to production and quality;
    - training and development;
    - attractive compensation and remuneration packages; and
    - measurement of performance of the individuals and teams.
  - Process Area Goals
    - Three to five goals stating objectives for each Process Area

# Overview of the People CMM<sup>®</sup>

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- Maturity Levels:
  - Staged Representation only
    - Maturity Levels 1 through to 5
  - Level 1: Initial
    - Inconsistent management of the workforce
    - Workforce practices ad hoc and inconsistent
    - Low staff retention
    - Shortage of available a talented workforce typically blamed
    - Heavy reliance on slogans and exhortations
    - Cultural belief that workforce issues are HR's problem



# Overview of the People CMM®

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- Maturity Levels (continued):
    - Level 2: Managed
      - Basic '*workforce practices*' applied consistently (i.e. staffing, coordinating commitments, resourcing, managing performance, skilling, and compensation decisions)
      - Focus is at the unit level
      - Executives commit the organization to workforce development
      - Staffing and performance objectives based on committed work
      - Unit managers responsible for performing these practices
      - Units identify and manage their skill needs
      - Establishes the foundation for organizational improvements
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# Overview of the People CMM®

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- Maturity Levels (continued):
    - Level 3: Defined
      - Organization identifies ‘*workforce competencies*’ required (i.e. knowledge, skills and process abilities)
      - Competencies based on organization’s strategic plan
      - Workforce capability is linked to strategic business objectives
      - Focus is at the organizational level
      - Workforce planning develops the required competencies
      - Workforce practices tailored from competencies
      - Culture of participation through levels of autonomy
      - Establishes infrastructure for measuring workforce capability
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# Overview of the People CMM<sup>®</sup>

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- Maturity Levels (continued):
  - Level 4: Predictable
    - Organizational assets established and trusted based on results from proven competency-based processes
    - Workgroups trusted with greater responsibility and authority
    - Managers turn their attention to more strategic issues
    - Integration of different competency-based processes into multidisciplinary processes
    - Competency-based process performance and capability are managed quantitatively to achieve strategic objectives (and set new ones)

# Overview of the People CMM®

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- Maturity Levels (continued):
  - Level 5: Optimizing
    - Organizational-wide focus on continual improvement of its competency-based processes
    - Competency-based process performance and capability are aligned across workgroups, units, and the entire organization
    - Establishes a process for proposing, evaluating and deploying innovations and new technologies to workforce practices (which can be originated at levels of the organization)

# Overview of the People CMM®



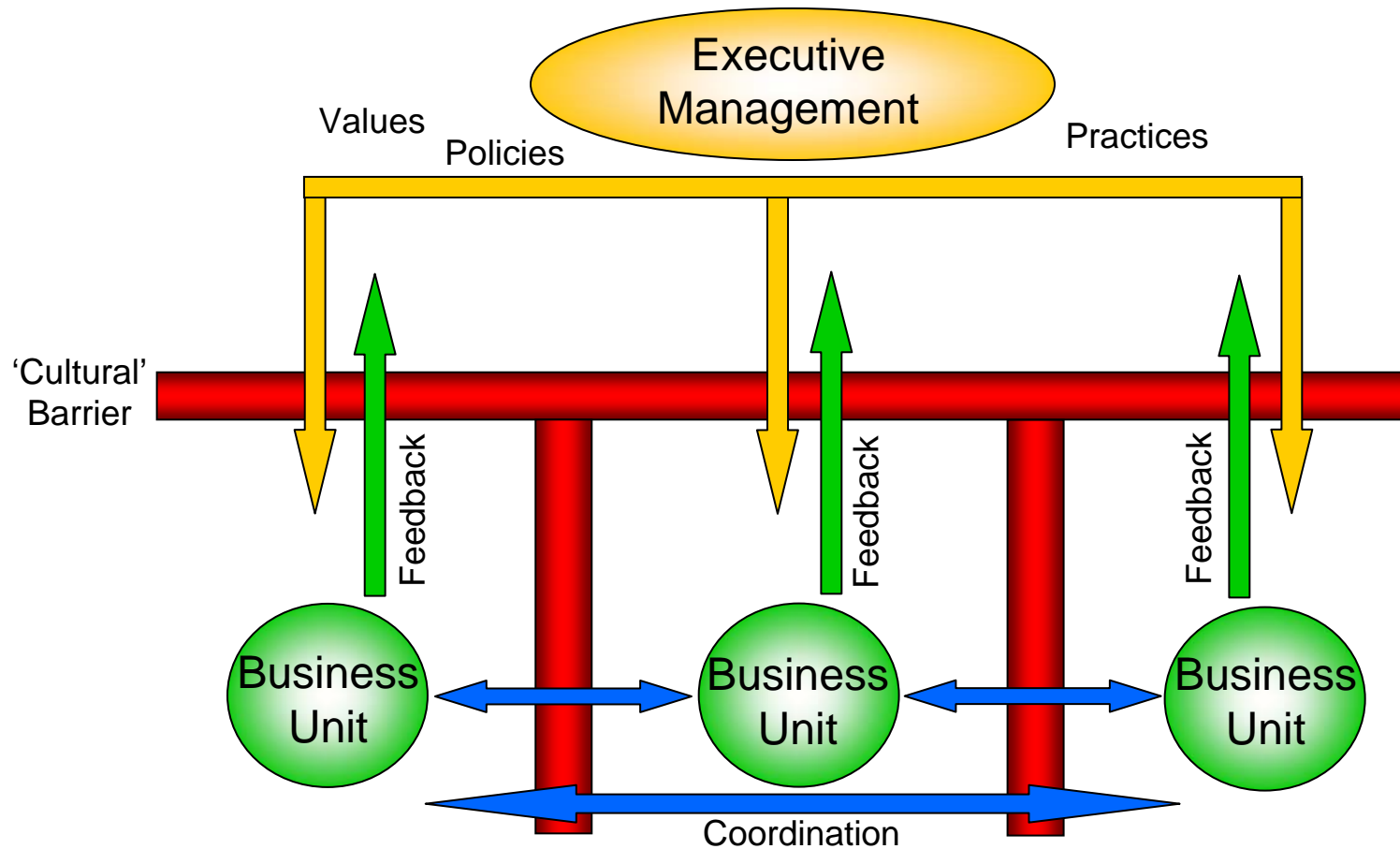
| Levels                   | People CMM Threads                            |  |  |                                      |
|--------------------------|---|--|--|--------------------------------------|
|                          | Developing competency                         | Building workgroups & culture                  | Motivating & managing performance                          | Shaping the workforce                |
| <b>5<br/>Optimizing</b>  | Continuous Capability Improvement             |  | Organizational Performance Alignment                       | Continuous Workforce Innovation      |
| <b>4<br/>Predictable</b> | Mentoring<br>Competency Based Assets          | Competency Integration<br>Empowered Workgroups | Quantitative Performance Management                        | Organizational Capability Management |
| <b>3<br/>Defined</b>     | Competency Development<br>Competency Analysis | Workgroup Development<br>Participatory Culture | Competency Based Practices<br>Career Development           | Workforce Planning                   |
| <b>2<br/>Managed</b>     | Training and Development                      | Communication & Coordination                   | Compensation<br>Performance Management<br>Work Environment | Staffing                             |

Source: Figure 3.6, People CMM®, v2

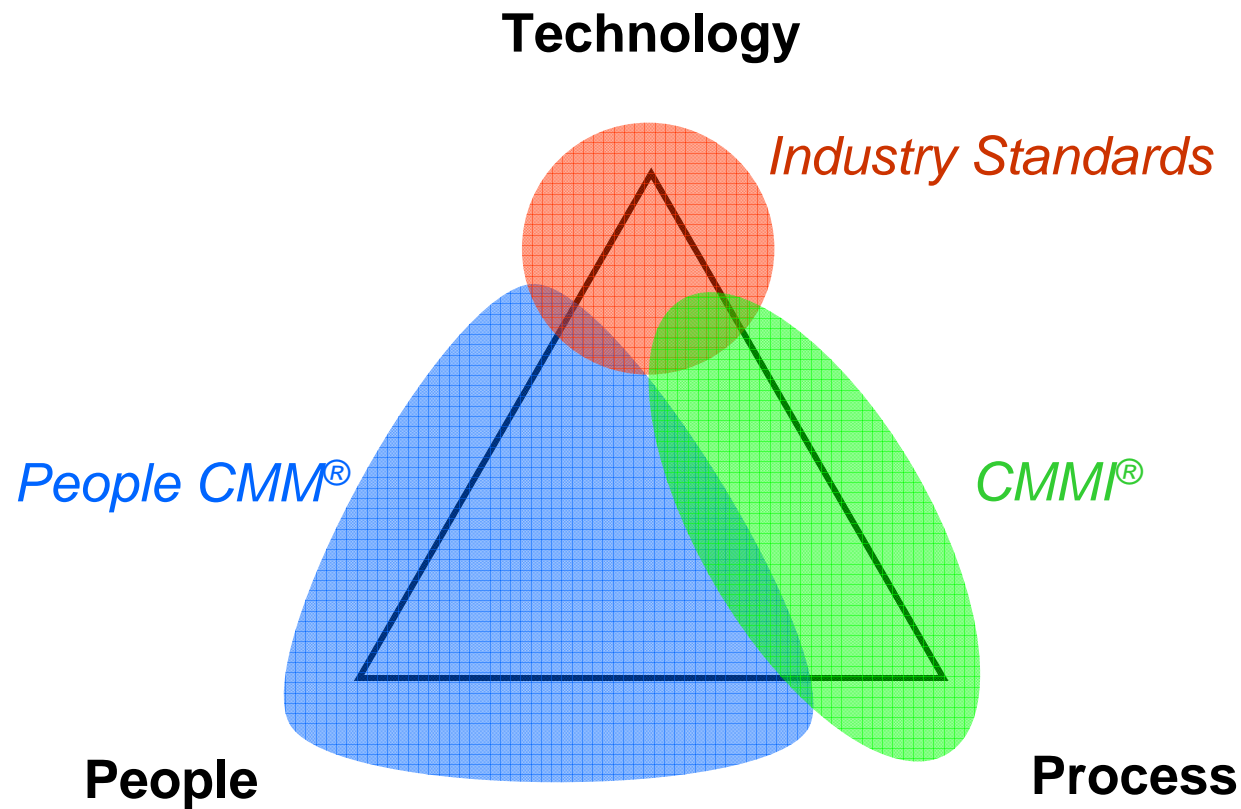
# Overview of the People CMM®



# Overview of the People CMM<sup>®</sup>



# Context of the People CMM<sup>®</sup>





# Measurement and the People CMM®

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



- Improving an organization's workforce capability cannot be done without measuring performance
- Measurement is the foundation of People CMM®
- Measurement practices have been built into the model (see next slides)



MEASUREMENT MAPPING TO P-CMM GOALS

| Maturity Levels | 5                                    | [Green]     |          |          |          |          |          |             |          |         |          |          |          |             |          |          |         |          |         |             |          |          |  |
|-----------------|--------------------------------------|-------------|----------|----------|----------|----------|----------|-------------|----------|---------|----------|----------|----------|-------------|----------|----------|---------|----------|---------|-------------|----------|----------|--|
|                 | 4                                    | [Green]     |          |          |          |          |          |             |          |         |          |          |          |             |          |          |         |          |         |             | [Grey]   |          |  |
|                 | 3                                    | [Green]     |          |          |          |          |          |             |          |         |          |          |          |             | [Grey]   |          |         |          |         |             |          |          |  |
|                 | 2                                    | [Green]     |          |          |          |          |          |             | [Green]  |         |          |          |          |             | [Grey]   |          |         |          |         |             |          |          |  |
|                 | 1                                    | [Grey]      |          |          |          |          |          |             |          |         |          |          |          |             |          |          |         |          |         |             |          |          |  |
| Goals           | GOAL 5                               | [Yellow]    | [Grey]   | [Grey]   | [Yellow] | [Grey]   | [Grey]   | [Grey]      | [Grey]   | [Grey]  | [Grey]   | [Yellow] | [Grey]   | [Grey]      | [Grey]   | [Grey]   | [Grey]  | [Yellow] | [Grey]  | [Yellow]    | [Grey]   | [Grey]   |  |
|                 | GOAL 4                               | [White]     | [Yellow] | [Grey]   | [Green]  | [Grey]   | [Yellow] | [Yellow]    | [Yellow] | [Grey]  | [Yellow] | [Green]  | [Yellow] | [Yellow]    | [Yellow] | [Yellow] | [Grey]  | [Green]  | [Grey]  | [White]     | [Grey]   | [Yellow] |  |
|                 | GOAL 3                               | [White]     | [White]  | [Yellow] | [Green]  | [Yellow] | [White]  | [White]     | [Green]  | [White] | [Yellow] | [Green]  | [White]  | [Green]     | [Green]  | [Green]  | [White] | [Yellow] | [Green] | [Yellow]    | [Yellow] | [Green]  |  |
|                 | GOAL 2                               | [White]     | [White]  | [White]  | [Green]  | [White]  | [White]  | [White]     | [Green]  | [White] | [White]  | [Green]  | [White]  | [Green]     | [Green]  | [Green]  | [Green] | [Green]  | [Green] | [Green]     | [Green]  | [Green]  |  |
|                 | GOAL 1                               | [White]     | [White]  | [White]  | [Green]  | [White]  | [White]  | [White]     | [Green]  | [White] | [White]  | [Green]  | [White]  | [Green]     | [Green]  | [Green]  | [Green] | [Green]  | [Green] | [Green]     | [Green]  | [Green]  |  |
| Process Areas   | STAFFING                             | [Grey]      | [Grey]   | [Grey]   | [Grey]   | [Grey]   | [Grey]   | [Grey]      | [Grey]   | [Grey]  | [Grey]   | [Grey]   | [Grey]   | [Grey]      | [Grey]   | [Grey]   | [Grey]  | [Grey]   | [Grey]  | [Grey]      | [Grey]   | [Grey]   |  |
|                 | COMMUNICATION & COORDINATION         | [Grey]      | [Grey]   | [Grey]   | [Grey]   | [Grey]   | [Grey]   | [Grey]      | [Grey]   | [Grey]  | [Grey]   | [Grey]   | [Grey]   | [Grey]      | [Grey]   | [Grey]   | [Grey]  | [Grey]   | [Grey]  | [Grey]      | [Grey]   | [Grey]   |  |
|                 | WORK ENVIRONMENT                     | [Grey]      | [Grey]   | [Grey]   | [Grey]   | [Grey]   | [Grey]   | [Grey]      | [Grey]   | [Grey]  | [Grey]   | [Grey]   | [Grey]   | [Grey]      | [Grey]   | [Grey]   | [Grey]  | [Grey]   | [Grey]  | [Grey]      | [Grey]   | [Grey]   |  |
|                 | PERFORMANCE MANAGEMENT               | [Grey]      | [Grey]   | [Grey]   | [Green]  | [Grey]   | [Grey]   | [Grey]      | [Green]  | [Grey]  | [Grey]   | [Green]  | [Grey]   | [Green]     | [Green]  | [Green]  | [Green] | [Green]  | [Green] | [Green]     | [Green]  | [Green]  |  |
|                 | TRAINING & DEVELOPMENT               | [Grey]      | [Grey]   | [Grey]   | [Green]  | [Grey]   | [Grey]   | [Grey]      | [Green]  | [Grey]  | [Grey]   | [Green]  | [Grey]   | [Green]     | [Green]  | [Green]  | [Green] | [Green]  | [Green] | [Green]     | [Green]  | [Green]  |  |
|                 | COMPENSATION                         | [Grey]      | [Grey]   | [Grey]   | [Grey]   | [Grey]   | [Grey]   | [Grey]      | [Grey]   | [Grey]  | [Grey]   | [Grey]   | [Grey]   | [Grey]      | [Grey]   | [Grey]   | [Grey]  | [Grey]   | [Grey]  | [Grey]      | [Grey]   | [Grey]   |  |
|                 | COMPETENCY ANALYSIS                  | [Grey]      | [Grey]   | [Grey]   | [Grey]   | [Grey]   | [Grey]   | [Grey]      | [Green]  | [Grey]  | [Grey]   | [Green]  | [Grey]   | [Green]     | [Green]  | [Green]  | [Green] | [Green]  | [Green] | [Green]     | [Green]  | [Green]  |  |
|                 | WORKFORCE PLANNING                   | [Grey]      | [Grey]   | [Grey]   | [Green]  | [Grey]   | [Grey]   | [Grey]      | [Green]  | [Grey]  | [Grey]   | [Green]  | [Grey]   | [Green]     | [Green]  | [Green]  | [Green] | [Green]  | [Green] | [Green]     | [Green]  | [Green]  |  |
|                 | COMPETENCY DEVELOPMENT               | [Grey]      | [Grey]   | [Grey]   | [Green]  | [Grey]   | [Grey]   | [Grey]      | [Green]  | [Grey]  | [Grey]   | [Green]  | [Grey]   | [Green]     | [Green]  | [Green]  | [Green] | [Green]  | [Green] | [Green]     | [Green]  | [Green]  |  |
|                 | CAREER DEVELOPMENT                   | [Grey]      | [Grey]   | [Grey]   | [Green]  | [Grey]   | [Grey]   | [Grey]      | [Green]  | [Grey]  | [Grey]   | [Green]  | [Grey]   | [Green]     | [Green]  | [Green]  | [Green] | [Green]  | [Green] | [Green]     | [Green]  | [Green]  |  |
|                 | COMPETENCY-BASED PRACTICES           | [Grey]      | [Grey]   | [Grey]   | [Green]  | [Grey]   | [Grey]   | [Grey]      | [Green]  | [Grey]  | [Grey]   | [Green]  | [Grey]   | [Green]     | [Green]  | [Green]  | [Green] | [Green]  | [Green] | [Green]     | [Green]  | [Green]  |  |
|                 | WORKGROUP DEVELOPMENT                | [Grey]      | [Grey]   | [Grey]   | [Green]  | [Grey]   | [Grey]   | [Grey]      | [Green]  | [Grey]  | [Grey]   | [Green]  | [Grey]   | [Green]     | [Green]  | [Green]  | [Green] | [Green]  | [Green] | [Green]     | [Green]  | [Green]  |  |
|                 | PARTICIPATORY CULTURE                | [Grey]      | [Grey]   | [Grey]   | [Green]  | [Grey]   | [Grey]   | [Grey]      | [Green]  | [Grey]  | [Grey]   | [Green]  | [Grey]   | [Green]     | [Green]  | [Green]  | [Green] | [Green]  | [Green] | [Green]     | [Green]  | [Green]  |  |
|                 | COMPETENCY INTEGRATION               | [Grey]      | [Grey]   | [Grey]   | [Green]  | [Grey]   | [Grey]   | [Grey]      | [Green]  | [Grey]  | [Grey]   | [Green]  | [Grey]   | [Green]     | [Green]  | [Green]  | [Green] | [Green]  | [Green] | [Green]     | [Green]  | [Green]  |  |
|                 | EMPOWERED WORKING GROUPS             | [Grey]      | [Grey]   | [Grey]   | [Green]  | [Grey]   | [Grey]   | [Grey]      | [Green]  | [Grey]  | [Grey]   | [Green]  | [Grey]   | [Green]     | [Green]  | [Green]  | [Green] | [Green]  | [Green] | [Green]     | [Green]  | [Green]  |  |
|                 | COMPETENCY-BASED ASSETS              | [Grey]      | [Grey]   | [Grey]   | [Green]  | [Grey]   | [Grey]   | [Grey]      | [Green]  | [Grey]  | [Grey]   | [Green]  | [Grey]   | [Green]     | [Green]  | [Green]  | [Green] | [Green]  | [Green] | [Green]     | [Green]  | [Green]  |  |
|                 | QUANTITATIVE PERFORMANCE MANAGEMENT  | [Grey]      | [Grey]   | [Grey]   | [Green]  | [Grey]   | [Grey]   | [Grey]      | [Green]  | [Grey]  | [Grey]   | [Green]  | [Grey]   | [Green]     | [Green]  | [Green]  | [Green] | [Green]  | [Green] | [Green]     | [Green]  | [Green]  |  |
|                 | ORGANISATIONAL CAPABILITY MANAGEMENT | [Grey]      | [Grey]   | [Grey]   | [Green]  | [Grey]   | [Grey]   | [Grey]      | [Green]  | [Grey]  | [Grey]   | [Green]  | [Grey]   | [Green]     | [Green]  | [Green]  | [Green] | [Green]  | [Green] | [Green]     | [Green]  | [Green]  |  |
|                 | MENTORING                            | [Grey]      | [Grey]   | [Grey]   | [Green]  | [Grey]   | [Grey]   | [Grey]      | [Green]  | [Grey]  | [Grey]   | [Green]  | [Grey]   | [Green]     | [Green]  | [Green]  | [Green] | [Green]  | [Green] | [Green]     | [Green]  | [Green]  |  |
|                 | CONTINUOUS CAPABILITY IMPROVEMENT    | [Grey]      | [Grey]   | [Grey]   | [Green]  | [Grey]   | [Grey]   | [Grey]      | [Green]  | [Grey]  | [Grey]   | [Green]  | [Grey]   | [Green]     | [Green]  | [Green]  | [Green] | [Green]  | [Green] | [Green]     | [Green]  | [Green]  |  |
|                 | ORGANISATIONAL PERFORMANCE ALIGNMENT | [Grey]      | [Grey]   | [Grey]   | [Green]  | [Grey]   | [Grey]   | [Grey]      | [Green]  | [Grey]  | [Grey]   | [Green]  | [Grey]   | [Green]     | [Green]  | [Green]  | [Green] | [Green]  | [Green] | [Green]     | [Green]  | [Green]  |  |
|                 | CONTINUOUS WORKFORCE INNOVATION      | [Grey]      | [Grey]   | [Grey]   | [Green]  | [Grey]   | [Grey]   | [Grey]      | [Green]  | [Grey]  | [Grey]   | [Green]  | [Grey]   | [Green]     | [Green]  | [Green]  | [Green] | [Green]  | [Green] | [Green]     | [Green]  | [Green]  |  |
|                 |                                      | LEVEL 2 PAs |          |          |          |          |          | LEVEL 3 PAs |          |         |          |          |          | LEVEL 4 PAs |          |          |         |          |         | LEVEL 5 PAs |          |          |  |

 MEASUREMENT PRACTICES REQUIRED FOR IMPLEMENTATION  
 MEASUREMENT PRACTICES REQUIRED FOR INSTITUTIONALIZATION

# Measurement and the People CMM<sup>®</sup>

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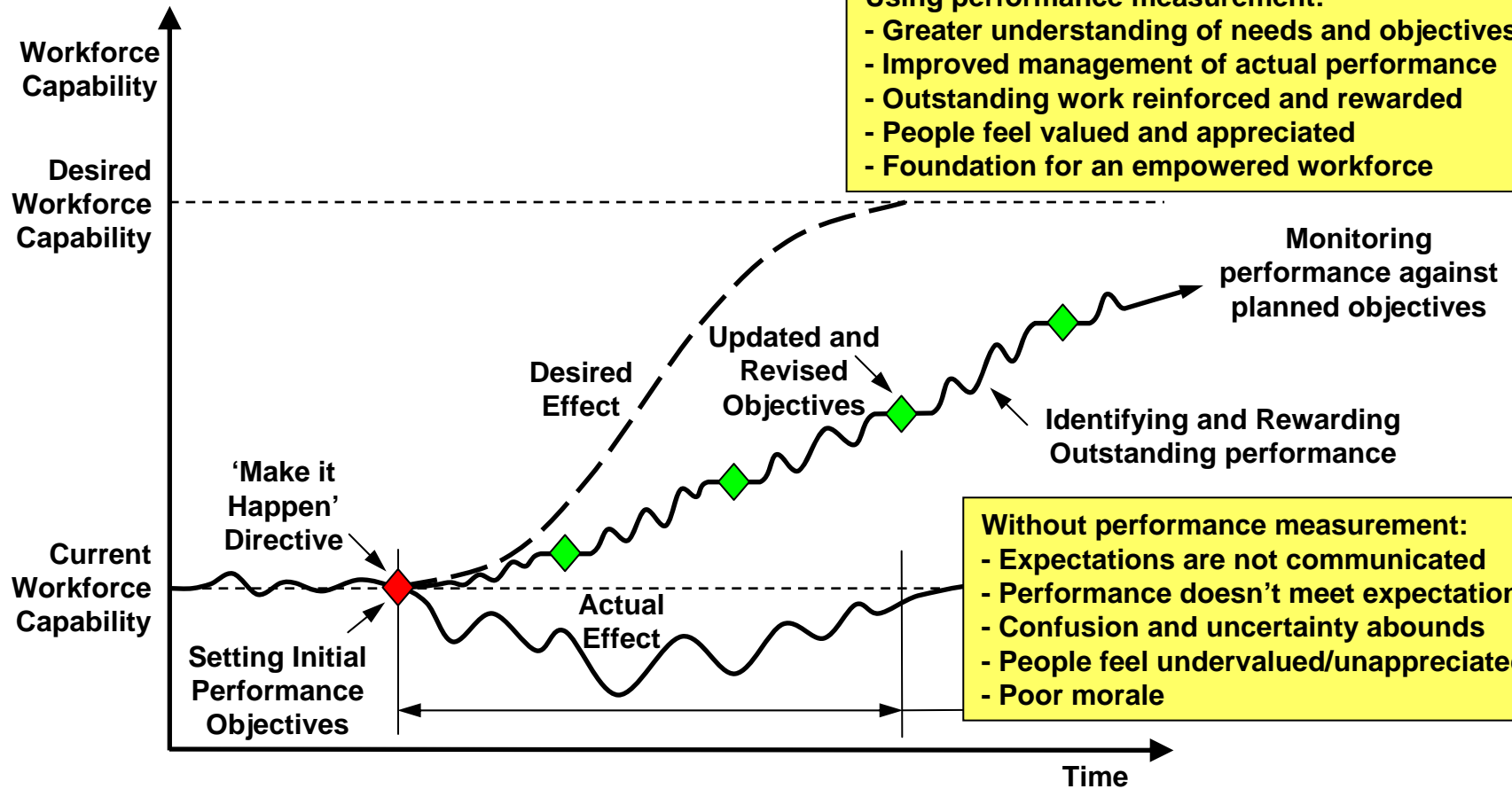


- Establish measurable objectives for work that has been committed to:
    - At both the individual and unit levels
  - Monitor actual performance:
    - Focus is to identify ways to improve performance
  - Recognize and reward outstanding performance:
    - Creating incentives for improving individual, unit, and (ultimately) organisational performance through positive reinforcement
-



- Organisational objectives include targets, needs and end-states:
    - Objectives form the basis for strategic plans which in-turn are used to derive tactical, work-group and/or unit plans
    - Staff, processes, tools, facilities and other resources are needed to achieve targets, needs and end-states
  - Measurement of performance is fundamental to ensuring harmonisation between individual / unit objectives and organisational objectives
-

# Measurement and the People CMM<sup>®</sup>





# Lessons learnt

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- Lack of policy direction
- Lack of executive sponsorship
- Lack of resources to undertake initiatives
- Measurement data used against people
- Other 'cultural' barriers

*The People CMM<sup>®</sup> assumes a hostile reception!*

# Case study

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- IT development organisation in a bank:
  - CMMI<sup>®</sup> Maturity Level 1 processes (ad-hoc processes or non-existent and heavily dependent on heroes)
  - Aim: to establish organisational-wide measurement program
  - Balanced-score card to ‘force’ improvement already in place:
    - Schedule Key Performance Index (KPI) of 95% or better (among a dozen other KPIs)
    - Bonus payments tied to achievement of Schedule KPI



# Case study

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- KPI selected arbitrarily:
  - Senior manager: ‘I thought it was a reasonable figure’
- Tying bonus to Schedule KPI encouraged ‘cheating’ on schedule performance:
  - Project Manager: ‘I re-baseline the schedule the day before we report KPIs to that I can get my bonus’
- Almost everyone received bonuses despite poor project performances:
  - Other KPI’s indicative of real schedule performance

# For more information

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<http://www.sei.cmu.edu/cmm-p/version2/>

The People CMM<sup>®</sup>, Guidelines  
for Improving the Workforce

Addison Wesley  
Book

Introduction to the People CMM<sup>®</sup>

3-Day Course

Intermediate Concepts of People CMM<sup>®</sup>

5-day Course

SCAMPI<sup>SM</sup> for People CMM<sup>®</sup>

5-day Course

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