Comparing Maturity Models: CMMI®, OPM3® and P3M3®

Lynda Bourne, Mosaic Project Services

Angela Tuffley, Software Quality Institute

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OPM3 and PMBOK are marks of Project Management Institute, Inc
P3M3 is a mark of Office of Government Commerce UK (OGC)

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Why Maturity Models?

- Assessing an organisation's capability against recognised maturity models can provide:
  - Substantial ROI (estimated >4:1)
  - A known and independently verified maturity
  - A prioritised roadmap to get to the next level
  - Comparison with other organisations

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Why Maturity Models?

- Research shows that organisations who improve their process maturity gain:
  - improved schedule and budget predictability
  - improved cycle time
  - increased productivity
  - improved quality (as measured by defects)
  - increased customer satisfaction
  - improved employee morale
  - increased return on investment
  - decreased cost of quality

Carnegie Mellon University: data provided by Angela Tuffley, Software Quality Institute

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Today's Focus

- Three Maturity models will be compared on the basis of:
  - Maturity Criteria
  - Functional Criteria
- These models are:
  - OPM3 from PMI
  - CMMI from Software Engineering Institute (SEI): Carnegie Mellon University
  - P3M3 from Office of Government Commerce UK (OGC)

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The Starting Point

- PMI engaged a number of international model experts
    - In Australia
        - Angela Tuffley
            - CMMI
        - Lynda Bourne
            - OPM3 and PMBOK
- Spreadsheets distributed to experts to record their reviews
    - Comparison of specific aspects of both models

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Disclaimer

- The following comparisons between CMMI and OPM3 are based on the results of this work

BUT

- The information presented here is based on a different approach and different evaluation methodology

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Representations of Maturity

- CMMI
  - Staged (Levels 1 -5)
  - Continuum
- OPM3
  - Continuum
- P3M3
  - Staged (Levels 1 -5)
- Certifications cover all or part of an organisation

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CMMI

- The Capability Maturity Model Integration (CMMI)
  - Developed by the Software Engineering Institute (SEI)
  - Assist organisations to improve processes for developing and maintaining the products and services of the organisation
- Focus on disciplines:
  - Software and systems engineering
  - Integrated product and process development

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CMMI Representations
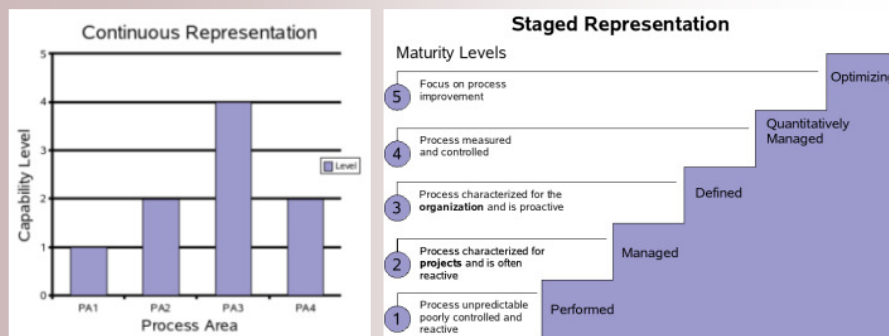
OPM3

- The Organizational Project Management Maturity Model (OPM3)
    - Developed by the Project Management Institute (PMI)
    - Assists organisations improve capabilities for managing projects, programs and portfolios, leading to business improvement.
    - Developed from PMI's standards:
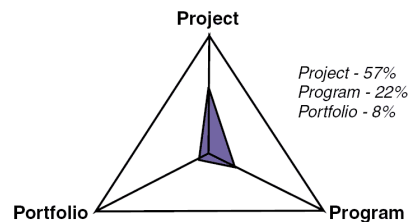   - PMBOK, and the standards for Program Portfolio Management

OPM3 reports

Your Organization on OPM3 Continuum

33%

◼ Organization's Relative Maturity

**Your Organization on OPM3 Continuum
Project / Program / Portfolio (PPP)**

Project

Project - 57%
Program - 22%
Portfolio - 8%

Portfolio　　　　　　　　Program

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P3M3

- *Portfolio, Programme and Project Management Maturity Model (P3M3)*

- Developed by UK Government's Office of Government Commence (OGC)

- Portfolio, programme and project management are nested within the P3M3 model, building on:

  – PRINCE2 (for projects)

  – Managing Successful Programmes (MSP)

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P3M3 overview

Portfolio, Programme and Project Management Maturity Model (P3M3)
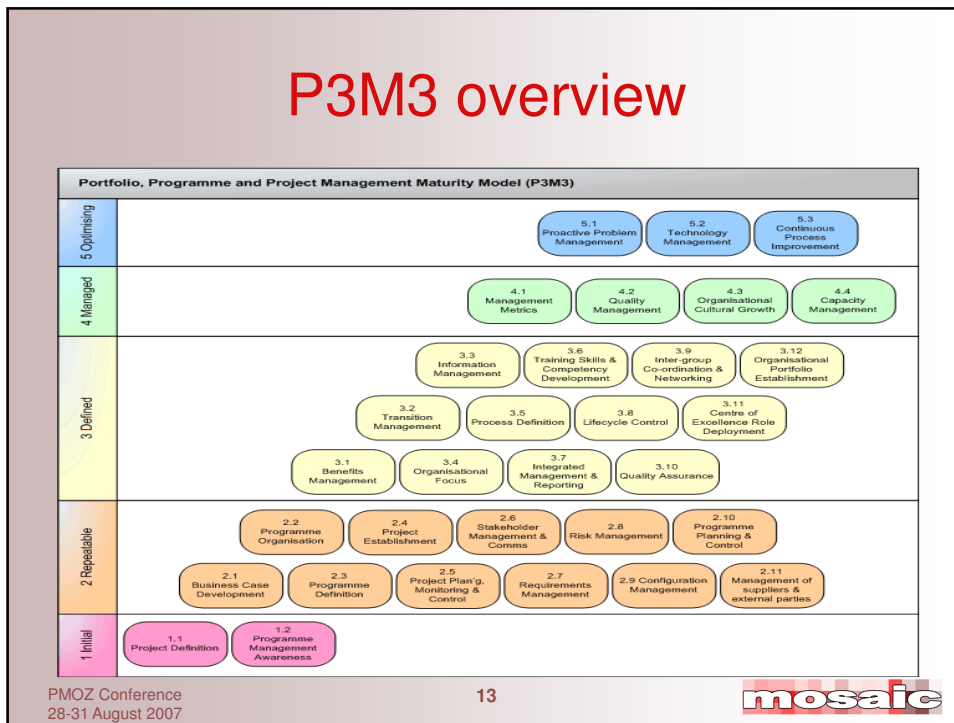
Maturity Criteria Results

Criteria	CMMI	OPM3	P3M3
Background	Exists	Exists	Exists
Explanation of Model Architecture	Exists	Exists	Exists
Explanatory Text	Exists	Exists	Exists
Assessment	Partially Exists	Exists	Exists
Improvement	Exists	Exists	Exists
Multiple Representations	Exists	Exists	Exists
Compatibility	Does not Exist	Does not Exist	Does not Exist
References	Exists	Exists	Exists
Sample Case Study	Exists	Partially Exists	Does not Exist
Content Amplification	Exists	Does not Exist	Does not Exist

Comparison model in this and succeeding slide provided by Angela Tuffley, Software Quality Institute

Function Criteria Results

Function Criteria	CMMI	OPM3	P3M3
Link to Strategy	Exists	Partially exists	Exists
Program Management	Partially exists	Exists	Exists
Project v. Program	Partially exists	Exists	Exists
Manage Related Projects	Exists	Partially exists	Exists
Program Management Processes	Exists	Exists	Exists
Role of Program Manager	Does not exist	Partially exists	Exists
Portfolio Management	Does not exist	Exists	Exists
Project Selection	Does not exist	Partially exists	Exists
Review Projects against Continue or Terminate Criteria	Does not exist	Exists	Does not exist
Portfolio Management Processes	Does not exist	Exists	Partially exists
Role of Portfolio Manager	Does not exist	Partially exists	Does not exist
Role of Project Manager	Exists	Exists	Exists
Project Management in Context of General Management	Partially exists	Exists	Partially exists
Organizational Project Management Processes	Exists	Exists	Exists

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Conclusions

- CMMI offers two approaches to maturity assessment:
  - Staged and continuous
- OPM3 offers reports on:
  - A continuum of best practice
  - By project, program, portfolio
  - Stages of improvement (S, M, C, I)
- P3M3 offers reports by stages over all three domains

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Conclusions

- CMMI (and predecessors) has been used by organisations for many years
  - Statistical proof of effectiveness
- OPM3 offers most comprehensive assessment and reporting
  - Supported by software
- P3M3 offers a staged approach that supports an organization's journey through progressive maturity in all three domains

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